Helping you manage your global mobile and fixed spend and usage

Vodafone Business Reporting 1.37

Customer/Commercial Administrator's Guide

Together we can
vodafone business

Contents

Chapter 1: Welcome to VTR

Vodafone Business Reporting (VTR) provides reporting across all VGE products. It supports Vodafone carrier billing data that is loaded via Consolidated Spend Analytics (CSA) from local OPCO's or via Central Billing (Keenan Billing System). VTR includes the following features:

Invoice Reporting: Loading of the detailed electronic invoices from CSA for a wide variety of VGE, services including Mobility, Conferencing, RED, and Unified Communications.

Spend Analysis: Dynamic reporting on high level views such as total spend, number of calls, or call duration and then drills down to spend analysis by location, inventory by service type, and other details over the past two years.

> VTR is compatible with the latest two versions of the following browsers: Microsoft Edge, Mozilla Firefox, and Google Chrome.

> The Customer Administrator's Online Help and Guide applies to both *Customer Administrators* and *Commercial Administrators*.

Support roles

The VTR **Support Administrator's Guide** includes instructions for Levels 1, 2, and 3 Support Administrators, as well as Billing Administrators. However, depending on your role, you may not have access to the full functionality. Use the visual aids below to determine if you have access to the functionality described. Each topic that restricts content to specific user roles will specify those roles at the beginning of the topic.

The **Customer Administrator's Guide** includes instructions relevant only to the specific roles of Customer Administrators and Commercial Administrators. It may also include the visual aids below, which you can use to assist you when you contact Vodafone Support.

The **Customer Standard User's Guide** includes instructions relevant only to the specific roles of Customer Standard Users, IoT Customer Standard Users and Commercial Standard Users. It may also include the visual aids below, which you can use to assist you when you contact Vodafone Support.

SU	Functionality available for **Customer Standard Users**.
IU	Functionality available for **IoT Customer Standard Users**.
MU	Functionality available for **Commercial Standard Users**.
CA	Functionality available for **Customer Administrators**.
MA	Functionality available for **Commercial Administrators**.
BA	Functionality available for **Billing Administrators**.
L1	Functionality available for **L1 Support Administrators**.
L2	Functionality available for **L2 Support Administrators**.
L3	Functionality available for **L3 Support Administrators**.

Chapter 2: Getting started with VTR

VTR provides a complete responsive interface to your reporting and tasks.

You can

- View reporting on telecom spend and consumption over a specific time period and region.
- Setup customer accounts and reference data and view services tied to each account.
- Configure customers and users.
- Manage your profile.

The application is secured by user permissions: not all users will have access to all modules or functionality in the application. Rather, each user will be granted permission only to that functionality required to perform his/her job.

To make it easy to use, the VTR interface offers a consistent layout and functionality across all modules, so once you learn how to search or export data in one module, it will be easy for you to apply that knowledge to subsequent tasks.

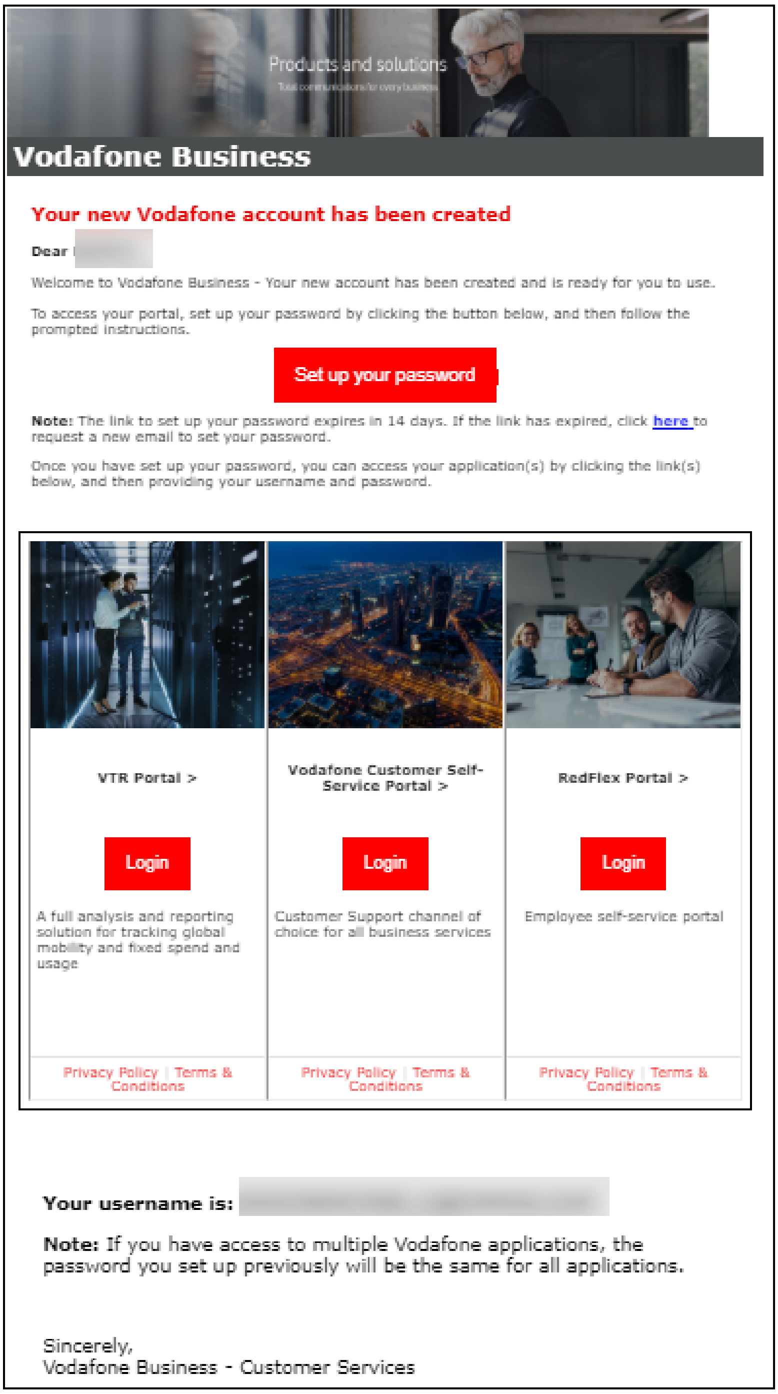
The remainder of this chapter provides you an overview of the user interface, including

- Access the portal and login
- 'Feature components' on page 11
- 'Screen layout and functionality' on page 12

Access the portal and login

When you enrol into the VTR program, Vodafone will send you an email to welcome you to VTR and provide you with a link to set up your password.

1. To begin using VTR, you must first set up your password. To do that, in the VTR Welcome Email that you have received, click **Set up your password**.



Products and solutions

Vodafone Business

Your new Vodafone account has been created

Dear

Welcome to Vodafone Business - Your new account has been created and is ready for you to use.

To access your portal, set up your password by clicking the button below, and then follow the prompted instructions.

Set up your password

Note: The link to set up your password expires in 14 days. If the link has expired, click here to request a new email to set your password.

Once you have set up your password, you can access your application(s) by clicking the link(s) below, and then providing your username and password.

VTR Portal >	Vodafone Customer Self-Service Portal >	RedFlex Portal >
Login	Login	Login
A full analysis and reporting solution for tracking global mobility and fixed spend and usage	Customer Support channel of choice for all business services	Employee self-service portal
Privacy Policy | Terms & Conditions	Privacy Policy | Terms & Conditions	Privacy Policy | Terms & Conditions

Your username is:

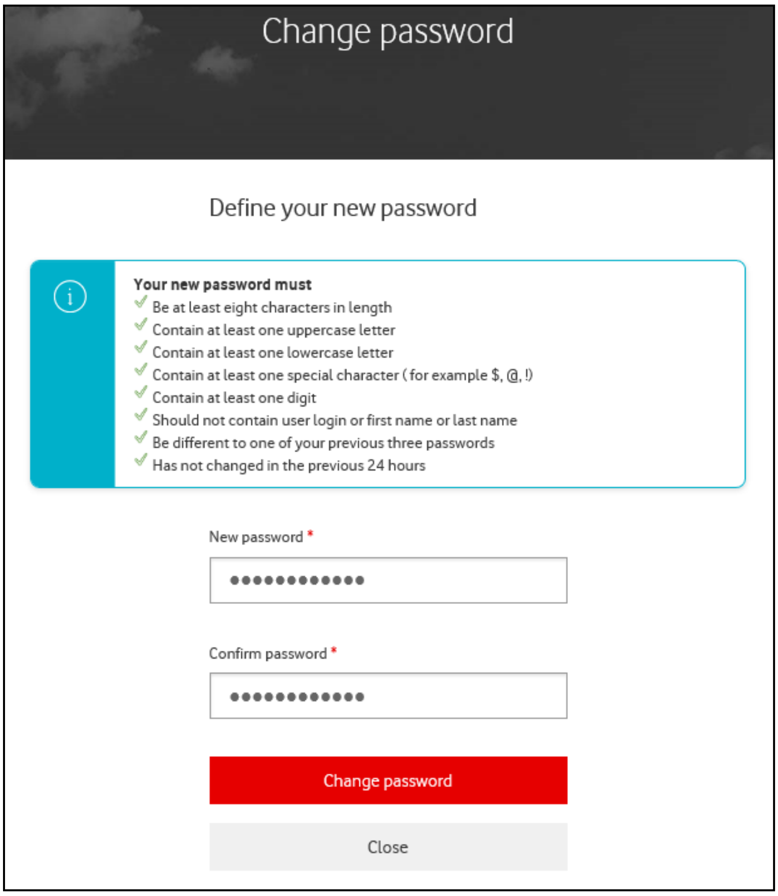
Note: If you have access to multiple Vodafone applications, the password you set up previously will be the same for all applications.

Sincerely,
Vodafone Business - Customer Services

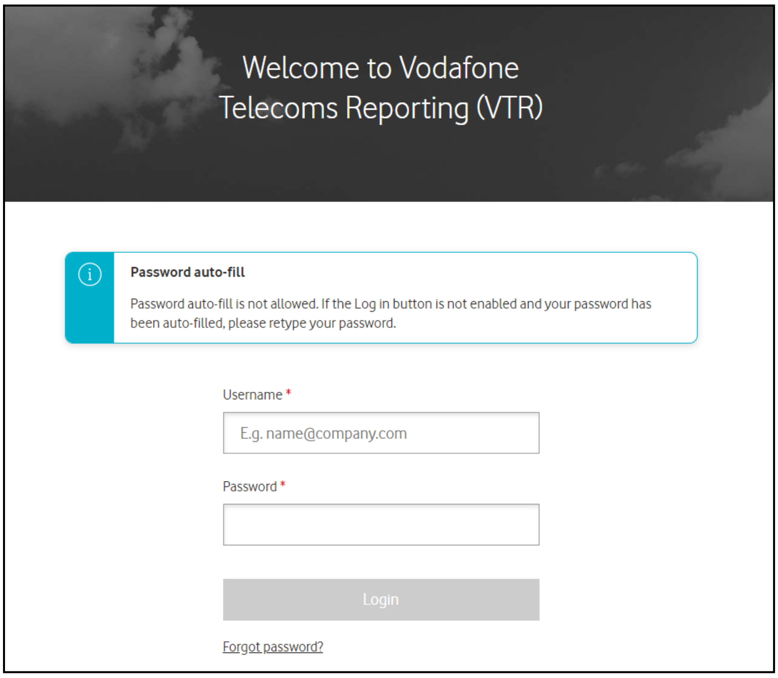
The link to set up your password expires in 14 days. If the link has expired, click where prompted in the Welcome email and the link will take you to the VTR screen to request a new password. You will receive a new Password Change request email to reset your password.

The Define your new password page appears.

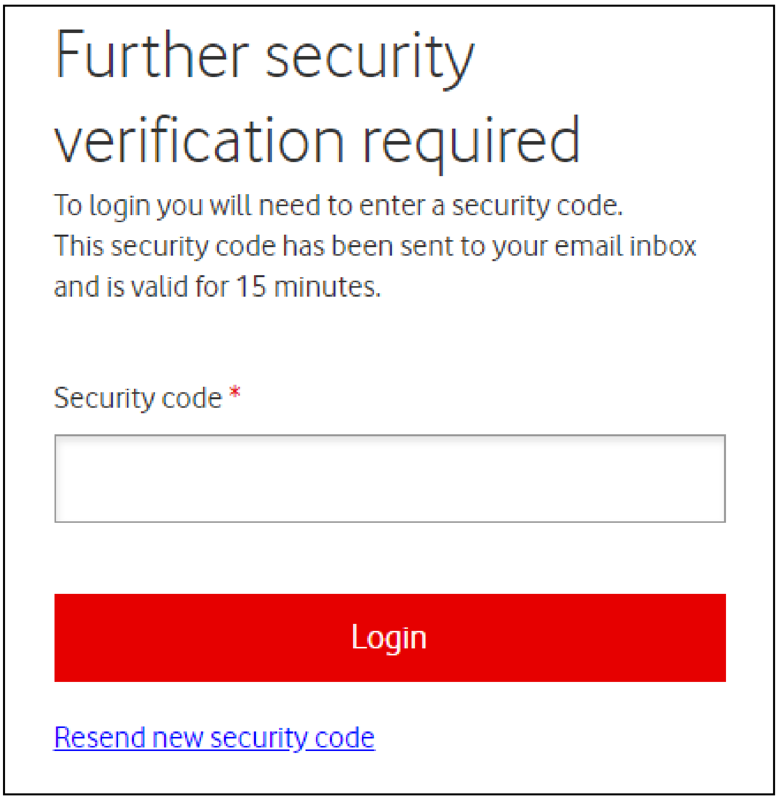
2. Type your **New password**, confirm it, and then click **Change password**.



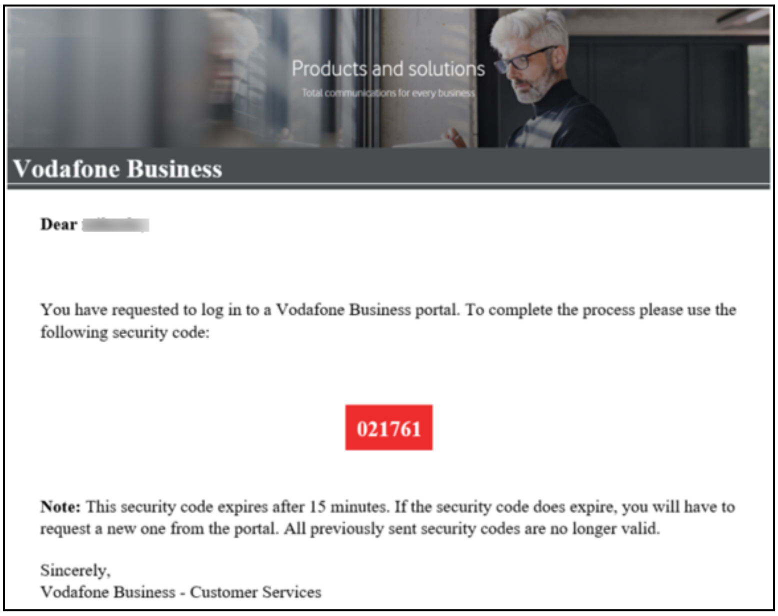
3. On the Login page that reappears, type your **username** and your new **password** into the boxes provided, and then click **Login**.



You will be asked to enter a six-digit security code, that will have been sent to your email inbox.

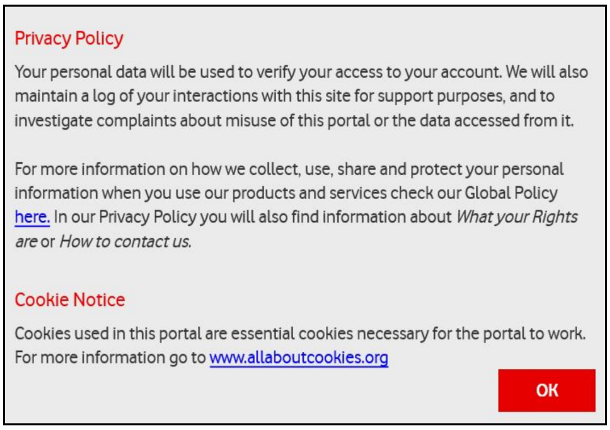


4. Retrieve the security code from the email and populate it in the **Security code** field.



Once you provide the **Security code**, you will be redirected to the Landing page.

5. Review the Privacy Policy and Cookie Notice pop-up that will appear, and then click **OK**.



6. On the My Profile page that appears, specify your Personal settings and review account access and contacts, and then click **Save**. For more information on this page, see 'Manage your profile' on page 16.

The VTR Spend Analysis page appears. See 'Analysing your spend' on page 20.

Log out of VTR

You should log out when you have finished using VTR. On any page in the portal, click the profile icon at the top right, and then click **Log out**. VTR logs you out within a few seconds. Once you have been logged out, the portal takes you to the Logged out page, where you are allowed to **Go to log in**.

Best practice is to sign out when you have finished using VTR. If you close the browser before logging out, then VTR will not release your active session until the scheduled timeout 5 minutes later. However, if you try to log back in, then VTR will display a message giving you the opportunity to release the session at that time. To do so, click **OK**.

Inactivity sign out period

For your security, you will be automatically logged out of VTR after 5 minutes of inactivity. Follow the prompts on the displayed message to log in to VTR again.

If you have not logged in for 60 days to the customer schema you have access to, you will receive a "VTR Portal Login Audit" email; however, you have the option to log in again within 20 days after receiving the email. If you do not login to the available customer schema within 20 days after receiving this email, you will be flagged inactive automatically for that schema.

VTR logs you out, terminates your session, and returns you to the Welcome to Vodafone Telecoms Reporting (VTR) page.

Supported browsers and configuration

VTR is compatible with the latest two versions of the following browsers: Microsoft Edge, Mozilla Firefox, and Google Chrome.

> If you run VTR and you get a "Session expired" message at any step, try to log in again.

VTR Roles

VTR controls access to features and functionality by user roles. One of the following nine available roles are assigned to a user at the time the user is created.

Role	Permissions
Customer Standard User	My Profile Analysis Reporting Invoices Technology Funds Credit Notes
IoT Customer Standard User	My Profile Analysis (only IoT category) Reporting (only IoT reports) Invoices **NOTE**: Only used when the user only has IoT accounts.
Commercial Standard User	My Profile Analysis Reporting Invoices Historical Invoices Technology Funds Credit Notes **NOTE**: Has access to all the customers and all the accounts.

Role	Permissions
Customer Administrator	My Profile Analysis Reporting Invoices Technology Funds Credit Notes Administration • Accounts: View and edit auto-add properties • Services: View and edit • Cost Centres: View • Reference Data: View, add, edit, delete • Data Management Centre • Contacts
Commercial Administrator	My Profile Analysis Reporting Invoices Historical invoices Technology Funds Credit Notes Administration • Accounts: View and edit auto-add properties • Services: View and edit • Cost Centres: View • Reference Data: View, add, edit, delete • Data Management Centre • Contacts **NOTE**: Has access to all the customers and all the accounts.

Role	Permissions
Billing Administrator	My Profile Alerts Analysis Reporting Technology Funds Invoices Credit Notes Administration • Accounts: View and edit auto-add properties • Services: View and edit • Cost Centres: View • Reference Data: Add and edit • Data Management Centre • Contacts

Feature components

VTR includes a number of modules that enable you to understand your telecom spend. It also includes modules for customer configuration and administration.

From the VTR home page, click the main menu items in the upper navigation bar to access each area of functionality:

Analysis: Reports on your telecom spend and consumption. See 'Analysing your spend' on page 20.

Reporting: Run predefined reports, which you can filter, sort, and choose columns to display just the data you want. You may view and customize reports on Chargeback (Billing) and Inventory. See 'Reporting' on page 55

Invoices: Displays invoices for all accounts to which you have access. See 'Invoices' on page 169.

Administration: Lets you manage your customer data, including

- **Accounts**: View all accounts, and depending on your permissions, assign cost centres and users, add and delete accounts, and edit existing account information and call masking settings. See 'Manage accounts' on page 218.

- **Services**: View service information and allocate service expenses to specific cost centres. See 'Manage services' on page 225
- **Cost centres**: View cost centres associated with your customer. See 'View cost centre hierarchies' on page 246
- **Reference data**: View and configure the data that appears in drop downs through the application, as well as exchange rates, and service type and class relationships. See 'Work with reference data' on page 247.
- **Data Management Centre**: Upload cost centres and exchange rates in bulk. See 'Upload and manage data in bulk' on page 262.
- **Contacts**: Add, removed, or update customer contacts. See 'Specify customer contacts' on page 276.

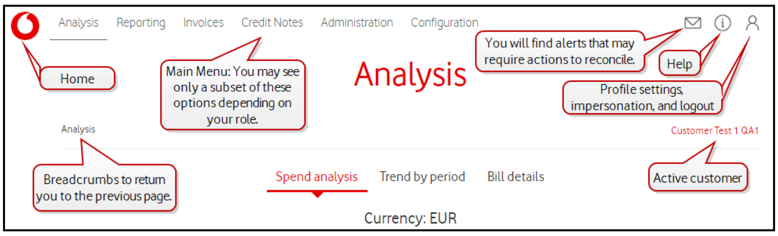
Screen layout and functionality

Once you log in, you will see the VTR home page, which also functions as the Analysis page, providing reports on your telecom spend and consumption.

You will also see the following elements:

Header

Every page in the application displays a consistent header that enables you to navigate through the application.

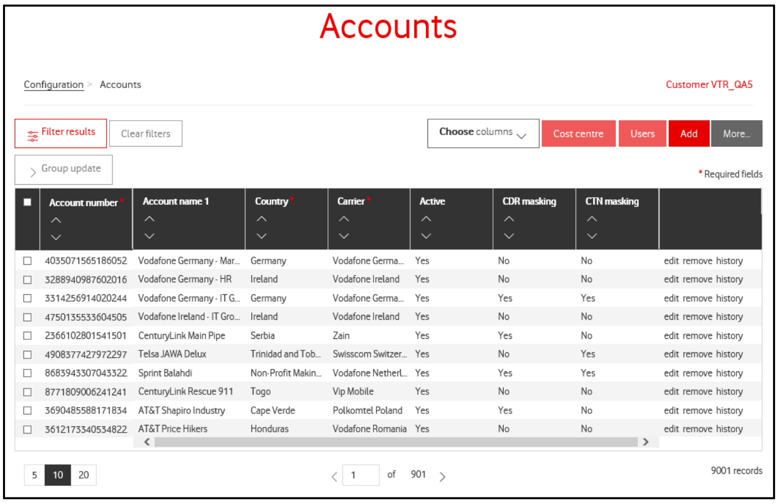


- **Vodafone logo**: Click the corner logo to return to this home page.
- **Menu bar**: Click through the main menu options to navigation to that functionality. Each menu opens a page with a number of modules that enable you to interact with VTR. Note that depending on your role, you may see only a subset of the menu items pictured.
- **Profile**: Opens a menu with information about your active session, as well as options for profile management, impersonation, and switch customers without logging off and on again.
- **Help**: Opens help about the current page in a new browser window.
- **Breadcrumbs**: Let you return to the previous page.
- **Customer**: Displays the name of the customer whose data you are viewing.

- **Current page** title: The current page title will always appear in large print in the centre top of the header.

Data information

Although the Analysis page provides a number of charts to present information, most other pages display data in a grid.



Click the arrows in the column headers to sort the data. To choose which columns appear, drop down the **Choose columns** list and select or clear the check boxes beside the data you want to view or hide, or click the **Check / Uncheck All** button to select/clear all fields with one click.

In most grids, you can also perform the following tasks:

- Filter the results as described on page 'Filter the results' on page 13
- Export the data as described on page 'Export the data' on page 14
- Update multiple table rows in bulk as described on page 'Update multiple table rows in bulk' on page 15

Filter the results

You can filter the data returned to display only those line items in which you are interested.

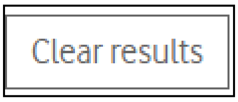
1. Above the table, click **Filter results**.

2. A drop down menu with a number of filtering options appears. You may filter on any data that appears in the grid. You can add and remove columns from the grid and by extension the filter list using the **Choose columns** drop down.

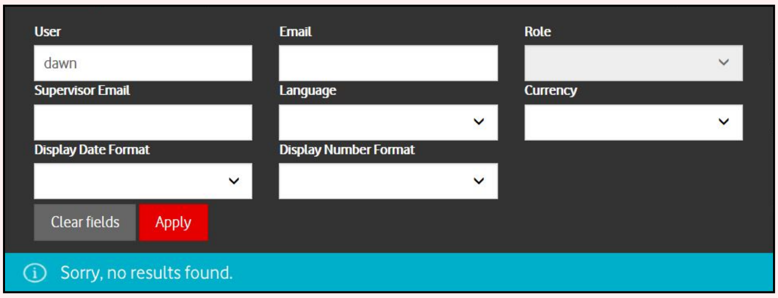
3. Type or select the fields on which you want to filter the data. For example, if **Date** is an option, you can select a date to narrow your results; if **Name** is an option, you can type as much of a name as you know, such as "Ab" to return all names that contain those letters.

Filtering on a **Start date** will display all records that begin on that date or later. Likewise, filtering on an **End date** will display all records that have an end date of any time up to and including the selected date. If there is only a single date field, then filtering on that date returns records that match that date exactly. When filtering on the **Create date** range, all records matching that create date range will be returned.

4. When you have finished defining your filters, click **Apply**.
5. The table filters to display only those records that match your filter criteria.
6. To return to the full view, click the **Clear results** button.



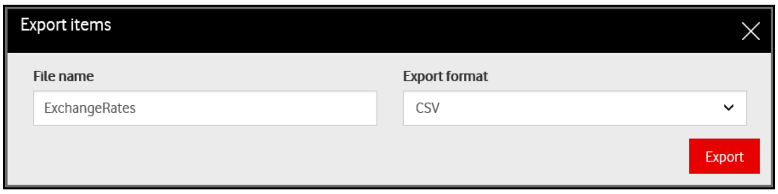
If your filter results in no matches found, then the filter menu will remain open with the message, "Sorry, no results found." Click **Clear fields**, and then try a wider filter.



Export the data

You can export data from the active grid in each module.

1. Above the grid, click **More**, and then choose **Export**.



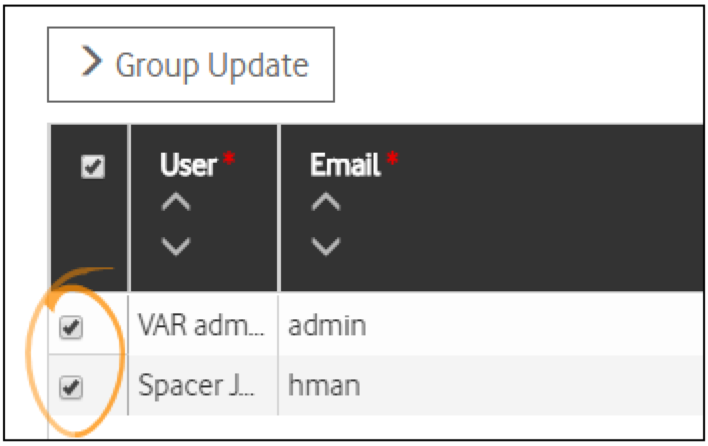
2. On the Export page, type the file name for your export, and then choose the available format in which you want to export the data: **XLSX** or **CSV**.
3. Click **Export**.
4. Follow your browser's instructions to save or open the exported file. Note that only the displayed data is exported; not all data available.

Update multiple table rows in bulk

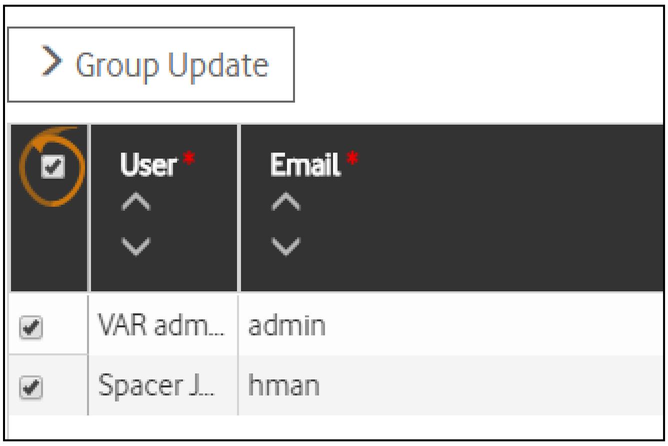
Group Updates can be done in various modules in VTR. Where Group Updates are available, follow the instructions below on how to apply them.

Not all fields in a module may be updated via the Group Update.

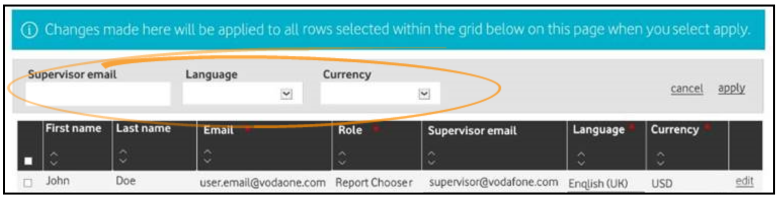
1. Choose which columns you want to appear.
2. In the active grid, select the check boxes in the first column of each row that you want to edit in bulk.



3. To select all the rows, click the check box in the header row.



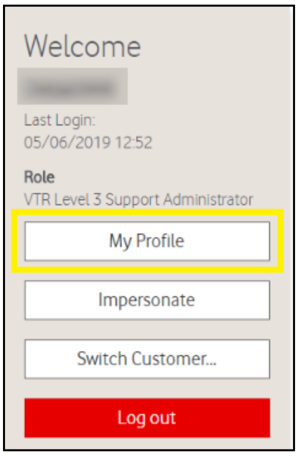
4. Click the **Group update** button.
   VTR displays the number of rows selected along with a tip that the changes you make will apply to all selected rows.
5. Above the table, blank editable boxes appear above each column header that contains editable information. Type or select the value of each field that you want to apply to all rows. For example, the table below shows Users. To assign the same Supervisor Email to the selected users. click in the **Supervisor email** box and type an address such as LineManager@mycompany.com, and then click **Apply**. The email address is applied to all selected users.



Manage your profile

Your profile manages your personal information and displays the account(s) to which you have access.

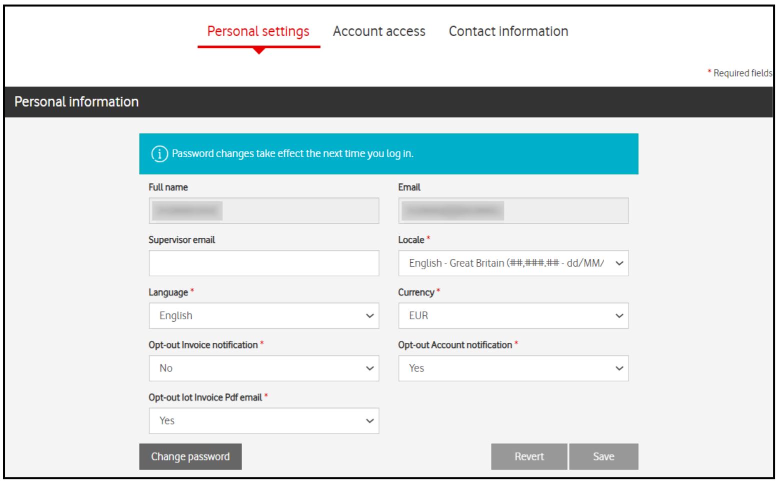
1. To manage your profile, click the person icon on the menu bar. The personal menu displays your name and last successful login attempt as well as your role.
2. Click **My Profile**.



The profile page is divided into three sections: Personal settings, Account access, and Contact info. Each is described below.

Personal settings: You may modify your language, date formats, currency, and your supervisor email.

By default, the **Personal settings** tab is selected.



1. Review your **Full name** and **Email** address. If any information is wrong, contact your administrator.
2. To modify your **Supervisor email** address, click in the box and type the new address using the format name@company.com. VTR will validate the address against basic email format rules.
3. To choose your **Locale**, which controls how your numbers (for example 1,000.00 for English and 1.000,00 for Italian) and dates (for example, 24 February 2017; 24/02/17; or Feb. 24, 2017) appear, drop down the Locale list and choose your country specific language and locale.
4. Drop down the **Language** list and choose the language in which you want the VTR application to appear.
5. Drop down the **Currency** list and choose the default currency in which your costs appear, but note that you can change the reporting currency at any time within the Analysis screen.
6. To receive email notifications of all new invoices, make sure that the **Opt-out Invoice notification** drop down is **No**. If you want to stop receiving these notifications, select **Yes**. You might choose to stop receiving notifications if you are a global user with permissions on all accounts in all countries. The default is **No**, but your selection here will override the configuration set in the Users module.
7. To receive email notifications of all new accounts added in the country with which you are associated, make sure that the **Opt-out Account notification** drop down is **No**. If you want to stop receiving these notifications, select **Yes**. You might choose to stop receiving notifications if you are a global user with permissions on all accounts in all countries. The default is **No**, but your selection here will override the configuration set in the Users module.
8. To receive email notifications of all new IoT PDF invoices, make sure that the **Opt-out Iot Invoice Pdf email** drop down is **No**. If you want to stop receiving these notifications, select **Yes**. This feature is only available for the IoT role. The default is **No**, but your selection here will override the

configuration set in the Users module.

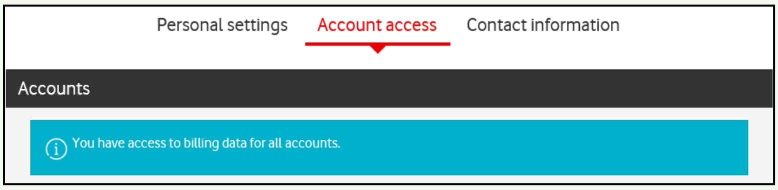
9. To change your password, click **Change your password**.

> If you are a Federated user, the **Change your password** button will be disabled. Your password is managed by your company's Identity Management System.

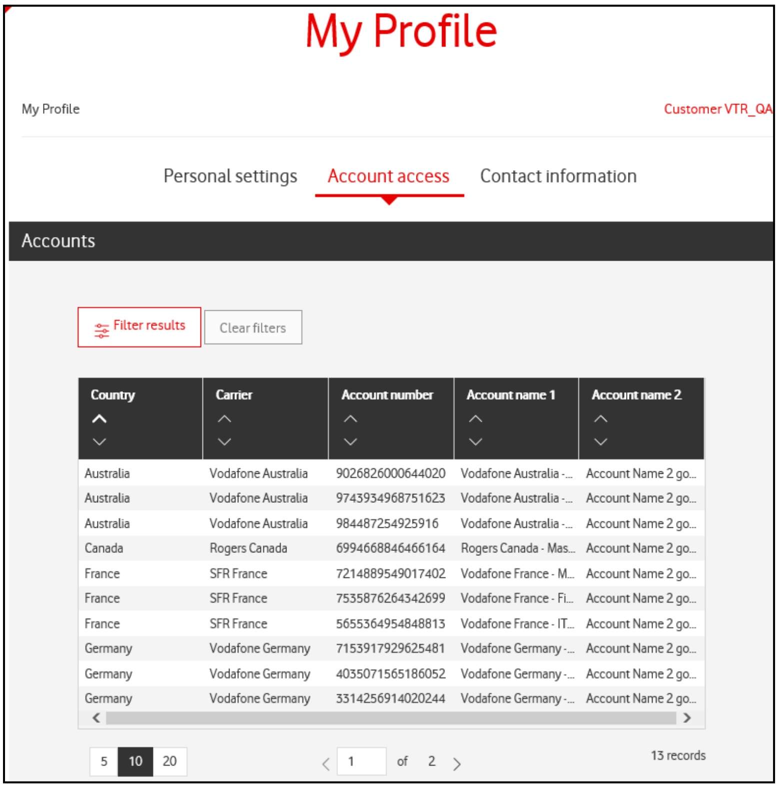
10. Click **Save**.

Account access: View the accounts to which you have access.

> If you have access to all accounts, you will see a message indicating that access. For more information, go to the Accounts page. See 'Manage accounts' on page 218.



To view the accounts with which you are associated, click the **Account access** tab on the My Profile page:



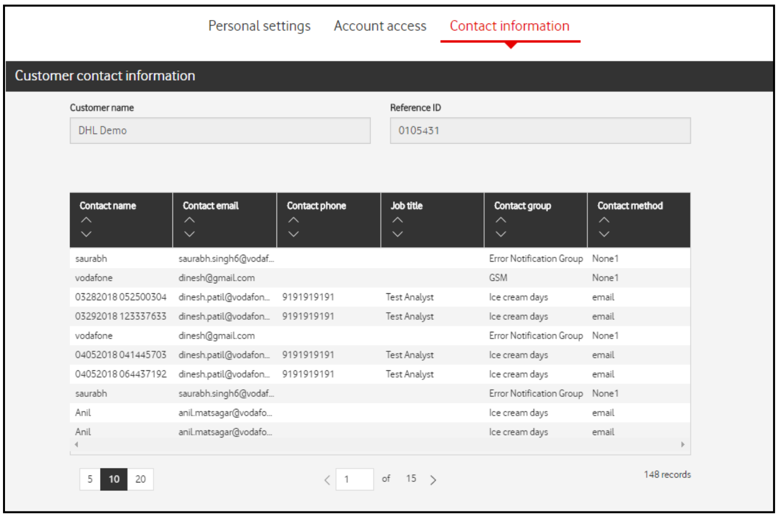
You will see a table with the **Country**, **Carrier**, **Account number**, **Account name 1**, and **Account name 2**. You can sort the data in ascending or descending order by clicking on any column header. If there is too much information, you can also filter the list. See 'Filter the results' on page 13. You may not modify any of this information.

Contact information: View contact information for each customer.

To view a customer's contacts, click the **Contact information** tab.

On the Customer contact information page, you can view the **Customer name** and **Reference ID**, which is a unique identifier assigned to the customer. For VGE customers this is the Global Account Number or GAN.

The table below displays each **Contact name**, **Contact email**, **Contact phone**, **Job title**, **Contact group**, and **Contact method**, as specified during the initial customer setup.



Unlock your account

If you are locked out of your account, wait 15 minutes and then try to log in again.

If it still fails, then contact your support team to restore your credentials. Once restored, support will send you an email instructing you on the login steps.

Note that to maintain security, you account will be locked for 15 minutes before you are permitted to access VTR.

Chapter 3: Analysing your spend

One of the key elements of understanding telecom expense needs is analysing and tracking spend—where and how is budget being spent? VTR provides dynamic reporting on high level views such as total spend, number of calls, or call duration and then offers drill down to analyse spend by location, inventory by service type, and other details over the past two years.

By default, any values are expressed in the following units of measure:

- duration = minutes
- spend = currency
- units = number
- volume = megabytes

You can view any of the following detailed reports:

- **'Review spend analysis by period' on page 22**: Including breakdown by duration, spend, units, or volume for the user set and time period you choose.
- **'Analyse spend trends by time period' on page 30**: Including weekly, monthly, and quarterly trending.
- **'Analyse bill details for the selected data set' on page 33**: Including a table of call details, including charge and analysis codes, for the selected user set.
- **'Review Red minimum spend analysis' on page 29**: Including a graph that displays the minimum and spent amounts, as well as months elapsed out of the contract length.
- **'Analyse Vodafone Usage Manager data' on page 37**: Including weekly, monthly, and quarterly VUM alerts.
- **'Analyse unbilled usage for the selected data set' on page 42**: Including unbilled usage details for the selected user set.
- **'Analyse data roaming usage for the selected data set' on page 45**: Including data roaming usage details for the selected user set.

Account Name: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Review spend analysis by period

The Analysis page reports on relative spend, monthly trend, and individual monthly details.

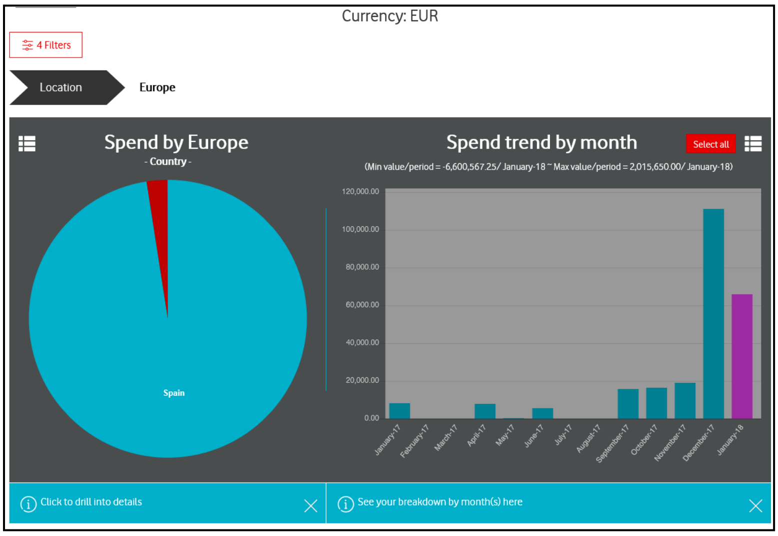
1. On the VTR menu, click **Analysis**. VTR displays multiple charts that offer progressive drill down into your spend details.
2. On the Analysis page, click **Filter** and choose the category, data type, and time period you want to view. You may filter all the way to the Service Owner for the finest granularity of details. For more information on how to set all of the filtering options that are available to you, see 'Filter the analysed spend data set' on page 51.
3. At the top of the page, click **Spend analysis**.
   The Spend analysis page is divided into two sections with related spend information based on the filter you choose in step 2.
   - 'Spend Analysis: Spend by category and Spend by month' on page 23: Displays the spend or consumption based on the category you select in a comparative pie chart along side a 13 month trend.
   - 'Spend Analysis: Spend details for the selected period' on page 28: Drills down into the details on the month(s) you select in the Spend trend by month graph.
   - 'Review spend analysis by period' on page 22: Shows relative spend or consumption over a global map.

By default, any values are expressed in the following units of measure:

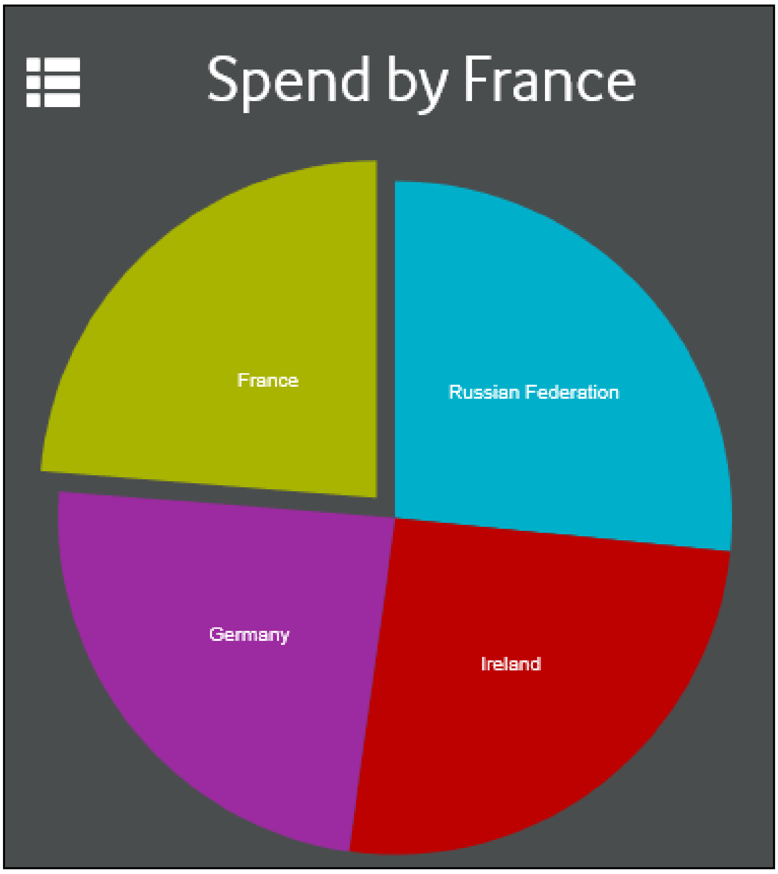
- duration = minutes
- spend = currency
- units = number
- volume = megabytes

Spend Analysis: Spend by category and Spend by month

The first set of Spend Analysis charts display the spend or consumption based on the category you select in a comparative pie chart along side a 13 month trend. The data representing each month is grouped by the invoice start date. Spend is always the default, but you can modify the data type and location using the Filter option. See 'Filter the analysed spend data set' on page 51.



- The pie chart depicts your relative spend by the category you selected in the filter. Double-click a slice to drill into the details:



Location: Region>Country>Service Owner>Service Number.

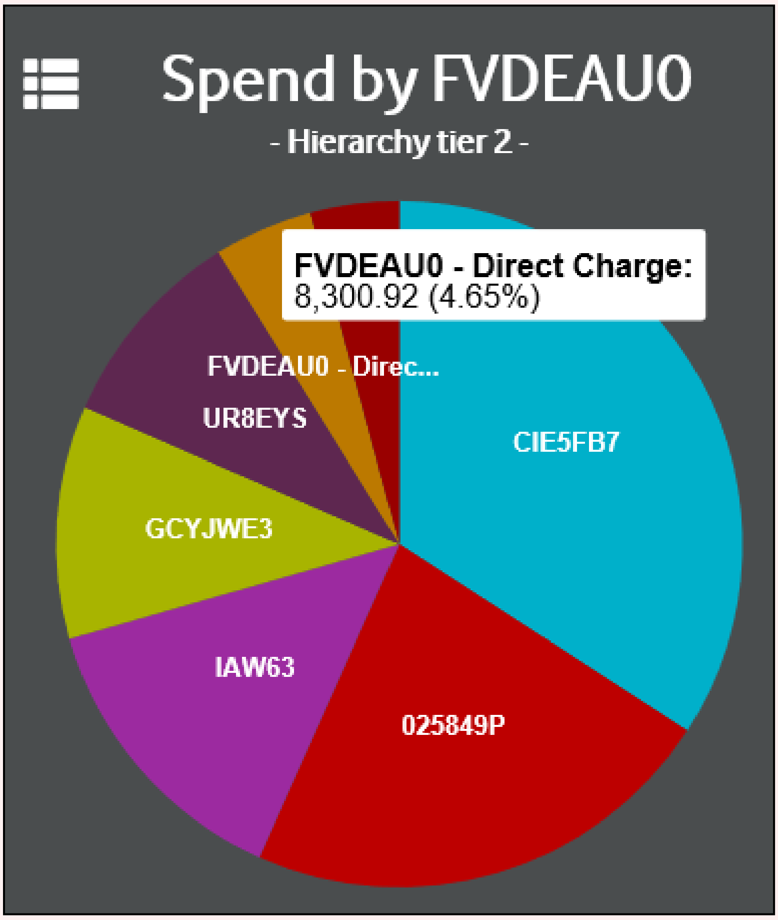
Top spenders: Top 25 Service Owners>Service Number.

Expense type: Item Type>Item Subtype>Carrier>Account Number>Service Owner>Service Number.

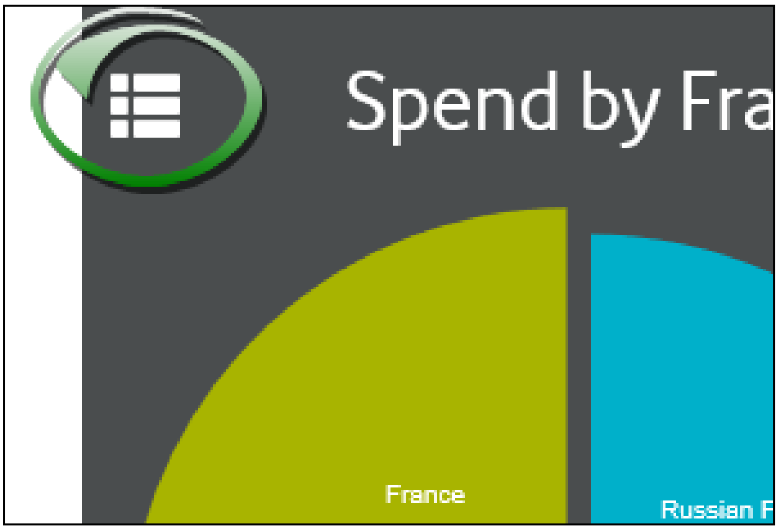
Carrier: Carrier>Account Number>Service Owner>Service Number.

Inventory: Service Class>Service Type>Region>Country>Service Owner>Service Number.

If you are drilling into an organizational cost centre hierarchy (Category=Organization), and the charge is posted to a mid level cost centre rather than the final level, the pie chart will indicate this charge with the text *Direct Charge*.



- To see the numeric breakdown of your totals in a table format, click the table icon in the upper left corner of the pie chart panel. Note that if there are more than 10 items in the breakdown, VTR automatically displays them in this table format rather than a pie chart.

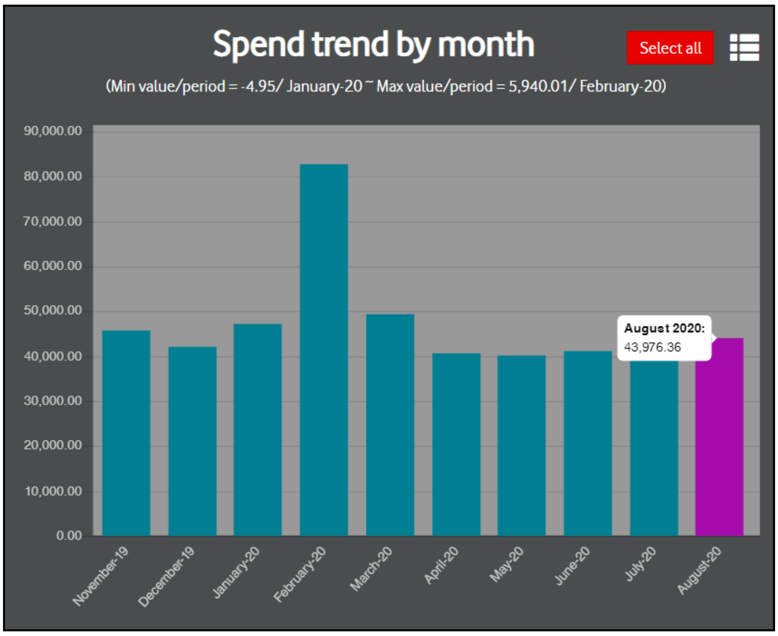


- VTR reports the details spend in a table form by data type and amount:

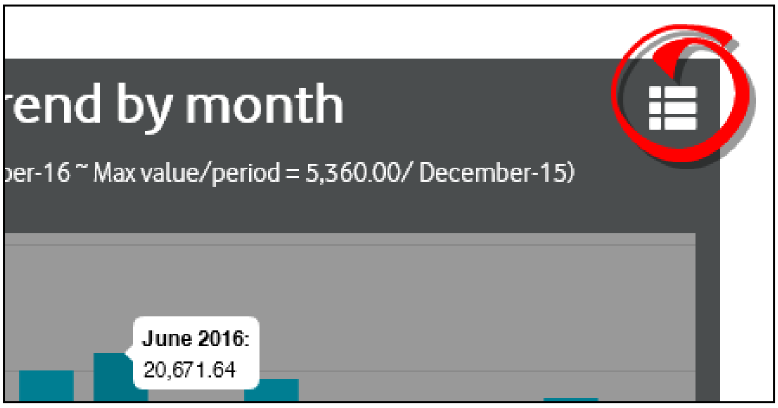
Spend by France

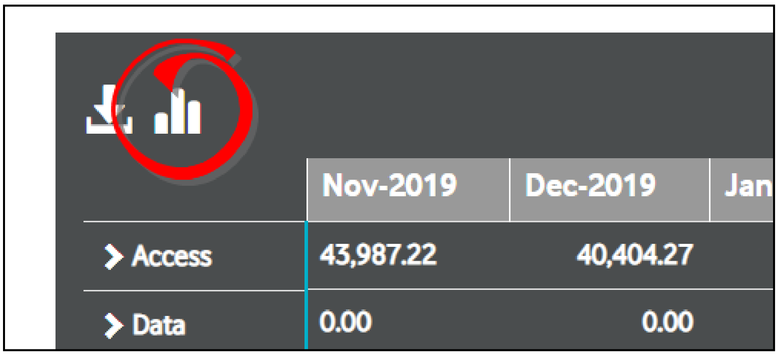
code	country	amount
ru	Russian Federation	24074.22
ie	Ireland	23190.86
de	Germany	21777.33
fr	France	21502.11

- At each drill level, such as Region>Country, the navigation pane shows an overall spend view, which is complemented by cost trend per month chart and spend by charge category table that update dynamically to show the monthly spend over 13 months. The minimum spend and the maximum spend over that period appears at the top of the chart.

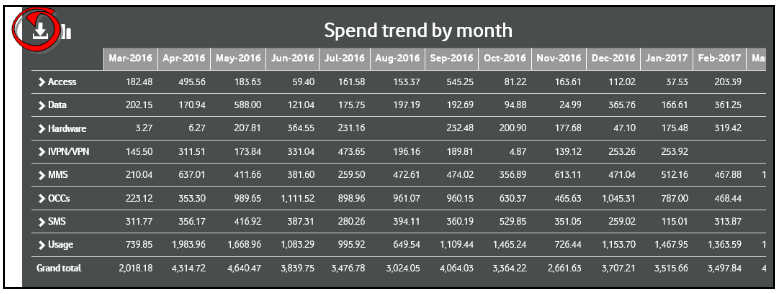


- To view spend over a multiple month period, click the bars representing each month you want to include. The totals update on the remaining charts on the page. To view data on all 13 months, click the **Select all** button above the chart. You can then individually click bars to exclude that month's data, or click **Clear all** to return to the current month selection.
- You can display this monthly spend in a table as well. Click the table icon in the upper right corner of the **Spend trend by month** panel. (Click the graph icon to return to Trend by Month Bar Chart.).





- VTR displays the detailed consumption for each month by charge type in a pivot table. You can drop down the arrow beside the charge type to see further details on the detail by analysis code. The image below shows units by month for each location.



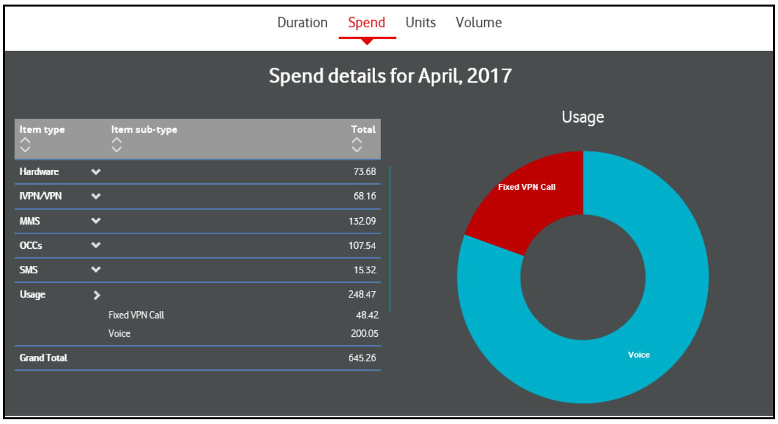
Spend trend by month

	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Jan-2017	Feb-2017	Ma
Access	182.48	495.56	183.63	59.40	161.58	153.37	545.25	81.22	163.61	112.02	37.53	203.39	
Data	202.15	170.94	588.00	121.04	175.75	197.19	192.69	94.88	24.99	365.76	166.61	361.25	
Hardware	3.27	6.27	207.81	364.55	231.16		232.48	200.90	177.68	47.10	175.48	319.42	
IVPN/VPN	145.50	311.51	173.84	331.04	473.65	196.16	189.81	4.87	139.12	253.26	253.92		
MMS	210.04	637.01	411.66	381.60	259.50	472.61	474.02	356.89	613.11	471.04	512.16	467.88	1
OCCs	223.12	353.30	989.65	1,111.52	898.96	961.07	960.15	630.37	465.63	1,045.31	787.00	468.44	
SMS	311.77	356.17	416.92	387.31	280.26	394.11	360.19	529.85	351.05	259.02	115.01	313.87	
Usage	739.85	1,983.96	1,668.96	1,083.29	995.92	649.54	1,109.44	1,465.24	726.44	1,153.70	1,467.95	1,363.59	1
Grand total	2,018.18	4,314.72	4,640.47	3,839.75	3,476.78	3,024.05	4,064.03	3,364.22	2,661.63	3,707.21	3,515.66	3,497.84	4

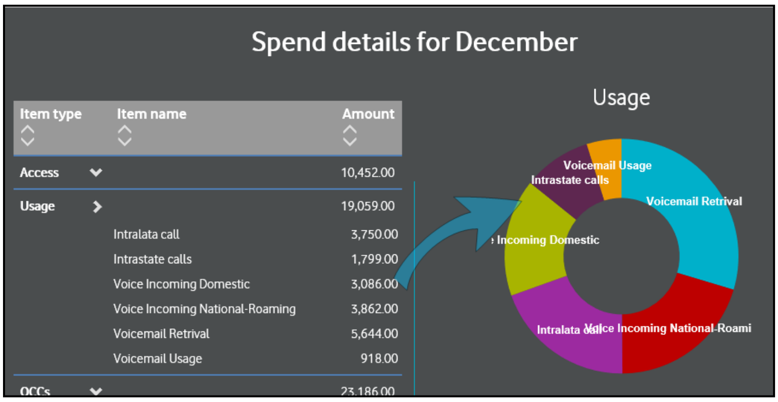
- To export this pivot table, click the export tool in the upper left of the panel. See 'Export spend details' on page 47.

Spend Analysis: Spend details for the selected period

The middle panel drills down into the details about the month(s) you selected: Click a month (or Ctrl+click multiple months) to see a further drill down in the **Spend Details** charts that appear in the middle panel of the Spend Analysis page.



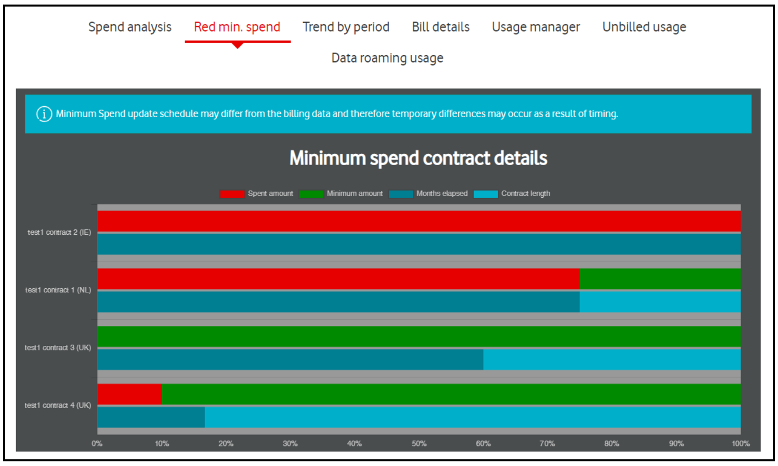
- The pivot grid on the left side of the middle panel displays spend by **Item type**, which you can then expand to drill into the details by **Item name**. For more information on the definitions of this data, see definition of spend types.
- The right side of the middle panel displays a doughnut chart depicting the relative spend for the selected months; when you double-click a section to drill into a specific type, the doughnut updates to display the details of that type.



- To learn how to export data from this grid, see 'Export spend details' on page 47.

Review Red minimum spend analysis

The **Red minimum spend** report allows you to compare the actual spend over the lifetime of the contract against the contracted minimum spend. This report is available for **Vodafone Group Enterprise (VGE) Red** and **Red Enterprise Bundles (EB)** customers.



1. On the VTR menu, click **Analysis**. VTR displays multiple charts that offer progressive drill down into your spend details.
2. At the top of the page, click **Red min. spend**.

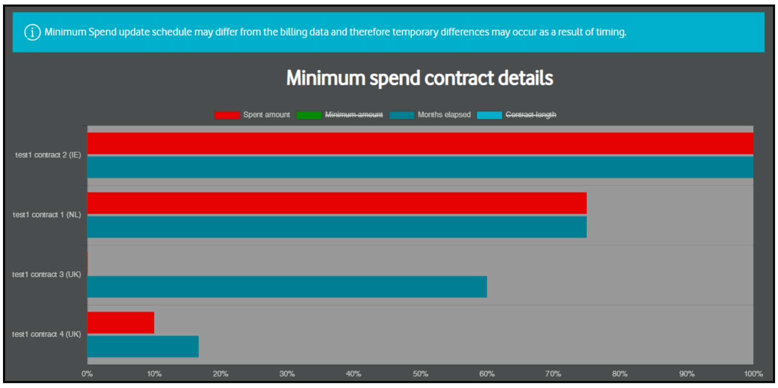
   > The **Red min. spend** tab is not displayed in case there is no available data.

   a. The **Minimum spend contract details** section displays 4 criteria on top of the graph:
      - **Spent amount**: The actual total spend fulfilled since the contract's start date.
      - **Minimum amount**: The minimum total spend to be fulfilled over the lifetime of the contract.
      - **Months elapsed**: The difference in months between the contract's start date and the current date.
      - **Contract length**: The total number of months between the contract's start date and the end date.

   b. On the left side of the graph, the contract display name is shown, along with the respective country code.

   c. In the graph, hover over a bar chart to view its value. The values displayed are those from the latest uploaded file, which may or may not differ from the values of the previous upload.

> In the **Minimum spend contract details** graph, you can hide/unhide specific values by clicking them. When a value is marked with a strikethrough, it is no longer visible in the graph. Multiple values can be hidden at the same time.

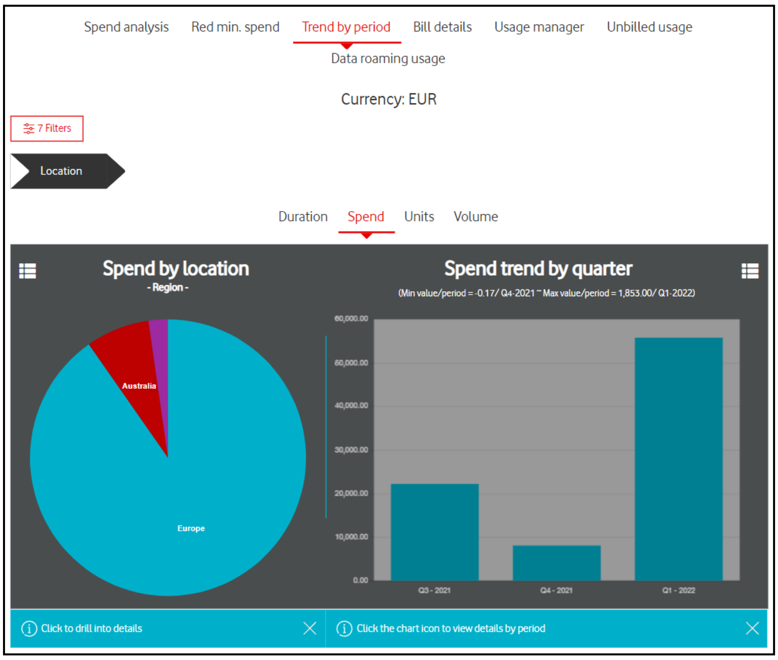


Analyse spend trends by time period

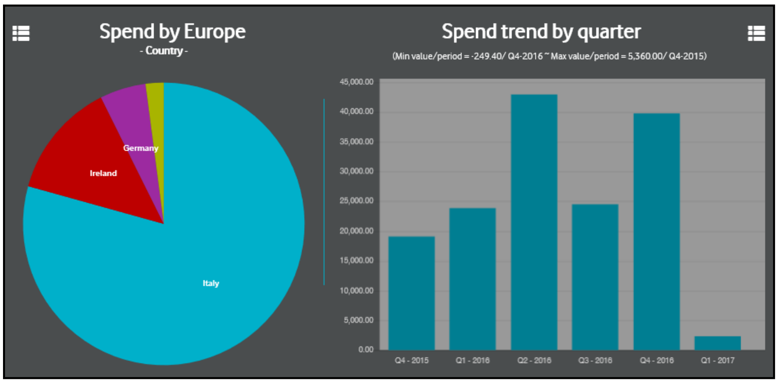
The Trend by period charts under Analysis display bar graphs to illustrate spend trends weekly, monthly (grouped by invoice start date), and quarterly for the selected data set.

1. On the VTR menu, click **Analysis**.
2. On the Analysis page, click **Filter** and choose the location and time period you want to view. You may filter all the way to the Service Owner for the finest granularity of details. see 'Filter the analysed spend data set' on page 51.
3. At the top of the page, click **Trend by period**.

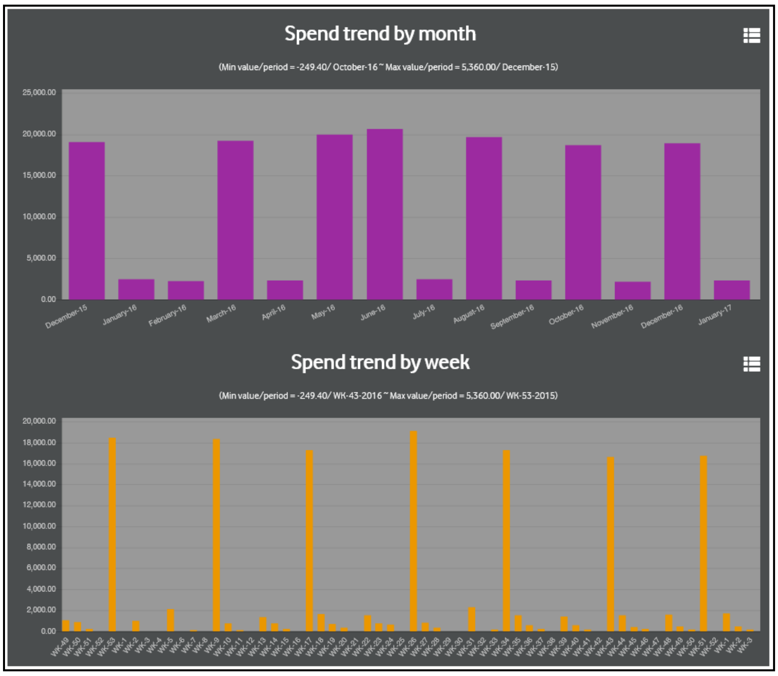
   The Trend by period page displays your spend or consumption by the data type you have selected.



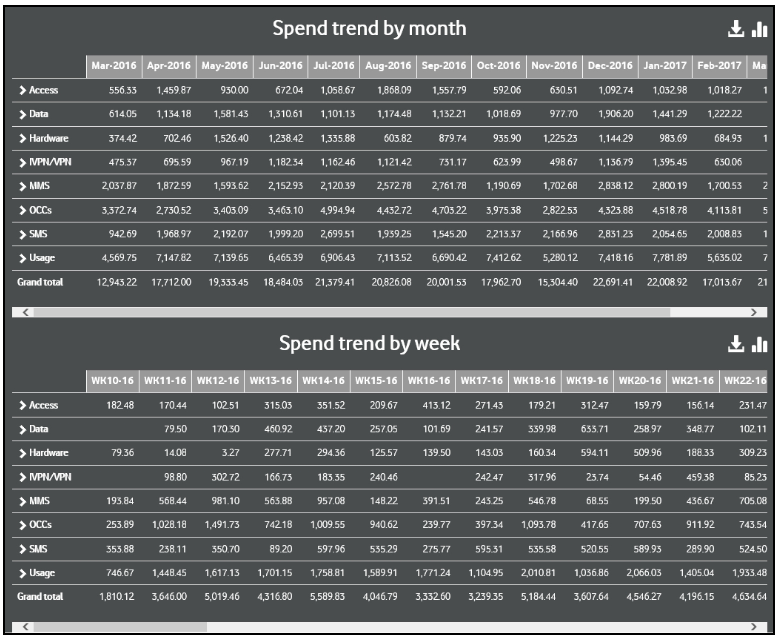
4. To view further granularity of data, double-click a slice of the pie. Below is an example of **Location>Europe>France**. Hover over the pie slice to see the actual values.



5. Notice the bar char on the right shows the relative consumption by **Quarter**. The minimum spend and the maximum spend over that period appears at the top of the chart. Below, the charts display the same information broken down by **Month** and by **Week**.



6. For any of these trending views, you can toggle between the bar chart and a grid view.The grid view provides a pivot display of Item type and Sub-type spend by the time period selected. For more information on the data that appears here, see Charge codes.



Spend trend by month

	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	Jan-2017	Feb-2017	Ma
Access	556.33	1,459.87	930.00	672.04	1,058.67	1,868.09	1,557.79	592.06	630.51	1,092.74	1,032.98	1,018.27	1
Data	614.05	1,134.18	1,581.43	1,310.61	1,101.13	1,174.48	1,132.21	1,018.69	977.70	1,906.20	1,441.29	1,222.22	
Hardware	374.42	702.46	1,526.40	1,238.42	1,335.88	603.82	879.74	935.90	1,225.23	1,144.29	983.69	684.93	1
IVPN/VPN	475.37	695.59	967.19	1,182.34	1,162.46	1,121.42	731.17	623.99	498.67	1,136.79	1,395.45	630.06	
MMS	2,037.87	1,872.59	1,593.62	2,152.93	2,120.39	2,572.78	2,761.78	1,190.69	1,702.68	2,838.12	2,800.19	1,700.53	2
OCCs	3,372.74	2,730.52	3,403.09	3,463.10	4,994.94	4,432.72	4,703.22	3,975.38	2,822.53	4,323.88	4,518.78	4,113.81	5
SMS	942.69	1,968.97	2,192.07	1,999.20	2,699.51	1,939.25	1,545.20	2,213.37	2,166.96	2,831.23	2,054.65	2,008.83	1
Usage	4,569.75	7,147.82	7,139.65	6,465.39	6,906.43	7,113.52	6,690.42	7,412.62	5,280.12	7,418.16	7,781.89	5,635.02	7
Grand total	12,943.22	17,712.00	19,333.45	18,484.03	21,379.41	20,826.08	20,001.53	17,962.70	15,304.40	22,691.41	22,008.92	17,013.67	21

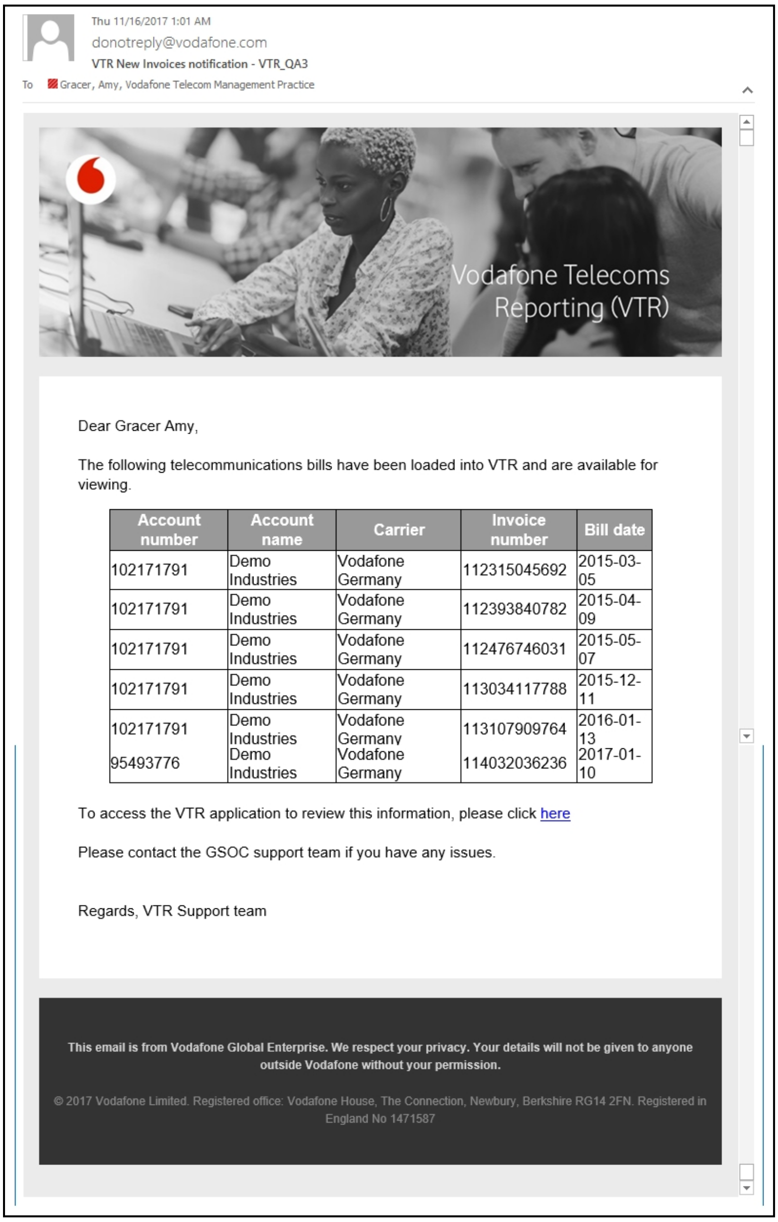
Spend trend by week

	WK10-16	WK11-16	WK12-16	WK13-16	WK14-16	WK15-16	WK16-16	WK17-16	WK18-16	WK19-16	WK20-16	WK21-16	WK22-16
Access	182.48	170.44	102.51	315.03	351.52	209.67	413.12	271.43	179.21	312.47	159.79	156.14	231.47
Data		79.50	170.30	460.92	437.20	257.05	101.69	241.57	339.98	633.71	258.97	348.77	102.11
Hardware	79.36	14.08	3.27	277.71	294.36	125.57	139.50	143.03	160.34	594.11	509.96	188.33	309.23
IVPN/VPN		98.80	302.72	166.73	183.35	240.46		242.47	317.96	23.74	54.46	459.38	85.23
MMS	193.84	568.44	981.10	563.88	957.08	148.22	391.51	243.25	546.78	68.55	199.50	436.67	705.08
OCCs	253.89	1,028.18	1,491.73	742.18	1,009.55	940.62	239.77	397.34	1,093.78	417.65	707.63	911.92	743.54
SMS	353.88	238.11	350.70	89.20	597.96	535.29	275.77	595.31	535.58	520.55	589.93	289.90	524.50
Usage	746.67	1,448.45	1,617.13	1,701.15	1,758.81	1,589.91	1,771.24	1,104.95	2,010.81	1,036.86	2,066.03	1,405.04	1,933.48
Grand total	1,810.12	3,646.00	5,019.46	4,316.80	5,589.83	4,046.79	3,332.60	3,239.35	5,184.44	3,607.64	4,546.27	4,196.15	4,634.64

7. To export this pivot table, click the export tool in the upper left of the panel. See 'Export spend details' on page 47.

Analyse bill details for the selected data set

Once daily, VTR sends an email notification about invoices that were loaded into the system over the past 24 hours. You will receive this invoice notification email for all accounts to which you have access.



Thu 11/16/2017 1:01 AM
donotreply@vodafone.com
VTR New Invoices notification - VTR_QA3
To Gracer, Amy, Vodafone Telecom Management Practice

Vodafone Telecoms Reporting (VTR)

Dear Gracer Amy,

The following telecommunications bills have been loaded into VTR and are available for viewing.

Account number	Account name	Carrier	Invoice number	Bill date
102171791	Demo Industries	Vodafone Germany	112315045692	2015-03-05
102171791	Demo Industries	Vodafone Germany	112393840782	2015-04-09
102171791	Demo Industries	Vodafone Germany	112476746031	2015-05-07
102171791	Demo Industries	Vodafone Germany	113034117788	2015-12-11
102171791	Demo Industries	Vodafone Germany	113107909764	2016-01-13
95493776	Demo Industries	Vodafone Germany	114032036236	2017-01-10

To access the VTR application to review this information, please click here

Please contact the GSOC support team if you have any issues.

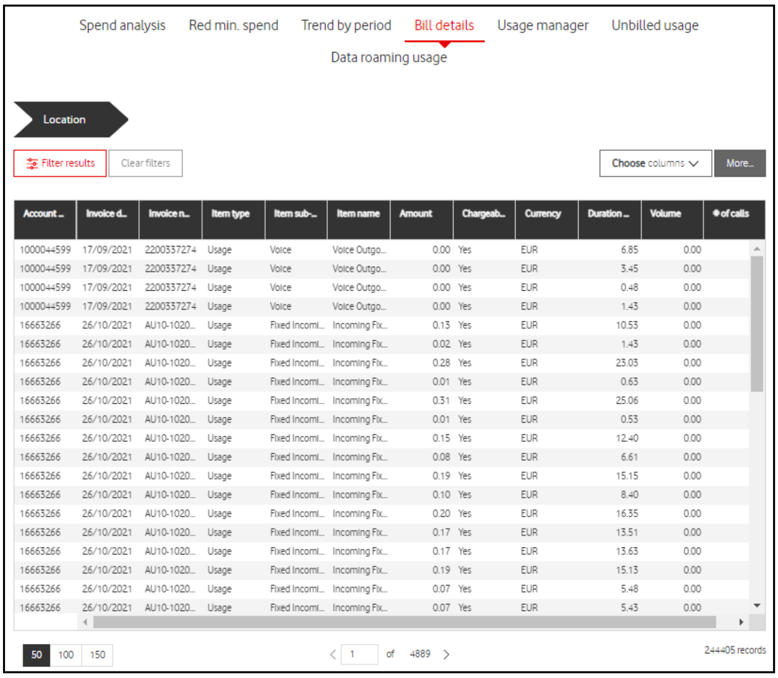
Regards, VTR Support team

This email is from Vodafone Global Enterprise. We respect your privacy. Your details will not be given to anyone outside Vodafone without your permission.

© 2017 Vodafone Limited. Registered office: Vodafone House, The Connection, Newbury, Berkshire RG14 2FN. Registered in England No 1471587

You can view details of those invoices in the **Bill details** tab on the **Analysis** page. **Bill details** displays a table of call details for the filtered set of data and time period.

1. On the VTR menu, click **Analysis**.
2. On the Analysis page, click **Filter** and choose the location and time period you want to view. You may filter all the way to the Service Owner for the finest granularity of details. See 'Filter the analysed spend data set' on page 51.
3. At the top of the page, click **Bill details**. VTR displays an itemized version of your bill:



Thu 11/16/2017 1:01 AM
donotreply@vodafone.com
VTR New Invoices notification - VTR_QA3
To Gracer, Amy, Vodafone Telecom Management Practice

Dear Gracer Amy,

The following telecommunications bills have been loaded into VTR and are available for viewing.

Account number	Account name	Carrier	Invoice number	Bill date
102171791	Demo Industries	Vodafone Germany	112315045692	2015-03-05
102171791	Demo Industries	Vodafone Germany	112393840782	2015-04-09
102171791	Demo Industries	Vodafone Germany	112476746031	2015-05-07
102171791	Demo Industries	Vodafone Germany	113034117788	2015-12-11
102171791	Demo Industries	Vodafone Germany	113107909764	2016-01-13
95493776	Demo Industries	Vodafone Germany	114032036236	2017-01-10

To access the VTR application to review this information, please click here

Please contact the GSOC support team if you have any issues.

Regards, VTR Support team

This email is from Vodafone Global Enterprise. We respect your privacy. Your details will not be given to anyone outside Vodafone without your permission.

4. Review the following information:
   - **Account number**: The identifier of the account on which the invoice was billed.
   - **Invoice date**: The date on which the invoice was issued.
   - **Invoice number**:The identifier of the bill on which the service appears.
   - **Item type**: The charge category. For details, see definition of spend types.
   - **Item sub-type**: The charge subcategory. For details, see definition of spend types.
   - **Item name**: A description of the charge
   - **Amount**: The total charge for the service.
   - **Chargeable**: An indicator that the call detail record is chargeable.
   - **Currency**: The currency type in which the charge was calculated.

- **Duration (mins)**: The total number of minutes used. Does not apply when viewing details on the Organization.
- **Volume**: The total data used, measured in gigabytes. Does not apply when viewing details on the Organization.
- **Number of calls**: The total number of call detail records identified as 'calls'. Calls where there is no charge have been excluded from the count.

5. To export this data, see 'Export spend details' on page 47.
6. To view more details, click the **Check / Uncheck All** button, select/clear all fields with one click, or drop down the **Choose columns** list and select any of the following:

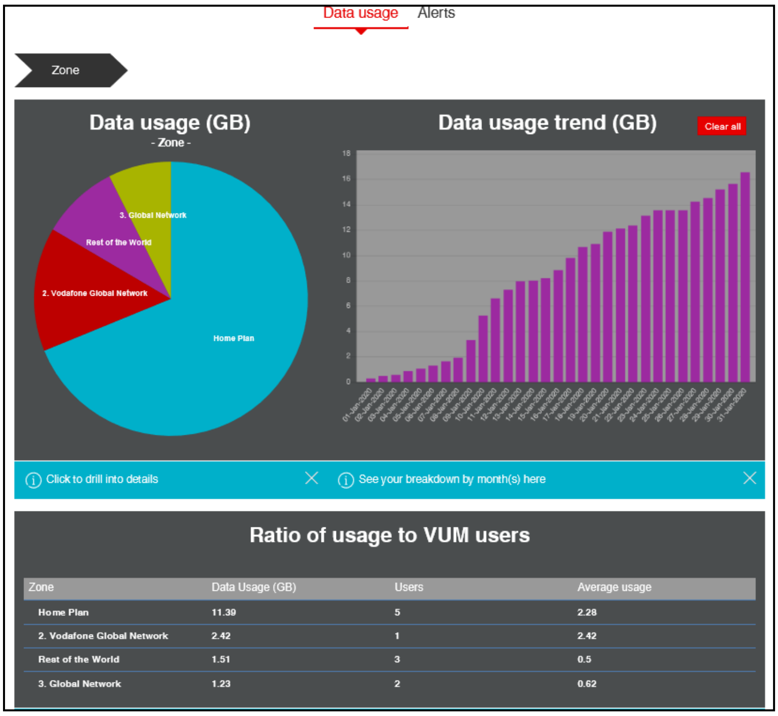
- **Called number**: The destination service number.
- **Called or calling country**: The destination country of the call.
- **Calling number**: The service number that placed the call.
- **Conference id**: The conference number attached to the service.
- **Contract id**: The identification number of the contract for services provided on this invoice.
- **Custom attribute 1-4**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, these fields will be disabled from editing.
- **End date**: The date on which the billing cycle ends.
- **Invoice label**: The identifier on a charge for a Vone RED zone tariff charge type.
- **Percentage charged**: At what percentage the service was charged: 100% is fully charged; 0% is free.
- **Plan Name**: Name of the plan with which the usage item is associated, for example "Voice Calls Pack." If the data is not a usage item, then this column is blank.
- **Product**: The plan package.
- **Roam country**: The country in which the roaming charges were applied.
- **Roam network**: The roaming network.
- **Service number**: The service number being charged.
- **Source Country**: Country where the data usage and calls were made.
- **Source Network**: Network operator that raised the data usage and call charge.
- **Start date**: The date on which the billing cycle starts.
- **Sub-account**: The non-billable account.
- **Subscriber cost centre**: The cost centre of the subscribers, particularly for conferencing services.
- **Subscriber first name**: The first name of the service subscriber, particularly for conferencing services.
- **Subscriber last name**: The last name of the service subscriber, particularly for conferencing services.
- **Target Country**: Country to which the call was made or data was used for.
- **Target Network**: Network operator the subscriber used when receiving a call.

- **Tariff type**: The rate category applied to the charge.
- **Usage date**: The date of the spend.
- **Usage time**: The time of the usage, displayed in **hh:mm:ss** format.
- **User email**: The email address of the service owner.
- **User ID**: User associated with the service. Used to aggregate all RED services to a single user.
- **VGE code**: The internal billing code. For details, see the definition of spend types.

Analyse Vodafone Usage Manager data

The Usage manager charts under Analysis display bar graphs to illustrate user alerts and data usage weekly, monthly, quarterly or for a pre-determined time range for the selected data set. The Usage manager tab becomes available only for the VUM-enabled users with all the VTR roles apart from the IoT users.

1. On the VTR menu, click **Analysis**.
2. On the Analysis page, click **Usage manager**.

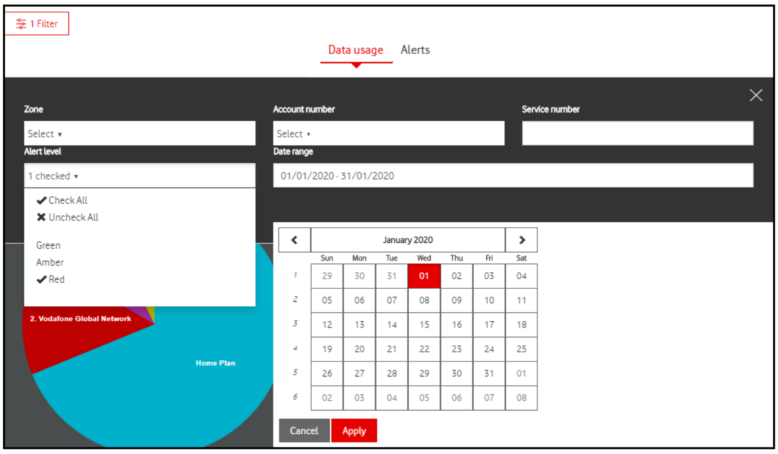


The tab opens with the **Data Usage** default sub-tab displayed.

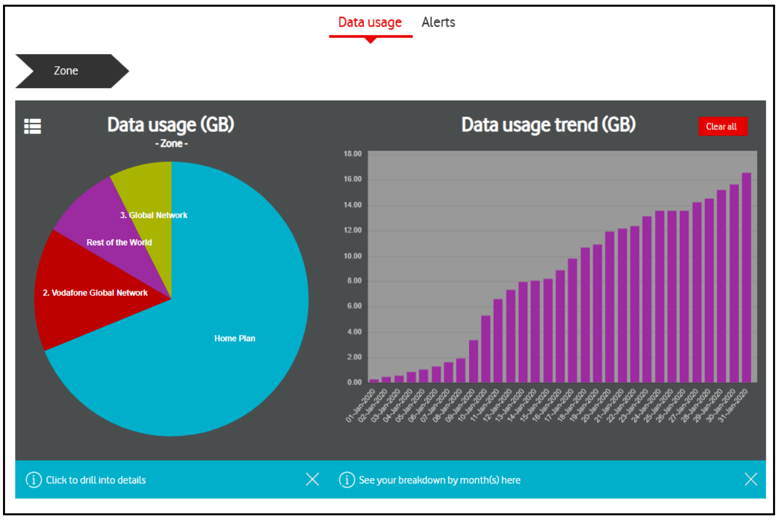
To view data usage

3. Under the **Usage manager** tab, click **Data usage**.

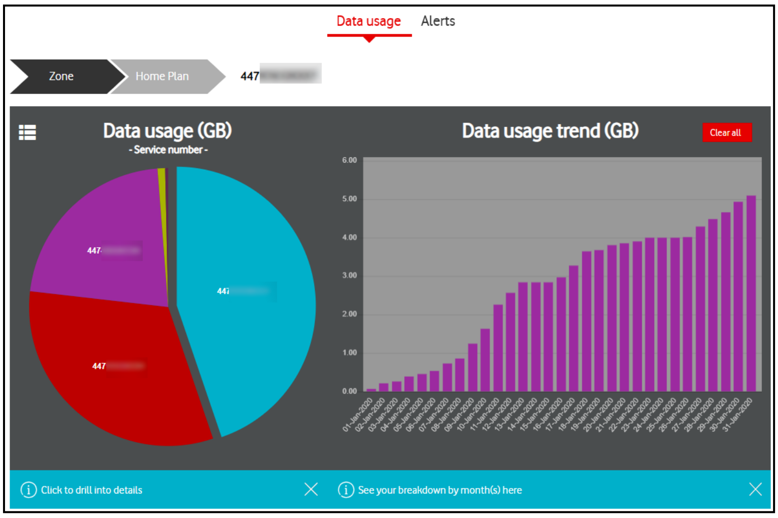
4. To narrow the data usage information displayed, click **Filter** and choose any of the filtering fields. By default, the filters applied are for Red alerts. You can also select here the date range for which you can see the data usage: click **Date range**, navigate to the month for which you want to see the alerts, click the day of the month, and then click **Apply**.



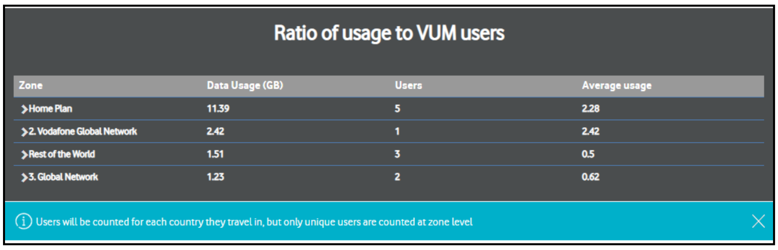
5. The Usage manager tab, **Data usage** sub-tab, displays by default the data usage by zone in pie chart format and the daily data usage generated for the last 31 days in bar chart format.



6. To view further granularity of data usage, double-click any of the zones in the pie chart. Notice that the bar chart on the right changes data according to the zone you have selected on the left.



7. Scroll down to view the **Ratio of usage to VUM users** section. This bar chart displays the data usage for the last 30 days, plus the current day. The current day is selected by default. In case no data has been loaded for the current day, the data for yesterday is displayed.

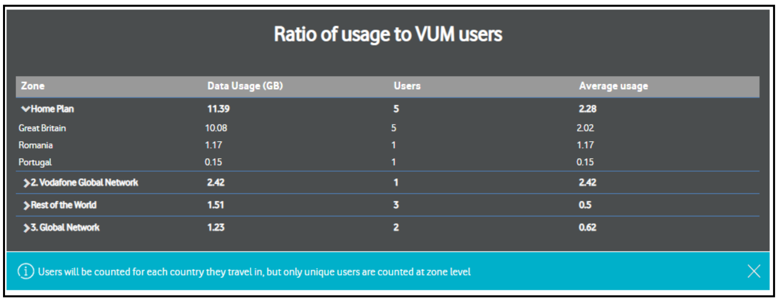


Ratio of usage to VUM users

Zone	Data Usage (GB)	Users	Average usage
Home Plan	11.39	5	2.28
2. Vodafone Global Network	2.42	1	2.42
Rest of the World	1.51	3	0.5
3. Global Network	1.23	2	0.62

Users will be counted for each country they travel in, but only unique users are counted at zone level

8. (Optional) Click the arrow next to a zone to expand the countries included in that zone.



Ratio of usage to VUM users

Zone	Data Usage (GB)	Users	Average usage
Home Plan	11.39	5	2.28
Great Britain	10.08	5	2.02
Romania	1.17	1	1.17
Portugal	0.15	1	0.15
2. Vodafone Global Network	2.42	1	2.42
Rest of the World	1.51	3	0.5
3. Global Network	1.23	2	0.62

Users will be counted for each country they travel in, but only unique users are counted at zone level

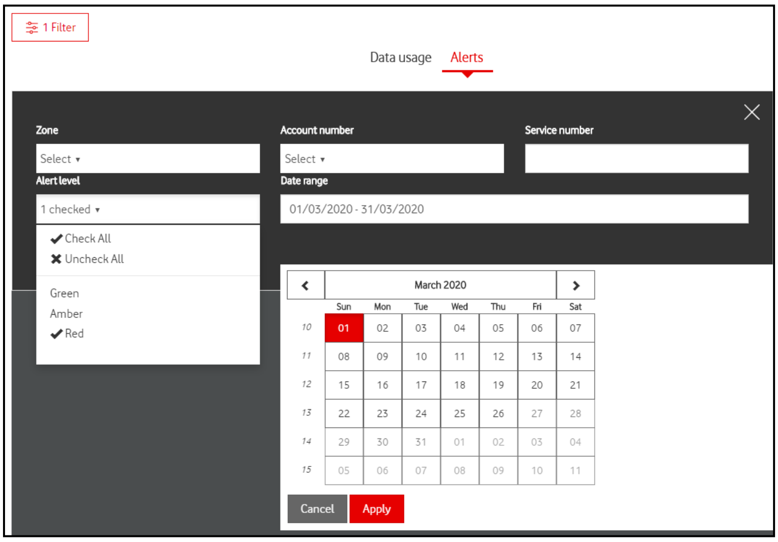
You can see the following information:

- **Zone**: The zone for which the data usage has been registered.
- **Data usage**: Data used in GB per the period selected.
- **Users**: Number of users for whom the data usage has been recorded.
- **Average usage**: Average data usage per user.

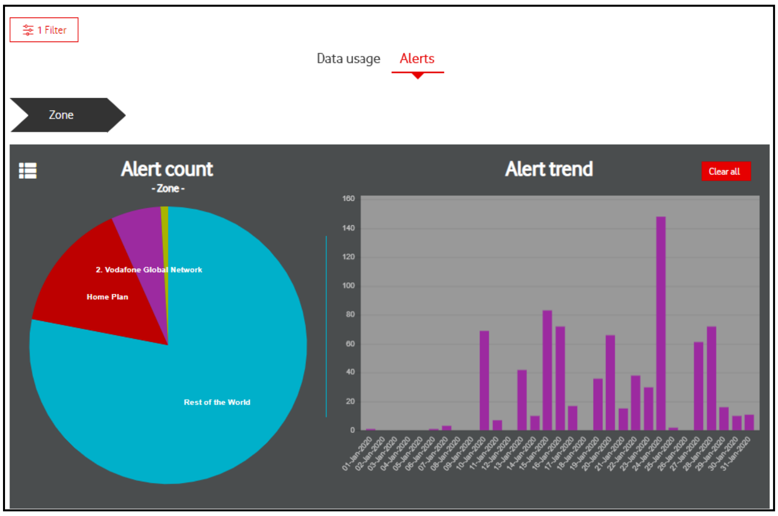
For more details about filtering VUM data, refer to 'Filter the analysed spend data set' on page 51.

To see the VUM alerts

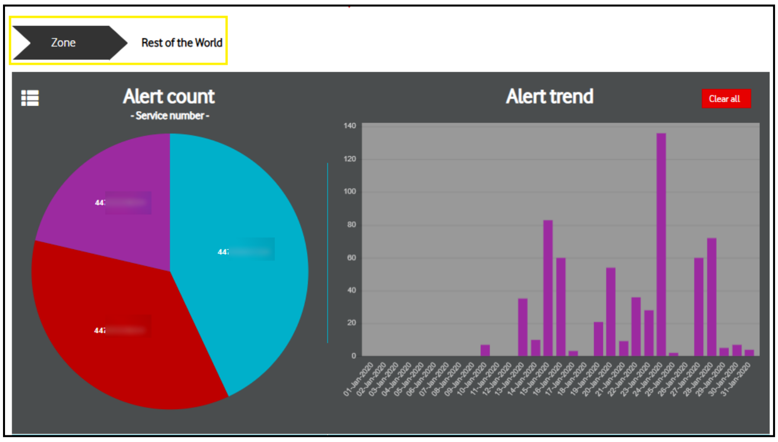
To narrow the alerts displayed, click **Filter** and choose any of the filtering fields. By default, the filters applied are for **Red** alerts. You can also select here the date range for which you can see the alerts data: click **Date range**, navigate to the month for which you want to see the alerts, click the day of the month, and then click **Apply**.



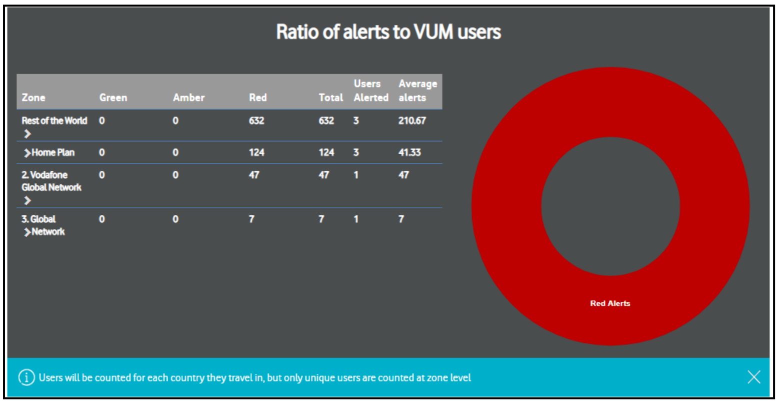
The Usage manager tab, **Alerts** sub-tab, displays by default the alerts by zone in pie chart format and the daily alerts generated for the last 31 days in bar chart format.



To view further granularity of data, double-click any of the zones in the pie chart. Notice that the bar chart on the right changes data according to the zone you have selected on the left.



Scroll down to view the Ratio of alerts section. This bar chart displays the alerts for the last 30 days, plus the current day. The current day is selected by default. In case no data has been loaded for the current day, the data for yesterday is displayed.



Zone	Green	Amber	Red	Total	Users Alerted	Average alerts
Rest of the World	0	0	632	632	3	210.67
Home Plan	0	0	124	124	3	41.33
2. Vodafone Global Network	0	0	47	47	1	47
3. Global Network	0	0	7	7	1	7

You can also see the following information:

- **Zone**: the zone for which the alert has been triggered.
- **No of Alerts per type**: Number of alerts generated per alert type: green, amber, and red.
- **Total**: Total number of alerts generated
- **Users Alerted**: The number of users that have received alerts.
- **Average alerts**: Average number of alerts per user.

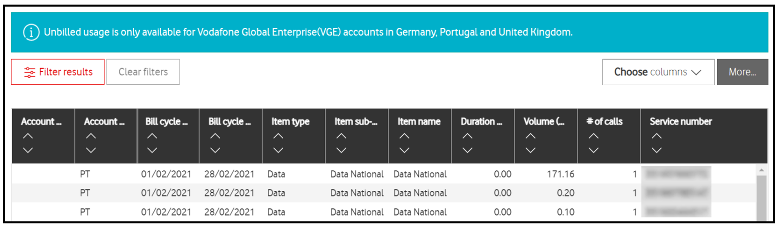
Analyse unbilled usage for the selected data set

Users are able to view the unbilled data usage, for all the accounts to which they have access.

You can view such details in the **Unbilled usage** tab on the **Analysis** page. **Unbilled usage** displays a table of details for the filtered set of data and time period.

> This feature is currently available only for selected tariffs and specific billing accounts: Germany, Portugal and United Kingdom. Please contact your Account Manager to find out if you are eligible.

1. On the VTR menu, click **Analysis**.
2. At the top of the page, click **Unbilled usage**. VTR displays an itemized version of the unbilled usage.
3. VTR retrieves unbilled usage records and displays the first 100 (by default). You can filter on a number of fields. To learn more about how to narrow your search, click **Filter results**. See 'Filter the results' on page 13.



4. Review the following information:
   - **Account number**: The identifier of the account on which the invoice was billed.
   - **Account country**: The country associated with the location of an account.
   - **Bill cycle start date**: The start date of the billing cycle.
   - **Bill cycle end date**: The end date of the billing cycle.
   - **Item type**: The charge category. For details, see definition of spend types.
   - **Item sub-type**: The charge subcategory. For details, see definition of spend types.
   - **Item name**: A description of the charge.
   - **Duration (mins)**: The total number of minutes used.
   - **Volume (MB)**: The total data used, measured in megabytes.
   - **Number of calls**: The total number of call detail records identified as ‘calls’.
   - **Service number**: The service number being used.
   - **User ID**: User associated with the service. Used to aggregate all RED services to a single user.
   - **Usage date**: The date of the usage, displayed in **DD/MM/YYYY** format.
   - **Zone**: The Zone where the usage occurred. Zones are based on regions.

5. To export this data, see 'Export spend details' on page 47.
6. To view more details, click the **Check / Uncheck All** button, select/clear all fields with one click, or drop down the **Choose columns** list and select any of the following:
   - **Account Currency**: The currency associated with the account.
   - **Called number**: The destination service number.
   - **Calling number**: The service number that placed the call.
   - **Conference id**: The conference number attached to the service.
   - **Contract id**: The identification number of the contract for services provided on this invoice.
   - **Product**: The plan package.
   - **Rated date**: The usage rate date, displayed in **DD/MM/YYYY** format.
   - **Rated time**: The usage rate time, displayed in **hh:mm:ss** format.
   - **Source country**: Country where the data usage and calls were made.
   - **Source network**: Network operator that raised the data usage and call usage.
   - **Subscriber cost centre**: The cost centre of the subscribers, particularly for conferencing services.
   - **Subscriber first name**: The first name of the service subscriber, particularly for conferencing services.
   - **Subscriber last name**: The last name of the service subscriber, particularly for conferencing services.
   - **Target country**: Country to which the call was made.
   - **Target network**: Network operator to which the call was made.
   - **Usage time**: The time of the usage, displayed in **hh:mm:ss** format.
   - **User email**: The email address of the service owner.
   - **VGE code**: The internal billing code. For details, see definition of spend types.

Understanding Worry Free Roaming

The front page of the monthly statement provides information about:

- the bundle that you were optimized to and your actual usage for the month
- your plan and out of bundle costs
- device access and service fees
- the total chargeable amount for the month, including VAT, across all devices.

If you are entitled for company contribution, you will see the amount paid by your company in the **Company contribution** section.

About Worry Free Roaming (WFR)

The WFR service allows both the end user and the customer admin to avoid 'bill shock' incidents due to roaming in a high-cost country.
The VGE Red Tariff provides WFR across 132 territories. Customers can continue to use data services across a further 60 territories (Zone 4 countries), but this is charged at £20 per 50Mb, potentially resulting in high costs or 'bill shock'.

End User Notifications

When the WFR service detects a user in a Zone 4 country consuming data, they will receive an initial SMS advice notification:

Hello! We have recently detected that you have started to use mobile data in {country name}. This is in our Rest of the World Zone 4 region. Mobile data here is not included in your domestic bundle. You will either be charged in blocks of 50Mb or impact your company pool, depending on your plan. Data usage costs are high here so you should try to avoid streaming video or other data intensive activities. You may wish to locate Wi-Fi services before carrying out such activity. Thank you, Vodafone Business

Whilst the user remains in a Zone 4 country and continues to use data, they will receive an additional SMS advice notification every 24 hours.

Customer Administrator Notifications

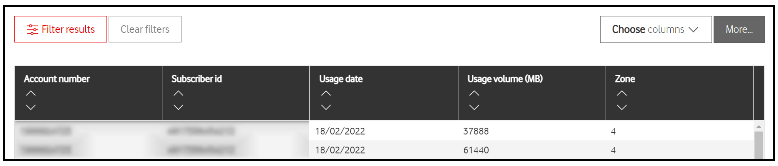
Any unbilled roaming data is aggregated and made available in near real time through the 'RoW Data Roaming Unbilled Usage Report' on page 138. The report can be scheduled and emailed to customer administrators (with a customer specified data volume threshold if required).
This information allows customer administrators to spot excessive Zone 4 data usage and act before a 'bill shock' event occurs.

Analyse data roaming usage for the selected data set

Users are able to view the data roaming usage, for all the accounts to which they have access.

You can view such details in the **Data roaming usage** tab on the **Analysis** page. **Data roaming usage** displays a table of details for the filtered set of data and time period. This tab is only visible if the **Customer Configuration** value for this feature is set to Yes.

1. On the VTR menu, click **Analysis**.
2. At the top of the page, click **Data roaming usage**. VTR displays an itemized version of the data roaming usage.
3. VTR retrieves data roaming usage records and displays the first 100 (by default). You can filter on a number of fields. To learn more about how to narrow your search, click **Filter results**. See 'Filter the results' on page 13.



4. Review the following information:
   - **Account number**: The identifier of the account on which the invoice was billed.
   - **Subscriber ID**: Subscriber ID associated with the service.
   - **Usage date**: The date of the usage, displayed in **dd/mm/yyyy** format.
   - **Usage volume (MB)**: The total data used, measured in megabytes.
   - **Zone**: The Zone where the usage occurred. Zones are based on regions.
5. To export this data, see 'Export spend details' on page 47.
6. To view more details, click the **Check / Uncheck All** button, select/clear all fields with one click, or drop down the **Choose columns** list and select any of the following:
   - **Source country**: Country where the data usage was made.
   - **Source network**: Network operator that raised the data usage.
   - **Subscriber ID**: Subscriber ID associated with the service.
   - **Usage date**: The date of the usage, displayed in **dd/mm/yyyy** format.
   - **Usage volume (MB)**: The total data used, measured in megabytes.
   - **Zone**: The Zone where the usage occurred. Zones are based on regions.

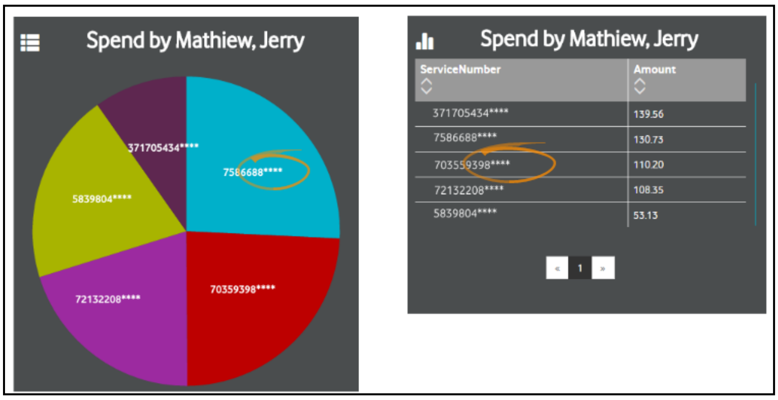
Understanding call masking

Call Masking hides a pre-determined number of digits of the called, calling number, and/or the service number, as displayed in the Spend Analysis and Services modules, as well as any data exports from the modules or reports:

- The **called number** is either masked or unmasked, depending on how the customer has instructed the carrier to implement this. This may range from masking all called numbers or it can be selective to specific customer telephone numbers. The customer can also request via their Vodafone partner or operating company to mask called numbers at company level or individual customer telephone numbers (VIP).
- The **calling number** is masked by default.
- The **service number** is not masked by default, but you can mask individual service numbers or all service numbers belonging to an account.

You may want to unmask the service number. The CTN Masking setting in the Accounts or Services modules will allow you to do this. This masking protects the identity of the service owner during data analysis. However, note that even if your service number is configured for masking and will appear masked in reports, you will always be allowed to see your own service number.

Masked service numbers appear with asterisks replacing the last 4 digits as follows:



Administrators can configure call masking of the CTN at the Account level and the Service Number level. To learn how to configure call masking, see 'Configure call masking for a service' on page 241.

Account level masking applies to all services that belong to that account; however, an individual service number's masking takes precedence over the account setting, unless the account setting is stricter. See the following table for details:

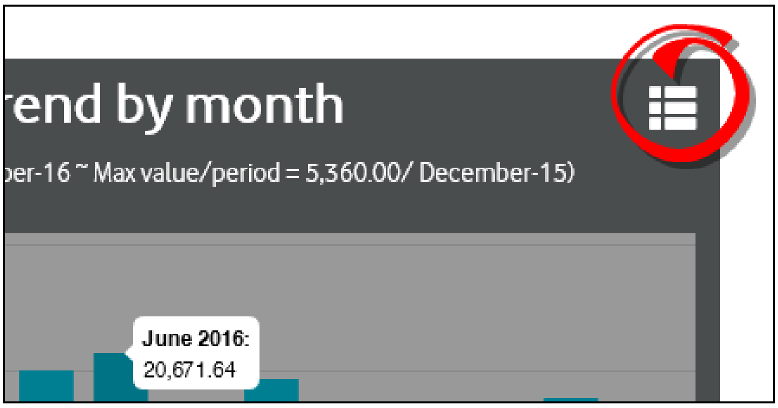
	Service setting	Account Setting	CTN	CDR
Use Case	CTN Masking	CTN Masking	Service Number	Calling Number
1 (Default)	On	On	Masked	Masked
2	On	Off	Masked	Masked
3	Off	Off	Not Masked	Masked
4	Off	On	Not masked	Masked

Export spend details

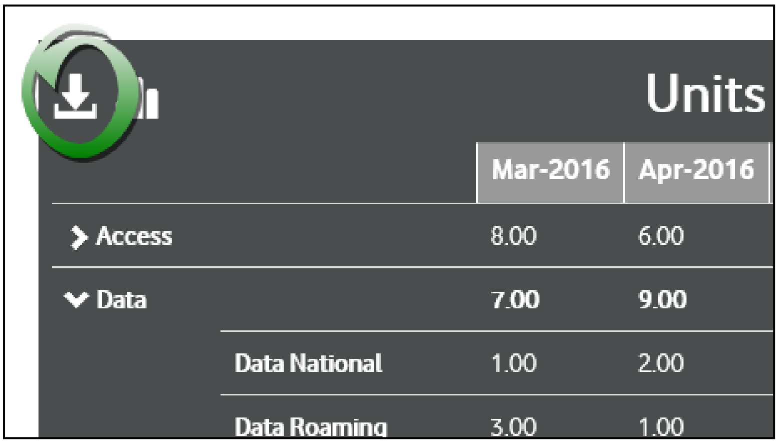
You can export spend details from the Spend Analysis, Trend by Period, or Bill Details pages of Spend Analysis.

To export from Spend analysis

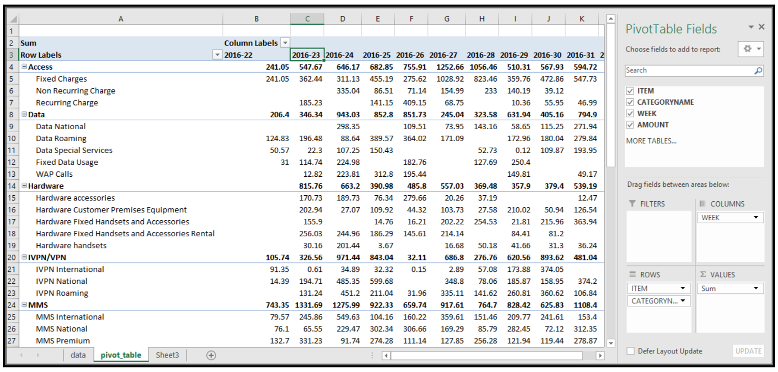
1. On the 'Review spend analysis by period' on page 22 page, click the graph icon in the upper right corner of the Spend by Month bar chart.



2. The Spend Trend by Month pivot grid appears. To export this pivot data to Microsoft Excel™ xlsx format, click the export icon in the upper left corner of the grid panel.

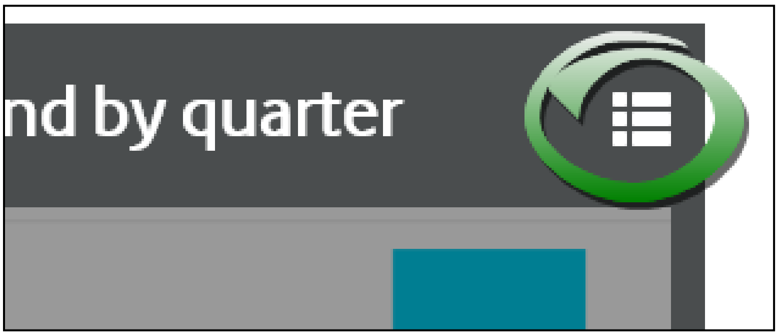


3. Follow your browser's standard procedure for downloading and saving the xlsx file.

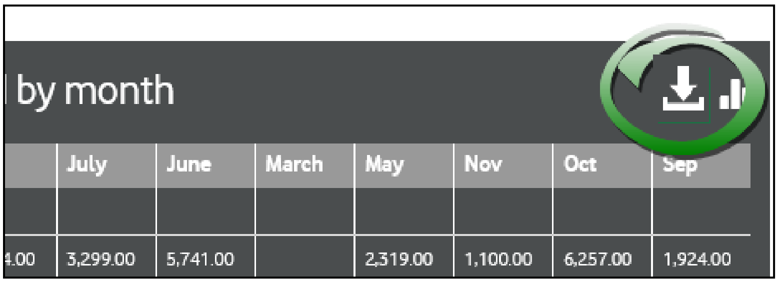


To export from Trend by period

1. On the 'Analyse spend trends by time period' on page 30 page, click the graph icon in the upper right corner of any of the Spend by Period bar charts.



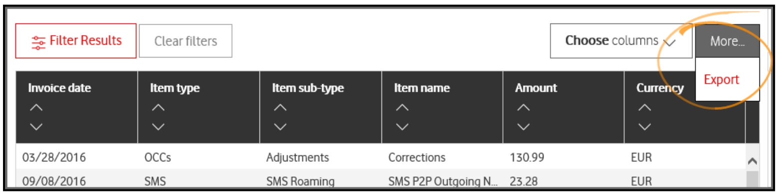
2. The Spend Trend by Period (Quarter, Month, or Week) pivot grid appears. To export this pivot data to Microsoft Excel™ xlsx format, click the Excel icon in the upper right corner of the grid panel.



3. Follow your browser's standard procedure for downloading and saving a file.

To export bill details

1. Review Bill Details and choose the columns you want to include in the export as described in 'Analyse bill details for the selected data set' on page 33.
2. Click the **More** button, and then click **Export**.

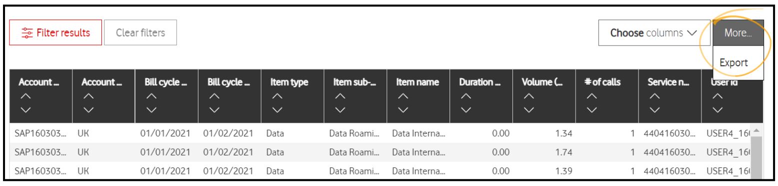


3. In the Export items pop-up, choose the **File name** and **Format** (either CSV or XLSX) for the exported data.

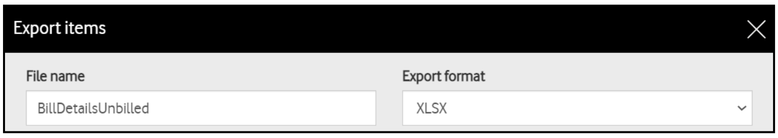
4. Click **Export**.
5. Follow your browser's standard procedure for downloading and saving a file.

To export unbilled usage details

1. Review unbilled usage and choose the columns you want to include in the export as described in 'Analyse unbilled usage for the selected data set' on page 42.
2. Click the **More** button, and then click **Export**.



3. In the Export items pop-up, choose the **File name** and **Format** (either CSV or XLSX) for the exported data.



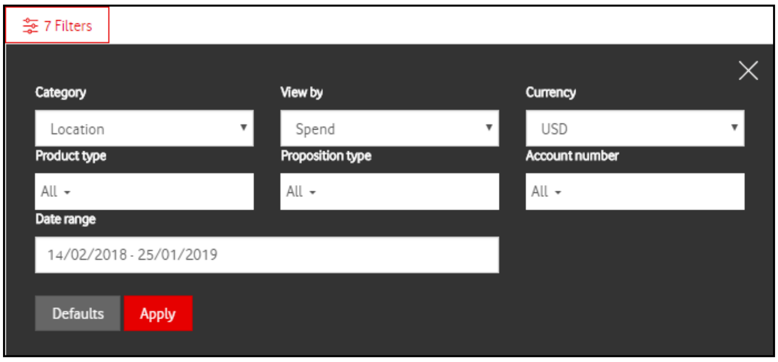
4. Click **Export**.
5. Follow your browser's standard procedure for downloading and saving a file.

Filter the analysed spend data set

Filter spend data set

To display spend and usage details on the most granular level desired, you can filter by the primary category, and then drill down to the lowest level of detail you want to view.

1. On the **Analysis** page, click **Filter** to narrow down the number of usage detail records that appear, and choose your criteria. See 'Filter the results' on page 13.



2. From the **Category** list, choose how you want your data displayed, by:

- **Location**: Region>Country>Service Owner>Service Number

- **Organization**: Cost Code Hierarchy Tier 1 . . . 5>Service Owner>Service Number

  If your Company is not set up to use Cost Centres, then the Organization option in the filter will not be available.

- **Top spenders**: Top 25 Service Owners>Service Numbers

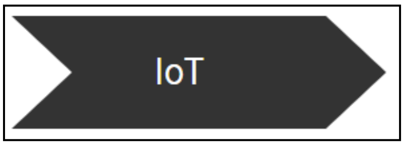
- **Expense type**: Item Type>Item Subtype>Carrier>Account Number>Service Owner

- **Carrier**: Carrier>Account Number>Service Owner>Service Number

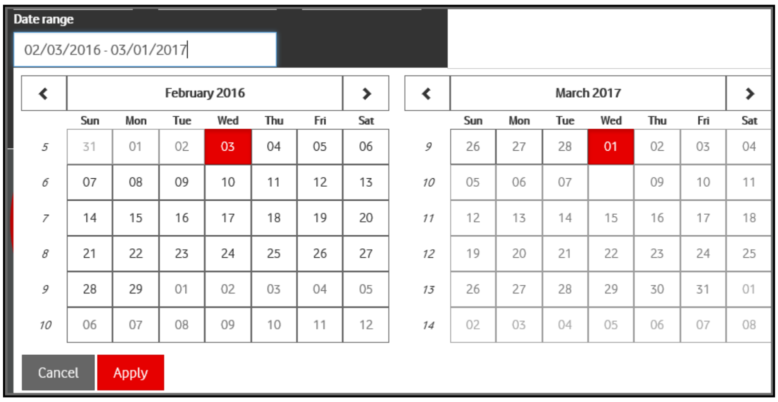
- **Inventory**: Service Class>Service Type>Region>Country>Service Owner>Service Number

- **Roaming**: Roaming Zone>Service Owner>Service Number

- **IoT**: Spend trend graph



3. Drop down the **Filter** list and choose which data you want to display for the selected category:
   - **Duration**: The total number of minutes used.
   - **Spend**: The total cost of the item excluding taxes, displayed in the currency you choose. By default, VTR filters on Spend.
   - **Units**: The total number of line items on the bill, broken down by item type. For example, number of calls, number of messages, number of roaming calls, number of accessories.
   - **Volume**: The total data used, measured in gigabytes.
4. Drop down the **Currency** list and choose the currency in which you want the amounts to appear.
5. Drop down the **Product type**, **Proposition type** and/or **Account number** to further filter your result set. The default is **All**, but you may select one or more values in the drop-down to limit the results to the multiple values selected. The filter fields will indicate how many have been selected. Additionally, each of these three fields have the **Uncheck All** option, while only the **Product type** and **Proposition type** fields also have the **Check All** option.
6. Click In the **Date range** box, and then from the Calendars that appear choose the range of dates you want to include, up to 13 months total.

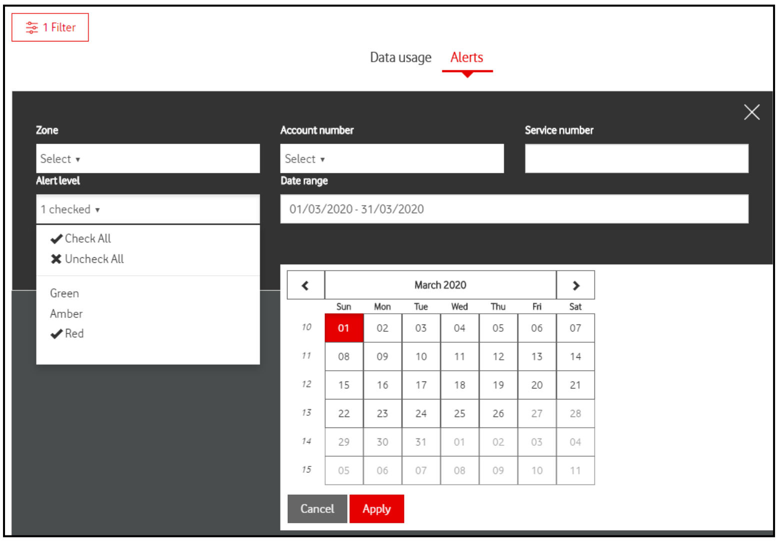


7. Click **Apply**.

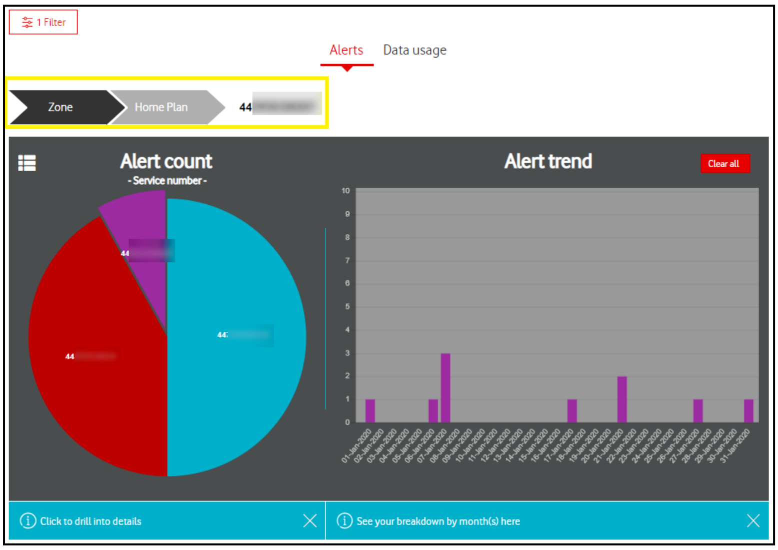
Filter Vodafone usage

To display VUM details about alerts per zone, account number or service number, you can use the filter fields available on the **Usage manager** tab, and then drill-down to the lowest level needed. The following procedure applies for VUM alerts, but the same logic applies for Vodafone data usage filtering.

1. On the Analysis page, click the **Usage manager** tab. The tab opens with the Alerts sub-tab opened by default.
2. Click **Filter** to narrow the search for the VUM alerts.

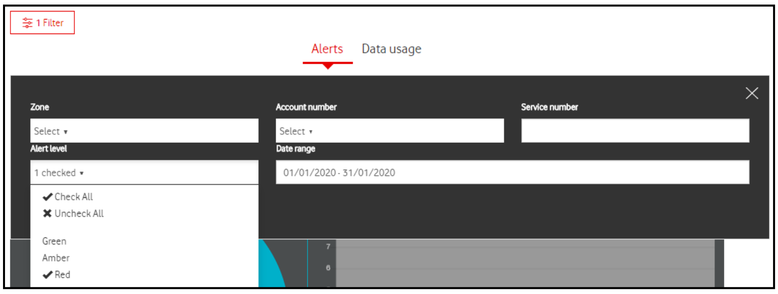


3. Click the pie chart to reach the available drill-down levels:

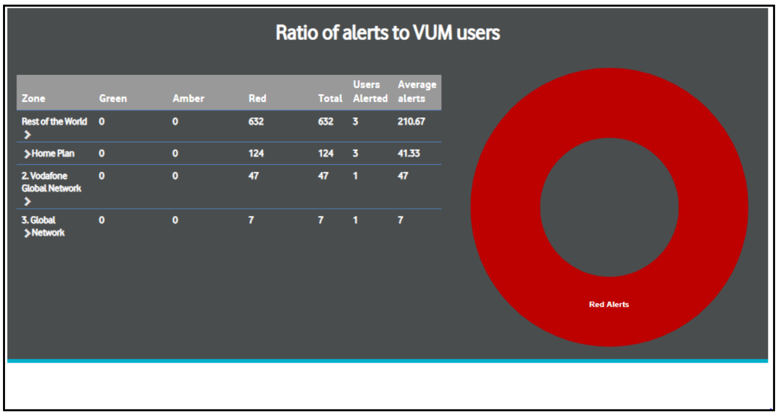


4. By default, **Red** is the default alert level. To change the data displayed, use any of the filter criteria from the **Filter** panel.

> The Red alerts include also the Admin alerts, as they are Red alerts for which the system sends emails to the employee or the manager.



5. Scroll down to have a more detailed view of the selected data. By default, the last seven days of data are selected. You can further click several daily alerts to display more data in the detailed view.



Chapter 4: Reporting

Using VTR, you can run predefined reports, filter the result set, and customise the columns that appear and their sort order in the active report. You may view reports on Chargeback (Billing), Red Reporting, Top N, and Inventory.

Any reports that display billing amounts will do so in the currency of your profile: see 'Manage your profile' on page 16. VTR applies the most recent exchange rate conversions available based on the usage date of each call detail record. If you notice that exchange rates appear out of date, contact your administrator to request an update.

* You cannot save customisations to a report; reports will always reset to their defaults.
* If you do not see your currency changes in a report, click **Refresh** at the bottom of the report page and it will rerun with your new currency selection. Subsequent runs will include your updated currency.
* Changes to services and accounts can take up to one day to appear in reports. If after a day you still don't see the changes, re-rerun the report and click Refresh at the bottom of the report, and it will refresh the data instead of using cached data.

To access the Reporting module, click the **Reporting** tab at the top of the VTR Home Page. The reports are categorised in the Report Catalogue list on the left. From the Report Catalogue list, select the category link to see the individual reports in the category that will display in the main panel.

From here, you can:

- Learn about the 'Available reports' on page 56
- 'Run a report' on page 151

- 'Modify the report filters and run the report again' on page 153
- 'Schedule reports' on page 154
- 'Download bulk invoice reports' on page 163
- 'Modify the report page layout in real time' on page 164
- 'Export a report' on page 165

- Learn about Global reports

Depending on your configuration, certain data may be masked to ensure privacy. For more information, see 'Understanding call masking' on page 46.
If your administrator has enabled data slicing, then your reports will also be restricted to only those accounts to which you have been given access.

To ensure high performance by managing the number of records in the results list, non-IoT reports do not include IoT invoice data.

Available reports

VTR includes the following reports out of the box:

Report Category	Reports
Top Spenders Reporting	'High Cost Calls Report' on page 62 'Long Duration Calls Report' on page 64 'Premium Numbers Report' on page 67
Top N Reporting	'Top N Calls Report (Highest Priced Calls) ' on page 113 'Top N Users Report' on page 118 'Top N Data Usages Report' on page 116
Spend & Usage Summary Reporting	'Account Listing Report' on page 58 'Spend & Usage Summary Report' on page 84 'Spend by Location Report' on page 71 'Usage by Day Report' on page 90
Spend & Usage Detail Reporting	'Spend & Usage Detail Report' on page 79 'Zero Usage Report' on page 93 'Spend & Usage Detail - Voice Only Report' on page 87

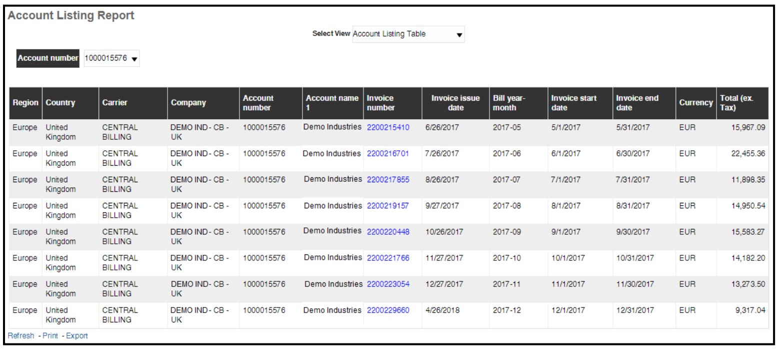
Report Category	Reports
Chargeback Reporting	'Spend & Usage Chargeback Summary Report' on page 77 'Spend & Usage Chargeback Detail Report' on page 73
Customer Administrative Reporting	'Account Access Report' on page 122
Vodafone Usage Manager Reporting	'VUM Top Alerts Report' on page 123 'VUM Data Usage By Zones Report' on page 125 'VUM Alerts Trend By User Report' on page 127 'VUM Alerts History By User Report' on page 126 'VUM Summary Report' on page 129 'VUM Registration Status Report' on page 130 'VUM App Status Summary History Report' on page 131
IoT Reporting	'IoT Spend & Usage By Country Report' on page 133 'IoT Spend & Usage By CSP Report' on page 134
Red - Spend & Usage Reporting	'Red Spend & Usage Detail Report' on page 98 'Red Spend & Usage Detail Roaming Report' on page 103 'Red Spend by Zone Report' on page 108 'Red Spend Trend by Bundle Report' on page 110 'Unbilled Usage Detail Report' on page 135
Red - Worry Free Roaming	'RoW Data Roaming Unbilled Usage Report' on page 138 'WFR SMS Report' on page 140 'RoW Data Roaming Blocking Current Status Report' on page 142 'RoW Data Roaming Blocking Historical Status Report' on page 144
Red - EB Fair Usage Reporting	'Fair Usage Summary Report' on page 145 'Fair Usage Detail Report - Voice' on page 147 'Fair Usage Detail Report - Data' on page 149

> ⓘ You can find help on these standard reports included with VTR. You may also request custom reports from the Vodafone Service Team; these reports will then appear in the Report Catalogue list on the left of the Reporting page.

Account Listing Report

The Account Listing report provides a view of accounts and invoices at the service number level with usage and cost details by the country and region with which the account is associated. This report will contain both active and inactive accounts.

The report is pre-filtered for services that record charges in calls, data, messages, recurring, non-recurring, hardware, adjustments, credits, or other, where the service number is not the same as the account.



Account Listing Report

Select View Account Listing Table

Account number 1000015576

Region	Country	Carrier	Company	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Total (ex. Tax)
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200215410	6/26/2017	2017-05	5/1/2017	5/31/2017	EUR	15,967.09
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200216701	7/26/2017	2017-06	6/1/2017	6/30/2017	EUR	22,455.36
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200217855	8/26/2017	2017-07	7/1/2017	7/31/2017	EUR	11,898.35
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200219157	9/27/2017	2017-08	8/1/2017	8/31/2017	EUR	14,950.54
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200220448	10/26/2017	2017-09	9/1/2017	9/30/2017	EUR	15,583.27
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200221766	11/27/2017	2017-10	10/1/2017	10/31/2017	EUR	14,182.20
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200223054	12/27/2017	2017-11	11/1/2017	11/30/2017	EUR	13,273.50
Europe	United Kingdom	CENTRAL BILLING	DEMO IND - CB - UK	1000015576	Demo Industries	2200229660	4/26/2018	2017-12	12/1/2017	12/31/2017	EUR	9,317.04

Refresh - Print - Export

To view the Account Listing Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Summary Reporting**, click the **Run** button on the **Account Listing Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> ⓘ It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is three months.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.

- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Account Listing Data, as described below:

Account Listing Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

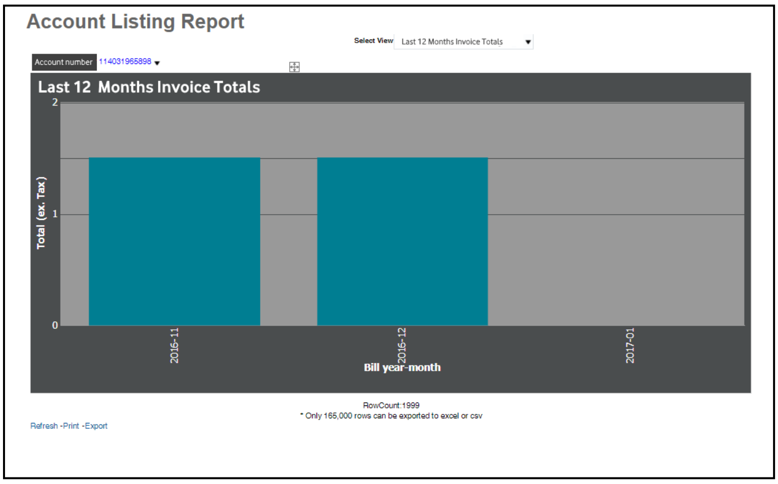
Bill year month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

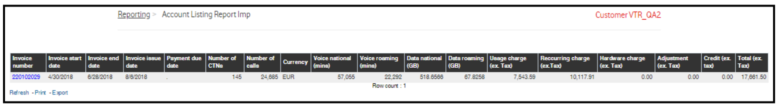
Invoice End Date: The date on which the billing cycle ends.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. To view data for a different account, drop down the **Account number** field above the table, and choose the account on which you want to view data.
6. To view a comparison graph of the data, drop down the **Select view** list above the table and choose **Graph**. The bar chart displays the total spend per month over the last 12 months, enabling you to compare month to month spend.



7. To drill down into further details about a specific Invoice, click the **Invoice number** hyperlink, and then click **Go to SubReport**. To return to the Account Listing report filters, click the **Invoice number** hyperlink and choose **Go to Account Listing report**. You will return to the Account Listing report filters page, where you can reset your filters and rerun the report.



Reporting > Account Listing Report Imp

Customer VTR_QA2

Invoice number	Invoice start date	Invoice end date	Invoice issue date	Payment due date	Number of CTNs	Number of calls	Currency	Voice national (mins)	Voice roaming (mins)	Data national (GB)	Data roaming (GB)	Usage charge (ex. Tax)	Reccurring charge (ex.Tax)	Hardware charge (ex. Tax)	Adjustment (ex. Tax)	Credit (ex. tax)	Total (ex. Tax)
220102029	4/30/2018	6/28/2018	8/6/2018	.	145	24,685	EUR	57,055	22,292	518.6566	67.8258	7,543.59	10,117.91	0.00	0.00	0.00	17,661.50

Row count : 1

Refresh -Print -Export

8. Review the Invoice Data

Invoice Data

Invoice Number: The identifier of the bill for the service.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Invoice Issue Date: The date when the bill was issued.

Payment due date: The date on which payment must be made.

Number of CTNs: Count of all unique customer telephone numbers on the invoice.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Currency: The currency in which the report values appear.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice roaming (mins): The total minutes for all charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Hardware charge (ex. Tax): The total sum, excluding tax, of charges identified as hardware charges on the invoice. Hardware charges include things such as purchase of handsets.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

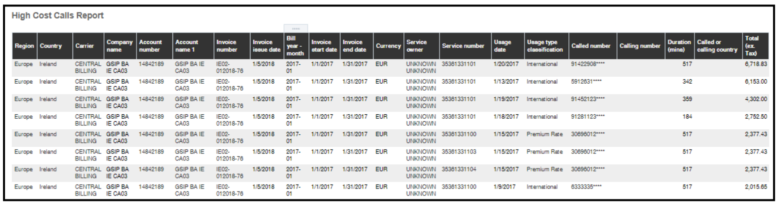
Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

9. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
10. (Optional) Export the report. See 'Export a report' on page 165.

High Cost Calls Report

This report returns billing information for calls by region, country, account number, invoice number, and invoice dates which is sorted by total cost per call in descending order. In addition, it includes details on various categories of billing charges typically found on the front page on an invoice. The High Cost Calls report will prompt you for a cost value where all calls returned will be equal to or greater than the value entered. It also provides additional pre-defined filters on key data elements, allowing for more accurate data analysis.


High Cost Calls Report

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year - month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Usage date	Usage type classification	Called number	Calling number	Duration (mins)	Called or calling country	Total (ex. Tax)
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/20/2017	International	91422908****		517		6,718.83
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/13/2017	International	5912631****		342		6,153.00
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/19/2017	International	91452123****		359		4,302.00
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/18/2017	International	91281123****		184		2,752.50
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/15/2017	Premium Rate	30696012****		517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331103	1/15/2017	Premium Rate	30696012****		517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331104	1/15/2017	Premium Rate	30696012****		517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/9/2017	International	6333335****		517		2,015.65

To view the High Cost Calls Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top Spenders Reporting**, click the **Run** button on the **High Cost Calls Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Usage date and **Total** are required filters.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Total (ex. Tax)**: The amount or higher that you want to report on as high priced calls. For example, type 100 to report on calls that cost 100 euros or more.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.

- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the High Cost Calls data, as described below:

High Cost Calls Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Usage date: The date shown on the invoice when the charge was incurred.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Called number: The service number to which a call was placed as identified on the invoice.

Calling number: The service number placing the call as identified on the invoice.

Duration (mins): The length of time in minutes of the call detail record.

Called or calling country: The country to which the call was placed.

Source Country: Country from where the call was made.

Target Country: Country to which the call was made.

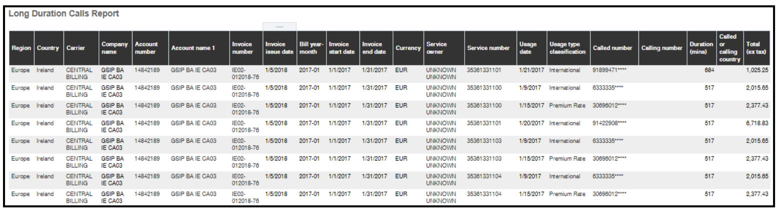
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Long Duration Calls Report

This report returns billing information by region, country, account number, invoice number, and invoice dates and is sorted by call duration (in minutes) in descending order. In addition, it includes details on various categories of billing charges typically found on the front page on an invoice. The Long Duration Calls report will provide a prompt for you to enter a duration value where the calls returned will be equal to or greater than the entered value. The report also provides pre-defined filters on key data elements, allowing for more accurate data analysis.



Long Duration Calls Report

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Usage date	Usage type classification	Called number	Calling number	Duration (mins)	Called or calling country	Total (ex tax)
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/21/2017	International	91899471****		684		1,025.25
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/9/2017	International	6333335****		517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/15/2017	Premium Rate	30696012****		517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/20/2017	International	91422908****		517		6,718.83
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331103	1/9/2017	International	6333335****		517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331103	1/15/2017	Premium Rate	30696012****		517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331104	1/9/2017	International	6333335****		517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331104	1/15/2017	Premium Rate	30696012****		517		2,377.43

To view the Long Duration Calls Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top Spenders Reporting**, click the **Run** button on the **Long Duration Calls Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Usage date and **Duration** are required filters. By default, the date range is one month.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Duration (Min.)**: The length of time in minutes of the call detail records.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Long Duration Calls data, as described below:

Long Duration Calls Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Usage date: The date shown on the invoice when the charge was incurred.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Called number: The service number to which a call was placed as identified on the invoice.

Calling number: The service number placing the call as identified on the invoice.

Duration (mins): The length of time in minutes of the call detail record.

Called or calling country: The country to which the call was placed.

Source Country: Country from where the call was made.

Target Country: Country to which the call was made.

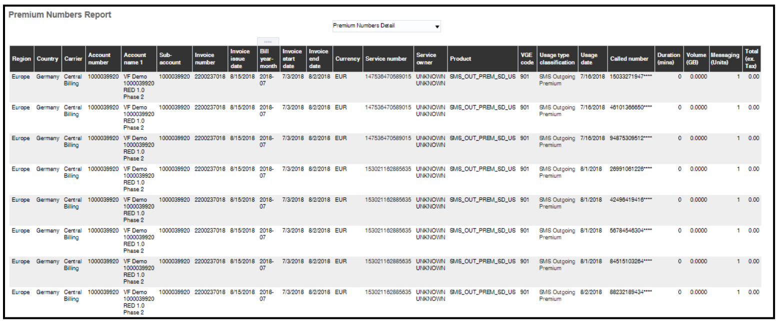
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Premium Numbers Report

The Premium Numbers reports displays premium usage such as that from a fixed number to a non-geographic region like Free Phone or Directory Assistance. It shows the minutes, gigabytes, and messaging for the call record. The report provides pre-defined filters on key data elements allowing for more accurate data analysis. The report includes only those premium charges which incurred an additional cost; for example, those covered under the one-time Red bundle fee are excluded.



Premium Numbers Report

Premium Numbers Detail

Region	Country	Carrier	Account number	Account name 1	Sub-account	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service number	Service owner	Product	VGE code	Usage type classification	Usage date	Called number	Duration (mins)	Volume (GB)	Messaging (Units)	Total (ex. Tax)
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	15033271947****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	46101366650****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	94875309512****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	26991061226****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	42496419416****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	56784546304****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	84515103264****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/2/2018	88232189434****	0	0.0000	1	0.00

To view the Premium Numbers Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top Spenders Reporting**, click the **Run** button on the **Premium Numbers Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters. By default, the date range is one month.

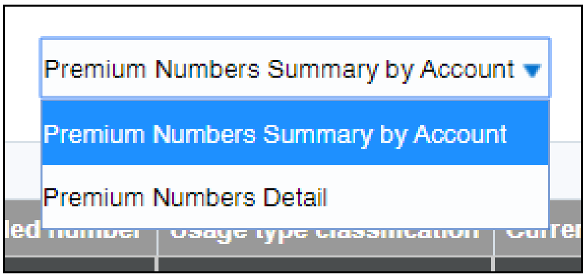
Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.

- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

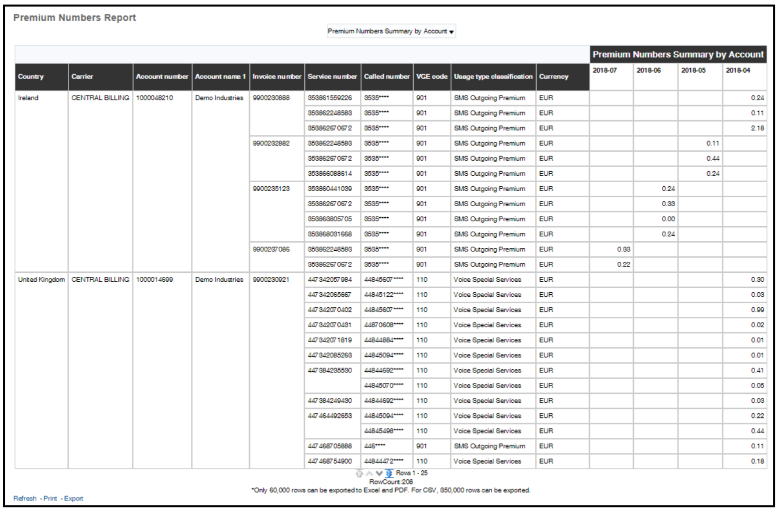
4. By default, the initial view is the Premium Numbers Summary by Account. To switch to the detail, select Premium Numbers Detail from the report view drop-down at the top-center of the report:



5. Review the Premium Numbers Summary by Account data, as described below:

Premium Numbers Summary by Account

The Premium Numbers Summary by Account view is grouped by Country, Carrier, Account number, Invoice number, and then by Service number, and it is sorted by Country (asc), then Carrier (asc), then Account number (asc), then Invoice number (asc).



Premium Numbers Report

Premium Numbers Summary by Account ▾

										Premium Numbers Summary by Account			
Country	Carrier	Account number	Account name 1	Invoice number	Service number	Called number	VGE code	Usage type classification	Currency	2018-07	2018-06	2018-05	2018-04
Ireland	CENTRAL BILLING	1000048210	Demo Industries	9900230888	353861559226	3535****	901	SMS Outgoing Premium	EUR				0.24
					353862248583	3535****	901	SMS Outgoing Premium	EUR				0.11
					353862670672	3535****	901	SMS Outgoing Premium	EUR				2.18
				9900232882	353862248583	3535****	901	SMS Outgoing Premium	EUR			0.11	
					353862670672	3535****	901	SMS Outgoing Premium	EUR			0.44	
					353866088614	3535****	901	SMS Outgoing Premium	EUR			0.24	
				9900235123	353860441039	3535****	901	SMS Outgoing Premium	EUR		0.24		
					353862670672	3535****	901	SMS Outgoing Premium	EUR		0.33		
					353863805705	3535****	901	SMS Outgoing Premium	EUR		0.00		
					353868031668	3535****	901	SMS Outgoing Premium	EUR		0.24		
				9900237086	353862248583	3535****	901	SMS Outgoing Premium	EUR	0.33			
					353862670672	3535****	901	SMS Outgoing Premium	EUR	0.22			
United Kingdom	CENTRAL BILLING	1000014699	Demo Industries	9900230921	447342057984	44845607****	110	Voice Special Services	EUR				0.30
					447342065667	44845122****	110	Voice Special Services	EUR				0.03
					447342070402	44845607****	110	Voice Special Services	EUR				0.99
					447342070431	44870608****	110	Voice Special Services	EUR				0.02
					447342071819	44844884****	110	Voice Special Services	EUR				0.01
					447342085263	44845094****	110	Voice Special Services	EUR				0.01
					447384235530	44844692****	110	Voice Special Services	EUR				0.41
						44845070****	110	Voice Special Services	EUR				0.05
					447384249430	44844692****	110	Voice Special Services	EUR				0.03
					447464492653	44845094****	110	Voice Special Services	EUR				0.22
						44845498****	110	Voice Special Services	EUR				0.44
					447468705888	446****	901	SMS Outgoing Premium	EUR				0.11
					447468754900	44844472****	110	Voice Special Services	EUR				0.18

Rows 1 - 25

RowCount:208

*Only 60,000 rows can be exported to Excel and PDF. For CSV, 350,000 rows can be exported.

Refresh - Print - Export

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Service Number: The unique number to identify the service.

Called number: The service number to which a call was placed as identified on the invoice.

VGE code: The code used by Vodafone to define usage classification groupings within Analysis and Reporting. This column may be hidden by default, in which case, you can ignore it.

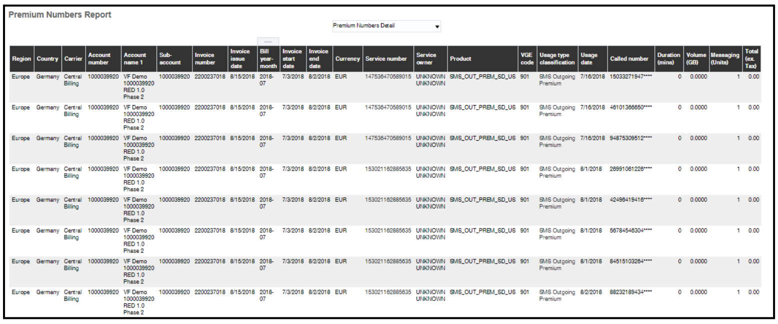
Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Currency: The currency in which the report values appear.

Bill year-month: Year and month of the bill date.

Premium Numbers Detail

The Premium Numbers is sorted by Region, then Country, then Carrier, then Account number, then Invoice number, then Bill year-month (desc), and then Service number (asc).


Premium Numbers Report

Premium Numbers Detail

Region	Country	Carrier	Account number	Account name 1	Sub-account	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service number	Service owner	Product	VGE code	Usage type classification	Usage date	Called number	Duration (mins)	Volume (GB)	Messaging (Units)	Total (ex. Tax)
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	15033271947****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	46101366650****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	147536470589015	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	7/16/2018	94875309512****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	26991061226****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	42496419416****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	56784546304****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/1/2018	84515103264****	0	0.0000	1	0.00
Europe	Germany	Central Billing	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	153021162885635	UNKNOWN UNKNOWN	SMS_OUT_PREM_SD_US	901	SMS Outgoing Premium	8/2/2018	88232189434****	0	0.0000	1	0.00

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Sub-account: Child account of the account associated with the service number. This account typically does not exist on its own in VTM; rather, it exists in relationship to the master account only.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

Product: A description of the package or product used.

VGE code: The code used by Vodafone to define usage classification groupings within Analysis and Reporting. This column may be hidden by default, in which case, you can ignore it.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Usage date: The date shown on the invoice when the charge was incurred.

Called number: The service number to which a call was placed as identified on the invoice.

Duration (mins): The length of time in minutes of the call detail record.

Volume (GB): The amount of data in gigabytes for the call detail records on the invoice.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

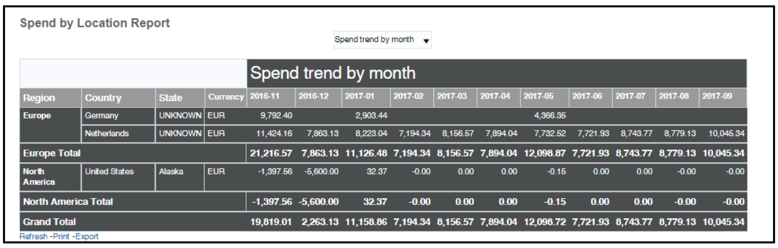
User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

6. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
7. (Optional) Export the report. See 'Export a report' on page 165.
8. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Spend by Location Report

This pivot report returns billing information by location (region, country, state) for a defined time period where the default is the last full month. Three views are provided to view monthly billing data summarized by spend, duration, and volume.

The report is pre-filtered for services that record charges in calls, data, messages, recurring, non-recurring, hardware, adjustments, credits, or other, where the service number is not the same as the account.


Spend by Location Report

Spend trend by month

Region	Country	State	Currency	2016-11	2016-12	2017-01	2017-02	2017-03	2017-04	2017-05	2017-06	2017-07	2017-08	2017-09
Europe	Germany	UNKNOWN	EUR	9,792.40		2,903.44				4,366.35				
	Netherlands	UNKNOWN	EUR	11,424.16	7,863.13	8,223.04	7,194.34	8,156.57	7,894.04	7,732.52	7,721.93	8,743.77	8,779.13	10,045.34
Europe Total				21,216.57	7,863.13	11,126.48	7,194.34	8,156.57	7,894.04	12,098.87	7,721.93	8,743.77	8,779.13	10,045.34
North America	United States	Alaska	EUR	-1,397.56	-5,600.00	32.37	-0.00	0.00	0.00	-0.15	0.00	0.00	-0.00	-0.00
North America Total				-1,397.56	-5,600.00	32.37	-0.00	0.00	0.00	-0.15	0.00	0.00	-0.00	-0.00
Grand Total				19,819.01	2,263.13	11,158.86	7,194.34	8,156.57	7,894.04	12,098.72	7,721.93	8,743.77	8,779.13	10,045.34

Refresh -Print -Export

To view the Spend by Location Report

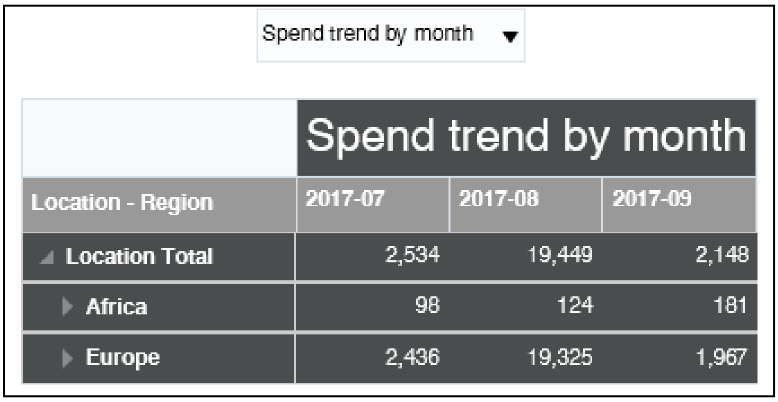
1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Summary Reporting**, click the **Run** button on the **Spend by Location** tile.
3. On the report filters page that appears, select criteria to narrow the result set, and then click **OK**.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

   - **Invoice start date (Between)**: Choose the range of dates on which you want to report spend by location.
   - **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

   For more options on filters, see 'Report filter operators and advanced options' on page 151.

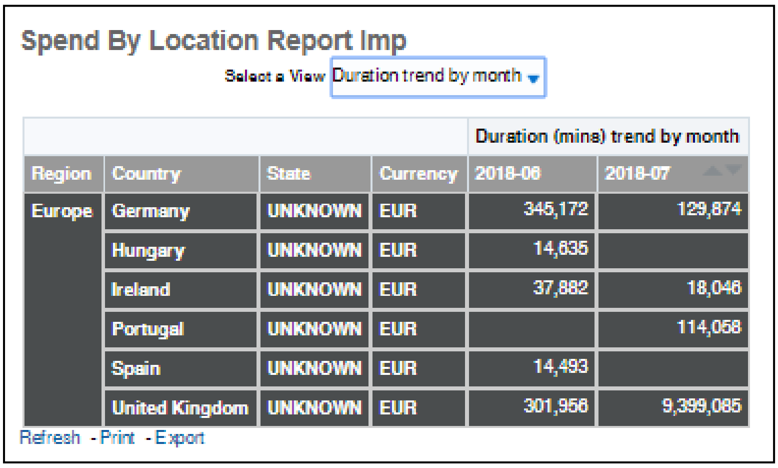
4. By default, the Spend by Location page pivots on spend, which shows the Total Spend (ex tax) by month for each location. You can expand each location to drill down into further details.



Spend trend by month

	Spend trend by month		
Location - Region	2017-07	2017-08	2017-09
Location Total	2,534	19,449	2,148
Africa	98	124	181
Europe	2,436	19,325	1,967

5. To view the trend by call duration in minutes, drop down the list above the pivot table and choose **Duration trend by month**.



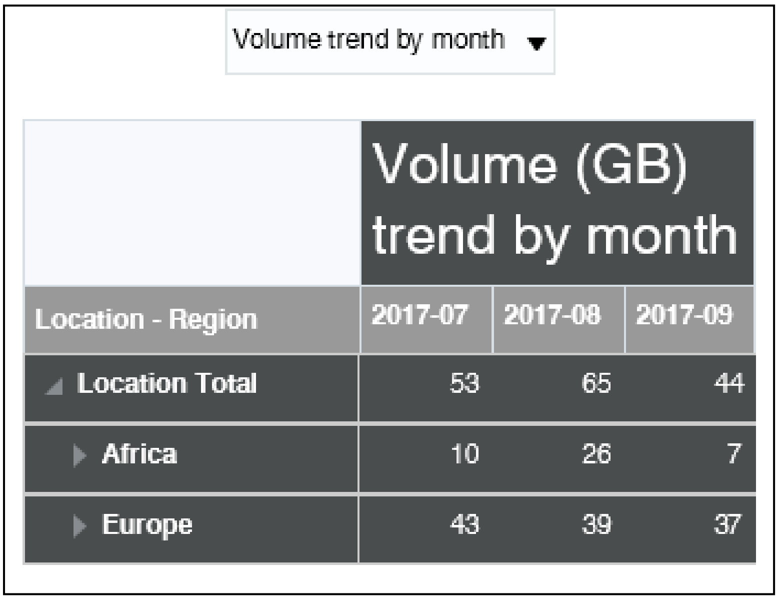
Spend By Location Report Imp

Select a View Duration trend by month

				Duration (mins) trend by month	
Region	Country	State	Currency	2018-06	2018-07
Europe	Germany	UNKNOWN	EUR	345,172	129,874
	Hungary	UNKNOWN	EUR	14,635	
	Ireland	UNKNOWN	EUR	37,882	18,046
	Portugal	UNKNOWN	EUR		114,058
	Spain	UNKNOWN	EUR	14,493	
	United Kingdom	UNKNOWN	EUR	301,956	9,399,085

Refresh - Print - Export

6. To view the trend by volume of data used in GB, drop down the list above the pivot table and choose **Volume trend by month**.



Volume trend by month

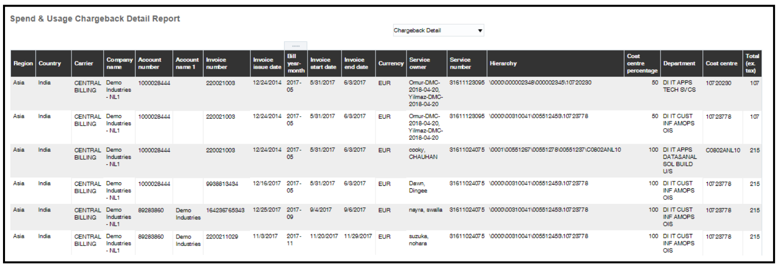
Location - Region	2017-07	2017-08	2017-09
Location Total	53	65	44
Africa	10	26	7
Europe	43	39	37

7. (Optional) Export the report. See 'Export a report' on page 165.
8. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Spend & Usage Chargeback Detail Report

This detail report returns billing information by region, country, service provider, account number, invoice number and invoice details. In addition, it includes further details on cost centre and hierarchy allocation down to the service number.

The report is pre-filtered for services that record charges in calls, data, messages, recurring, non-recurring, hardware, adjustments, credits, or other, where the service number is not the same as the account.



Spend & Usage Chargeback Detail Report

Chargeback Detail

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Hierarchy	Cost centre percentage	Department	Cost centre	Total (ex. tax)
Asia	India	CENTRAL BILLING	Demo Industries - NL1	1000028444		220021003	12/24/2014	2017-05	5/31/2017	6/3/2017	EUR	Omur-DMC-2018-04-20, Yilmaz-DMC-2018-04-20	31611123095	\0000\000002348\000002345\10720230	50	DI IT APPS TECH SVCS	10720230	107
Asia	India	CENTRAL BILLING	Demo Industries - NL1	1000028444		220021003	12/24/2014	2017-05	5/31/2017	6/3/2017	EUR	Omur-DMC-2018-04-20, Yilmaz-DMC-2018-04-20	31611123095	\0000\00310041\005512453\10723778	50	DI IT CUST INF AMOPS OIS	10723778	107
Asia	India	CENTRAL BILLING	Demo Industries - NL1	1000028444		220021003	12/24/2014	2017-05	5/31/2017	6/3/2017	EUR	cooky, CHAUHAN	31611024075	\0001\00551267\00551278\00551237\C0802ANL10	100	DI IT APPS DATA&ANAL SOL BUILD U/S	C0802ANL10	215
Asia	India	CENTRAL BILLING	Demo Industries - NL1	1000028444		9938813434	12/16/2017	2017-05	5/31/2017	6/3/2017	EUR	Dawn, Dingee	31611024075	\0000\00310041\005512453\10723778	100	DI IT CUST INF AMOPS OIS	10723778	215
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	164236765343	12/25/2017	2017-09	9/4/2017	9/6/2017	EUR	nayra, swalla	31611024075	\0000\00310041\005512453\10723778	100	DI IT CUST INF AMOPS OIS	10723778	215
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	2200211029	11/3/2017	2017-11	11/20/2017	11/29/2017	EUR	suzuka, nohara	31611024075	\0000\00310041\005512453\10723778	100	DI IT CUST INF AMOPS OIS	10723778	215

To view the Spend & Usage Chargeback Detail Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Chargeback Reporting**, click the **Run** button on the **Spend & Usage Chargeback Detail Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

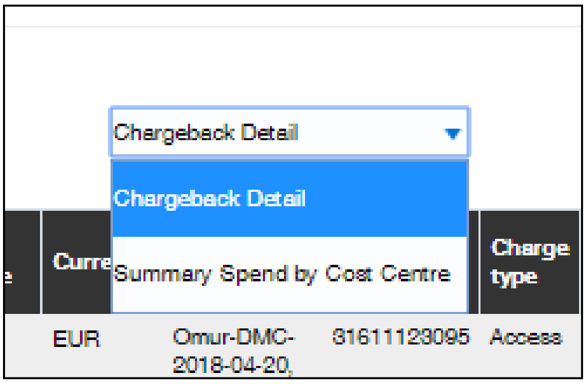
Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: Filters the results to service owners with the name you type. You may type a specific name, such as **Maria Louisa Rivera**, and see only that user's records, or you may type a partial name such as **J** and see all service owners with J in any place in their name. Make sure you choose the **contains any** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains** operator.
- **Hierarchy**: Type as much of the cost code hierarchy name as you know, and then results will be filtered to just those containing matching characters. Make sure you choose the **contains any** operator.
- **Department**: Filters the results to specific departments. Type as much of the department name as you know, and then results will be filtered to just those departments containing matching characters. Make sure you choose the **contains any** operator.

- **Cost centre**: From the drop-down, you may select one or more cost centres to filter your report result set. You may also type in multiple cost centre values separated by a semi-colon. The default is *All*.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. By default, the initial view is the Chargeback Detail. To switch to the summary, select **Summary Spend by Cost Centre** from the report view drop-down at the top-center of the report:



5. Review the Spend & Usage Chargeback Detail or Summary Spend by Cost Centre data, as described below:

Spend & Usage Chargeback Detail Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Charge type: The type of charge.

Charge classification: Analysis Code charge classification.

Charge description: Analysis Code charge group description.

Hierarchy: The full cost hierarchy used for chargeback.

Cost centre percent: The percent of the total charge that will be allocated to the cost centre.

Department: The department associated with the charge.

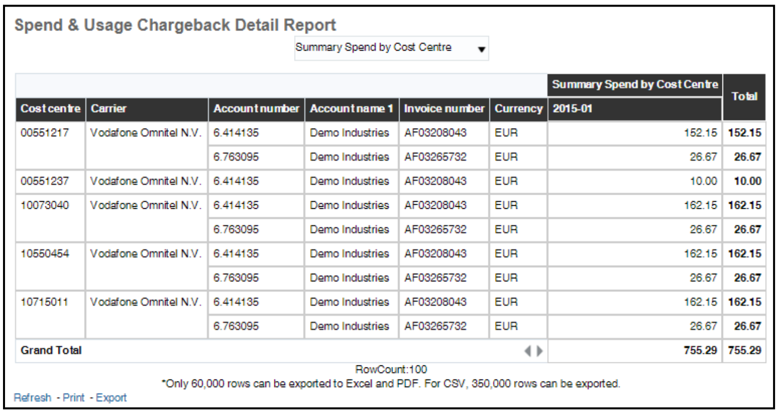
Cost centre: The last level in the cost code hierarchy, which is where charge will be allocated.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

Spend & Usage Summary Spend by Cost Centre

The Summary Spend by Cost Centre view is grouped by Carrier, Account number and then by Invoice number by month, and it is sorted by Cost centre (asc), then Carrier (asc), then Account number (asc), then Invoice number (asc).


Spend & Usage Chargeback Detail Report

Summary Spend by Cost Centre

						Summary Spend by Cost Centre	Total
Cost centre	Carrier	Account number	Account name 1	Invoice number	Currency	2015-01	
00551217	Vodafone Omnitel N.V.	6.414135	Demo Industries	AF03208043	EUR	152.15	**152.15**
		6.763095	Demo Industries	AF03265732	EUR	26.67	**26.67**
00551237	Vodafone Omnitel N.V.	6.414135	Demo Industries	AF03208043	EUR	10.00	**10.00**
10073040	Vodafone Omnitel N.V.	6.414135	Demo Industries	AF03208043	EUR	162.15	**162.15**
		6.763095	Demo Industries	AF03265732	EUR	26.67	**26.67**
10550454	Vodafone Omnitel N.V.	6.414135	Demo Industries	AF03208043	EUR	162.15	**162.15**
		6.763095	Demo Industries	AF03265732	EUR	26.67	**26.67**
10715011	Vodafone Omnitel N.V.	6.414135	Demo Industries	AF03208043	EUR	162.15	**162.15**
		6.763095	Demo Industries	AF03265732	EUR	26.67	**26.67**
Grand Total						**755.29**	**755.29**

RowCount:100

*Only 60,000 rows can be exported to Excel and PDF. For CSV, 350,000 rows can be exported.

Refresh - Print - Export

Cost centre: The last level in the cost code hierarchy, which is where charge will be allocated.

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Currency: The currency in which the report values appear.

Bill year-month: Year and month of the bill date.

Total: Total of all the charges for the cost centre/account number/invoice.

6. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
7. (Optional) Export the report. See 'Export a report' on page 165.

Spend & Usage Chargeback Summary Report

This Spend & Usage Chargeback Summary Report returns billing information by cost centre and includes region, country, service provider, account number, invoice number and invoice details per cost centre.

The report is pre-filtered for services that record charges in calls, data, messages, recurring, non-recurring, hardware, adjustments, credits, or other, where the service number is not the same as the account.

Spend & Usage Chargeback Summary Report

		Summary spend by cost centre					
Cost centre	Currency	2017 - 01	2017 - 05	2017 - 07	2017 - 09	2017 - 10	2017 - 11
000003	EUR	7,863.13	11,424.16		15,626.56	16,465.69	18,824.48
000005	EUR	672.99	853.83	1,010.68	1,168.00	1,117.43	1,452.99
000051	EUR			1.18			
000055	EUR	642.44	845.14	778.68	1,169.06	1,110.78	1,538.88
000061	EUR			3.54			
000071	EUR			3.54			
000081	EUR			3.54			
000105	EUR	672.11	856.73	728.94	1,213.89	1,105.28	1,542.49
000155	EUR	700.45	922.63	741.91	1,284.69	1,182.72	1,571.58
000205	EUR	519.86	883.12	739.54	1,271.93	1,225.37	1,424.19
000255	EUR	619.90	1,029.61	599.28	1,392.54	1,375.36	1,587.84
000305	EUR	564.93	993.25	773.92	1,222.54	1,279.41	1,498.29
000355	EUR	576.38	956.39	768.69	1,273.18	1,282.53	1,609.83
000405	EUR	637.85	980.37	829.25	1,259.89	1,561.76	1,647.78
000455	EUR	617.37	831.21	827.85	1,170.31	1,453.55	1,366.19
000505	EUR	580.97	771.41	1,022.73	1,123.65	1,384.51	1,285.73
000555	EUR	598.75	830.11	1,049.27	1,176.95	1,442.09	1,302.36
000605	EUR	459.14	670.36	1,011.38	899.92	944.91	996.32
Grand Total		15,726.27	22,848.32	10,893.92	31,253.12	32,931.38	37,648.95

To view the Spend & Usage Chargeback Summary Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Chargeback Reporting**, click the **Run** button on the **Spend & Usage Chargeback Summary Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: Filters the results to service owners with the name you type. You may type a specific name, such as **Maria Louisa Rivera**, and see only that user's records, or you may type a partial name such as **J** and see all service owners with J in any place in their name. Make sure you choose the **contains any** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains** operator.
- **Hierarchy**: Type as much of the cost code hierarchy name as you know, and then results will be filtered to just those containing matching characters. Make sure you choose the **contains any** operator.

- **Department**: Filters the results to specific departments. Type as much of the department name as you know, and then results will be filtered to just those departments containing matching characters. Make sure you choose the **contains any** operator.
- **Cost centre**: From the drop-down, you may select one or more cost centres to filter your report result set. You may also type in multiple cost centre values separated by a semi-colon. The default is *All*.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Spend & Usage Detail Data, as described below:

Spend & Usage Chargeback Detail Data

Cost centre: The last level in the cost code hierarchy, which is where charge will be allocated.

Currency: The currency in which the report values appear.

Bill year-month: Year and month of the bill date.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Spend & Usage Detail Report

This detail report returns billing information by region, country, account number, invoice number and invoice dates; however, it drills down into bill detail information at the service number level. The Spend & Usage Detail report provides pre-defined filters on key data elements allowing for more accurate data analysis.

The report is pre-filtered for services that record charges in calls, data, messages, recurring, non-recurring, hardware, adjustments, credits, or other.

Spend & Usage Detail Report

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Owner name	Service number	Employee ID	Custom Attribute 1	Custom Attribute 2
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A
Europe	Austria	A1 Telekom Austria	Unilever - AT	[illegible]	Unilever	[illegible]	09/07/2019	2019-06	01/06/2019	30/06/2019	EUR	UNKNOWN UNKNOWN	[illegible]	N/A	N/A	N/A

To view the Spend & Usage Detail Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Detail Reporting**, click the **Run** button on the **Spend & Usage Detail Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: Filters the results to service owners with the name you type. You may type a specific name, such as **Maria Louisa Rivera**, and see only that user's records, or you may type a partial name such as **J** and see all service owners with J in any place in their name. Make sure you choose the **contains any** operator.
- **Employee ID**: Filters the results to employee id's that contain the characters you enter. By default, all employee id's will be included.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains** operator.

- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Spend & Usage Detail Data, as described below:

Spend & Usage Detail Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Owner name: The owner assigned to the service.
Employee ID: The Employee ID associated to a service.

Cost centre n - %: The cost centre and percentage allocation identified on the service. This is used for charge allocation. Up to 4 cost centres are supported.

Service Number: The unique number to identify the service.

Custom Attribute 1-4: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, these fields will be disabled from editing.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice roaming (mins): The total minutes for all charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Premium (GB): The total amount of data in gigabytes for all charges identified as Data Premium on the invoice using the VGE codes. This includes charges that apply to data sent and received from premium numbers, such as those for competitions and voting services.

Messaging National: The total amount of data for all charges identified as messaging (SMS and MMS) national on the invoice using the VGE codes.

Messaging International: The total amount of data for all charges identified as messaging (SMS and MMS) International on the invoice using the VGE codes.

Messaging roaming: The total amount of data in gigabytes for all charges identified as messaging (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

Voice national charge (ex. Tax): The total sum, excluding tax, for charges identified as National usage on the invoice using the VGE codes

Voice international charge (ex. Tax): The charges identified as International usage on the invoice using the VGE codes

Voice roaming charge (ex. Tax): The charges identified as Roaming usage on the invoice using the VGE codes. Roaming includes voice usage while overseas.

Voice premium charge (ex. Tax): The charges identified as Premium usage on the invoice using the VGE codes. Premium includes calls made to and from premium numbers, such as competitions and voting services.

Data national (ex tax): The total sum, excluding tax, of charges identified as data national on the invoice using the VGE codes.

Data roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as data roaming on the invoice using the VGE codes. Roaming charges include data usage while overseas.

Data premium charge (ex. Tax): The total sum, excluding tax, of charges identified as data premium on the invoice using the VGE codes. Premium charges apply to data sent to and from premium numbers, which include things such as competitions and voting services.

Messaging national charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging national (SMS and MMS) on the invoice using the VGE codes

Messaging international charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging international (SMS and MMS) on the invoice using the VGE codes

Messaging roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging roaming on the invoice using the VGE codes. This includes messages (SMS and MMS) sent and received while overseas.

Messaging premium charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging premium on the invoice using the VGE codes. Premium charges apply to messages (SMS and MMS) sent and received from premium numbers, such as competitions and voting services.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

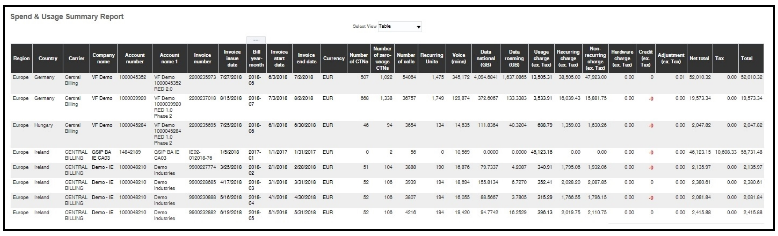
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Spend & Usage Summary Report

This summary report returns billing information by region, country, account number, invoice number, and invoice dates. In addition, it includes further details on various categories of billing charges typically found on the front page on an invoice. The Spend & Usage Summary report provides pre-defined filters on key data elements, allowing for more accurate data analysis.



Spend & Usage Summary Report

Select View Table

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency
Europe	Germany	Central Billing	VF Demo	1000045352	VF Demo 1000045352 RED 2.0	2200235973	7/27/2018	2018-06	6/3/2018	7/2/2018	EUR
Europe	Germany	Central Billing	VF Demo	1000039920	VF Demo 1000039920 RED 1.0 Phase 2	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR
Europe	Hungary	Central Billing	VF Demo	1000045284	VF Demo 1000045284 RED 1.0 Phase 2	2200235695	7/25/2018	2018-06	6/1/2018	6/30/2018	EUR
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR
Europe	Ireland	CENTRAL BILLING	Demo - IE	1000048210	Demo Industries	9900227774	3/25/2018	2018-02	2/1/2018	2/28/2018	EUR
Europe	Ireland	CENTRAL BILLING	Demo - IE	1000048210	Demo Industries	9900228685	4/17/2018	2018-03	3/1/2018	3/31/2018	EUR
Europe	Ireland	CENTRAL BILLING	Demo - IE	1000048210	Demo Industries	9900230888	5/16/2018	2018-04	4/1/2018	4/30/2018	EUR
Europe	Ireland	CENTRAL BILLING	Demo - IE	1000048210	Demo Industries	9900232882	6/19/2018	2018-05	5/1/2018	5/31/2018	EUR

Invoice number	Number of CTNs	Number of zero-usage CTNs	Number of calls	Recurring Units	Voice (mins)	Data national (GB)	Data roaming (GB)	Usage charge (ex. Tax)	Recurring charge (ex. Tax)	Non-recurring charge (ex. Tax)	Hardware charge (ex. Tax)	Credit (ex. Tax)	Adjustment (ex. Tax)	Net total	Tax	Total
2200235973	507	1,022	54064	1,475	345,172	4,094.6841	1,637.0865	13,505.31	38,505.00	47,923.00	0.00	0	0.01	52,010.32	0.00	52,010.32
2200237018	668	1,338	36757	1,749	129,874	372.6067	133.3383	3,533.91	16,039.43	15,881.75	0.00	-0	0.00	19,573.34	0.00	19,573.34
2200235695	46	94	3654	134	14,635	111.8364	40.3204	688.79	1,359.03	1,630.26	0.00	-0	0.00	2,047.82	0.00	2,047.82
IE02-012018-76	0	2	56	0	10,569	0.0000	0.0000	46,123.16	0.00	0.00	0.00	-0	0.00	46,123.15	10,608.33	56,731.48
9900227774	51	104	3888	190	16,876	79.7337	4.2087	340.91	1,795.06	1,932.06	0.00	-0	0.00	2,135.97	0.00	2,135.97
9900228685	52	106	3939	194	18,694	155.8134	6.7270	352.41	2,028.20	2,087.85	0.00	0	0.00	2,380.61	0.00	2,380.61
9900230888	52	106	3807	194	16,055	88.5667	3.7805	315.29	1,766.55	1,796.15	0.00	-0	0.00	2,081.84	0.00	2,081.84
9900232882	52	106	4216	194	19,420	94.7742	16.2529	396.13	2,019.75	2,110.75	0.00	0	0.00	2,415.88	0.00	2,415.88

To view the Spend & Usage Summary Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Summary Reporting**, click the **Run** button on the **Spend & Usage Summary Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.

- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Spend & Usage Summary Data, as described below:

Spend & Usage Summary Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Bill year-month: Year and month of the bill date.

Invoice Issue Date: The date when the bill was issued.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Number of CTNs: Count of all unique customer telephone numbers on the invoice.

Number of Zero Usage CTNs: Count of all subscribers for which the number of calls = 0, duration = 0 and volume = 0.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Voice (mins): The total number of minutes for all charges identified as Calls on the invoice.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Currency: The currency in which the report values appear.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Net Total: The net total of charges on the invoice.

Tax: The total tax charges on the invoice.

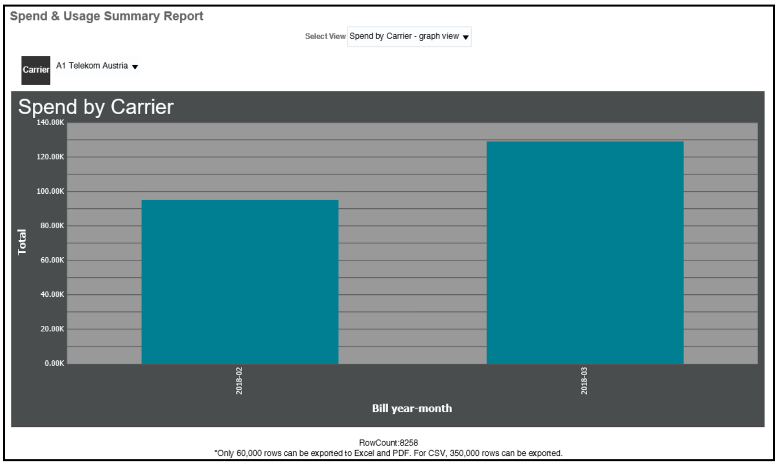
Charge amount: The sum of all charges on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

Contract id: Account contract id.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.

6. To view the information as a pie chart showing spend summary by carrier, drop down the **Select view** list, and choose **Spend by Carrier - graph view**. 'To view data on a different carrier, drop down the **Carrier** list and choose one.



7. To view carrier's spend trend by month, drop-down the **Select view** list, and choose **Spend by Carrier - pivot view**.

Spend & Usage Summary Report

Select View: Spend by Carrier - pivot view

	Spend trend by month											Total
Carrier	2018-01	2018-02	2018-03	2018-04	2018-05	2018-06	2018-07	2018-08	2018-09	2018-10	2018-11	
A1 Telekom Austria		94,881.60	128,884.32									**223,765.92**
CENTRAL BILLING	11,649,661.33		949,691.80	3,390,663.97	278,805.30	666,682.66		20,659.32	29,154,881.45	100,750.05		**46,211,795.88**
Central Billing				20,896.62	79,693.51	347,797.76	732,238.94	14,066,860.63	2,234,882.82	8,860,143.80	44,044.13	**26,386,558.22**
TDC Norway								438,652.38	3,158,782.04	903,582.60		**4,501,017.02**
Vodafone UK	1,472,978.21								3,307.46	12,178.89		**1,488,464.56**
Grand Total	**13,122,639.55**	**94,881.60**	**1,078,576.12**	**3,411,560.60**	**358,498.81**	**1,014,480.42**	**732,238.94**	**14,526,172.33**	**34,551,853.78**	**9,876,655.33**	**44,044.13**	**78,811,601.61**

RowCount:8258
*Only 60,000 rows can be exported to Excel and PDF. For CSV, 350,000 rows can be exported.

8. (Optional) Export the report. See 'Export a report' on page 165.

Spend & Usage Detail - Voice Only Report

This detail report returns Voice billing information by region, country, and billing dates down to a service number level. The Spend & Usage Detail - Voice only Report provides pre-defined filters on key data elements allowing for more accurate data analysis

The report is pre-filtered for services that record charges in calls.

Spend & Usage Detail - Voice only Report

Region	Country	Company name	Account number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service number	Number of calls	Voice national (mins)	Voice international (mins)	Voice roaming (mins)	Voice premium (mins)	Conferencing (mins)	Voice national charge (ex. Tax)	Voice international charge (ex. tax)	Voice roaming charge (ex. Tax)	Voice premium charge (ex. Tax)	Conferencing charge (ex. Tax)
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/07/2018	2017-06	01/06/2017	30/06/2017	EUR	441344476501	8	43	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/08/2018	2017-07	01/07/2017	31/07/2017	EUR	441344476501	10	12	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/08/2018	2017-07	01/07/2017	31/07/2017	EUR	441344476545	2	53	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/07/2018	2017-06	01/06/2017	30/06/2017	EUR	441344476550	4	11	0	0	0	0	0.00	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/07/2018	2017-06	01/06/2017	30/06/2017	EUR	441344476566	23	186	0	0	0	0	1.10	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/08/2018	2017-07	01/07/2017	31/07/2017	EUR	441344476566	33	194	0	0	0	0	1.43	0.00	0.00	0.00	0.00
Europe	United Kingdom	Demo Ind - CB - UK	1000015576	26/07/2018	2017-06	01/06/2017	30/06/2017	EUR	441344476573	2	2	2	0	0	0	0.00	0.00	0.00	0.00	0.00

To view the Spend & Usage Detail - Voice Only Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Detail Reporting**, click the **Run** button on the **Spend & Usage Detail - Voice Only Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

   Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

Select Filters

   - **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
   - **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **>=** operator.
   - **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
   - **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
   - **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains** operator.
   - **Company name**: Filters the result to a specific company name to which the telecom services are being supplied.
   - **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

   For more options on filters, see 'Report filter operators and advanced options' on page 151

4. Review the Spend & Usage Detail - Voice Only Data, as described below:

Spend & Usage Detail - Voice Only Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Number: The unique number to identify the service.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice roaming (mins): The total minutes for all charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Voice national charge (ex. Tax): The total sum, excluding tax, for charges identified as National usage on the invoice using the VGE codes

Voice international charge (ex. Tax): The charges identified as International usage on the invoice using the VGE codes

Voice roaming charge (ex. Tax): The charges identified as Roaming usage on the invoice using the VGE codes. Roaming includes voice usage while overseas.

Voice premium charge (ex. Tax): The charges identified as Premium usage on the invoice using the VGE codes. Premium includes calls made to and from premium numbers, such as competitions and voting services.

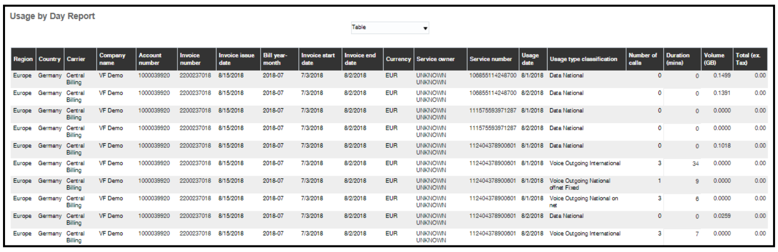
Conferencing charge (ex. Tax): The total number of minutes for all charges identified as Conference calls on the invoice using the VGE codes, excluding tax charges.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

Usage by Day Report

This Usage by Day Report will include the ability to view usage by day using four graphs which will display usage by charge excluding tax, number of calls, call duration and total data (GB) for the selected invoice(s) All four graphs use the invoice start and end dates to limit the data to display, which means that some usage may not be shown if it was carried from the previous invoice billing cycle period, for example, roaming usage. Each graph shows the usage dates on the x-axis and the values on the y-axis.

When the report first appears, it shows a table data used in the Usage by Day graphs:


Usage by Day Report

Table

Region	Country	Carrier	Company name	Account number	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Usage date	Usage type classification	Number of calls	Duration (mins)	Volume (GB)	Total (ex. Tax)
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	106855114248700	8/1/2018	Data National	0	0	0.1499	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	106855114248700	8/2/2018	Data National	0	0	0.1391	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	111575593971287	8/1/2018	Data National	0	0	0.0000	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	111575593971287	8/2/2018	Data National	0	0	0.0000	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/1/2018	Data National	0	0	0.1018	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/1/2018	Voice Outgoing International	3	34	0.0000	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/1/2018	Voice Outgoing National offnet Fixed	1	9	0.0000	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/1/2018	Voice Outgoing National on net	3	6	0.0000	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/2/2018	Data National	0	0	0.0259	0.00
Europe	Germany	Central Billing	VF Demo	1000039920	2200237018	8/15/2018	2018-07	7/3/2018	8/2/2018	EUR	UNKNOWN UNKNOWN	112404378900601	8/2/2018	Voice Outgoing International	3	7	0.0000	0.00

To view the Usage by Day Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Summary Reporting**, click the **Run** button on the **Usage by Day Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set, and then click **OK**.

ⓘ It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Usage date is a required filter: you must set this range of dates to run the report.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.

- **Service owner**: The name of the person in charge of this service. Type as much of the first and or last name as you know. The results will be filtered to just those matching names. Make sure you choose the **is equal to/is in** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Usage by Day Data, as described below:

Usage by Day Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Usage date: The date shown on the invoice when the charge was incurred.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Duration (mins): The length of time in minutes of the call detail record.

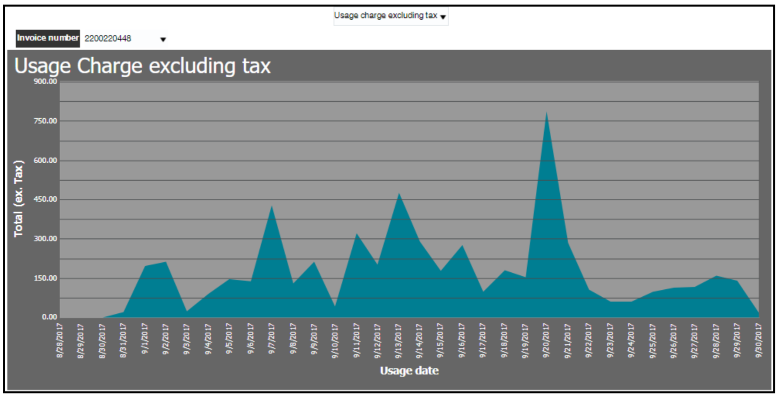
Volume (GB): The amount of data in gigabytes for the call detail records on the invoice.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

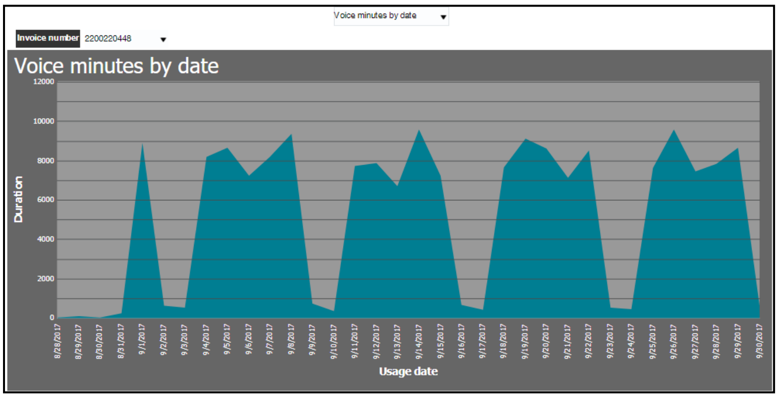
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

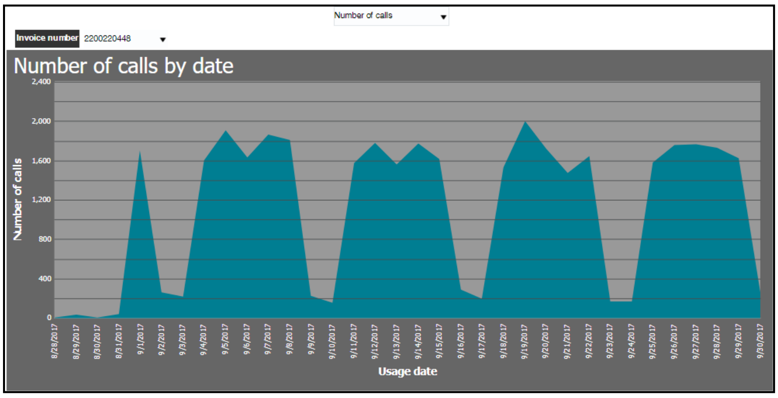
5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. To view a graph of the usage charges by day, drop down the list above the table and choose **Usage charge excluding tax**. To view data for a different invoice, drop down the **Invoice number** list and choose the want you want to graph.



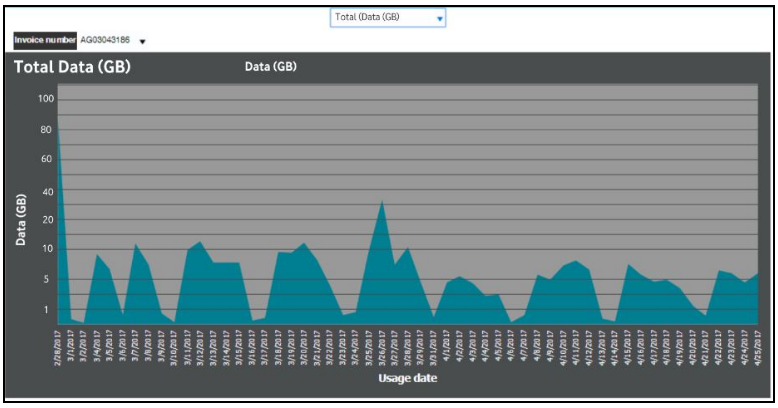
7. To view a graph of the voice minutes used by day, drop down the list above the table and choose **Voice minutes by date**. To view data for a different invoice, drop down the **Invoice number** list and choose the want you want to graph.



8. To view a graph of the number of calls by day, drop down the list above the table and choose **Number of calls**. To view data for a different invoice, drop down the **Invoice number** list and choose the want you want to graph.



9. To view a graph of the total data by day, drop down the list above the table and choose **Total Data (GB)**. To view data for a different invoice, drop down the **Invoice number** list and choose the want you want to graph.

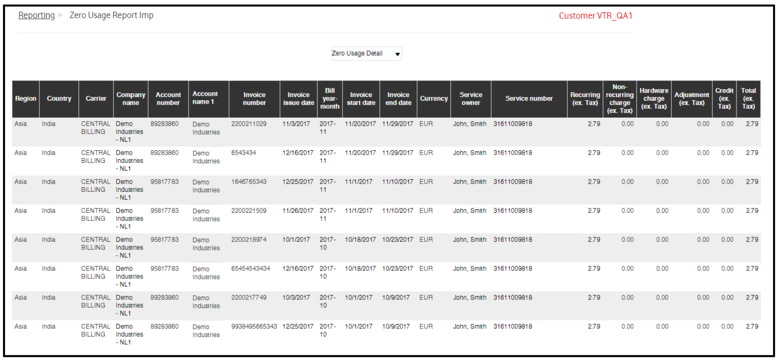


10. (Optional) Export the report. See 'Export a report' on page 165.

Zero Usage Report

The Zero Usage reports displays services that have an associated bill but no usage. This means that the service number may have monthly or other recurring charges, but no usage charges such as minutes, text, or data. Use this report to find unused services that may be cancelled, thereby saving you money.

The report is pre-filtered for service numbers that are not account numbers and that show no calls, no data, and no messages, but charges in other areas such as recurring, non-recurring, hardware, adjustments, or credits.



Reporting > Zero Usage Report Imp

Customer VTR_QA1

Zero Usage Detail

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Recurring (ex. Tax)	Non-recurring charge (ex. Tax)	Hardware charge (ex. Tax)	Adjustment (ex. Tax)	Credit (ex. Tax)	Total (ex. Tax)
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	2200211029	11/3/2017	2017-11	11/20/2017	11/29/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	6543434	12/16/2017	2017-11	11/20/2017	11/29/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	1646765343	12/25/2017	2017-11	11/1/2017	11/10/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	2200221509	11/26/2017	2017-11	11/1/2017	11/10/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	2200218974	10/1/2017	2017-10	10/18/2017	10/23/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	65454543434	12/16/2017	2017-10	10/18/2017	10/23/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	2200217749	10/3/2017	2017-10	10/1/2017	10/9/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	9938495665343	12/25/2017	2017-10	10/1/2017	10/9/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79

To view the Zero Usage Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Spend & Usage Detail Reporting**, click the **Run** button on the **Zero Usage Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is one month.

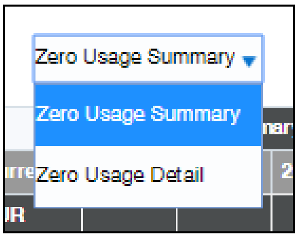
Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know. the results will be filters to just those invoices numbers containing those matching digits. Make sure you choose the **contains any** operator.

- **Service owner**: Filters the results to service owners with the name you type. You may type a specific name, such as **Maria Louisa Rivera**, and see only that user's records, or you may type a partial name such as **J** and see all service owners with J in any place in their name. Make sure you choose the **contains any** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. By default, the initial view is the Zero Usage Summary. To switch to the detail, select **Zero Usage Detail** from the report view drop-down at the top-center of the report:



5. Review the Zero Usage reports, as described below:

Zero Usage Summary

The Zero Usage Summary view is grouped by Service number, then Account number, then Service number.

Zero Usage Report

Zero Usage Summary

Carrier	Account number	Service number	Currency	Zero Usage Summary 2018-07	2018-06	2018-05	2018-04	2018-03	2018-02	2018-01
CENTRAL BILLING	1000014699	447341501137@demo_uk	EUR		70.64	101.27	26.83	26.05	26.01	25.01
		447341501142	EUR		0.58	2.56	2.58	2.55		
		447341501142@demo_uk	EUR		0.00	0.00	0.00	0.00	31.55	25.01
		447341509815@demo_uk	EUR		6.01	6.01	6.05	5.98	5.97	5.98
		447342057984@demo_UK	EUR			31.78	25.31	387.49	24.97	28.54
		447342057984@demo_uk	EUR		28.68					
		447342058273@demo_uk	EUR		18.09	11.96	18.23	351.72	17.98	11.89
		447342065667@demo_uk	EUR		34.71	18.11	18.23	40.67	17.98	18.01
		447342070402@demo_uk	EUR		18.09	18.11	12.04	11.89	11.88	21.41
		447342070415@demo_uk	EUR		11.95	6.01	21.67	18.01	5.97	5.98
		447342070431@demo_uk	EUR		28.68	28.71	28.89	31.60	28.50	31.60
		447342071819@demo_uk	EUR		6.01	6.01	12.04	11.89	5.97	5.98
		447342073582@demo_uk	EUR		25.13	36.57	6.05	11.89	5.97	11.89
		447342073583	EUR						0.18	
		447342073583@demo_uk	EUR						0.00	5.98
		447342076053@demo_uk	EUR		36.51	25.15	21.67	25.01	11.88	37.26
		447342076149@demo_uk	EUR		18.09	18.11	18.23	131.29	17.98	21.41
		447342083752@demo_uk	EUR		18.09	11.96	18.23	11.89	17.98	18.01
		447342085263@demo_uk	EUR		21.51	18.11	31.53	11.89	11.88	11.89
		447342085358	EUR		2.50	2.56	2.58	2.55	2.54	2.55
		447342085358@demo_uk	EUR		0.00	0.00	0.00	0.00	0.00	0.00
		447342086251@demo_uk	EUR		34.48	36.57	31.99	31.60	28.50	52.67
		447342087603@demo_uk	EUR		11.95	11.96	18.23	22.83	5.97	11.89
		447342088260@demo_uk	EUR		18.09	18.11	18.23	18.01	17.98	18.01
		447384235530@demo_uk	EUR		34.48	34.52	36.80	36.36	34.27	453.05

Rows 1 - 25

Refresh - Print - Export

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Service Number: The unique number to identify the service.

Currency: The currency in which the report values appear.

Bill year-month: Year and month of the bill date.

Zero Usage Detail

Reporting > Zero Usage Report Imp

Customer VTR_QA1

Zero Usage Detail

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Recurring (ex. Tax)	Non-recurring charge (ex. Tax)	Hardware charge (ex. Tax)	Adjustment (ex. Tax)	Credit (ex. Tax)	Total (ex. Tax)
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	2200211029	11/3/2017	2017-11	11/20/2017	11/29/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	6543434	12/16/2017	2017-11	11/20/2017	11/29/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	1646765343	12/25/2017	2017-11	11/1/2017	11/10/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	2200221509	11/26/2017	2017-11	11/1/2017	11/10/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	2200218974	10/1/2017	2017-10	10/18/2017	10/23/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	95817783	Demo Industries	65454543434	12/16/2017	2017-10	10/18/2017	10/23/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	2200217749	10/3/2017	2017-10	10/1/2017	10/9/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79
Asia	India	CENTRAL BILLING	Demo Industries - NL1	89283860	Demo Industries	9938495665343	12/25/2017	2017-10	10/1/2017	10/9/2017	EUR	John, Smith	31611009818	2.79	0.00	0.00	0.00	0.00	2.79

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Hardware charge (ex. Tax): The total sum, excluding tax, of charges identified as hardware charges on the invoice. Hardware charges include things such as purchase of handsets.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

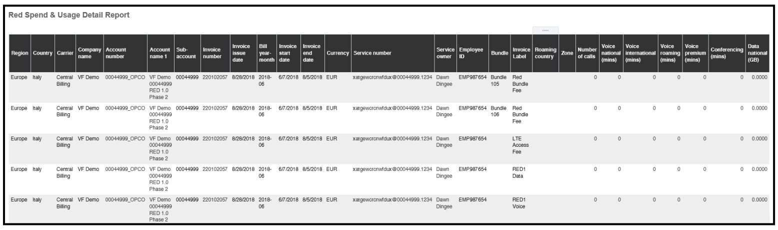
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

6. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
7. (Optional) Export the report. See 'Export a report' on page 165.
8. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Red Spend & Usage Detail Report

The Red Bundle Spend & Usage Detail report includes only services using the Red tariff. It displays spend details to determine bundle costs vs. out of bundle costs and out of bundle roaming costs to allow you a complete view of your device fleet and mobile applications using Vodafone Red.



Red Spend & Usage Detail Report

Region	Country	Carrier	Company name	Account number	Account name 1	Sub-account	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service number	Service owner	Employee ID	Bundle	Invoice Label	Roaming country	Zone	Number of calls	Voice national (mins)	Voice international (mins)	Voice roaming (mins)	Voice premium (mins)	Conferencing (mins)	Data national (GB)
Europe	Italy	Central Billing	VF Demo	00044999_OPCO	VF Demo 00044999 RED 1.0 Phase 2	00044999	220102057	8/28/2018	2018-06	6/7/2018	8/5/2018	EUR	xatgewcrcnwfdux@00044999.1234	Dawn Dingee	EMP987654	Bundle 105	Red Bundle Fee			0	0	0	0	0	0	0.0000
Europe	Italy	Central Billing	VF Demo	00044999_OPCO	VF Demo 00044999 RED 1.0 Phase 2	00044999	220102057	8/28/2018	2018-06	6/7/2018	8/5/2018	EUR	xatgewcrcnwfdux@00044999.1234	Dawn Dingee	EMP987654	Bundle 106	Red Bundle Fee			0	0	0	0	0	0	0.0000
Europe	Italy	Central Billing	VF Demo	00044999_OPCO	VF Demo 00044999 RED 1.0 Phase 2	00044999	220102057	8/28/2018	2018-06	6/7/2018	8/5/2018	EUR	xatgewcrcnwfdux@00044999.1234	Dawn Dingee	EMP987654		LTE Access Fee			0	0	0	0	0	0	0.0000
Europe	Italy	Central Billing	VF Demo	00044999_OPCO	VF Demo 00044999 RED 1.0 Phase 2	00044999	220102057	8/28/2018	2018-06	6/7/2018	8/5/2018	EUR	xatgewcrcnwfdux@00044999.1234	Dawn Dingee	EMP987654		RED1 Data			0	0	0	0	0	0	0.0000
Europe	Italy	Central Billing	VF Demo	00044999_OPCO	VF Demo 00044999 RED 1.0 Phase 2	00044999	220102057	8/28/2018	2018-06	6/7/2018	8/5/2018	EUR	xatgewcrcnwfdux@00044999.1234	Dawn Dingee	EMP987654		RED1 Voice			0	0	0	0	0	0	0.0000

To view the Red Spend & Usage Detail Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Worry Free Roaming Reporting**, click the **Run** button on the **Red Spend & Usage Detail Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters. By default, the date range is two months.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.

- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: The name of the person in charge of this service. Type as much of the first and or last name as you know. The results will be filtered to just those matching names. Make sure you choose the **is equal to/is in** operator.
- **Employee ID**: Filters the results to employee id's that contain the characters you enter. By default, all employee id's will be included.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Red Spend & Usage Detail data, as described below:

Red Spend & Usage Detail Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Sub-account: Child account of the account associated with the service number. This account typically does not exist on its own in VTM; rather, it exists in relationship to the master account only.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.
Employee ID: The Employee ID associated to a service.

Bundle: The bundle tier (Tariff) applied for the billing period.

Invoice label: A text description of the charge.

Roaming country: The country in which the roaming charges occurred.

Zone: The Zone used for the bundle pricing. Zones are based on regions.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice roaming (mins): The total minutes for all charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Premium (GB): The total amount of data in gigabytes for all charges identified as Data Premium on the invoice using the VGE codes. This includes charges that apply to data sent and received from premium numbers, such as those for competitions and voting services.

Messaging National: The total amount of data for all charges identified as messaging (SMS and MMS) national on the invoice using the VGE codes.

Messaging International: The total amount of data for all charges identified as messaging (SMS and MMS) International on the invoice using the VGE codes.

Messaging roaming: The total amount of data in gigabytes for all charges identified as messaging (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

Recurring Units: The number of recurring charges.

Voice national charge (ex. Tax): The total sum, excluding tax, for charges identified as National usage on the invoice using the VGE codes

Voice international charge (ex. Tax): The charges identified as International usage on the invoice using the VGE codes

Voice roaming charge (ex. Tax): The charges identified as Roaming usage on the invoice using the VGE codes. Roaming includes voice usage while overseas.

Voice premium charge (ex. Tax): The charges identified as Premium usage on the invoice using the VGE codes. Premium includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing charge (ex. Tax): The total number of minutes for all charges identified as Conference calls on the invoice using the VGE codes, excluding tax charges.

Data national (ex tax): The total sum, excluding tax, of charges identified as data national on the invoice using the VGE codes.

Data roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as data roaming on the invoice using the VGE codes. Roaming charges include data usage while overseas.

Data premium charge (ex. Tax): The total sum, excluding tax, of charges identified as data premium on the invoice using the VGE codes. Premium charges apply to data sent to and from premium numbers, which include things such as competitions and voting services.

Messaging national charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging national (SMS and MMS) on the invoice using the VGE codes

Messaging international charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging international (SMS and MMS) on the invoice using the VGE codes

Messaging roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging roaming on the invoice using the VGE codes. This includes messages (SMS and MMS) sent and received while overseas.

Messaging premium charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging premium on the invoice using the VGE codes. Premium charges apply to messages (SMS and MMS) sent and received from premium numbers, such as competitions and voting services.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Proration Ratio: Ratio that is applied to the full monthly recurring charges for connections that are activated or terminated throughout the month. This ensures that the users only pay the amount that corresponds to the number of active days in that month.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

Red Spend & Usage Detail Roaming Report

The Red Bundle Spend & Usage Detail Roaming report includes only services using the Red tariff. It displays spend details to determine bundle costs vs. out of bundle costs, as well as out of bundle roaming costs with breakdown on usage in each zone, to allow you a complete view of your device fleet and mobile applications using Vodafone Red.

Red Spend & Usage Detail Roaming Report

Region	Country	Carrier	Company name	Account number	Account name 1	Sub-account	Invoice number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service number	Service owner	Voice national (mins)	Voice internation (mins)
Europe	Ireland	Central Billing	BAHW	1616030506	PARKNRL	1616030506	220051028	04/09/2020	2020-08	01/08/2020	31/08/2020	EUR	ACCOUNT_1616030506	UNKNOWN UNKNOWN	0	

To view the Red Spend & Usage Detail Roaming Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Spend & Usage Reporting**, click the **Run** button on the **Red Spend & Usage Detail Roaming Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date, **Invoice end date** and **Currency code** are required filters. By default, the date range is two months.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.

- **Service owner**: The name of the person in charge of this service. Type as much of the first and or last name as you know. The results will be filtered to just those matching names. Make sure you choose the **is equal to/is in** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.
- **Employee ID**: Filters the results to employee id's that contain the characters you enter. By default, all employee id's will be included.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Red Spend & Usage Detail Roaming data, as described below:

Red Spend & Usage Detail Roaming Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Sub-account: Child account of the account associated with the service number. This account typically does not exist on its own in VTM; rather, it exists in relationship to the master account only.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice Roaming Zone 1 (mins): The total minutes for all Zone 1 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 2 (mins): The total minutes for all Zone 2 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 3 (mins): The total minutes for all Zone 3 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 4 (mins): The total minutes for all Zone 4 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 5 (mins): The total minutes for all Zone 5 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming Zone 1 (GB): The total amount of data in gigabytes for all Zone 1 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 2 (GB): The total amount of data in gigabytes for all Zone 2 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 3 (GB): The total amount of data in gigabytes for all Zone 3 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 4 (GB): The total amount of data in gigabytes for all Zone 4 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 5 (GB): The total amount of data in gigabytes for all Zone 5 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Premium (GB): The total amount of data in gigabytes for all charges identified as Data Premium on the invoice using the VGE codes. This includes charges that apply to data sent and received from premium numbers, such as those for competitions and voting services.

Messaging National: The total amount of data for all charges identified as messaging (SMS and MMS) national on the invoice using the VGE codes.

Messaging International: The total amount of data for all charges identified as messaging (SMS and MMS) International on the invoice using the VGE codes.

Messaging Roaming Zone 1: The total number of messages for all Zone 1 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 2: The total number of messages for all Zone 2 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 3: The total number of messages for all Zone 3 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 4: The total number of messages for all Zone 4 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 5: The total number of messages for all Zone 5 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

Recurring Units: The number of recurring charges.

Voice national charge (ex. Tax): The total sum, excluding tax, for charges identified as National usage on the invoice using the VGE codes

Voice international charge (ex. Tax): The charges identified as International usage on the invoice using the VGE codes

Voice roaming charge (ex. Tax): The charges identified as Roaming usage on the invoice using the VGE codes. Roaming includes voice usage while overseas.

Voice premium charge (ex. Tax): The charges identified as Premium usage on the invoice using the VGE codes. Premium includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing charge (ex. Tax): The total number of minutes for all charges identified as Conference calls on the invoice using the VGE codes, excluding tax charges.

Data national charge (ex. Tax): The total sum, excluding tax, of charges identified as data national on the invoice using the VGE codes.

Data roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as data roaming on the invoice using the VGE codes. Roaming charges include data usage while overseas.

Data premium charge (ex. Tax): The total sum, excluding tax, of charges identified as data premium on the invoice using the VGE codes. Premium charges apply to data sent to and from premium numbers, which include things such as competitions and voting services.

Messaging national charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging national (SMS and MMS) on the invoice using the VGE codes

Messaging international charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging international (SMS and MMS) on the invoice using the VGE codes

Messaging roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging roaming on the invoice using the VGE codes. This includes messages (SMS and MMS) sent and received while overseas.

Messaging premium charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging premium on the invoice using the VGE codes. Premium charges apply to messages (SMS and MMS) sent and received from premium numbers, such as competitions and voting services.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Hardware charge (ex. Tax): The total sum, excluding tax, of charges identified as hardware charges on the invoice. Hardware charges include things such as purchase of handsets.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

Red Spend by Zone Report

The Red Spend by Zone report includes only services using the Red tariff. It displays the billing data broken out by Zone for Vodafone Red. Data is presented in a bar graph and a table showing spend per Zone per month to allow you a complete view of your device fleet and mobile applications spending per zone using Vodafone Red.

For details on the data used to generate these graphs, see 'Red Spend & Usage Detail Report' on page 98.

To view the Red Spend by Zone Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Spend & Usage Reporting**, click the **Run** button on the **Red Spend by Zone Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters. By default, the date range is three months.

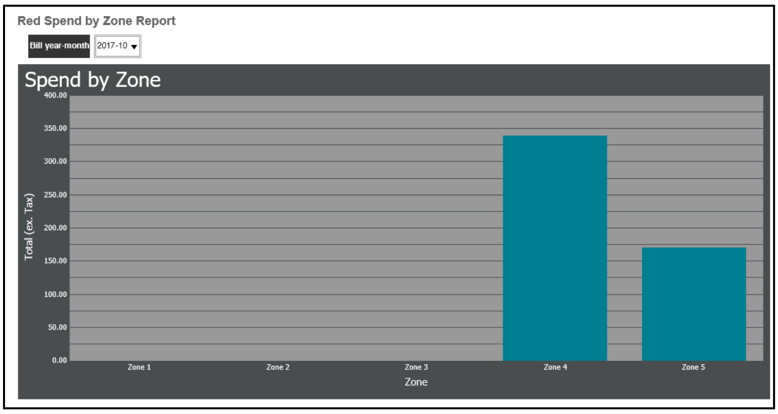
Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.

- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: The name of the person in charge of this service. Type as much of the first and or last name as you know. The results will be filtered to just those matching names. Make sure you choose the **is equal to/is in** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. The total roaming charges within each zone appear in a bar graph.



5. Beneath the bar graph, review the data as displayed in tabular format.

		Total (ex. Tax)	
Zone	Currency	2017-10	2017-11
Zone 1	EUR	0.00	0.00
Zone 2	EUR	0.00	0.00
Zone 3	EUR	0.00	0.00
Zone 4	EUR	338.99	23.30
Zone 5	EUR	170.43	552.31
Total		**16,465.69**	**18,824.48**

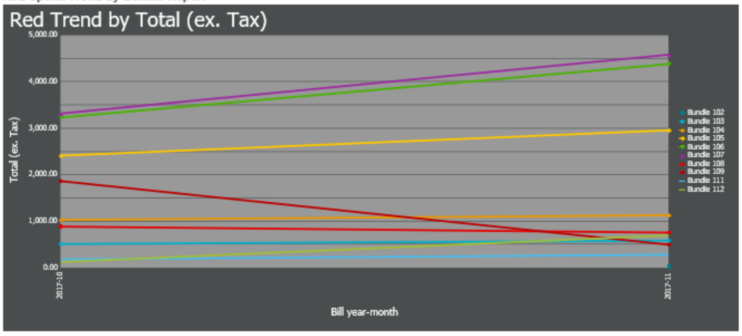
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

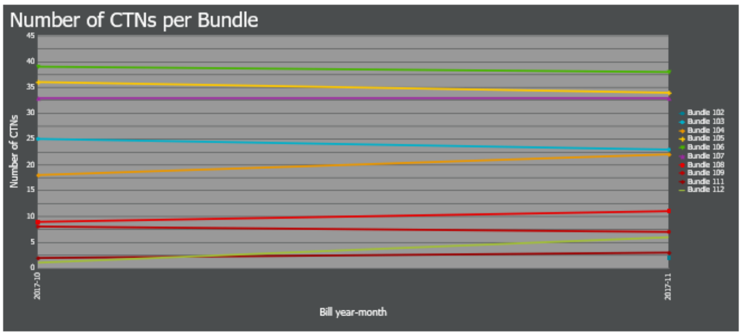
Red Spend Trend by Bundle Report

The Red Spend Trend by Bundle report includes only services using the Red tariff. It presents data in line graphs and a table showing bundle trends per month, allowing you a complete view of your device fleet and mobile applications spending per zone using Vodafone Red.

For details on the data used to generate these graphs, see 'Red Spend & Usage Detail Report' on page 98.

Red Spend Trend by Bundle Report





		2017-05		2017-06		2017-07		2017-08	
Bundle	Currency	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)
Bundle 102	EUR							1	12.85
Bundle 103	EUR	23	280.18	23	224.40	33	424.40	32	533.40
Bundle 104	EUR	16	709.06	19	636.87	17	617.34	21	704.14
Bundle 105	EUR	50	1,794.50	49	1,853.17	45	1,793.26	40	1,992.52
Bundle 106	EUR	37	2,489.74	35	2,236.50	30	1,773.08	30	2,084.13
Bundle 107	EUR	24	1,583.28	23	1,797.82	27	1,857.67	24	2,004.95
Bundle 108	EUR	9	589.51	9	655.51	8	502.10	12	694.16
Bundle 109	EUR	5	354.20	7	459.50	6	1,479.98	4	246.34
Bundle 110	EUR	3	231.41	1	46.05	1	45.56		
Bundle 111	EUR					3	225.55	3	216.67
Bundle 112	EUR	1	55.65			1	113.84	4	447.00
Total		**168**	**8,087.53**	**166**	**7,909.81**	**171**	**8,832.80**	**171**	**8,936.17**

Refresh - Print - Export

To view the Red Spend Trend by Bundle Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Spend & Usage Reporting**, click the **Run** button on the **Red Spend Trend by Bundle Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters. By default, the date range is three months.

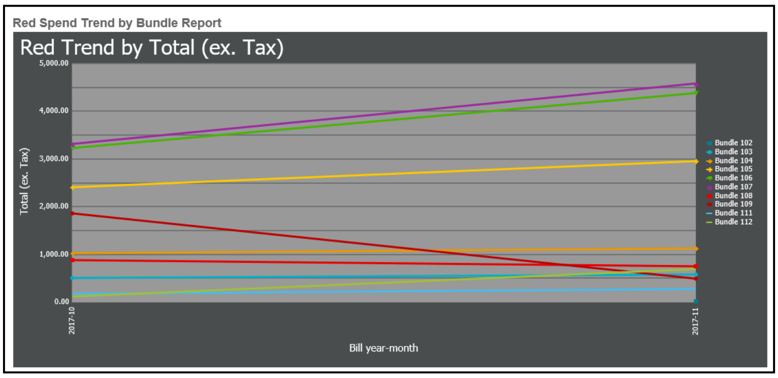
Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: The name of the person in charge of this service. Type as much of the first and or last name as you know. The results will be filtered to just those matching names. Make sure you choose the **is equal to/is in** operator.
- **Service number**: Filters the results to service numbers that contain the digits you type here. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

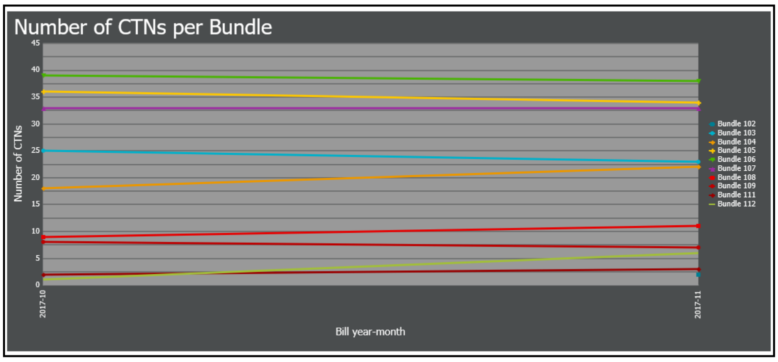
For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the follow charts:

- **Red Trend by Total** displays a line graph of the total spend excluding tax by each bundle tier.



- **Number of CTNs per Bundle** display a line graph with the total number of calls made within each bundle tier.



- The pivot table show both the number of calls and the total by Bundle.

		2017-05		2017-06		2017-07		2017-08		2017-09		2017-11	
Bundle	Currency	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)	Number of CTNs	Total (ex. Tax)
Bundle 102	EUR							1	12.85	1	2.85	1	2.85
Bundle 103	EUR	23	280.18	23	224.40	33	424.40	32	533.40	12	133.16	24	794.08
Bundle 104	EUR	16	709.06	19	636.87	17	617.34	21	704.14	12	514.74	26	1,495.78
Bundle 105	EUR	50	1,794.50	49	1,853.17	45	1,793.26	40	1,992.52	26	1,527.06	62	4,179.02
Bundle 106	EUR	37	2,489.74	35	2,236.50	30	1,773.08	30	2,084.13	28	2,557.30	33	2,517.03
Bundle 107	EUR	24	1,583.28	23	1,797.82	27	1,857.67	24	2,004.95	20	2,705.28	17	1,877.68
Bundle 108	EUR	9	589.51	9	655.51	8	502.10	12	694.16	3	208.74	3	327.32
Bundle 109	EUR	5	354.20	7	459.50	6	1,479.98	4	246.34	4	293.40	1	127.89
Bundle 110	EUR	3	231.41	1	46.05	1	45.56					1	96.23
Bundle 111	EUR					3	225.55	3	216.67	1	108.88		
Bundle 112	EUR	1	55.65			1	113.84	4	447.00	2	245.26	1	319.34
Total		168	8,087.53	166	7,909.81	171	8,832.80	171	8,936.17	109	8,296.67	169	11,737.23

Refresh - Print - Export

5. (Optional) Export the report. See 'Export a report' on page 165.
6. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Top N Calls Report (Highest Priced Calls)

This Top number report displays the top calls based on the total charges for the call record. The Top N Calls Report provides pre-defined filters on key data elements, allowing for more accurate data analysis. By default, the top 50 calls are included, but you can filter the report to show fewer. Note that if there is a tie for the bottom number in the list, all tied numbers will appear, even if that extends the list beyond the number chosen.

Top N Calls Report Imp

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice Number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Usage date	Usage Type Classification	Called Number	Calling Number	Duration (mins)	Called Or Calling Country	Total (ex tax)
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/20/2017	International		91422908****	517		6,718.83
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/13/2017	International		5912631****	342		6,153.00
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/19/2017	International		91452123****	359		4,302.00
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/18/2017	International		91281123****	184		2,752.50
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/15/2017	Premium Rate		30696012****	517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331103	1/15/2017	Premium Rate		30696012****	517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331104	1/15/2017	Premium Rate		30696012****	517		2,377.43
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331100	1/9/2017	International		6333335****	517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331103	1/9/2017	International		6333335****	517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331104	1/9/2017	International		6333335****	517		2,015.65
Europe	Ireland	CENTRAL BILLING	GSIP BA IE CA03	14842189	GSIP BA IE CA03	IE02-012018-76	1/5/2018	2017-01	1/1/2017	1/31/2017	EUR	UNKNOWN UNKNOWN	35361331101	1/17/2017	International		85523634****	509		1,830.60

To view the Top N Calls Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top N Reporting**, click the **Run** button on the **Top N Calls Report** tile.

3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

The **Top N** filter and the **Usage date** are required filters: you must provide these details to run the report.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Top N**: The number of records you want to display, from 1 to 100. The default is 100.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Top N Calls data, as described below.

Top N Calls Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Usage date: The date shown on the invoice when the charge was incurred.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

Called number: The service number to which a call was placed as identified on the invoice.

Calling number: The service number placing the call as identified on the invoice.

Duration (mins): The length of time in minutes of the call detail record.

Called or calling country: The country to which the call was placed.

Source Country: Country from where the call was made.

Target Country: Country to which the call was made.

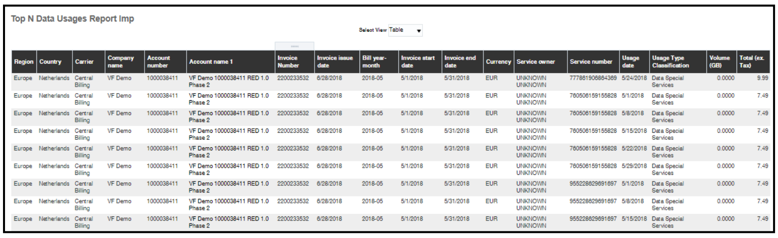
Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Top N Data Usages Report

The Top Data Usages report displays the service numbers that show the highest data charges. By default, the top 50 service numbers appear, but you can filter the report to show fewer. Note that if there is a tie for the bottom number in the list, all tied numbers will appear, even if that extends the list beyond the number chosen.



Top N Data Usages Report Imp

Select View Table

Region	Country	Carrier	Company name	Account number	Account name 1	Invoice Number	Invoice issue date	Bill year-month	Invoice start date	Invoice end date	Currency	Service owner	Service number	Usage date	Usage Type Classification	Volume (GB)	Total (ex. Tax)
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	777861906864369	5/24/2018	Data Special Services	0.0000	9.99
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	760506159155828	5/1/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	760506159155828	5/8/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	760506159155828	5/15/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	760506159155828	5/22/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	760506159155828	5/29/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	955228629691697	5/1/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	955228629691697	5/8/2018	Data Special Services	0.0000	7.49
Europe	Netherlands	Central Billing	VF Demo	1000038411	VF Demo 1000038411 RED 1.0 Phase 2	2200233532	6/28/2018	2018-05	5/1/2018	5/31/2018	EUR	UNKNOWN UNKNOWN	955228629691697	5/15/2018	Data Special Services	0.0000	7.49

To view the Top N Data Usages Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top N Reporting**, click the **Run** button on the **Top N Data Usages Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

The **Top N** filter as well as the **Usage date** are required filters: you must provide these details to run the report.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Top N**: The number of records you want to display, from 1 to 100. The default is 100.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.

- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know, and the results will be filtered to just those invoice numbers containing those matching digits. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Top N Usages data, as described below.

Top Data Usages Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Carrier: The service provider of the communications services.

Company: The name of the company to which the telecom services are being supplied.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Invoice Number: The identifier of the bill for the service.

Invoice Issue Date: The date when the bill was issued.

Bill year-month: Year and month of the bill date.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Currency: The currency in which the report values appear.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

VUM Provisioned Date: The date when the user has been provisioned in VUM, if available.

VUM Registration Date: The date when the user has registered to use VUM, if the case.

Usage date: The date shown on the invoice when the charge was incurred.

Usage type classification: The sub category description of the VGE code used to classify call detail records. VGE hierarchy is Item Type > Item name > Item Description.

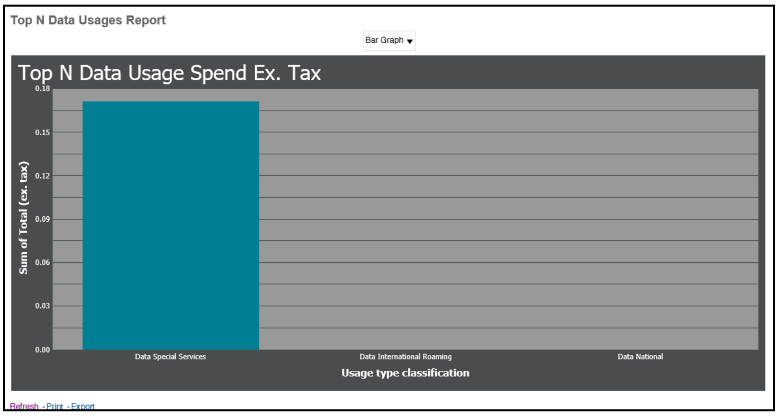
Source Country: Country where the data usage was made.

Volume (GB): The amount of data in gigabytes for the call detail records on the invoice.

Total (ex. Tax): The sum of all charges, excluding tax, on the invoice.

User ID: An internal identifier used to manage data visibility (slicing) rules. This column is hidden by default, and you can ignore it.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. To view the information as a pie chart showing total spend by usage type classification, drop down the **Select view** list, and choose **Bar Graph**. You can filter this graph by Region, Country, and State.



7. (Optional) Export the report. See 'Export a report' on page 165.
8. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Top N Users Report

The Top Users Report displays the top 50 users with the highest total spend. By default, the top 50 service numbers appear, but you can filter the report to show fewer. Note that if there is a tie for the bottom number in the list, all tied numbers will appear, even if that extends the list beyond the number chosen.

To view the Top N Users Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Top N Reporting**, click the **Run** button on the **Top N Users Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

The **Top N** and the **Usage date** filters are required, therefore you must provide these details to run the report.

Select Filters

- **Usage date (Between)**: The date shown on the invoice when the charge was incurred. Choose the range of dates on which you want to report.
- **Top N**: The number of records you want to display, from 1 to 100. The default is 100.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Carrier**: Filters the results to those services provided by the selected carrier. Drop down and select the carrier from the list. Make sure you choose the **is equal to/is in** operator.
- **Account number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access. Make sure you choose the **is equal to/is in** operator.
- **Invoice number**: Filters the results to specific invoices. Type as much of the invoice number as you know. The results are narrowed to just those invoices numbers containing the provided matching digits. Make sure you choose the **contains any** operator.
- **Service owner**: Filters the results to service owners with the name you type. You may type a specific name, such as **Maria Louisa Rivera**, and see only that user's records, or you may type a partial name such as **J** and see all service owners with J in any place in their name. Make sure you choose the **contains any** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Top N Users data, as described below.

Top Users Data

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Service Owner: The owner assigned to the service.

Service Number: The unique number to identify the service.

Number of calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone, so this number represents the number of calls rolled up into a single row.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice roaming (mins): The total minutes for all charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Premium (GB): The total amount of data in gigabytes for all charges identified as Data Premium on the invoice using the VGE codes. This includes charges that apply to data sent and received from premium numbers, such as those for competitions and voting services.

Messaging National: The total amount of data for all charges identified as messaging (SMS and MMS) national on the invoice using the VGE codes.

Messaging International: The total amount of data for all charges identified as messaging (SMS and MMS) International on the invoice using the VGE codes.

Messaging roaming: The total amount of data in gigabytes for all charges identified as messaging (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

Voice national charge (ex. Tax): The total sum, excluding tax, for charges identified as National usage on the invoice using the VGE codes

Voice international charge (ex. Tax): The charges identified as International usage on the invoice using the VGE codes

Voice roaming charge (ex. Tax): The charges identified as Roaming usage on the invoice using the VGE codes. Roaming includes voice usage while overseas.

Voice premium charge (ex. Tax): The charges identified as Premium usage on the invoice using the VGE codes. Premium includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing charge (ex. Tax): The total number of minutes for all charges identified as Conference calls on the invoice using the VGE codes, excluding tax charges.

Data national (ex tax): The total sum, excluding tax, of charges identified as data national on the invoice using the VGE codes.

Data roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as data roaming on the invoice using the VGE codes. Roaming charges include data usage while overseas.

Data premium charge (ex. Tax): The total sum, excluding tax, of charges identified as data premium on the invoice using the VGE codes. Premium charges apply to data sent to and from premium numbers, which include things such as competitions and voting services.

Messaging national charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging national (SMS and MMS) on the invoice using the VGE codes

Messaging international charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging international (SMS and MMS) on the invoice using the VGE codes

Messaging roaming charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging roaming on the invoice using the VGE codes. This includes messages (SMS and MMS) sent and received while overseas.

Messaging premium charge (ex. Tax): The total sum, excluding tax, of charges identified as messaging premium on the invoice using the VGE codes. Premium charges apply to messages (SMS and MMS) sent and received from premium numbers, such as competitions and voting services.

Usage charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice using the VGE codes.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Non-recurring Charge (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring or one-time charges on the invoice using the VGE codes, including hardware purchases.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Credit (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

Total(ex tax): The total spend per owner. If the owner has more than one transaction in one month, this column returns the total amount of all owner transactions.

VUM Provisioned Date: The date when the user has been provisioned in VUM, if available.

VUM Registration Date: The date when the user has registered to use VUM, if the case.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Account Access Report

The Account Access Report contains a list of accounts you have access to and all the other users in your company who can access those accounts.

To view the Account Listing Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Customer Administrative Reporting**, click the **Run** button on the **Account Access Report** tile.

Select Filters

- **Account Number**: Filters the results to only those services associated with a selected account. Type as much of the account number as you know. The results will be filtered to just those account numbers containing those matching digits. Note that if data slicing is enabled, the list is always filtered to only those accounts for which you have permission to access.
- **User ID**: The user's email address, which is also used for identification as the username during login.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

3. Review the Account Access Data, as described below:

Account Access Data

Account Number: The ID of the account to which the services belong.

Account Name: The account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Company: The name of the company to which the telecom services are being supplied.

Carrier: The service provider of the communications services.

Country: The country associated with the location of an account.

User ID: The user's email address, which is also used for identification as the username during login.

First name: The user's first name.

Last name: The user's last name.

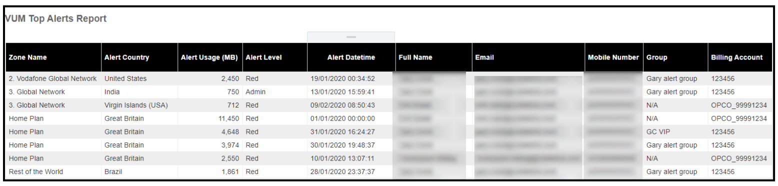
Last Login: The date on which the user successfully last logged into VTR.

Active: Indicates whether the user is active in the system.

4. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
5. (Optional) Export the report. See 'Export a report' on page 165.

VUM Top Alerts Report

The VUM Top Alerts Report returns the VUM users with the highest mobile usage alerts in the configured period of time. The results are ordered by alert level and usage. The report becomes available only for VUM-enabled companies.



VUM Top Alerts Report

Zone Name	Alert Country	Alert Usage (MB)	Alert Level	Alert Datetime	Full Name	Email	Mobile Number	Group	Billing Account
2. Vodafone Global Network	United States	2,450	Red	19/01/2020 00:34:52	[illegible]	[illegible]	[illegible]	Gary alert group	123456
3. Global Network	India	750	Admin	13/01/2020 15:59:41	[illegible]	[illegible]	[illegible]	Gary alert group	123456
3. Global Network	Virgin Islands (USA)	712	Red	09/02/2020 08:50:43	[illegible]	[illegible]	[illegible]	N/A	OPCO_99991234
Home Plan	Great Britain	11,450	Red	01/01/2020 00:00:00	[illegible]	[illegible]	[illegible]	N/A	OPCO_99991234
Home Plan	Great Britain	4,648	Red	31/01/2020 16:24:27	[illegible]	[illegible]	[illegible]	GC VIP	123456
Home Plan	Great Britain	3,974	Red	30/01/2020 19:48:37	[illegible]	[illegible]	[illegible]	Gary alert group	123456
Home Plan	Great Britain	2,550	Red	10/01/2020 13:07:11	[illegible]	[illegible]	[illegible]	N/A	OPCO_99991234
Rest of the World	Brazil	1,861	Red	28/01/2020 23:37:37	[illegible]	[illegible]	[illegible]	Gary alert group	123456

To view the VUM Top Alerts Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Top Alerts Report** tile.

3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

The **Alert Date** and the **Alert Usage** filters are mandatory, therefore you must provide these details to run the report.

Select Filters

Alert Date (Between): Time range for the usage alerts you want to view.

Zone Name: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

Billing Account: Billing account number, used as a default grouping in VUM.

Group: Name of any user-defined group the user belongs to.

Alert Usage: Usage that caused the alert.

4. Review the VUM top alerts data, as described below.

Zone Name: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

Alert Country: Country where the alert was generated.

Alert Usage (MB): Usage that caused the alert.

Alert Level: Level of the alert, for example: Red, Amber, Green or Admin.

Alert Datetime: Date and time when the alert was generated.

Full Name: The user first name, if found in the Services table.

Email: User's email.

Mobile Number: MSISDN the alert is associated with.

Group: Name of any user-defined group the user belongs to.

Billing Account: Billing account number, used as a default grouping in VUM.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM Data Usage By Zones Report

The VUM Data Usage by Zones Report returns the VUM users with the highest data usage in each zone in the configured period of time. The results are ordered by zone and data consumed. The report becomes available only for VUM-enabled companies.

VUM Data Usage by Zones

Full Name	Email	Mobile number	Group	Billing account	Zone name	Last country	Data usage (MB)	Last updated
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	851	03/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	518	05/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	333	10/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	301	07/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	227	05/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	177	09/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	170	02/09/2020
N/A		[illegible]	[illegible]	[illegible]	Home Plan	Great Britain	109	10/09/2020

To view the VUM Data Usage By Zones Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Data Usage By Zones** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

The **Last usage date** fields are mandatory, therefore you must set this range of dates to run the report. By default, the range is one month.

Select Filters

Last usage date (Between): Date range for the data usage you want to view.

Zone name: Zone of the data usage (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

Billing account: Billing account number, used as a default grouping in VUM.

Group: Name of any user-defined group the user belongs to.

4. Review the VUM usage data, as described below.

Full Name: The user first name, if found in the Services table.

Email: User's email.

Mobile Number: MSISDN the data usage is associated with.

Group: Name of any user-defined group the user belongs to.

Billing Account: Billing account number, used as a default grouping in VUM.

Zone Name: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

Last country: Last country of the data usage.

Data Usage (MB): The total amount of data usage in megabytes.

Last updated: Date when the usage was last updated.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM Alerts History By User Report

The VUM Alerts History By User Report returns a history of all mobile data usage alerts for a VUM user. The report becomes available only for VUM-enabled companies.

Email	Mobile Number	Billing Account	Datetime	Zone	Alert Level	Usage (MB)	Threshold (MB)	Percentage	Country
		123456	23/01/2020 10:08:25	Home Plan	Red	1,974	1,024	192%	Romania
		123456	22/01/2020 19:16:54	Home Plan	Red	1,924	1,024	187%	Romania
		123456	22/01/2020 18:09:24	Home Plan	Red	1,874	1,024	183%	Romania
		123456	21/01/2020 14:50:03	Home Plan	Red	1,824	1,024	178%	Romania
		123456	21/01/2020 12:52:09	Home Plan	Admin	1,774	1,024	173%	Romania
		123456	21/01/2020 12:52:09	Home Plan	Red	1,774	1,024	173%	Romania
		123456	21/01/2020 10:26:23	Home Plan	Red	1,724	1,024	168%	Romania
		123456	20/01/2020 23:50:30	Home Plan	Red	1,674	1,024	163%	Romania
		123456	20/01/2020 17:53:00	Home Plan	Red	1,624	1,024	158%	Romania
		123456	20/01/2020 17:38:15	Home Plan	Red	1,574	1,024	153%	Romania
		123456	20/01/2020 15:24:57	Home Plan	Admin	1,524	1,024	148%	Romania
		123456	20/01/2020 15:24:57	Home Plan	Red	1,524	1,024	148%	Romania
		123456	20/01/2020 14:55:44	Home Plan	Red	1,474	1,024	143%	Romania
		123456	20/01/2020 14:07:13	Home Plan	Red	1,424	1,024	139%	Romania
		123456	20/01/2020 12:27:40	Home Plan	Red	1,374	1,024	134%	Romania
		123456	20/01/2020 11:23:33	Home Plan	Red	1,324	1,024	129%	Romania
		123456	20/01/2020 11:22:53	Home Plan	Admin	1,274	1,024	124%	Romania
		123456	20/01/2020 11:22:53	Home Plan	Red	1,274	1,024	124%	Romania
		123456	20/01/2020 11:04:37	Home Plan	Red	1,224	1,024	119%	Romania
		123456	20/01/2020 08:37:15	Rest of the World	Admin	1,451	1	145,100%	Brazil
		123456	20/01/2020 08:37:15	Rest of the World	Red	1,451	1	145,100%	Brazil
		123456	20/01/2020 08:19:51	Rest of the World	Red	1,441	1	144,100%	Brazil
		123456	20/01/2020 08:18:49	Rest of the World	Red	1,431	1	143,100%	Brazil
		123456	20/01/2020 08:15:05	Rest of the World	Red	1,421	1	142,100%	Brazil
		123456	20/01/2020 08:11:45	Rest of the World	Red	1,411	1	141,100%	Brazil
		123456	20/01/2020 08:08:23	Rest of the World	Admin	1,401	1	140,100%	Brazil
		123456	20/01/2020 08:08:23	Rest of the World	Red	1,401	1	140,100%	Brazil
		123456	20/01/2020 08:06:07	Rest of the World	Red	1,391	1	139,100%	Brazil

To run the VUM Alerts History By User Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Alerts History By User** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

The **Date** and the **Mobile Number/Email** filters are mandatory, therefore you must provide these details to run the report.

Select Filters

Date (Between): Time range for the usage alerts history you want to view. Default range is the last 6 complete months plus current month to date.

Mobile Number/Email: MSISDN/email address the alert is associated with.

Zone: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone). It must only be in combination with an email or mobile filter, or the results will exceed allowable rows.

4. Review the VUM top alerts data, as described below.

   Email: End user's email.

   Mobile Number: MSISDN the alert is associated with.

   Billing Account: Billing account number, used as a default grouping in VUM.

   Zone Name: Zone of the alert (**Home Plan** for aggregate zones, **Rest of World** for countries not in a zone).

   Alert Datetime: The date and time when the alert has been triggered.

   Alert Level: Alert of the level triggered, for example, Red, Amber, Green, or Admin.

   Usage (MB): Usage that triggered the alert, in MB.

   Threshold (MB): Usage threshold, in MB.

   Percentage: Percentage of threshold.

   Country: Country for which the alert was triggered.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM Alerts Trend By User Report

The VUM Alerts Trend By User Report returns the mobile usage alerting trend for a VUM user, based on the highest alert for that user each month. The report results are ordered by zone and usage period start date. The report becomes available only for VUM-enabled companies.

VUM Alerts Trend by User

Email	Mobile Number	Usage Period Start Date	Usage Period End Date	Zone Name	Highest Alert Level	Highest Alert Usage (MB)	Alert Country
[illegible]	[illegible]	01/01/2020	31/01/2020	2. Vodafone Global Network	Red	2,450	United States
[illegible]	[illegible]	01/01/2020	31/01/2020	3. Global Network	Admin	750	India
[illegible]	[illegible]	28/10/2019	27/11/2019	Home Plan	Red	7,825	Great Britain
[illegible]	[illegible]	01/11/2019	30/11/2019	Home Plan	Red	5,174	Germany
[illegible]	[illegible]	01/12/2019	31/12/2019	Home Plan	Red	4,274	Great Britain
[illegible]	[illegible]	01/01/2020	31/01/2020	Home Plan	Red	4,648	Great Britain
[illegible]	[illegible]	01/02/2020	29/02/2020	Home Plan	Red	2,848	Great Britain
[illegible]	[illegible]	01/11/2019	30/11/2019	Rest of the World	Admin	301	India
[illegible]	[illegible]	01/01/2020	31/01/2020	Rest of the World	Red	1,861	Brazil

To run the VUM Alerts Trend By User Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Alerts Trend By User Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> ⓘ It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

The **Date** and the **Mobile Number/Email** filters are mandatory, therefore you must provide these details to run the report.

Select Filters

Date (Between): Time range for the usage alerts you want to view. Default range is the last 6 complete months plus current month to date.

Mobile Number/Email: MSISDN/email address that the alert is associated with.

Zone: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone). It must only be in combination with an email or mobile filter, or the results will exceed allowable rows.

4. Review the VUM top alerts data, as described below.

Email: End user's email.

Mobile Number: MSISDN the alert is associated with.

Usage Period Start Date: Start date of the usage period, calculated from the tariff renewal day in the alert record.

Usage Period End Date: End date of the usage period, calculated from the tariff renewal day in the alert record.

Zone Name: Zone of the alert (**Home Plan** for aggregate zones, **Rest of World** for countries not in a zone).

Highest Alert Level: The highest alert level triggered, for example, Red.

Highest Alert Usage (MB): Highest usage that triggered the alert, in MB.

Alert Country: Country for which the alert was triggered.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM Summary Report

The VUM Summary Report returns the monthly total of mobile data usage and number of alerts across all VUM users. The report becomes available only for VUM-enabled companies.

VUM Summary Report

Month/Year	Zone	Total usage (GB)	Number of users	Usage per user (GB)	Green alerts	Amber alerts	Red alerts	Admin alerts
Mar-2020	Home Plan	1.22	1	1.22	0	0	0	0
Mar-2020	Rest of the World	0.06	1	0.06	0	0	0	0
Feb-2020	Home Plan	4.14	2	2.07	0	4	5	0
Feb-2020	3. Global Network	0.80	1	0.80	0	2	3	0
Feb-2020	Rest of the World	0.06	1	0.06	0	0	33	31
Jan-2020	Home Plan	11.39	5	2.28	6	22	91	33
Jan-2020	2. Vodafone Global Network	2.42	1	2.42	3	6	40	7
Jan-2020	Rest of the World	1.51	3	0.50	0	0	427	205
Jan-2020	3. Global Network	1.23	2	0.62	3	6	6	1
Dec-2019	Home Plan	23.09	7	3.30	1	22	487	240
Dec-2019	1. Europe	4.30	5	0.86	0	0	0	0
Dec-2019	Rest of the World	0.06	2	0.03	0	0	55	28
Nov-2019	Home Plan	44.00	7	6.29	6	6	140	65
Nov-2019	Rest of the World	0.31	2	0.15	0	0	38	8
Nov-2019	1. Europe	0.18	2	0.09	0	0	0	0
Nov-2019	N/A	0.00	1	0.00	0	0	0	0
Oct-2019	Home Plan	2.45	4	0.61	0	0	4	1

To view the VUM Summary Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Summary Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

The **Month/Year** filter is mandatory, therefore you must set this range of dates to run the report.

Select Filters

Month/Year (Between): Time range for the usage alerts you want to view.

Zone: Zone of the alert (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

4. Review the VUM alerts summary, as described below.

Month/Year: calendar month for the data aggregation.

Zone: Zone of the usage and alerts (**Home Plan** for home country and zones where you can take your home plan abroad, **Rest of World** for countries not in a zone).

Total Usage (GB): Aggregated usage in the zone and month.

Number of users: Number of users for whom the data usage has been recorded.

Usage per user (GB): Total data usage per user for whom data has been recorded.

Green Alerts: Number of green-level alerts in the zone and month.

Amber Alerts: Number of amber-level alerts in the zone and month.

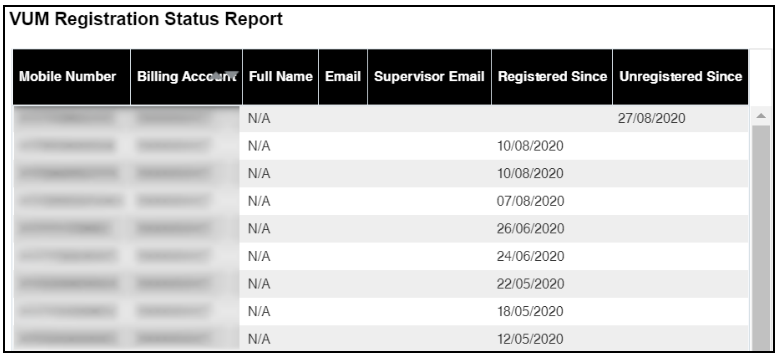
Red Alerts: Number of red-level alerts in the zone and month.

Admin Alerts: Number of admin alerts in the zone and month.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM Registration Status Report

The VUM Registration Status Report returns every 12 hours a history of which users in a company have registered on Usage Manager and who has not registered. The report becomes available only for VUM-enabled companies.



VUM Registration Status Report

Mobile Number	Billing Account	Full Name	Email	Supervisor Email	Registered Since	Unregistered Since
[illegible]	[illegible]	N/A				27/08/2020
[illegible]	[illegible]	N/A			10/08/2020	
[illegible]	[illegible]	N/A			10/08/2020	
[illegible]	[illegible]	N/A			07/08/2020	
[illegible]	[illegible]	N/A			26/06/2020	
[illegible]	[illegible]	N/A			24/06/2020	
[illegible]	[illegible]	N/A			22/05/2020	
[illegible]	[illegible]	N/A			18/05/2020	
[illegible]	[illegible]	N/A			12/05/2020	

To run the VUM Registration Status Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM Registration Status Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

Select Filters

Billing Account: Billing account number, used as a default grouping in VUM.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Registration Status data, as described below.

   Mobile Number: MSISDN the user is associated with.

   Billing Account: Billing account number, used as a default grouping in VUM.

   Full Name: The user's first name.

   Email: End user's email address.

   Supervisor Email: The email address of the supervisor of the service owner on the service.

   Registered Since: Date of the user's registration on Usage Manager.

   Unregistered Since: Date of the user's unregistration from Usage Manager.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

VUM App Status Summary History Report

The VUM App Status Summary History Report returns a daily history of the total number of provisioned, registered, and unregistered VUM users, thus viewing the trend of VUM app provisioning and adoption. The report becomes available only for VUM-enabled companies.

VUM App Status Summary History Report

Date	Provisioned Users	Registered Users	Unregistered Users
24/01/2020	2,286	7	1
23/01/2020	2,286	7	1
22/01/2020	2,286	7	1
21/01/2020	2,286	7	1
20/01/2020	2,286	7	1
19/01/2020	2,286	7	1
18/01/2020	2,286	7	1
17/01/2020	2,286	7	1
16/01/2020	2,286	7	1
15/01/2020	2,286	7	1
14/01/2020	2,286	7	1
13/01/2020	2,286	7	1
12/01/2020	2,286	7	1
11/01/2020	2,286	7	1
10/01/2020	2,286	7	1
09/01/2020	2,286	7	1
08/01/2020	2,286	7	1
07/01/2020	2,286	7	1
06/01/2020	2,286	7	1
05/01/2020	2,286	7	1
04/01/2020	2,286	7	1
03/01/2020	2,286	7	1
02/01/2020	2,286	7	1
01/01/2020	2,286	7	1

To run the VUM App Status Summary History Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Vodafone Usage Manager Reporting**, click the **Run** button next to the **VUM App Status Summary History Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters before running the report, as VTR supports only 350,000 rows.

Select Filters

Date (Between): Time range for the data you want to view. Default range is the last 3 complete months plus current month to date. Mandatory start/end date fields.

4. Review the VUM top alerts data, as described below.

   Date: Date when the user status has been generated.

   Provisioned Users: Total number of provisioned users.

   Registered Users: Total number of registered users.

   Unregistered Users: Total number of unregistered users.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

IoT Spend & Usage By Country Report

The IoT Spend & Usage by Country Report returns IoT billing information by country. The report provides pre-defined filters on key data elements allowing for more accurate data analysis.

To view the IoT Spend & Usage By Country Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **IoT Reporting**, click the **Run** button on the **IoT Spend & Usage By Country Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is three months.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the IoT Spend & Usage By CSP Data, as described below:

IoT Spend & Usage By Country Data

Country: The country associated with the location of an account.

Data (MB):The total data used, measured in megabytes.

Duration (mins): The total number of minutes used.

Number of calls:The total number of call detail records identified as ‘calls’. Data is aggregated by country, so this number represents the number of calls rolled up into a single row.

Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice.

Currency: The currency in which the report values appear.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

IoT Spend & Usage By CSP Report

The IoT Spend & Usage by CSP Report returns IoT billing information by CSP. The report provides pre-defined filters on key data elements allowing for more accurate data analysis.

To view the IoT Spend & Usage By CSP Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **IoT Reporting**, click the **Run** button on the **IoT Spend & Usage By CSP Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Invoice start date and **Invoice end date** are required filters: you must set this range of dates to run the report. By default, the date range is three months.

Select Filters

- **Invoice start date (Between)**: Choose the range of dates on which you want to report. To view all invoices, choose a very early start date. To view all invoices after your start date, choose a future date. Note that this will increase processing time.
- **CSP**: Customer Service Profile
- **Currency code**: Choose the currency in which you want amounts displayed. By default, the currency is the same as the one specified in your profile.

  For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the IoT Spend & Usage By CSP Data, as described below:

IoT Spend & Usage By CSP Data

CSP Name: Customer Service Profile Name.

Usage Type: Code of the usage type used describe the specific IoT event.

Quantity: Number of units.

Unit of measure: The total data used, measured in megabytes.

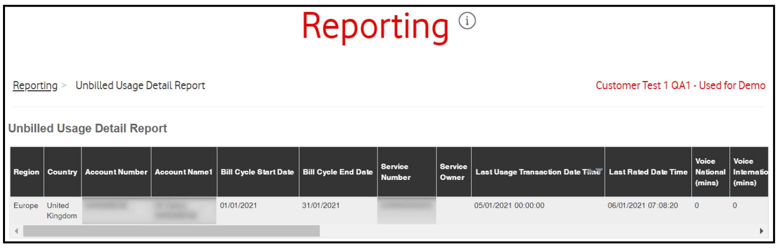
Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice.

Currency: The currency in which the report values appear.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Unbilled Usage Detail Report

This report displays the unbilled data usage. Unbilled reporting is only available for Vodafone Global Enterprise (VGE) accounts in Germany, Portugal, and United Kingdom.



To view the Unbilled Usage Detail Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Spend & Usage Reporting**, click the **Run** button on the **Unbilled Usage Detail Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

   Bill Cycle Start Date is a required filter.

Select Filters

- **Bill Cycle Start Date (Between)**: Choose the range of dates on which you want to report.
- **Account Number**: Only lists the accounts with unbilled usage.

   For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the Unbilled Usage Detail Report's data, as described below:

Unbilled Usage Detail Report Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Bill Cycle Start Date: The date on which the billing cycle starts.

Bill Cycle End Date: The date on which the billing cycle ends.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

Last Usage Transaction Date Time: The timestamp of the last usage.

Last Rated Date Time: The timestamp of the last rating.

Voice National (mins): The total minutes for all charges identified as National calls on the invoice using the VGE codes.

Voice International (mins): The total minutes for all charges identified as International calls on the invoice using the VGE codes.

Voice Roaming Zone 1 (mins): The total minutes for all Zone 1 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 2 (mins): The total minutes for all Zone 2 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 3 (mins): The total minutes for all Zone 3 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 4 (mins): The total minutes for all Zone 4 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Roaming Zone 5 (mins): The total minutes for all Zone 5 charges identified as Roaming calls on the invoice using the VGE codes. Calls include those made while overseas.

Voice Premium (mins): The total minutes for all charges identified as Premium calls on the invoice using the VGE codes. Premium calls includes calls made to and from premium numbers, such as competitions and voting services.

Conferencing (mins): The total minutes for all charges identified as Conference calls on the invoice using the VGE codes.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming Zone 1 (GB): The total amount of data in gigabytes for all Zone 1 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 2 (GB): The total amount of data in gigabytes for all Zone 2 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 3 (GB): The total amount of data in gigabytes for all Zone 3 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 4 (GB): The total amount of data in gigabytes for all Zone 4 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Roaming Zone 5 (GB): The total amount of data in gigabytes for all Zone 5 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Data Premium (GB): The total amount of data in gigabytes for all charges identified as Data Premium on the invoice using the VGE codes. This includes charges that apply to data sent and received from premium numbers, such as those for competitions and voting services.

Messaging National: The total amount of data for all charges identified as messaging (SMS and MMS) national on the invoice using the VGE codes.

Messaging International: The total amount of data for all charges identified as messaging (SMS and MMS) International on the invoice using the VGE codes.

Messaging Roaming Zone 1: The total number of messages for all Zone 1 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 2: The total number of messages for all Zone 2 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 3: The total number of messages for all Zone 3 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Roaming Zone 4: The total number of messages for all Zone 4 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

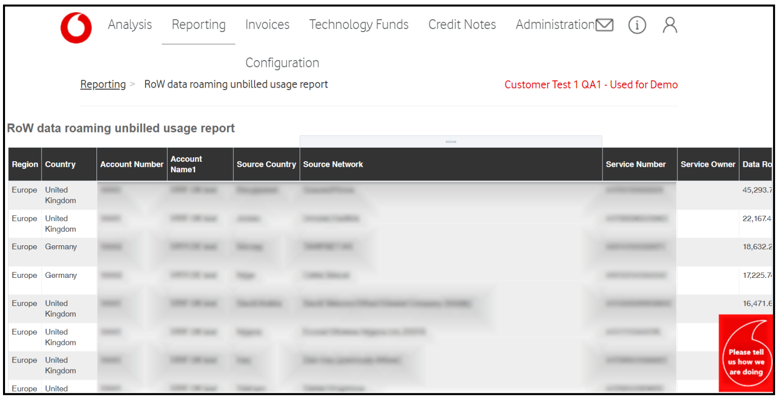
Messaging Roaming Zone 5: The total number of messages for all Zone 5 charges (SMS and MMS) roaming on the invoice using the VGE codes. This includes messages sent and received while overseas.

Messaging Premium: The total number of messages (SMS and MMS) premium on the invoice using the VGE codes. Premium charges that apply to messages sent and received from premium numbers, such as competitions and voting services.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

RoW Data Roaming Unbilled Usage Report

This report provides a near real time view of unbilled roaming data detected from our network, allowing you to monitor usage volumes and locations of connections currently roaming to help avoid any bill shocks. Please note that all timestamps are in UTC time zone.



All the timestamps from Vodafone Roaming Services (VRS) for worry-free roaming (WFR) are displayed in the UTC time zone.

To view the RoW Data Roaming Unbilled Usage Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Worry Free Roaming**, click the **Run** button on the **RoW Data Roaming Unbilled Usage Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

   It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

   ### Select Filters

   - **UTC Usage Date (Between)**: Choose the range of dates on which you want to report.
   - **Account Number**: Only lists the accounts with unbilled usage.

   For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the RoW Data Roaming Unbilled Usage Report's data, as described below:

Row Data Roaming Unbilled Usage Report Columns

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Source Country: Country where the data usage was made.

Source Network: Network where the data usage was made. A **Source Country** can have multiple **Source Networks**.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

Owner Email: The email address of the service owner.

Data Roaming Zone 4 (MB): The total amount of data in megabytes for all Zone 4 charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Earliest Usage: The first instance of usage for the service number within the specified date range, including date and time.

Latest Usage: The last instance of usage for the service number within the specified date range, including date and time.

Earliest SMS: First SMS message that was sent, displayed in the dd/mm/yy hh:mi:ss format.

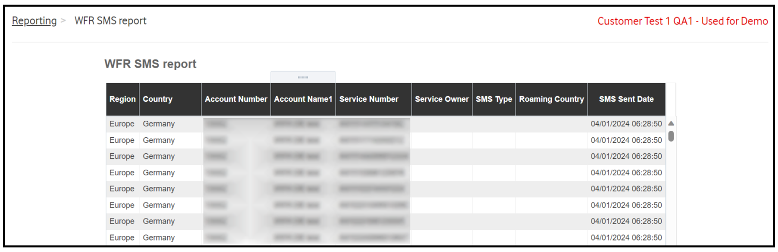
Latest SMS: Last SMS message that was sent, displayed in the dd/mm/yy hh:mi:ss format.

> Multiple SMS messages can be sent to a specific Service Number. To see the full list containing the time and date of all the messages, refer to the 'WFR SMS Report' on page 140.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

WFR SMS Report

This report provides a list of the SMS alerts sent by Vodafone Business to users in Zone 4.



To view the WFR SMS Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Worry Free Roaming Reporting**, click the **Run** button on the **WFR SMS Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Select Filters

- **SMS Date (Between)**: Choose the range of dates on which you want to report.
- **Account Number**: Only lists the accounts that received data roaming warning SMS alerts.
- **Roaming Country**: Drop down and select the roaming country from the list to filter the results to a specific country.
- **SMS Type**: Choose the specific type of SMS alert, such as **Zone 4 warning welcome SMS**.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

4. Review the WFR SMS Report's data, as described below:

WFR SMS Report Columns

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Service Number: The unique number to identify the service.

Service Owner: The name of the person to whom the service is tied. Data type is *Text*.

SMS Type: The specific type of SMS alert, such as **Zone 4 warning welcome SMS**.

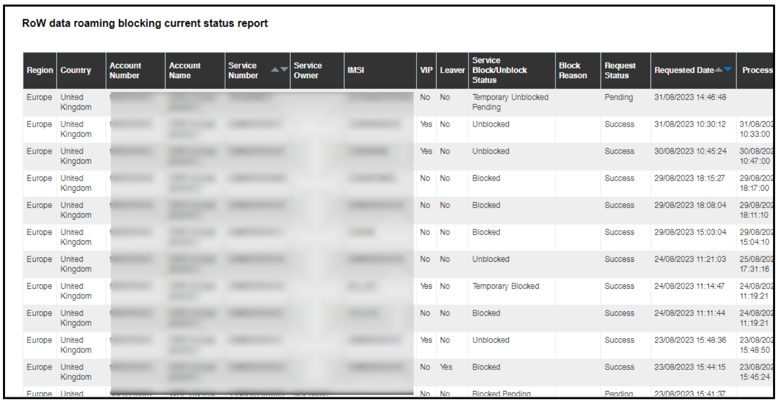
Roaming Country: The country that triggered the SMS to be sent.

SMS Sent Date: The date on which the SMS alert was sent, displayed in the dd/mm/yyyy hh:mi:ss format.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.
7. (Optional) Schedule the report. See 'Schedule reports' on page 154.

RoW Data Roaming Blocking Current Status Report

The RoW Data Roaming Blocking Current Status report provides a view of the current blocking status per service.


RoW data roaming blocking current status report

Region	Country	Account Number	Account Name	Service Number	Service Owner	IMSI	VIP	Leaver	Service Block/Unblock Status	Block Reason	Request Status	Requested Date	Process
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Temporary Unblocked Pending		Pending	31/08/2023 14:46:48	
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	No	Unblocked		Success	31/08/2023 10:30:12	31/08/202 10:33:00
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	No	Unblocked		Success	30/08/2023 10:45:24	30/08/202 10:47:00
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Blocked		Success	29/08/2023 18:15:27	29/08/202 18:17:00
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Blocked		Success	29/08/2023 18:08:04	29/08/202 18:11:10
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Blocked		Success	29/08/2023 15:03:04	29/08/202 15:04:10
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Unblocked		Success	24/08/2023 11:21:03	25/08/202 17:31:16
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	No	Temporary Blocked		Success	24/08/2023 11:14:47	24/08/202 11:19:21
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Blocked		Success	24/08/2023 11:11:44	24/08/202 11:19:21
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Yes	No	Unblocked		Success	23/08/2023 15:48:36	23/08/202 15:48:50
Europe	United Kingdom	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	Yes	Blocked		Success	23/08/2023 15:44:15	23/08/202 15:45:24
Europe	United	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	No	No	Blocked Pending		Pending	23/08/2023 15:41:37	

To view the RoW Data Roaming Blocking Current Status Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Worry Free Roaming Reporting**, click the **Run** button on the **RoW Data Roaming Blocking Current Status Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

   > It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

   Account Number, **Service Number** and **Service Block/Unblock Status** are required filters.
4. Review the RoW Data Roaming Blocking Current Status report data, as described below:

RoW Data Roaming Blocking Current Status Report

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

IMSI: Uniquely identifies a SIM.

VIP: The called number is either masked or unmasked, depending on how the customer has instructed the carrier to implement this. The column defines if the customer is VIP or not.

Leaver: This is determined by the continuity of a customer's account.

Service Block/Unblock Status: The following options are available:

- NULL
- Blocked
- Blocked Pending
- Temporary Blocked
- Temporary Unblocked Pending
- Unblocked

Block Reason: Displays the reason the customer was blocked.

Request Status: Displays if the status is pending or has succeeded.

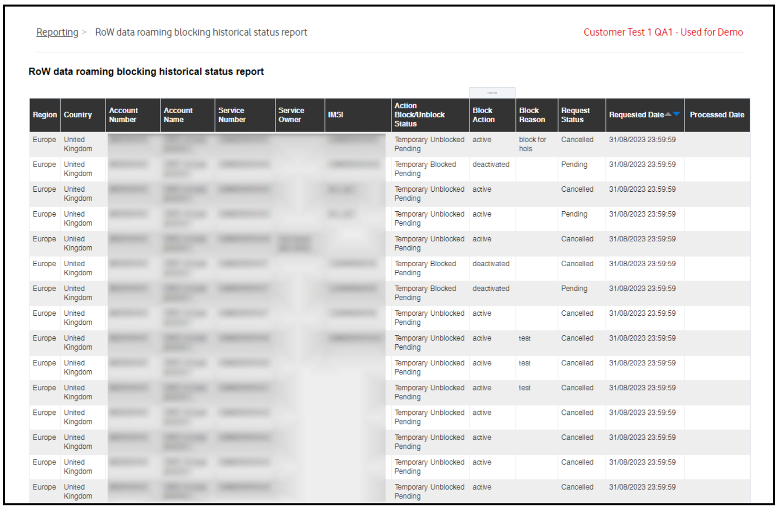
Requested Date: The date the request has been made.

Processed Date: The date the request has been processed.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

RoW Data Roaming Blocking Historical Status Report

This report provides a log of all the blocking status changes that happened per service during a predefined period of time.



To view the RoW Data Roaming Blocking Historical Status Report

1. From the VTR menu, choose **Reporting**.
2. On the Reporting page, under **Red - Worry Free Roaming Reporting**, click the **Run** button on the **RoW Data Roaming Blocking Historical Status Report** tile.
3. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Requested Date, **Account Number**, **Service Number** and **Block Action** are required filters.

4. Review the RoW Data Roaming Blocking Historical Status report data, as described below:

RoW Data Roaming Blocking Historical Status Report

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Service Number: The unique number to identify the service.

Service Owner: The owner assigned to the service.

IMSI: Uniquely identifies a SIM.

Action Block/Unblock Status: The following options are available:

- Blocked Pending
- Unblocked Pending
- Temporary Blocked Pending
- Temporary Unblocked Pending

Block Action: The actions available are active or deactivated.

Block Reason: Displays the reason the customer was blocked.

Request Status: Displays if the status is pending or has succeeded.

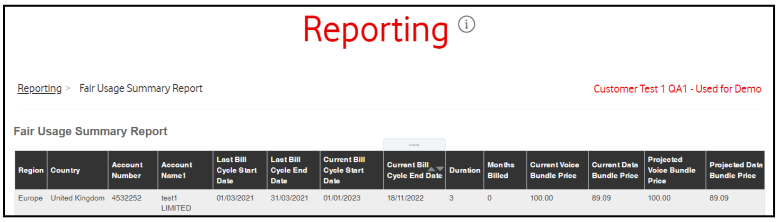
Requested Date: The date the request has been made.

Processed Date: The date the request has been processed.

5. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
6. (Optional) Export the report. See 'Export a report' on page 165.

Fair Usage Summary Report

This report displays, for Red Enterprise Bundles customers, the impact of actual monthly usage over the fair usage review period.



To view the Fair Usage Summary Report

1. From the VTR menu, choose **Reporting**. On the Reporting page, under **Fair Usage Reporting**, click the **Run** button on the **Fair Usage Summary Report** tile.
2. On the report filters page that appears, select criteria to narrow the result set.

> It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Current Bill Cycle Start Date is a required filter.

Select Filters

- **Current Bill Cycle Start Date (Between)**: Choose the range of dates on which you want to report.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Account Number**: Only lists the accounts relevant for this report type.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

3. Review the Fair Usage Summary Report's data, as described below:

Fair Usage Summary Report Data

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Last Bill Cycle Start Date: The date on which the last billing cycle started.

Last Bill Cycle End Date: The date on which the last billing cycle ended.

Current Bill Cycle Start Date: The date on which the current billing cycle starts.

Current Bill Cycle End Date: The date on which the current billing cycle ends.

Duration: The duration of the billing cycle.

Months Billed: Fair usage months billed.

Current Voice Bundle Price: Current voice bundle price, in the currency of the contract.

Current Data Bundle Price: Current data bundle price, in the currency of the contract.

Projected Voice Bundle Price: Projected new voice bundle price, in the currency of the contract.

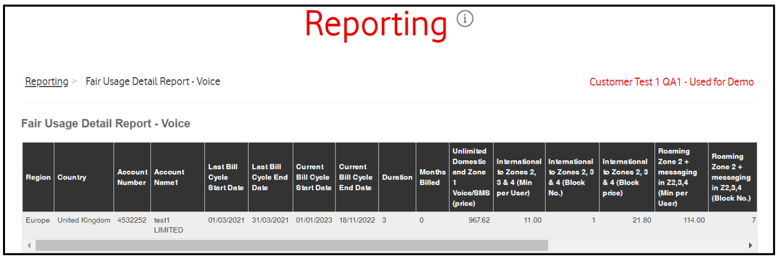
Projected Data Bundle Price: Projected new data bundle price, in the currency of the contract.

Site Reference: Site reference number.

4. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
5. (Optional) Export the report. See 'Export a report' on page 165.
6. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Fair Usage Detail Report - Voice

This report displays, for Red Enterprise Bundles customers, the details that led to the **Voice** bundle prices, i.e. usage averages per each voice category and respective block numbers and costs.



To view the Fair Usage Detail Report - Voice

1. From the VTR menu, choose **Reporting**. On the Reporting page, under **Fair Usage Reporting**, click the **Run** button on the **Fair Usage Detail Report - Voice** tile.
2. On the report filters page that appears, select criteria to narrow the result set.

> ⓘ It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Current Bill Cycle Start Date is a required filter.

Select Filters

- **Current Bill Cycle Start Date (Between)**: Choose the range of dates on which you want to report.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Account Number**: Only lists the accounts relevant for this report type.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

3. Review the data of the Fair Usage Detail Report - Voice, as described below:

Fair Usage Detail Report - Voice fields

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Last Bill Cycle Start Date: The date on which the last billing cycle started.

Last Bill Cycle End Date: The date on which the last billing cycle ended.

Current Bill Cycle Start Date: The date on which the current billing cycle starts.

Current Bill Cycle End Date: The date on which the current billing cycle ends.

Duration: The duration of the billing cycle.

Months Billed: Fair usage months billed.

Unlimited Domestic and Zone 1 Voice/SMS (price): Unlimited, it shows one column with the corresponding fixed price, in the currency of the contract.

International to Zones 2, 3 & 4 (Min per User): Average usage per user.

International to Zones 2, 3 & 4 (Block No.): The corresponding block number.

International to Zones 2, 3 & 4 (Block price): The corresponding block price, in the currency of the contract.

Roaming Zone 2 + messaging in Zones 2, 3 & 4 (Min per User): Average usage per user.

Roaming Zone 2 + messaging in Zones 2, 3 & 4 (Block No.): The corresponding block number.

Roaming Zone 2 + messaging in Zones 2, 3 & 4 (Block price): The corresponding block price, in the currency of the contract.

Roaming Zone 3 (Min per User): Average usage per user.

Roaming Zone 3 (Block No.): The corresponding block number.

Roaming Zone 3 (Block Price): The corresponding block price, in the currency of the contract.

Roaming Zone 4 (Min per User): Average usage per user.

Roaming Zone 4 (Block No.): The corresponding block number.

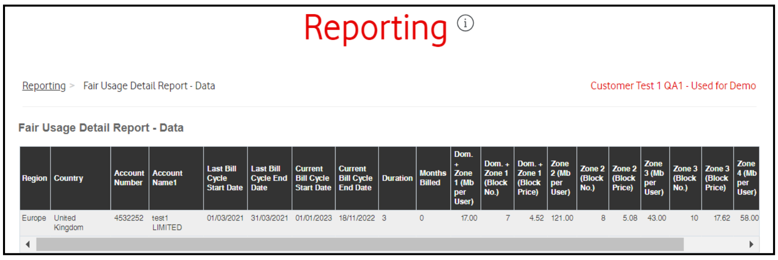
Roaming Zone 4 (Block price): The corresponding block price, in the currency of the contract.

4. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.

5. (Optional) Export the report. See 'Export a report' on page 165.
6. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Fair Usage Detail Report - Data

This report displays, for Red Enterprise Bundles customers, the details that led to the **Data** bundle prices, i.e. usage averages per each data category and respective block numbers and costs.



To view the Fair Usage Detail Report - Data

1. From the VTR menu, choose **Reporting**. On the Reporting page, under **Fair Usage Reporting**, click the **Run** button on the **Fair Usage Detail Report - Data** tile.
2. On the report filters page that appears, select criteria to narrow the result set.

> ⓘ It is recommended that you set filters on the report, as VTR supports a maximum of 350,000 rows.

Current Bill Cycle Start Date is a required filter.

Select Filters

- **Current Bill Cycle Start Date (Between)**: Choose the range of dates on which you want to report.
- **Region**: Filters the results to a specific region. Drop down and select the region from the list. Make sure you choose the **is equal to/is in** operator.
- **Country**: Filters the results to a specific country in the region. Drop down and select the country from the list. Make sure you choose the **is equal to/is in** operator.
- **Account Number**: Only lists the accounts relevant for this report type.

For more options on filters, see 'Report filter operators and advanced options' on page 151.

3. Review the data of the Fair Usage Detail Report - Data, as described below:

Fair Usage Detail Report - Data fields

Region: The region associated with the location of an account.

Country: The country associated with the location of an account.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Last Bill Cycle Start Date: The date on which the last billing cycle started.

Last Bill Cycle End Date: The date on which the last billing cycle ended.

Current Bill Cycle Start Date: The date on which the current billing cycle starts.

Current Bill Cycle End Date: The date on which the current billing cycle ends.

Duration: The duration of the billing cycle.

Months Billed: Fair usage months billed.

Dom. + Zone 1 (Mb per User): Average usage per user.

Dom. + Zone 1 (Block No.): The corresponding block number.

Dom. + Zone 1 (Block Price): The corresponding block price, in the currency of the contract.

Zone 2 (Mb per User): Average usage per user.

Zone 2 (Block No.): The corresponding block number.

Zone 2 (Block Price): The corresponding block price, in the currency of the contract.

Zone 3 (Mb per User): Average usage per user.

Zone 3 (Block No.): The corresponding block number.

Zone 3 (Block Price): The corresponding block price, in the currency of the contract.

Zone 4 (Mb per User): Average usage per user.

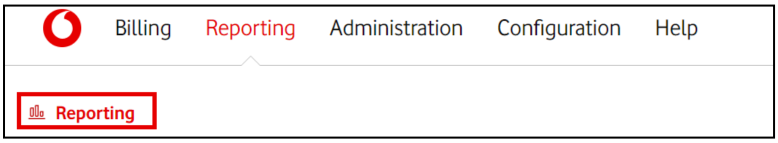
Zone 4 (Block No.): The corresponding block number.

Zone 4 (Block Price): The corresponding block price, in the currency of the contract.

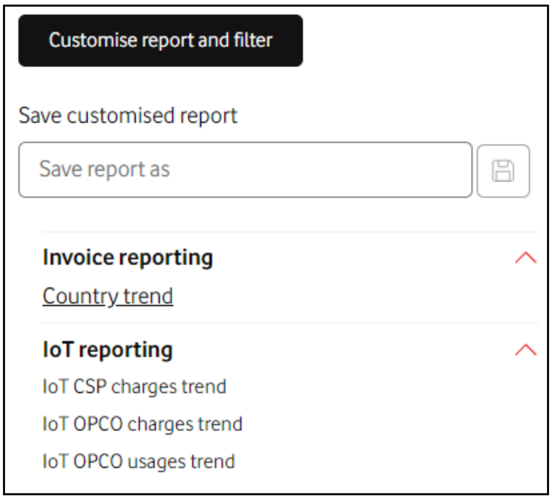
4. 'Modify the report page layout in real time' on page 164 to see the data in the sort order and column order you want.
5. (Optional) Export the report. See 'Export a report' on page 165.
6. (Optional) Schedule the report. See 'Schedule reports' on page 154.

Run a report

1. On the VTR main menu, click **Reporting**.



2. The Reporting module lists all available report categories in the **Report Catalogue** on the left. section



3. Click the report name to open the desired report.
4. VTR displays the filters page to help narrow the contents of the report.

   For more information on the reports and their available filters and data, see Available reports and 'Report filter operators and advanced options' on page 151. You can now

   - Sort the report and adjust columns to display just the data you want to view as described in 'Modify the report page layout in real time' on page 164
   - 'Export a report' on page 165

Report filter operators and advanced options

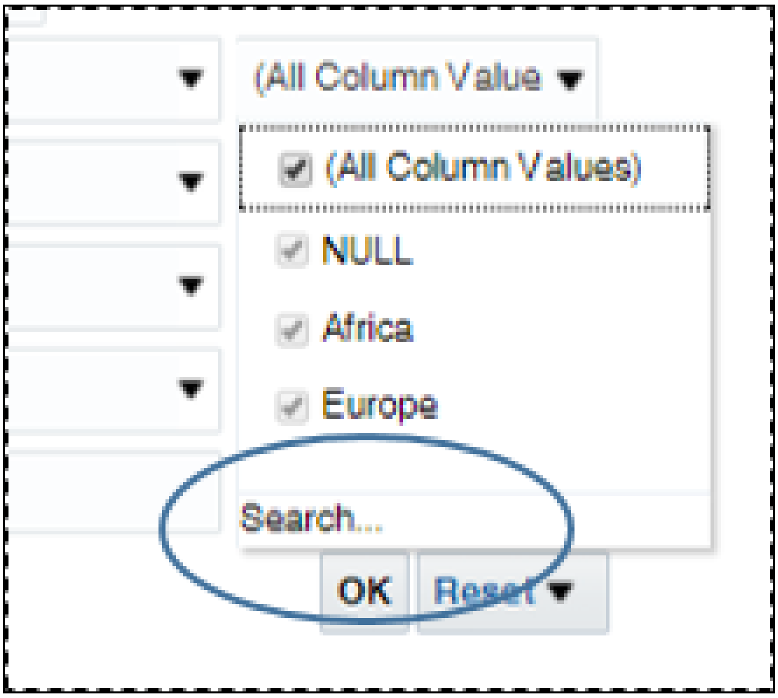
Report filters default to the most common operators; however, you may modify these operators. Not all operators will always apply to the type of data you are filtering, but you have the following options:

- is ranked last
- is ranked first
- is equal to/ is in
- is not equal to / is not in

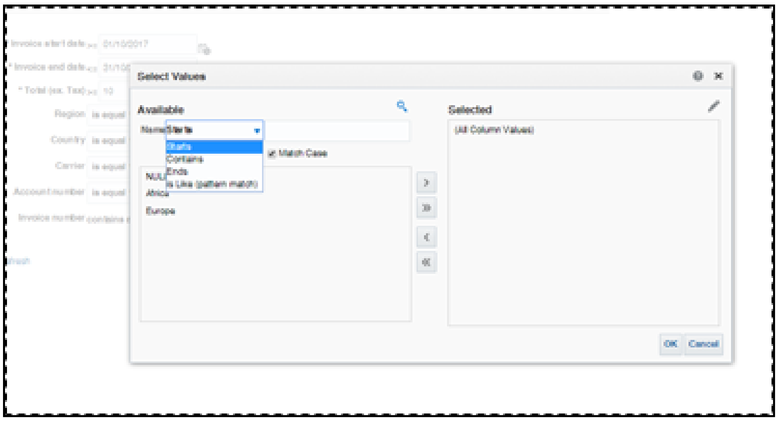
- is less than
- is greater than
- is less than or equal to
- is between
- contains any
- contains all
- does not contain
- begins with
- ends with
- is LIKE (pattern match)
- is not LIKE (pattern match)

You also have the option of applying advanced filters.

You can get to advanced filter options by selecting an operator and then clicking the **search** option on the filter input field.



In the **Available** section, you can select an operator, and then type a value to the right.



- Starts
- Contains
- Ends
- Is like (pattern match)

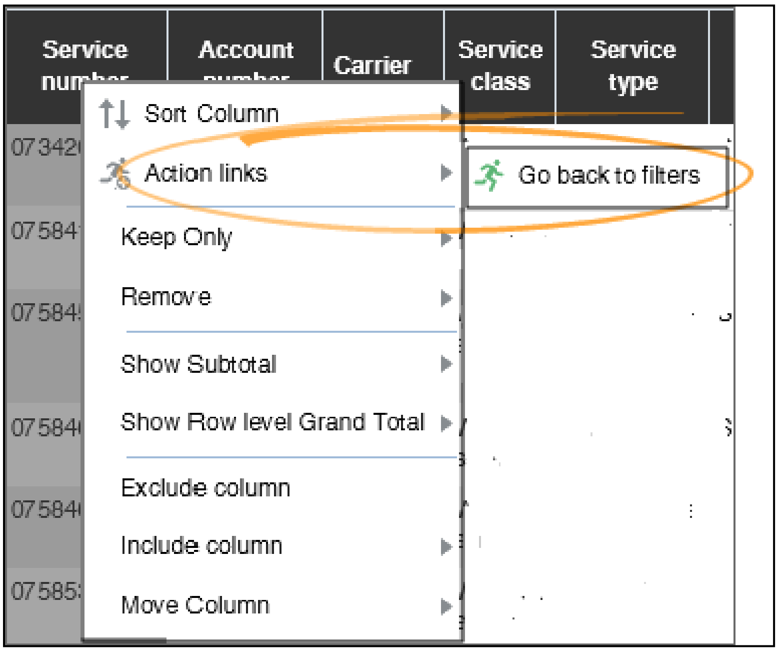
Another option is to select a value on the left and then click the left arrow to move the field to the right. Click **OK**, and then click **OK** again.

Modify the report filters and run the report again

If you run a report and then find that the filters you applied were either too restrictive to return data or so open that too much data was returned, you can return to the filters page, modify your selections, and run the report again.

To rerun the report with new filters

1. Run the report as described in 'Run a report' on page 151.
2. Right-click the first column. From the context menu that appears, point to **Action link**, and then click **Go back to filters**.



3. You will return to your report's filters page with your original selections saved. You may modify these selections and click **OK** to rerun the report. Note that it might take a few moments to return to the filters page.

   Note that if you are viewing a sub-report and use the Action menu to go back to the main report, then focus returns to the filters page, where you can re-enter filters and run the report again.

Schedule reports

You may configure VTR to run reports on schedule you set, and then email those reports to contacts or VTR users.

1. On the VTR main menu, click **Reporting**.
2. Make sure the **Scheduling** tab is selected.

   This page lists all of the reports that you have scheduled with the following information:

- **ID**: An internal sequential identification number assigned to the job.
- **Report job name**: The name you gave the scheduled job.
- **Report name**: The name of the report to run.
- **Frequency**: How often the report will run on schedule: Never, Once, Daily, Weekly, or Monthly.
- **Start date**: The day the first scheduled report will run.
- **End date**: The day the last scheduled report will run.
- **Active**: Whether the report schedule is live. If Yes, then the jobs are run on schedule. If No, then the reports will not run on their set schedule, but the job is saved to be reactivated at any time.

Jobs that are past their End date will not be active.

- **Owner**: The person who created this report schedule. It should always show your email.

3. To find a specific job, you may 'Filter the results' on page 13.
4. From here, you can perform the following tasks:

- 'Add a new scheduled report job' on page 155
- 'View and edit a report schedule and recipients ' on page 160
- 'View a scheduled report's run history' on page 161
- 'Deactivate a report job' on page 162
- 'Remove a scheduled report job' on page 162
- 'Export the data' on page 14

If a user is marked 'inactive' (either via the front-end in Users or DMC, or automatically based on nightly job), a system job will do the following:

- Update the frequency for any report that has this user as the Owner to "NEVER".
- Remove the user from the recipient list for any report that has the user as a Recipient.

If the user is set back to 'active', the user will NOT be automatically added back in as a recipient on those reports, and the scheduled reports will remain as 'NEVER" frequency by default.

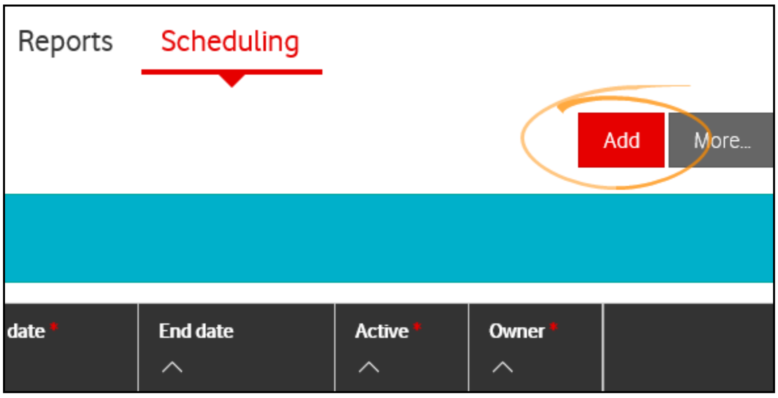
Add a new scheduled report job

You schedule a report to run on a regular basis. When you schedule reports, VTR runs the report, exports the data to the format you choose, and emails it to the specified recipients.

You can schedule summary reports to see the ongoing status of your telecom spend and usage. You should run detailed reports on an ad-hoc basis only, as these reports can be very large and could overwhelm your email server. To keep file sizes reasonable, VTR exports and emails only the first 30,000 records of any scheduled report.

To schedule a report

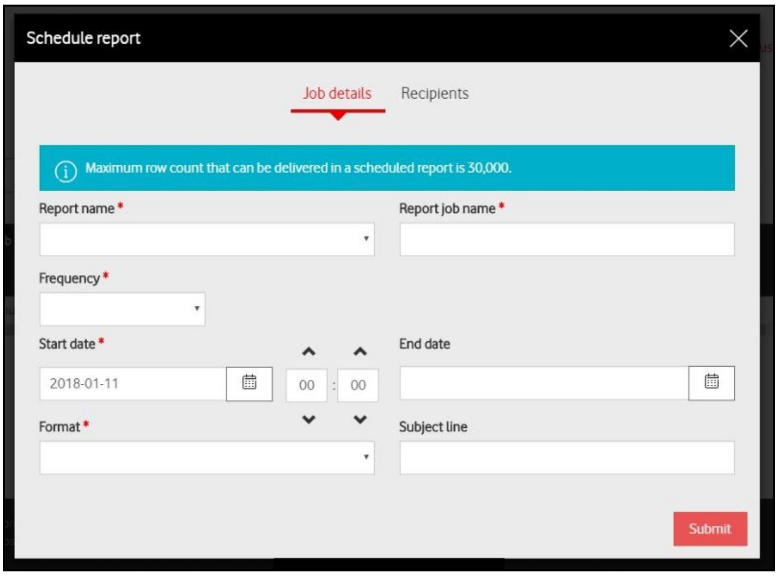
1. On the VTR main menu, click **Reporting**, and then click the **Scheduling** tab.
2. Above the jobs table, click the **Add** button.



3. On the report schedule pop-up that appears, specify the job details and recipients.

Specify job details

a. In the **Job details** tab, drop down the **Report name** list, and choose the report that you want to run on a schedule.



You have the following choices. For more information about any report, see Available reports.

- Customer Profile Report
- High Cost Calls Report
- IoT Spend & Usage by Country Report
- IoT Spend & Usage by CSP Report
- Long Duration Calls Report
- Portal Users Report
- Premium Numbers Report
- Red Spend & Usage Detail Roaming Report
- Red Spend by Zone Report

- Red Spend Trend by Bundle Report
- Spend & Usage Chargeback Detail Report
- Spend & Usage Chargeback Summary Report
- Spend & Usage Detail - Voice only Report
- Spend & Usage Detail Report
- Spend & Usage Summary Historical Report
- Spend & Usage Summary Report
- Spend by Location Report
- Top N Calls Report
- Top N Data Usages Report
- Top N Users Report
- Unbilled Usage Detail Report
- Unbilled Data Roaming Report
- Unbilled Data Roaming SMS Warning Report
- VUM App Status Summary History Report
- VUM Data Usage by Zones
- VUM Registration Status Report
- VUM Summary Report
- VUM Top Alerts Report
- Zero Usage Report

b. In the **Report job name** box, type a name to help you identify this report job.

c. The **Conditional** box is only displayed in case the **Unbilled Usage Detail Report** is selected. This feature allows the scheduling of a report based on certain conditions. You only receive the email in case the condition is met and it only includes the list of services with the selected criteria, therefore the content of the report is also filtered on the specified condition. Multiple schedules can be created based on a specific condition. Select **Yes** to choose the conditions of running this report:

i. **Condition field**: Drop down the list and choose one of the following options: **Data Roaming Zone 4 (GB)** or **Data National (GB)**.

ii. **Greater than value**: Select the GB value that will trigger the job. Decimal values are allowed.

a. Drop down the **Frequency** list and choose how often you want to run the report:

i. **Never**: The report job will be created, but the job will be inactive.

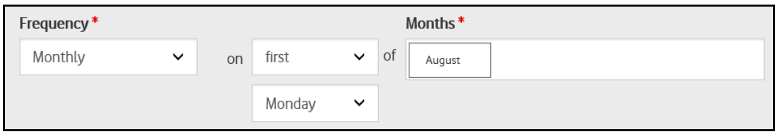
ii. **Once**: The job will run only one time on the Start date you select.

iii. **Daily**: Type the daily interval in the **Every *N* days** box.

iv. **Weekly**: Type the weekly interval in the **Every *N* weeks** box, and then drop down the **Days** list and choose the day of the week on which you want to run it.

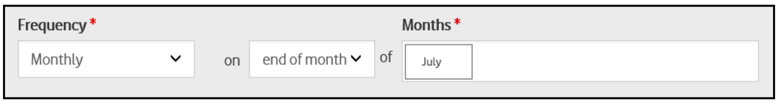
v. **Monthly**: Drop down the **on** list and choose one of the following options:

- **first**, **second**, **third**, **fourth**, **last**: you schedule VTR to run the report every first, second, third, fourth or last day of the month you indicate. For these options you also need to choose the day of the week when the report will run. For example, you can choose to run the report on the **first Monday** of the month. Then click in the **Months** list and choose the month/months during which you want to run the report. To run the report every first Monday of all the months, select **All** in the **Months** field.

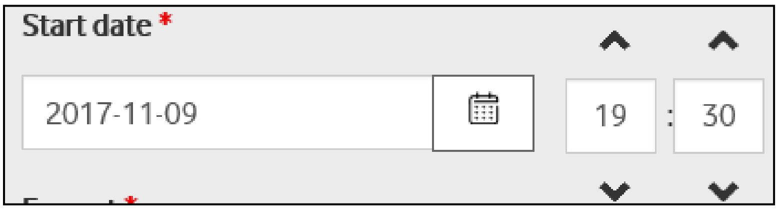


- **end of month** you need to select the month/months starting with which you want to receive the scheduled report. You can also select **All** for **Months**. VTR runs the report querying data from the first day until the last day of the month before the month/months you selected. You will receive the email with the attached report within the last day of the month and the second day of the following month. For example, if you select to run the report **monthly**, at the **end of the month**, in **July**, you will receive the email on one of the following days: 31st of July, 1st or 2nd of August, with billing data for June.
  When scheduling the report, make sure the invoice will have been issued before the date that you select for the report run.

> The data returned in the report belongs to the month before the month you selected for the schedule, because in the current month you receive the invoice for the previous month.



b. Under **Start date**, click the calendar, and then choose the date to begin running the job, then set the time to run the report by clicking the up and down arrow buttons above and below the hour and minute boxes.



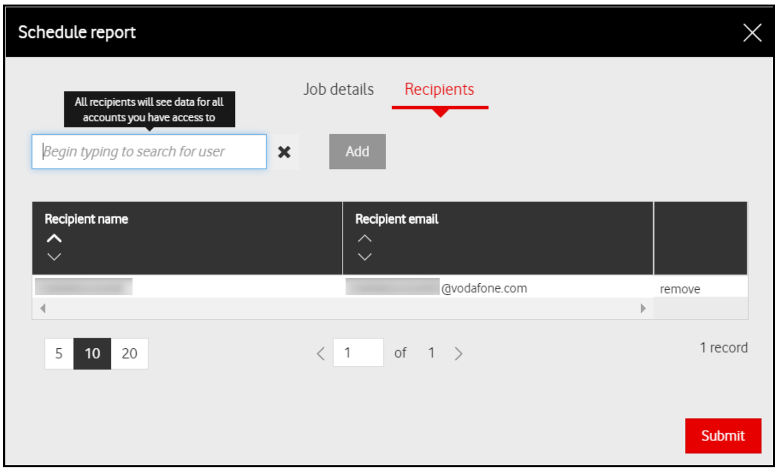
c. If you want to schedule an **End date**, choose that last date in the **End date** box.

d. Drop down the **Format** list and choose the file format in which you want the report delivered, such as CSV or Excel.

e. In the **Subject** line box, type the subject line for the emailed report.

Add recipients

a. Click on the **Recipients** tab.



b. Click in the *Begin typing to search for user* box, and type as much of the name or email address you know. VTR will drop down a list of matching names. Click one, and then click **Add**. You may email reports to VTR users or contacts.

c. Repeat that last step until you have added all the people you want to receive the emailed report.

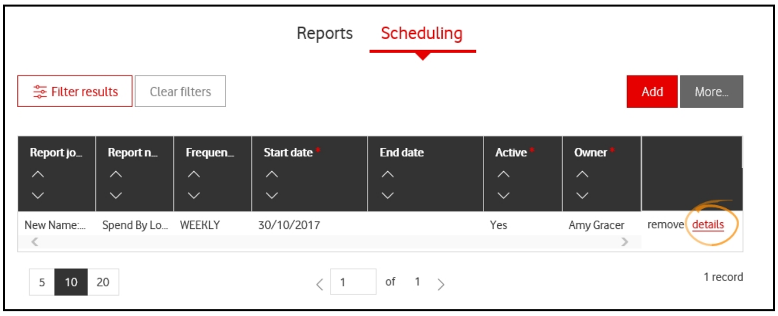
d. Click **Submit**.

All recipients will see data for all the accounts you have access to, because the person creating the schedule decides the data slicing. If you set up report scheduling, data slicing will not be applied to the output.

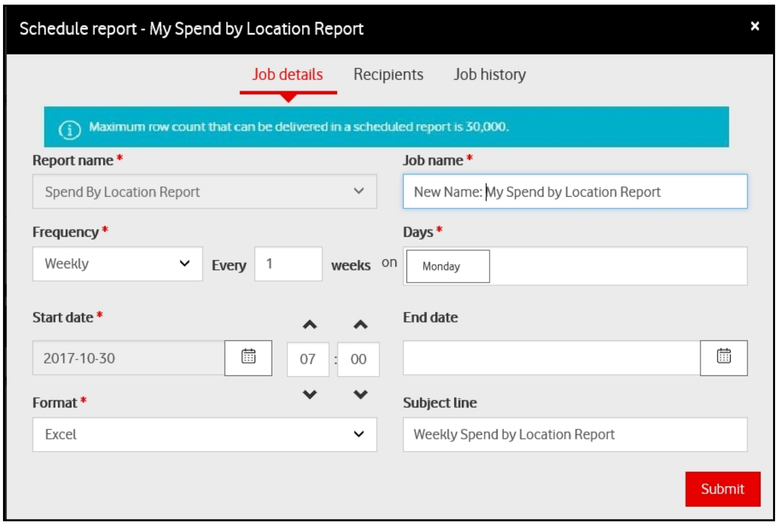
View and edit a report schedule and recipients

You can view and edit details about a scheduled report job that you created.

1. On the VTR main menu, click **Reporting**, and then click the **Scheduling** tab.



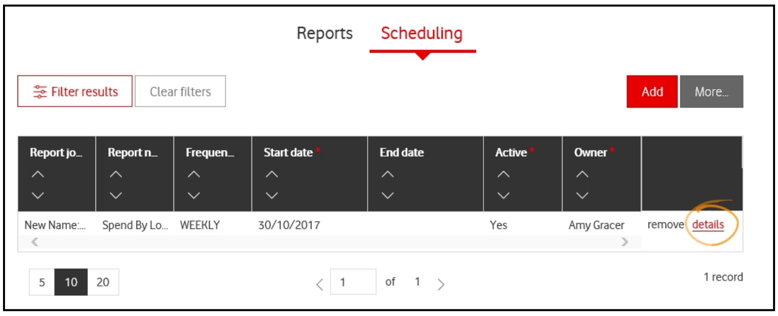
2. In the last column of the report you want to edit, click the **details** link.



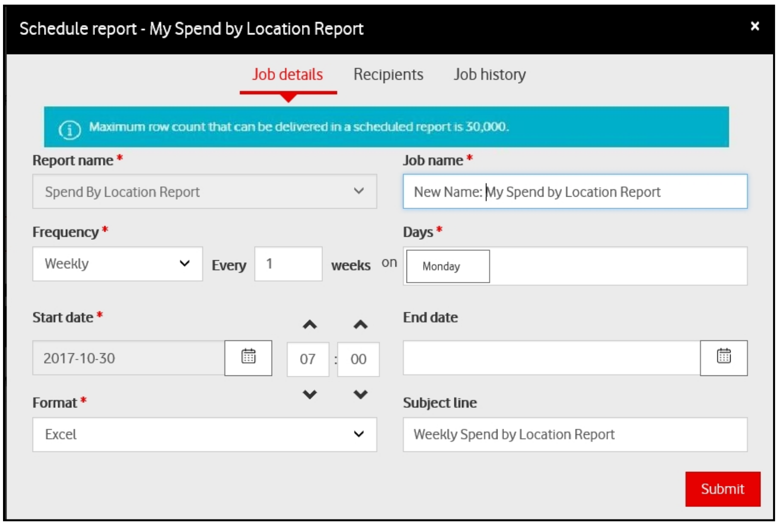
3. On the Job Details page that appears, edit any of the details except the **Report name** and **Start date**. To learn how to edit these details, go back to 'Add a new scheduled report job' on page 155.
4. Click the **Recipients** tab, and modifying the recipient list by adding recipients or deleting them by clicking the remove link in the last column.
5. You may also check the status of previously run jobs: Click the **Job history** tab. For more information, see 'View a scheduled report's run history' on page 161.
6. To save changes, click **Submit**.

View a scheduled report's run history

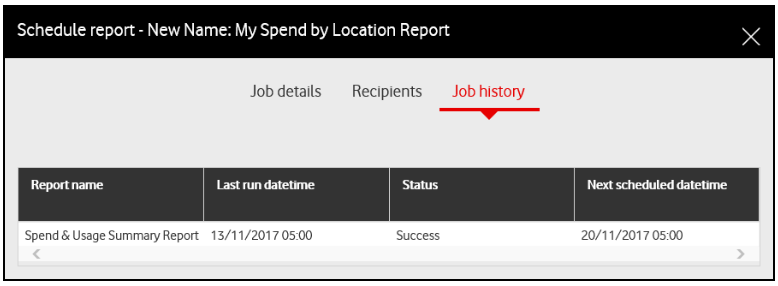
1. On the VTR main menu, click **Reporting**, and then click the **Scheduling** tab.



2. In the last column of the report you want to edit, click the **details** link.



3. On the Job Details page that appears click the **Job history** tab.

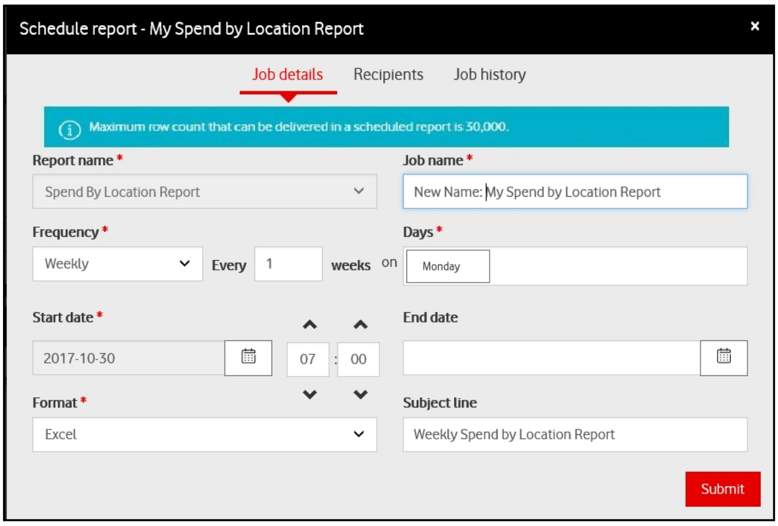


4. Review the following details about the selected scheduled report job:
   - **Last run date/time**: Last date and time the job ran. If it is a new job, then *Never*.
   - **Status**: Whether the job was Successful, Failed, or Never Run. If Never Run, then the job has either not yet started or it is in progress.
   - **Next scheduled run date/time**: The next date and time the job is scheduled to run.
5. To close the pop-up, click the X in the title bar.

Deactivate a report job

If you want to save a report schedule, but temporarily stop running the job, you may deactivate it:.

1. On the VTR main menu, click **Reporting**, and then click the **Scheduling** tab.
2. In the last column of the report you want to edit, click the **details** link.



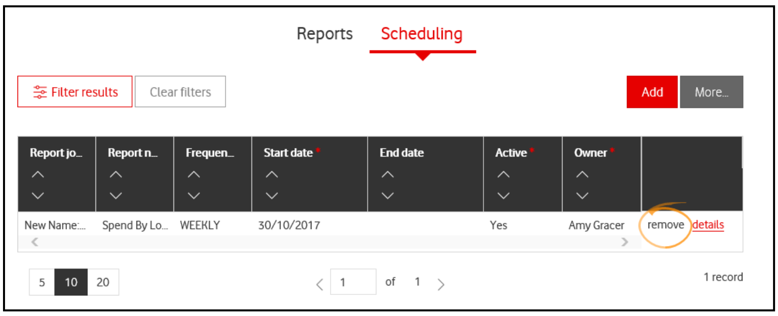
3. Drop down the **Frequency** list, and choose **Never**.
4. To save changes, click **Submit**.

To reactivate the job, go back to this page and choose the frequency with which you want to run it.

Remove a scheduled report job

You can remove a scheduled report job. The job will be cancelled and all the information about the job lost. If you want to keep the report schedule, but suspend it temporarily, you may deactivate it. See 'Deactivate a report job' on page 162.

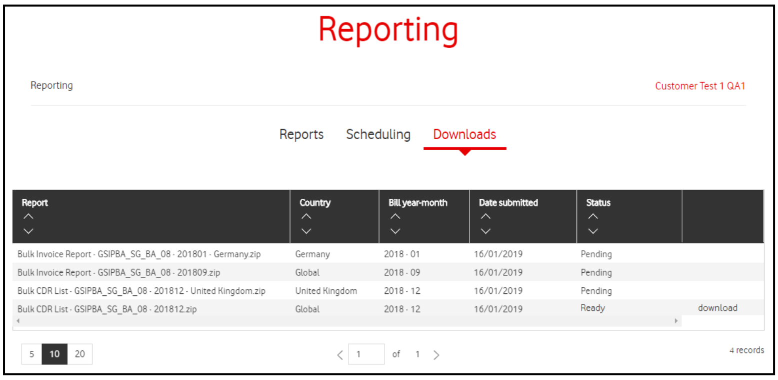
1. On the VTR main menu, click **Reporting**, and then click the **Scheduling** tab.
2. In the last column of the report you want to delete, click the **remove** link.



3. On the confirmation message that appears, click **Yes**.

Download bulk invoice reports

You can download only the invoice reports you have requested. Use the Invoice module to request bulk downloads. For more information, see 'Bulk download invoices' on page 187.



On the VTR main menu, click **Reporting** > **Downloads**.

The list of requested bulk invoice reports will be available in the main grid in descending order by the date the download request was submitted, and they will remain in the grid for 15 days.

Valid statuses will be:

1. **Pending** - Your request has been submitted and it will be processed by the nightly job, after which it can change to either *Ready* or *No results*.
2. **Ready** - The report is ready for download.
3. **No Results** - There were no invoices that met the criteria.

Available reports for download:

- **Bulk CDR List - <customer name> - <YYYYMM>.zip** - zipped files for each invoice in the Bill year-month for all countries; each zipped file contains a CSV file of the CDR list.
- **Bulk CDR List - <customer name> - <YYYYMM> - <country>.zip** - zipped files for each invoice in the Bill year-month for the specified Country; each zipped file contains a CSV file of the CDR list.
- **Bulk CDR List - <customer name> - <YYYYMM> - <country> - <product>.zip** - zipped files for each invoice in the Bill year-month for the specified Country and product; each zipped file contains a CSV file of the CDR list.
- **All Accounts CDR List - <customer name> - <YYYYMM> - <currency> - <product>.zip** - zipped single CSV file for all invoices in the Bill year-month for all countries for a single currency and specified product.

- **All Accounts CDR List - <customer name> - <YYYYMM> - <country> - <currency> - <product>.zip** - zipped single CSV file for all invoices in the Bill year-month for the specified country for a single currency and specified product.
- **Bulk Invoice Report - <customer name> - <YYYYMM>.zip** - XLSX files for each invoice in the Bill year-month for all countries.
- **Bulk Invoice Report - <customer name> - <YYYYMM> - <country>.zip** - XLSX files for each invoice in the Bill year-month for the specified Country.
- **All Accounts Invoice Report - <customer name> - <YYYYMM> - <currency>.xlsx** - single XLSX file for all invoices in the Bill year-month for all countries for a single currency.
- **All Accounts Invoice Report - <customer name> - <YYYYMM> - <country> - <currency>.xlsx** - single XLSX file for all invoices in the Bill year-month for the specified country for a single currency.
- **Bulk Invoice PDFs - <customer name> - <YYYYMM>.zip** - PDF files for each invoice in the Bill year-month for all countries.
- **Bulk Invoice PDFs - <customer name> - <YYYYMM> - <country>.zip** - PDF files for each invoice in the Bill year-month for the specified Country.
- Click **Download** next to the report whose status is *Ready*.

From the Invoice module, you will be able to request bulk downloads. See 'Bulk download invoices' on page 187 for more details on requesting the bulk invoice data.

Modify the report page layout in real time

After you run a report, you can modify the look by sorting on any column, filtering the data, and adding or removing any columns. These changes apply to the active report only and may not be saved.

To sort a report

1. Run the report as described in 'Run a report' on page 151.
2. To sort the report by a specific criteria, click that column heading to alternate ascending and descending sorting.
3. To add a secondary sort order, right-click the column. From the shortcut menu that appears, point to **Sort Column**, and then click **Add Ascending Sort** or **Add Descending Sort**.

To add or remove columns from a report

1. Run the report as described in 'Run a report' on page 151
2. To show columns, right-click any column heading, click **Include column**, and then select the columns you want to appear. If you don't see this option, then all columns are shown.
3. To hide a column, right click the column heading, and then click **Exclude column**.

To move columns

1. Run the report as described in 'Run a report' on page 151
2. Click and drag the column to the desired location, or right click the column, point to **Move Column**, and then click **Left** or **Right**.

Export a report

You can export any report to Excel or CSV, enabling further analysis and manipulation. The report will be exported with exactly the column data that appears on the screen; no additional data will be included. VTR supports export of up to 60,000 records exported to XLSX and 350,000 records when exporting to CSV.

When exporting data, note the following recommendations and limits for each report:

Report	Recommended Export Type	Notes
Account Listing Report	CSV	This report includes a sub-report; therefore, exporting in CSV is the only way to export all records. If exporting to XLSX, only one account will be shown. Note that this report cannot be scheduled.
High Cost Calls Report	XLSX or CSV	
Long Duration Calls	XLSX or CSV	
Premium Numbers Calls	XLSX or CSV	
Spend & Usage Chargeback Detail	CSV	Note that this report cannot be scheduled.
Spend & Usage Chargeback Summary	CSV	
Spend & Usage Detail	CSV	
Spend by Location	XLSX or CSV	
Usage by Day	XLSX or CSV	Note that this report cannot be scheduled.
Zero Usage	XLSX or CSV	

Report	Recommended Export Type	Notes
Red Spend & Usage Detail	CSV	Note that this report cannot be scheduled.
Red Spend by Zone	XLSX or CSV	
Red Spend Trend by Bundle	XLSX and CSV	
Top N Calls	XLSX or CSV	
Top N Data Usages	XLSX or CSV	
Top N Users	XLSX or CSV	
Services	CSV	Note that this report cannot be scheduled.
Customer Profile	XLSX or CSV	
Portal Users	XLSX or CSV	
IoT Spend & Usage By CSP Report	XLSX or CSV	
IoT Spend & Usage By Country Report	XLSX or CSV	
Account Access Report	XLSX or CSV	Note that this report cannot be scheduled.

To export a report

1. Run the report as described in 'Reporting' on page 55.
2. Sort and filter the report to display just the data you want to view as described in 'Modify the report page layout in real time' on page 164. This filtering will apply to the exported report in all export formats except CSV. CSV will show all records.
3. At the bottom of the report, click the **Export** link.
4. From the **Export** menu, choose the format in which you want:
   - To export to Excel, click **Excel 2007+** option
   - To export to CSV, click **Data** and then **CSV Format** option.
5. On the confirmation message that appears, click **OK**.
6. Follow your browser's instructions for exporting the file.

If you open an export in Excel and see #####, you should resize the column width to enable you to see all of the data.

The Export menu may include additional options such as Powerpoint, Web Archive, Tab Delimited, or XML format. VTR does not fully support these formats; therefore, if you choose one, results are unpredictable.

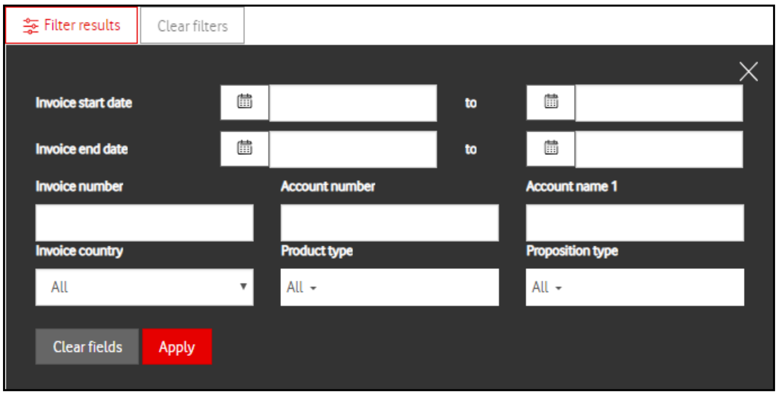
Chapter 5: Invoices

From the Invoices module, you can view all invoices for all accounts to which you have access, export data in various formats, and associate PDF invoice files to an invoice.

- **Viewing Invoices**: View invoices by Account or by Bill Year-Month, and export data. See 'Viewing invoices' on page 170.
- **Download individual invoice reports**: Download invoice report data for a single invoice or account. See 'Download individual invoice reports' on page 177.
- **Download invoices in bulk**: Download invoice data for a specific billing cycle. See 'Bulk download invoices' on page 187.
- **View attached invoice files**: View attached PDF Invoices. See 'View attached invoice files' on page 193.

Viewing invoices

1. On the main VTR menu, click **Invoices**. From the Invoices module, you can view invoices by Account or by Bill year-month. By default, the **View by account** tab is selected.
2. If you want to filter the invoices that appear based on a date range, country, invoice or account number, etc., click the **Filter results** button.



   This filters page functions the same as all other filters in VTR, except you can enter a start range and an end range of dates. This range enables you to filter for all invoices or accounts with a start date range to an end date range. For example, starting between 1 Jan 2015 to 7 Jan 2015 and ending between 1 Feb 2015 to 7 Feb 2015. For more information on how to use filter options, see 'Filter the results' on page 13.

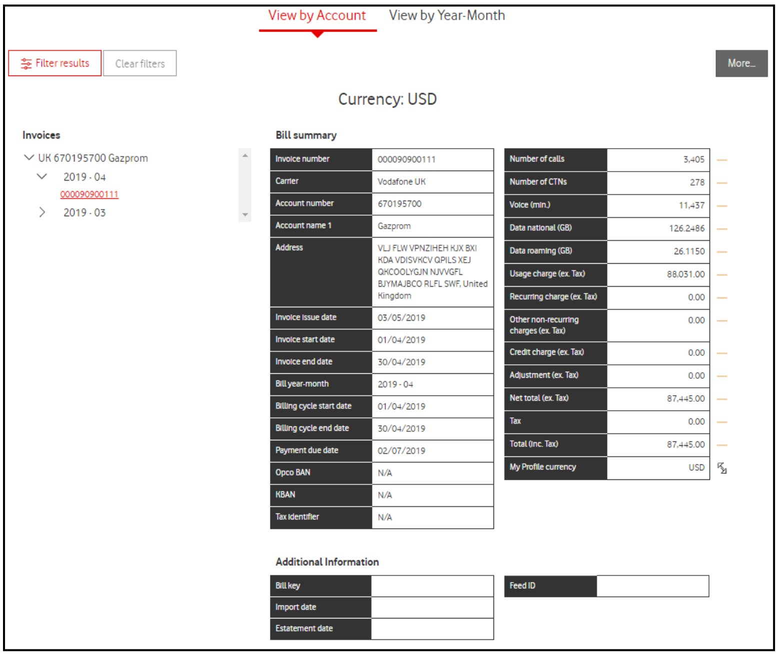
   Also, the **Product type** and **Proposition type** fields allow you to select more than one value in the drop-down. The default value for both fields is **All**.

3. Change the view by clicking the appropriate tab at the top of the **Bill summary** section:

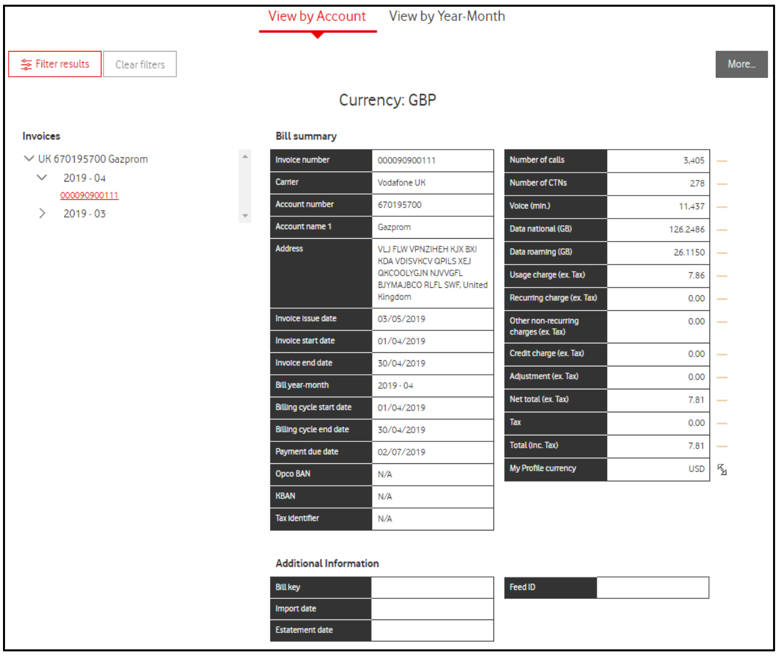
View by account

You may drill down to the invoice by selecting an account, and then a Bill year-month.

Along the left side, click the arrow to expand the account, and then the invoice start date for which you want to view invoices, and then click the invoice.



By default, Invoice data is displayed in the original currency. To view the Invoice in the currency that you have defined in your My Profile Currency setting, click the icon next to the **Invoice currency** field in the **Bill summary** list. The currency being viewed will display at the top of the page.



The values displayed in the **Billing summary** section have been rounded to two decimal places, therefore they do not reflect the exact amounts. You can view the accurate values in the Invoice PDF file.

The details on the right update with the following invoice information. The totals display up and down arrows to indicate the trending over last month:

- A red up arrow indicates the charge is greater this month than the previous month.
- A green down arrow indicates the charge is less this month than the previous month.
- An orange dash indicates that the charge is exactly equal to the previous month for the same charge category.
- No symbol means that there is no invoice from the previous month for comparison.

Bill summary fields

Invoice Number: The identifier of the bill for the service.

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Address: The address associated with the account.

Invoice Issue Date: The date when the bill was issued.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Bill year-month: Year and month of the bill date.

Billing cycle start date: The first day in the billing cycle, if the carrier provides it.

Billing cycle end date: The last day in the billing cycle, if the carrier provides it.

Payment due date: The date payment is due on the invoice.

Opco BAN: Opco billing account number that is associated with the invoice account.

KBAN: The Kenan billing account number, if applicable.

Tax Identifier: The tax identifier number.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Number of CTNs: Count of all unique customer telephone numbers on the invoice.

Voice (mins): The total number of minutes for all charges identified as Calls on the invoice.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Other non-recurring charges (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring for hardware and DLM invoices only. An example is a purchase of a device.

Credit Charge (ex. Tax): The total sum, excluding tax, of charges identified as credits on the invoice.

Adjustment (ex. Tax): The total sum, excluding tax, of charges identified as adjustments on the invoice. An example of an adjustment is a one-off adjustment to the charges on an earlier bill, such as billing corrections.

Net total (ex. Tax): The net total of charges on the invoice, excluding tax.

Tax: The total tax charges on the invoice.

Total (inc. Tax): The sum of all charges, including tax.

Invoice currency: The original currency in which the invoice was generated. To view data in the currency set up on the My profile page, click the button. Note that this button is available only when the original invoice currency is different from the currency you set up on the My profile page.

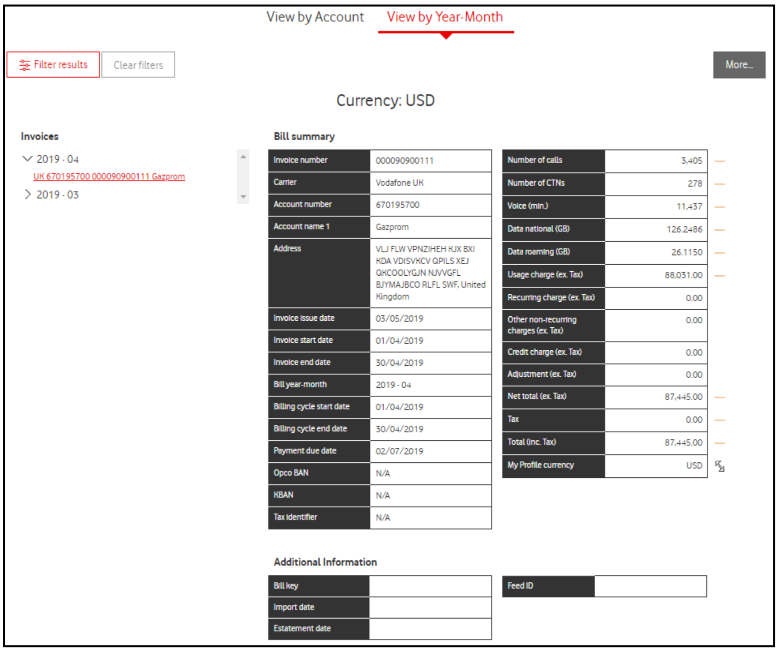
You can also review the following Additional information:

- **Estatement date**: The date when the e-statement was issued last. This field is visible only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.

View by Year-month

You may drill down to the invoice by selecting a Bill year-month, and then an invoice:

Along the left side, click the arrow to expand the issue date for which you want to view invoices, and then click the account name.



By default, Invoice data is displayed in the original currency. To view the Invoice defined in the currency that you have defined in the My Profile Currency setting, click the icon next to the Invoice currency. The currency being viewed will display at the top of the Invoice module.

The values displayed in the **Billing summary** section have been rounded to two decimal places, therefore they do not reflect the exact amounts. You can view the accurate values in the Invoice PDF file.

The details on the right update with the following invoice information. The totals display up and down arrows to indicate the trending over last month:

- A red up arrow indicates the charge is greater this month than the previous month.
- A green down arrow indicates the charge is less this month than the previous month.
- An orange dash indicates that the charge is exactly equal to the previous month for the same charge category.
- No symbol means that there is no invoice from the previous month for comparison.

Bill summary fields

Invoice Number: The identifier of the bill for the service.

Carrier: The service provider of the communications services.

Account Number: The ID of the account to which the services belong.

Account Name 1: The primary account name associated with the account. For central billing accounts, it represents the legal entity name, as referenced on the invoice. For all the other types of accounts, it represents the global account name.

Address: The address associated with the account.

Invoice Issue Date: The date when the bill was issued.

Invoice Start Date: The date on which the billing cycle starts.

Invoice End Date: The date on which the billing cycle ends.

Bill year-month: Year and month of the bill date.

Billing cycle start date: The first day in the billing cycle, if the carrier provides it.

Billing cycle end date: The last day in the billing cycle, if the carrier provides it.

Payment due date: The date payment is due on the invoice.

Opco BAN: Opco billing account number that is associated with the invoice account.

KBAN: The Kenan billing account number, if applicable.

Tax Identifier: The tax identifier number.

Number of Calls: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.

Number of CTNs: Count of all unique customer telephone numbers on the invoice.

Voice (mins): The total number of minutes for all charges identified as Calls on the invoice.

Data National (GB): The total amount of data in gigabytes for all charges identified as Data National on the invoice. Data usage includes charges such as internet access, use of mobile phone and modem (WAP excluded).

Data Roaming (GB): The total amount of data in gigabytes for all charges identified as Data Roaming on the invoice. Roaming includes data usage while overseas.

Usage Charge (ex. Tax): The total sum, excluding tax, of charges identified as usage charges on the invoice. This charge includes daily roaming fees.

Recurring Charge (ex. Tax): The number of recurring charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.

Other non-recurring charges (ex. Tax): The total sum, excluding tax, of charges identified as non-recurring. An example is a subscription fee or paper bill fee (includes monthly roaming fees).

Net total (ex. Tax): The net total of charges on the invoice, excluding tax.

Tax: The total tax charges on the invoice.

Total (inc. Tax): The sum of all charges, including tax.

Invoice currency: The original currency in which the invoice was generated. To view data in the currency set up on the My profile page, click the button. Note that this button is available only when the original invoice currency is different from the currency you set up on the My profile page.

You can also review the following Additional information:

- **Estatement date**: The date when the e-statement was issued last. This field is visible only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.

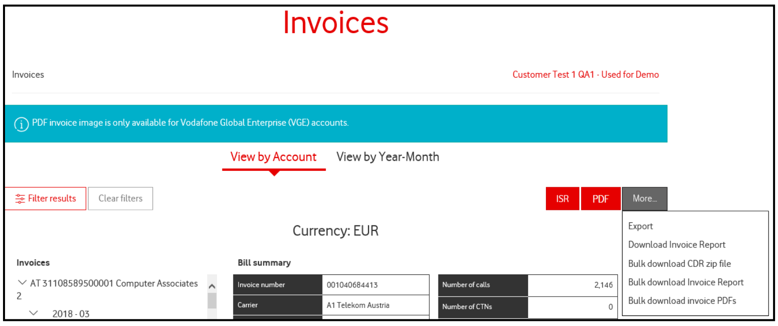
> These fields will represent the minimum value, maximum value or the sum of the values for all bundled PO invoices if multiple Hardware Billing invoices have been grouped into one, which occurs when the invoice falls under the same account number and bill cycle.

To export invoice data, filter for the data you want to export. See 'Export the data' on page 14.

> The exported data currency will be based on the currency in which you are currently viewing in the invoice module. As noted above, you should toggle to the desired currency before exporting.

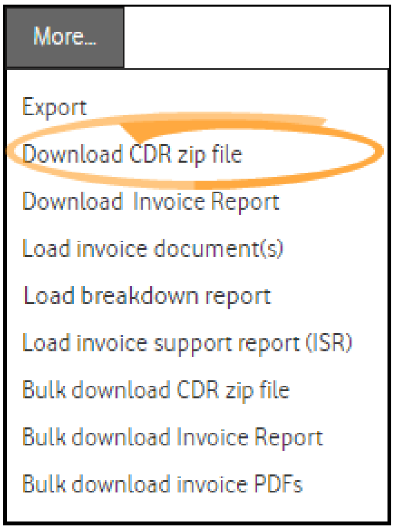
Download individual invoice reports

Invoice data can be downloaded in several formats, such as XLSX and CSV, as well as in various views for the type of data you require.



CDR file

To generate and download a CDR zip file for each regular invoice or bundled Hardware Billing PO invoice in CSV format, select **Download CDR zip file** from the **More** button drop-down. This drop-down menu option is not available if the CDR zip file is not available.



A bundled Hardware Billing PO invoice is created when there are multiple Hardware Billing invoices for the same account number and the same Bill cycle start date. For each of the calculated fields, the value will represent the total values across all the invoices included in the bundled PO, and for each of the non-calculated fields, the values in the report will follow specific business rules:

- **Min of all bundled PO Invoices** - Issue date, Invoice start date, Creation date
- **Max of all bundled PO Invoices** - Invoice end date, Import date, Payment date,

The CDR report will be based on the invoice's local currency and call masking rules will apply. The CDR file will be purged when the corresponding invoice data is purged based on your customer configuration setting for **Months to retain billing data**.

Regular and Hardware Billing Invoice

The default fields for regular and Hardware Billing invoices include the following:

- **USER_ID**: User ID associated with the user of the service. Not available for DLM Product Type.
- **SERVICE_ID_CTN**: Service Number. Masked value possible.
- **CHILD_ACCOUNT_NUMBER**: The non-billable account ID provided by the Carrier. Hidden if not available from the central billing system.
- **USAGE_DATE**: Usage Date.
- **INVOICE_LABEL**: Invoice Label.
- **USAGE_TYPE_CLASSIFICATION**: Usage Type Classification. Not available for DLM Product Type.
- **USAGE_TYPE_CLASSIFICATION_DET**: Charge Type Classification Detail. Not available for DLM Product Type.
- **USAGE_TYPE_CODE**: Usage: Type Code. Not available for DLM Product Type.
- **CALLING_NUMBER**: Calling number. Masked value possible. Not available for DLM Product Type.
- **CALLED_NUMBER**: Called number. Either masked or unmasked, depending on the customer's request towards the carrier. Not available for DLM Product Type.
- **SOURCE_COUNTRY**: Source Country. Not available for DLM Product Type.
- **TARGET_COUNTRY**: Target Country. Not available for DLM Product Type.
- **METRIC**: Metric: KB, SEC or UNITS. Not available for DLM Product Type.
- **UNITS**: Units. Not available for DLM Product Type.
- **CHARGEABLE**: Is this item line chargeable?
- **VAT_RATE**: Tax Rate
- **NET_CHARGE**: Charge excluding tax.
- **VAT**: Tax.
- **TOTAL**: Total including tax.
- **CURRENCY**: The currency type in which the charge was calculated. Visible only if the account Product type is DLM.
- **CHARGE_START_DATE**: Charge start date.
- **CHARGE_END_DATE**: Charge end date.
- **PRODUCT_CODE**: Product code.
- **MT_MO_INDICATOR**: MT = Mobile Terminate call, MO = Mobile Originate call, FO = Fixed Line Originate call, NU = Non usage. Not available for DLM Product Type.
- **USAGE_TIME**: Usage time. Not available for DLM Product Type.

- VCO columns:
  - **MAX_SUBSCRIBER_NAME**: Maximum value of owner first name and last name from services for the USER_ID. Visible only if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice. Not available for DLM Product Type.
  - **MAX_ALLOCATION_CODE_1**: Maximum value of custom attribute 1 from services for the USER_ID. Visible only if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice.
  - **MAX_ALLOCATION_CODE_2**: Maximum value of custom attribute 2 from services for the USER_ID. Visible only if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice.
  - **MAX_ALLOCATION_CODE_3**: Maximum value of custom attribute 3 from services for the USER_ID. Visible only if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice and if the **Display allocation codes 3/4** column has been set to **Yes** in the **Accounts** section.
  - **MAX_ALLOCATION_CODE_4**: Maximum value of custom attribute 4 from services for the USER_ID. Only visible if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice and if the **Display allocation codes 3/4** column has been set to **Yes** in the **Accounts** section.
- **ORDER_NUMBER**: Order number for specific hardware. Visible only for Hardware billing invoices
- **PRODUCT_NUMBER**: Product number of specific hardware. Visible only for Hardware billing invoices.
- **PURCHASE_ORDER_NUMBER**: Purchase Order number for specific hardware transaction. Visible only for Hardware billing invoices.

Fields visible only if the account Product type is **DLM**:

- **DLM ID**: Unique asset ID for a device/accessory.
- **USER NAME**: User name or user email.
- **END _USER_ID**: Unique identifier of the end user.
- **CHARGE_TYPE**: Charge type.
- **CHARGE_TYPE_CLASSIFICATION**: Charge type classification.
- **BUSINESS_UNIT**: The contract ID.
- **COST_CENTER_1**: The Subscriber Cost Centre.
- **IMEI**: IMEI Number of device.
- **CONTRACT_START_DATE**: The date on which the contract starts.
- **CONTRACT_END_DATE**: The date when the contract ends.
- **CHARGE_TYPE_CL**: Charge type code classification.

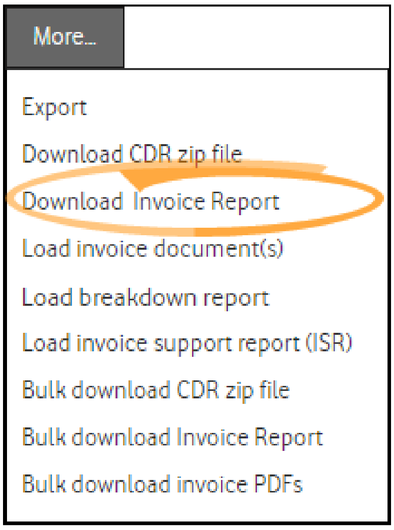
IoT Invoices

The default fields for IoT invoices include the following:

- **Transaction ID**: The IoT event's transaction ID.
- **IMSI**: Uniquely identifies a SIM.
- **Usage Start Date Time**: The start date of the reported usage.
- **Usage End Date Time**: The end date of the reported usage.
- **Usage Type**: Code of the usage type used describe the specific IoT event.
- **Called Number**: The service number to which a call was placed as identified on the report.
- **Volume**: The actual usage volume.
- **Rounded Volume**: The rounded usage volume.
- **Metric**: The type of the usage, expressed in Bytes (data), Units (SMS and API), or Seconds (voice).
- **Event Charge**: The reported event charge.
- **Event Type**: Type indicator of usage events.
- **Serving OpCo Code**: Network group derivation identifier, mandatory when network group based charging is required.
- **Network Tier Code**: Network tier code.
- **Network Tier Name**: Describes the network group or tier for the serving network.
- **Country**: Called or calling country.
- **Tariff Name**: GDSP Tariff name.
- **CSP Name**: Customer Service Profile Name.
- **Rate Profile**: The reported rate profile.
- **IP Address**: The identifying number that is associated with a specific computer or computer network.

Invoice Report:

To download the Invoice Report in XLSX format, select **Download Invoice Report** from the **More** button drop-down. The report will be based on the invoice's local currency. The Invoice Report will be purged when the corresponding invoice is purged base on your customer configuration setting for **Months to retain billing data**.



The Invoice Report is not available for IoT invoices.

The **Invoice Report** will contain three tabs:

Summary: This tab will show total values for the invoice. The fields included are described as follows:

- **Customer Name**: The Customer for the invoice.
- **Invoice Month**: Based on the Invoice Start Date.
- **Account number**: The ID of the account to which the services belong.
- **Invoice Address**: Address 1 + Address 2 + City + Postcode + Country.
- **Invoice Number**: The identifier of the bill for the service.
- **Invoice Issue Date**: The date when the bill was issued.
- **Invoice Start Date**: The date on which the billing cycle starts.
- **Invoice End Date**: The date on which the billing cycle ends.
- **Invoice Currency**: The original currency in which the invoice was generated.
- **Number of CTNs**: Count of all unique customer telephone numbers on the invoice. Not available for DLM Product Type.
- **Number of Calls**: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row. Not available for DLM Product Type.
- **Voice Minutes**: Sum of duration of all voice calls in minutes. Not available for DLM Product Type.
- **National Data (MB)**: Sum of volume of all data usages excluding roaming (national and international) in megabytes. Not available for DLM Product Type.
- **Roaming Data (MB)**: Sum of volume of roaming (national and international) only data usages in megabytes. Not available for DLM Product Type.

- **Usage Charge ex. Tax**: Sum of all charges except recurring charges and credits, including daily roaming charges (includes daily roaming fees). Not available for DLM Product Type.
- **Recurring Charge ex. Tax**: Sum of all recurring charges, including LTE Access charges, content services, subscribed services and monthly roaming charges, including recurring DLM Charges (includes monthly roaming fees).
- **Other Non-Recurring Charges ex. Tax**: Sum of all DLM one-off charges. This column only present for DLM accounts.
- **Device Fee ex. Tax**: Sum of all Device fee recurring charges.
- **Credit ex. Tax**: Sum of all Credits, Discounts and Refunds.
- **Average Rate per User ex. Tax**: Sum of all Invoice Average Revenue Per User ex. VAT.
- **Adjustments ex. Tax**: sum of all Adjustments.
- **Total Taxable**: Total ex. Tax where Tax rate is not 0 from Billing system, minus Tax Other value.
- **Total Non-Taxable**: Total ex. Tax where Tax rate is 0 from Billing system, minus Tax Other value.
- **Total ex. Tax**: Total ex. Tax from Billing System, minus Tax Other value.
- **Tax**: Total Tax on Invoice from Billing System.
- **Tax Other**: Sum of all recurring tax charges, e.g. Italian government tax. This column only present if the invoice total value is 0.
- **Total**: Total from Billing System.

Users: This tab will show total values for the invoice. The fields included are described as follows:

- **Company Name**: The Company for the invoice.
- **Account Number**: The ID of the account to which the services belong.
- **Child Account Number**: The non-billable account ID provided by the Carrier. Only included in the report if different from the account number.
- **Invoice Number**: The identifier of the bill for the service.
- **Invoice Issue Date**: The date when the bill was issued.
- **Invoice Start Date**: The date on which the billing cycle starts.
- **Invoice End Date**: The date on which the billing cycle ends.
- **User Id**: User ID associated with the user of the service. Not available for DLM Product Type.
- **DLM ID (only available for DLM Product Type)**: Unique asset ID for a device/ accessory.
- **User Name (only available for DLM Product Type)**: User name or user email.
- **End User ID (only available for DLM Product Type)**: Unique identifier of the end user.
- **Cost Centre 1 (only available for DLM Product Type)**: The Subscriber Cost Centre.

- VCO columns:
    - **Max User Ref)**: Maximum value of owner first name and last name from services for the USER_ID, only shown if any of the 4 custom attributes (aka. Allocation Codes) or the price plan code and description fields have a value for any of the services in the invoice.
    - **Max Allocation Code 1**: Maximum value of custom attribute 1 from services for the USER_ID, only shown if any of the 4 custom attributes (aka. Allocation Codes) or the price plan code and description fields have a value for any of the services in the invoice.
    - **Max Allocation Code 2**: Maximum value of custom attribute 2 from services for the USER_ID, only shown if any of the 4 custom attributes (aka. Allocation Codes) or the price plan code and description fields have a value for any of the services in the invoice.
    - **Max Allocation Code 3**: Maximum value of custom attribute 3 from services for the USER_ID. Only visible if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice and if the **Display allocation codes 3/4** column has been set to **Yes** in the **Accounts** section.
    - **Max Allocation Code 4**: Maximum value of custom attribute 4 from services for the USER_ID. Only visible if any of the 4 custom attributes or the price plan code or description fields have a value for any of the services in the invoice and if the **Display allocation codes 3/4** column has been set to **Yes** in the **Accounts** section.
- **Red Bundle Code**: Self-optimised Red bundle code. This column present only if there is Red Bundle information for the invoice for any account for the customer. Not available for DLM Product Type.
- **Red Bundle**: Self-optimised Red bundle description. If blank, this column will not appear. Not available for DLM Product Type.
- **Number of CTNs**: Count of all unique customer telephone numbers on the invoice. Not available for DLM Product Type.
- **Number of Calls**: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row. Not available for DLM Product Type.
- **Voice National (Min.)**: Sum of duration of all national calls in minutes. Not available for DLM Product Type.
- **Voice International (Min.)**: Sum of duration of all international calls in minutes. Not available for DLM Product Type.
- **Voice Roaming (Min.)**: Sum of duration of all roaming calls in minutes. Not available for DLM Product Type.
- **Voice Premium (Min.)**: Sum of duration of all premium calls in minutes. Not available for DLM Product Type.
- **Data National (MB)**: Sum of volume of all national data usage in megabytes. Not available for DLM Product Type.

- **Data Roaming (MB)**: Sum of volume of all roaming data usage in megabytes. Not available for DLM Product Type.
- **Data Premium (MB)**: Sum of volume of all premium data usage in megabytes. Not available for DLM Product Type.
- **Messaging National (Min.)**: Distinct count of national SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging International (Min.)**: Distinct count of international SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging Roaming (Min.)**: Distinct count of roaming SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging Premium (Min.)**: Distinct count of premium SMS and MMS CDRs. Not available for DLM Product Type.
- **Voice National Charge ex. Tax**: Sum of charge ex. Tax of all national calls in minutes. Not available for DLM Product Type.
- **Voice International Charge ex. Tax**: Sum of charge ex. Tax of all international calls in minutes. Not available for DLM Product Type.
- **Voice Roaming Charge ex. Tax**: Sum of charge ex. Tax of all roaming calls in minutes. Not available for DLM Product Type.
- **Voice Premium Charge ex. Tax**: Sum of charge ex. Tax of all premium calls in minutes. Not available for DLM Product Type.
- **Data National Charge ex. Tax**: Sum of charge ex. Tax of all national data usage in megabytes. Not available for DLM Product Type.
- **Data Roaming Charge ex. Tax**: Sum of charge ex. Tax of all roaming data usage in megabytes. Not available for DLM Product Type.
- **Data Premium Charge ex. Tax**: Sum of charge ex. Tax of all premium data usage in megabytes. Not available for DLM Product Type.
- **Messaging National Charge ex. Tax**: Sum of charge ex. Tax of all national SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging International Charge ex. Tax**: Sum of charge ex. Tax of all international SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging Roaming Charge ex. Tax**: Sum of charge ex. Tax of all roaming SMS and MMS CDRs. Not available for DLM Product Type.
- **Messaging Premium Charge ex. Tax**: Sum of charge ex. Tax of all premium SMS and MMS CDRs. Not available for DLM Product Type.
- **Usage Charge ex. Tax**: Sum of all charges except recurring charges and credits, including daily roaming charges. Not available for DLM Product Type.
- **Recurring Charge ex. Tax**: Sum of all recurring charges, including LTE Access charges, content services, subscribed services and monthly roaming charges, including recurring DLM Charges.

- **Other Non-Recurring Charges ex. Tax**: Sum of all DLM one-off charges. This column only present for DLM accounts.
- **Device Fee ex. Tax**: Sum of all Device fee recurring charges.
- **Daily Roaming Fee ex. Tax**: Sum of all device fee recurring charges. Not available for DLM Product Type.
- **Monthly Roaming Fee ex. Tax**: Sum of all monthly roaming fees. Not available for DLM Product Type.
- **Adjustments ex. Tax**: sum of all Adjustments. Not available for DLM Product Type.
- **Credit ex. Tax**: Sum of all Credits, Discounts and Refunds.
- **Total Taxable**: Total ex. Tax where Tax rate is not 0 from Billing system, minus Tax Other value.
- **Total Non-Taxable**: Total ex. Tax where Tax rate is 0 from Billing system, minus Tax Other value.
- **Total ex. Tax**: Total ex. Tax from Billing System, minus Tax Other value.
- **Total Tax**: Total Tax on Invoice from Billing System.
- **Tax Other**: Sum of all recurring tax charges, e.g. Italian government tax. This column only present if the invoice total value is 0.
- **Total**: Total from Billing System.

CTNs: This tab will show total values for each CTN, excluding any records where the CTN is not a number and it is the same as the User ID. The fields included are described as follows:

> The CTNs Tab is not available for DLM Product Type.

- **Company Name**: The Company for the invoice.
- **Account Number**: The ID of the account to which the services belong.
- **Child Account Number**: The non-billable account ID provided by the Carrier. Only included in the report if different from the account number.
- **Invoice Number**: The identifier of the bill for the service.
- **Invoice Issue Date**: The date when the bill was issued.
- **Invoice Start Date**: The date on which the billing cycle starts.
- **Invoice End Date**: The date on which the billing cycle ends.
- **User Id**: User ID associated with the user of the service.

- VCO columns:
  - **User Ref**: Value of owner first name and last name from services for the USER_ID, only shown if any of the 4 custom attributes (aka. Allocation Codes) or the price plan code and description fields have a value for any of the services in the invoice.
  - **Allocation Code 1**: Allocation / attribute used to provide grouping of services for UK provisioning. If blank, these columns will not appear.
  - **Allocation Code 2**: Allocation / attribute used to provide grouping of services for UK provisioning. If blank, these columns will not appear.
  - **Allocation Code 3**: Allocation / attribute used to provide grouping of services for UK provisioning. If blank, these columns will not appear.
  - **Allocation Code 4**: Allocation / attribute used to provide grouping of services for UK provisioning. If blank, these columns will not appear.
  - **Red Bundle Code/Price Plan**: Self-optimised Red bundle code or UK non-Red users price plan code. If blank, these columns will not appear.
  - **Red Bundle/Price Plan Description**: Self-optimised Red bundle description or UK non-Red users price plan description. If blank, these columns will not appear.
- **CTN**: The unique customer telephone numbers on the invoice. This column may be masked.
- **Number of Calls**: Count of all charges identified as Calls. Data is aggregated by Roaming country and Zone so this number represents the number of calls rolled up into a single row.
- **Voice National (Min.)**: Sum of duration of all national calls in minutes.
- **Voice International (Min.)**: Sum of duration of all international calls in minutes.
- **Voice Roaming (Min.)**: Sum of duration of all roaming calls in minutes.
- **Voice Premium (Min.)**: Sum of duration of all premium calls in minutes.
- **Data National (MB)**: Sum of volume of all national data usage in megabytes.
- **Data Roaming (MB)**: Sum of volume of all roaming data usage in megabytes.
- **Data Premium (MB)**: Sum of volume of all premium data usage in megabytes.
- **Messaging National**: Distinct count of national SMS and MMS CDRs.
- **Messaging International**: Distinct count of international SMS and MMS CDRs.
- **Messaging Roaming**: Distinct count of roaming SMS and MMS CDRs.
- **Messaging Premium**: Distinct count of premium SMS and MMS CDRs.

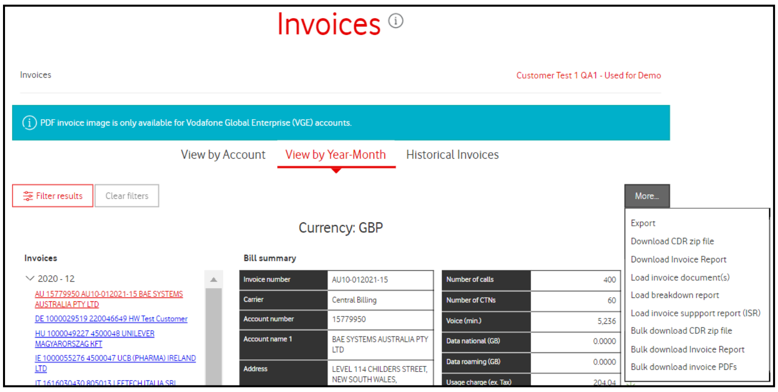
Bulk download invoices

You can request a download of invoice reports in bulk as a zip file for the invoices issued only for the accounts that you can access.

CDR zip files, Invoice Reports, and Invoice PDF files can be downloaded in bulk by Bill year-month period and country from the Invoices module, thereby eliminating numerous and time-consuming individual downloads.

The **Bill year-month** drop-down represents the Invoice issue date and the default year-month will be the current year and the last full month (for example, if today is December 21, 2018, then the drop-down will have 2018 - 11 as its first option). A total of 13 months will be listed in the drop-down in descending order, where only the months that have billing data will be listed.

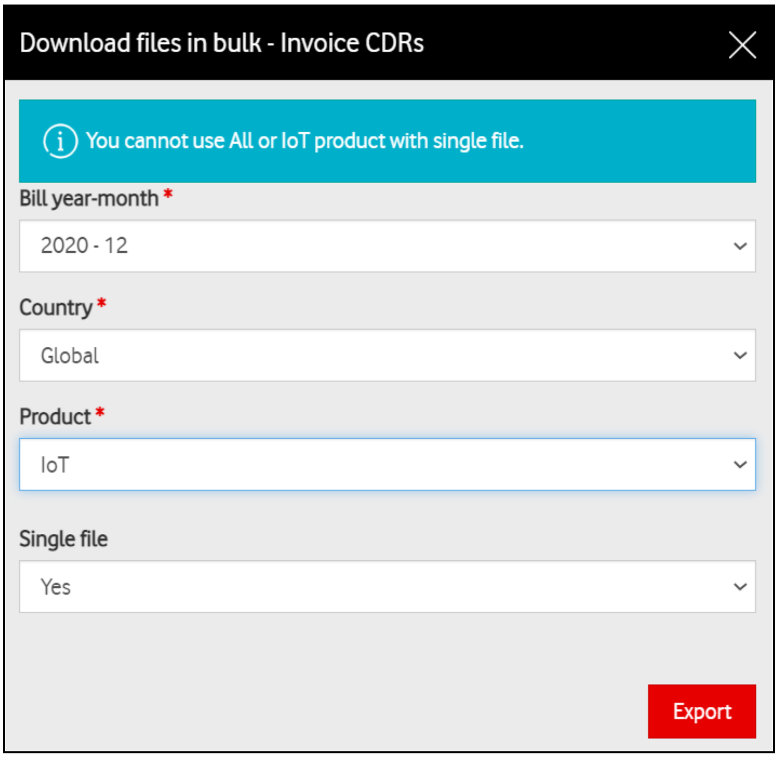
The **Country** drop-down will contain a list of countries where there is billing information, with a default of **Global** for all countries.



Bulk download CDR zip file:

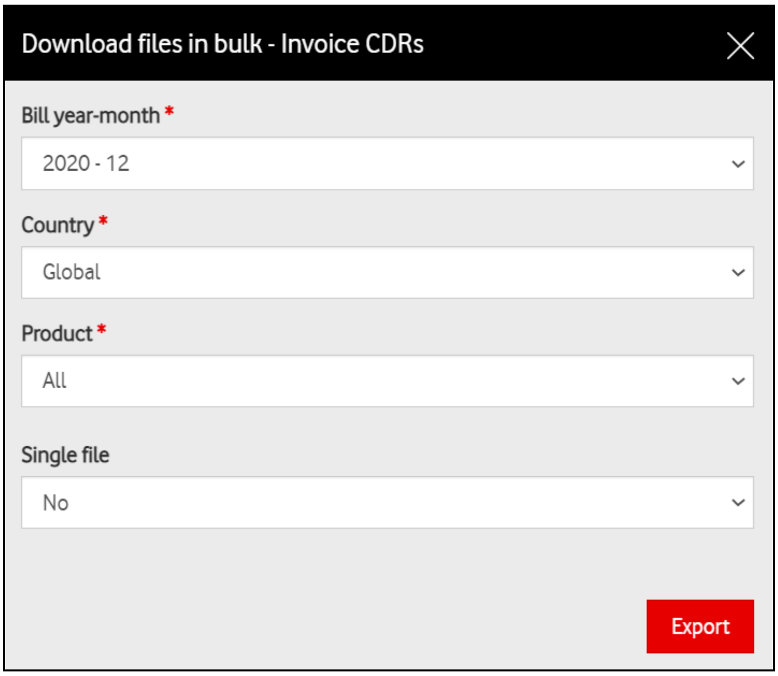
The Bulk download CDR zip file contains all the individual CDR zip files for the bill year-month selected and each individual zip file contains the CDR report files in CSV format.

There is also the possibility of having multiple CSV files merged into one downloadable zip file, if the **Single file** option is set to **Yes**. This functionality is available for any selection of the **Product** drop-down, except for **All** and **IoT**.



The CDR report is based on the invoice's local currency and call masking rules apply.

1. From the Invoices module, click **More** > **Bulk download CDR zip file**.
2. A pop-up will appear for you to select the billing cycle, country, product, and the single file option for the reports. Once provided, click the **Export** button to generate the zip file.



You will receive a confirmation message if the bulk download request has been accepted. Depending on the details you provided, the file name generated has a different name:

- If no country is specified, the file name will be **Bulk CDR List - <customer name> - <YYYYMM>.zip**, where **<customer name>** is replaced by the customer name in your Customer Configuration settings, and **<YYYYMM>** will be the Bill year-month selected in the drop-down field.
- If a specific country is selected, the file name will be **Bulk CDR List - <customer name> - <YYYYMM> - <country>.zip**, where **<country>** is the country selected in the drop-down field.
- If a specific product is selected, the file name will be **Bulk CDR List - <customer name> - <YYYYMM> - <country> - <product>.zip**, where **<product>** is the product selected in the drop-down field.

On the **Download files in bulk - Invoice CDRs** page, provide the following:

- **Single file** - default value: **No**, meaning that you will receive a zip archive with separate CDR zip files. When set to **Yes**, your downloaded zip file will contain a single CSV file with all the invoices matching the criteria provided.

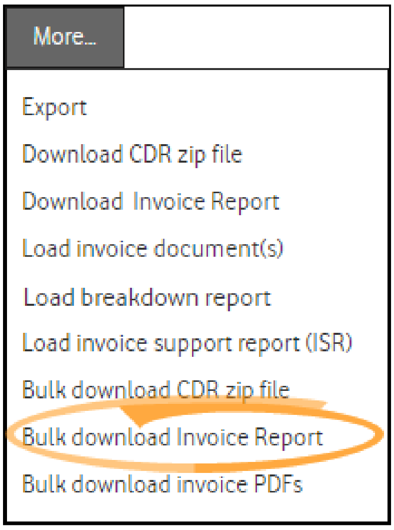
> When requesting the CDR extract as a single file, more than one zip file may be generated if the combination of bill year-month, country and product spans multiple currencies. For example, if you select **Global** in the **Country** field, the criteria may include invoices for multiple currencies and, in this case, a CDR zip file will be generated for each currency.

Bulk download Invoice Report:

The bulk download Invoice Report zip file contains all the individual Invoice Reports files for the bill year-month selected, in XLSX format. The Invoice Report is based on the invoice's local currency and call masking rules apply.

You can download the Invoice Report files in bulk as a single file or as separate files in a zip archive. You can view the status of the request in **Reporting** > **Downloads**.

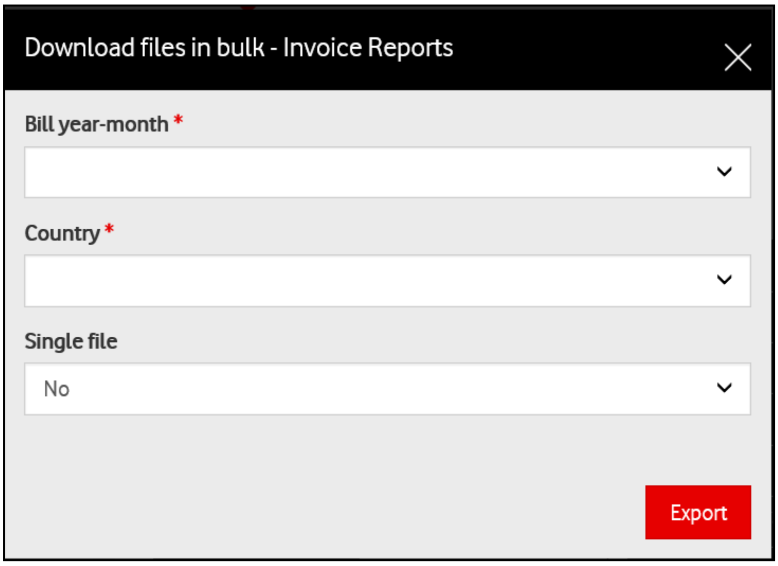
1. From the Invoices module, select **More** > **Bulk download Invoice Report**.



2. On the Download files in bulk - Invoice Reports page, provide the following:
   - **Bill year-month** - invoice issue date. The default year-month is the current year and the last full month (for example, if today is December 21, 2018, then the drop-down will have 2018 - 11 as its first option). A total of 13 months will be listed in the drop-down in descending order, where only the months that have billing data will be listed.
   - **Country** - the country for which you need the invoice report. Only countries that have billing data will be displayed.
   - **Single file** - default value: **No**, meaning that you will receive a zip archive with separate Invoice Reports. When set to **Yes**, your downloaded file will be a single report containing all the invoices matching the criteria provided. The bulk Invoice Report generated as a single file will display the sum of all the invoice data for the bill year-month and country.

> When requesting the Invoice Report as a single file, more than one report may be generated if the combination of bill year-month and country spans multiple currencies. For example, if you select **Global** in the **Country** field, the criteria may include invoices for multiple currencies and, in this case, an Invoice Report will be generated for each currency.

3. To generate the Invoice Report file, click **Export**.



You will receive a confirmation message if the bulk download request has been accepted. The file name generated has a different name, depending on the country you select and the value of the **Single file** field:

- If **Country** is set to **Global** and **Single file** is set to **No**, the bulk download name is **Bulk Invoice Report - <customer name> - <YYYYMM>.zip**, where **<customer name>** is your customer name in the Customer Configuration settings and **<YYYYMM>** is the Bill year-month selected in the drop-down field.
- If **Country** is set to **Global** and **Single file** is set to **Yes**, the Invoice Report generated as single file can include invoices for multiple currencies, if the combination of Bill year-month and country applies to more than one currency. In this case, the file name will include the currency type: **All Accounts Invoice Report- <customer name> - <YYYYMM> - <currency code>.xlsx**.
- If **Country** is specified and **Single file** is set to **No**, the bulk download name is **Bulk Invoice Report - <customer name> - <YYYYMM> - <country>.zip**, where **<country>** is the country selected in the drop-down field.
- If **Country** is specified and **Single file** is set to **Yes**, the Invoice Report generated as single file can include invoices for multiple currencies, if the combination of Bill year-month and country applies to more than one currency. In this case, the file name will include the currency type: **All Accounts Invoice Report - <customer name> - <YYYYMM> - <country> - <currency code>.xlsx**

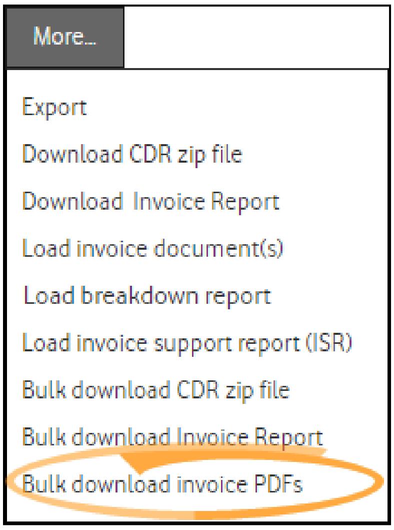
4. To access the downloaded file, click **Reporting** on the VTR Home page, and then select **Downloads**.

Bulk download invoice PDFs:

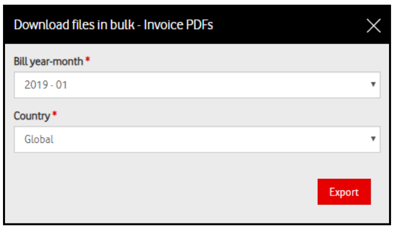
The bulk download invoice PDFs file contains all the individual Invoice PDF files for the bill year-month selected, in PDF format.

The Invoice PDF's is based on the invoice's local currency and call masking rules apply.

1. From the Invoices module, click **More** > **Bulk download invoice PDFs**.



2. A pop-up window will appear for you to select the billing cycle and country for the reports. Once provided, click the **Export** button to generate the zip file.



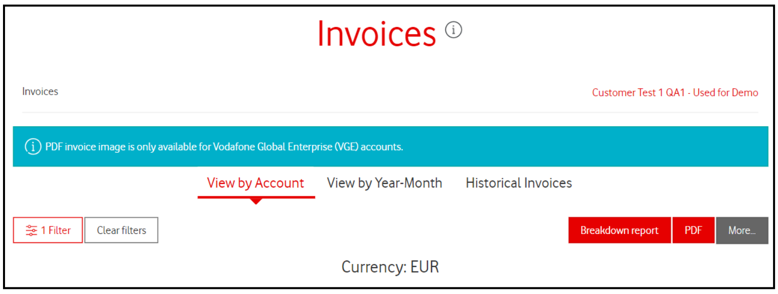
You will receive a confirmation message if the bulk download request has been accepted. Depending on the details you provided at step b, the file name generated has a different name:

- If no country is specified, the file name will be **Bulk Invoice PDFs - <customer name> - <YYYYMM>.zip**, where **<customer name>** is replaced by the customer name in your Customer Configuration settings, and **<YYYYMM>** will be the Bill year-month selected in the drop-down field.
- If a specific country is selected, the file name will be **Bulk Invoice PDFs - <customer name> - <YYYYMM> - <country>.zip**, where **<country>** will be the country selected in the drop-down field.

From the Reporting module, you will be able to see all of the bulk downloads that were generated. See 'Download bulk invoice reports' on page 163 for more details on retrieving the bulk data.

View attached invoice files

All users will have the ability to view the attached **PDF** file (regular/IoT/non-Purchase Order invoices), **ZIP** file (Purchase order hardware billing invoices), **CSV** file (Invoice Support Reports) or **XLSX** file (non-Purchase Order hardware billing invoices) from within the Invoices module.



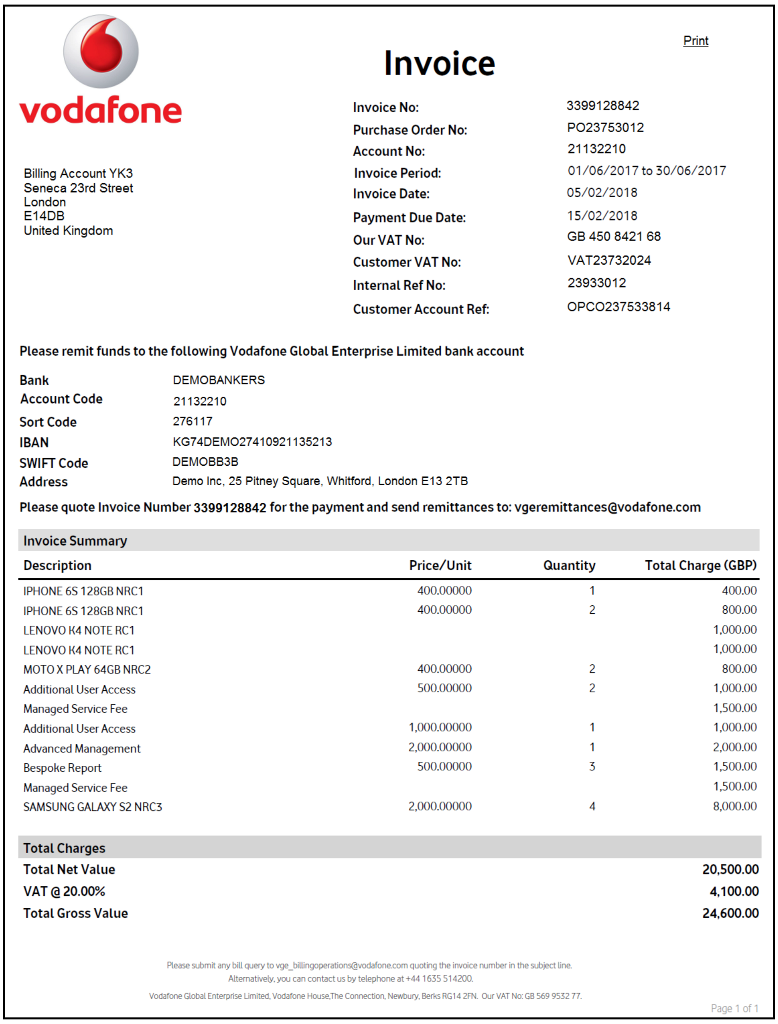
Depending on whether the invoice is an individual regular or IoT invoice, or a Hardware Billing Purchase Order (PO) invoice will dictate the type of file that is attached. PO Invoices are invoices that contain multiple invoices and therefore, the **ZIP** file attachments may contain multiple **PDF** or **XLSX** files that make up the aggregated PO invoice.

Button	Invoice Type	File Format
Breakdown Report	Hardware Billing PO Invoice	ZIP File containing XLSX Files
PDF	Hardware Billing PO Invoice	ZIP File containing PDF Files
Breakdown Report	Hardware Billing Non-PO Invoice	XLSX File
PDF	Hardware Billing Non-PO Invoice	PDF File
PDF	Regular Invoice	PDF File
PDF	IoT Invoice	PDF File
ISR	Invoice Support Report (ISR)	CSV File
SKU mapping	DLM	XLSX File

Regular/IoT/Non-Purchase Order Hardware Billing Invoice Attachments:

a. From the Invoices module, if there is a PDF attachment linked to the invoice, the **PDF** button will be visible.

b. When the **PDF** button is selected, the **PDF** attachment will be displayed in a pop-up window for the individual regular/IoT/non-Purchase Order invoices.



Print

vodafone

Invoice

Billing Account YK3
Seneca 23rd Street
London
E14DB
United Kingdom

Invoice No:	3399128842
Purchase Order No:	PO23753012
Account No:	21132210
Invoice Period:	01/06/2017 to 30/06/2017
Invoice Date:	05/02/2018
Payment Due Date:	15/02/2018
Our VAT No:	GB 450 8421 68
Customer VAT No:	VAT23732024
Internal Ref No:	23933012
Customer Account Ref:	OPCO237533814

Please remit funds to the following Vodafone Global Enterprise Limited bank account

Bank	DEMOBANKERS
Account Code	21132210
Sort Code	276117
IBAN	KG74DEMO27410921135213
SWIFT Code	DEMOBB3B
Address	Demo Inc, 25 Pitney Square, Whitford, London E13 2TB

Please quote Invoice Number 3399128842 for the payment and send remittances to: vgeremittances@vodafone.com

Invoice Summary

Description	Price/Unit	Quantity	Total Charge (GBP)
IPHONE 6S 128GB NRC1	400.00000	1	400.00
IPHONE 6S 128GB NRC1	400.00000	2	800.00
LENOVO K4 NOTE RC1			1,000.00
LENOVO K4 NOTE RC1			1,000.00
MOTO X PLAY 64GB NRC2	400.00000	2	800.00
Additional User Access	500.00000	2	1,000.00
Managed Service Fee			1,500.00
Additional User Access	1,000.00000	1	1,000.00
Advanced Management	2,000.00000	1	2,000.00
Bespoke Report	500.00000	3	1,500.00
Managed Service Fee			1,500.00
SAMSUNG GALAXY S2 NRC3	2,000.00000	4	8,000.00

Total Charges

Total Net Value	20,500.00
VAT @ 20.00%	4,100.00
Total Gross Value	24,600.00

Please submit any bill query to vge_billingoperations@vodafone.com quoting the invoice number in the subject line.
Alternatively, you can contact us by telephone at +44 1635 514200.

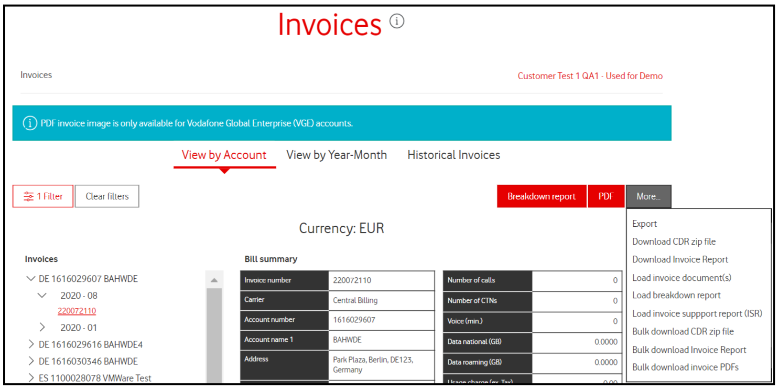
Vodafone Global Enterprise Limited, Vodafone House,The Connection, Newbury, Berks RG14 2FN. Our VAT No: GB 569 9532 77.

Page 1 of 1

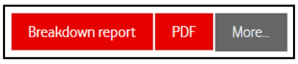
- **Description**: Description of the product.
- **Price/Unit**: Price per product unit.
- **Quantity**: Number of the product items.
- **Total Charge (GBP)**: Price per unit times number of product items.

c. A **Print** link at the top of the PDF or a menu option allows you to print the PDF.

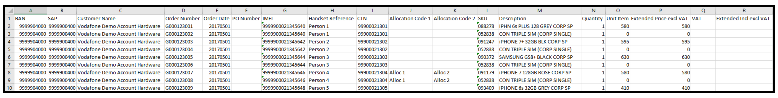
Hardware Billing Purchase Order Invoice Attachments:



a. From the Invoices module, if there are attachments linked to the invoice, the **Breakdown report** and/or the **PDF** button will be visible.



b. When the **Breakdown report** button is selected, the attached XLSX or ZIP file (containing multiple XLXS files) will be downloaded to your local machine and can be opened in MS Excel.



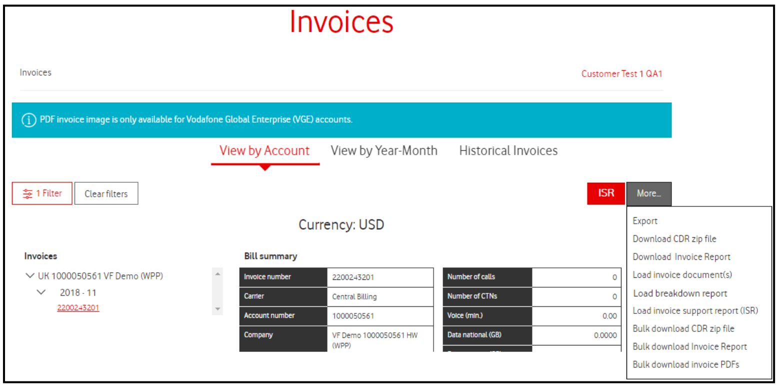
- **BAN**: Legacy Billing Id, which is mapped against billing account.
- **SAP**: SAP Account Number Identifier, which is mapped against with SAP Application.
- **Customer Name**: Bill company name mapped for corresponding account number.
- **Order Number**: Order Number for this charge.
- **Order Date**: Date of the purchase.
- **PO Number**: Purchase Order number for this charge.
- **IMEI**: IMEI Number of device.
- **Handset Reference**: User for the handset.
- **CTN**: Service ID.
- **Allocation Code 1**: Allocation Code 1 / attribute used to provide grouping of services.
- **Allocation Code 2**: Allocation Code 2 / attribute used to provide grouping of services.
- **SKU**: Identifier for the product.
- **Description**: The description of the product.

- **Quantity**: Number of units.
- **Unit Item Price**: Price per unit.
- **Extended Price Incl excl VAT**: Sum of amount and discount for this invoice.
- **VAT**: Value added tax rate.
- **Extended Incl excl VAT**: Sum of amount, discount and tax applied on this charge.

c. When the **PDF** button is selected, the PDF or ZIP file (containing multiple PDF files) will be downloaded to your local machine and can be opened in your browser.

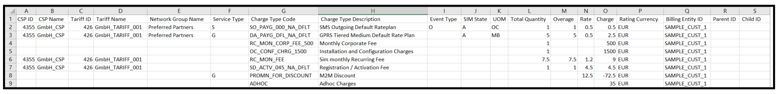
d. You can **Print** from the MS Excel File menu.

Invoice Support Report (ISR) Attachments:



a. From the Invoices module, if there is an ISR attachment linked to the invoice, the **ISR** and/or the **PDF** button will be visible.

b. When the **ISR** button is selected, the attached CSV file will be downloaded to your local machine and can be opened in MS Excel.



CSP ID	CSP Name	Tariff ID	Tariff Name	Network Group Name	Service Type	Charge Type Code	Charge Type Description	Event Type	SIM State	UOM	Total Quantity	Overage	Rate	Charge	Rating Currency	Billing Entity ID	Parent ID	Child ID
4355	GmbH_CSP	426	GmbH_TARIFF_001	Preferred Partners	S	SO_PAYG_000_NA_DFLT	SMS Outgoing Default Rateplan	O	A	OC	1	1	0.5	0.5	EUR	SAMPLE_CUST_1		
4355	GmbH_CSP	426	GmbH_TARIFF_001	Preferred Partners	G	DA_PAYG_DFL_NA_DFLT	GPRS Tiered Medium Default Rate Plan		A	MB	5	5	0.5	2.5	EUR	SAMPLE_CUST_1		
						RC_MON_CORP_FEE_500	Monthly Corporate Fee				1			500	EUR	SAMPLE_CUST_1		
						OC_CONF_CHRG_1500	Installation and Configuration Charges				1			1500	EUR	SAMPLE_CUST_1		
4355	GmbH_CSP	426	GmbH_TARIFF_001			RC_MON_FEE	Sim monthly Recurring Fee				7.5	7.5	1.2	9	EUR	SAMPLE_CUST_1		
4355	GmbH_CSP	426	GmbH_TARIFF_001			SD_ACTV_045_NA_DFLT	Registration / Activation Fee				1	1	4.5	4.5	EUR	SAMPLE_CUST_1		
					G	PROMN_FOR_DISCOUNT	M2M Discount						12.5	-72.5	EUR	SAMPLE_CUST_1		
						ADHOC	Adhoc Charges							35	EUR	SAMPLE_CUST_1		

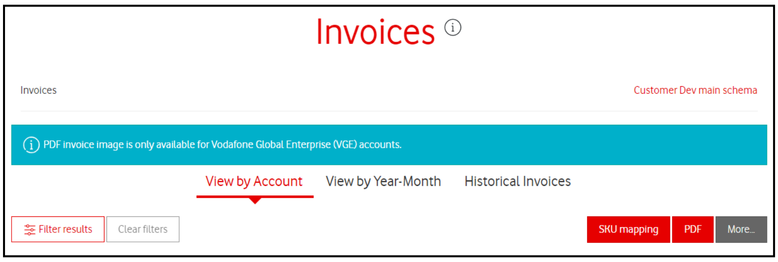
- **CSP ID**: Customer Service Profile ID.
- **CSP Name**: Customer Service Profile Name.
- **Tariff ID**: GDSP Tariff identifier.
- **Tariff Name**: GDSP Tariff name.
- **Network Group Name**: Network group description; will be blank for Customer level RC/OC, Invoice level discount and Ad-hoc charges.
- **Service Type**: Service Type of the event (GPRS, Voice, SMS).
- **Charge Type Code**: Code of the usage type - this is used for Bill Item Mapping to a VGE code (Usage, Discount, Ad-hoc, Min Fee, Min Charge, RC/OC).

- **Charge Type Description**: Charge type description (Usage, Discount, Ad-hoc, Min Fee, Min Charge, RC/OC).
- **Event Type**: Type of event such as SMS-MT for Wake-Up, M for SMS-MT with Payload, X for P2P SMS-MO). Event Type is only applicable in case of SMS.
- **SIM State**: State of the subscriber identification module.
- **UOM**: Unit Of Measurement for the usage record; for non-usage it will be blank.
- **Total Quantity**: Accumulated usage quantity.
- **Overage**: Calculated overage usage.
- **Rate**: Rate applied during rating; if discount, then it will represent discount %.
- **Charge**: Calculated charge amount in rating currency.
- **Rating Currency**: Rating currency code of the charge.
- **Billing Entity ID**: APRM code of the billing entry as configured during the onboarding of the billing entity.
- **Parent ID**: Parent id of the billing entity as configured during the onboarding of the billing entity.
- **Child ID**: Id of the child of the billing entity which the CSP in the record is associated to.

c. When the **View** button is selected, the CSV file will be downloaded to your local machine and can be opened in MS Excel.

d. You can **Print** from the MS Excel File menu.

Stock Keeping Unit (SKU) Mapping Attachments:



a. From the Invoices module, if there is SKU mapping attachment linked to the invoice, the **SKU mapping** button will be visible. This attachment type currently only applies for Device Lifecycle Management (DLM) invoices that are issued after a certain date, depending on the global configuration's setting.

b. When the **SKU mapping** button is selected, the attached Excel file will be downloaded to your local machine and can be opened in MS Excel.

c. You can **Print** from the MS Excel File menu.

> The Invoices module will include an information message at the top of the page to indicate that a PDF invoice image is only available for Vodafone Global Enterprise (VGE) accounts. This message will always be visible regardless of whether there is an actual PDF attached or not, as it explains why there is a PDF invoice for some invoices but not for others.

Manage e-statements

E-statements in VTR are notifications that the system sends at the end of the month whenever a user has exceeded a certain spend threshold defined at the Accounts level. The e-statements include details about the spend and usage for an invoicing period.

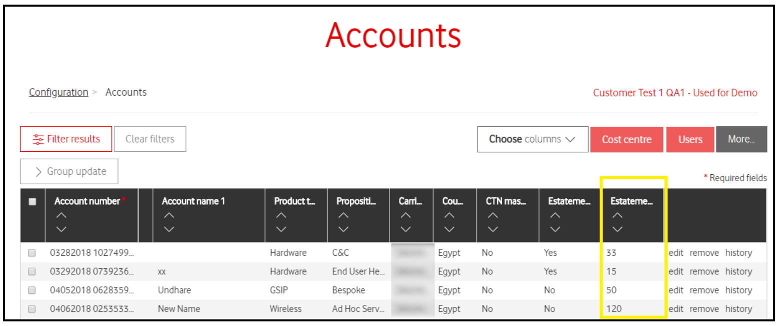
Pre-requisites for using the e-statements functionality

You can use e-statements only if the following conditions have been met in this order:

1. In **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**. This enables the **Estatements** and **Estatement threshold** columns in the Account list.
2. In **Configuration** > **Accounts**, the **Estatement** column is set to **Yes**. Here you also set up the threshold above which these e-statements will be sent to warn about the spend.
3. In **Administration** > **Services**, the **Estatement** column is set to **Yes**. Only the services enabled for e-statements will receive the email at the end of the month, if necessary.

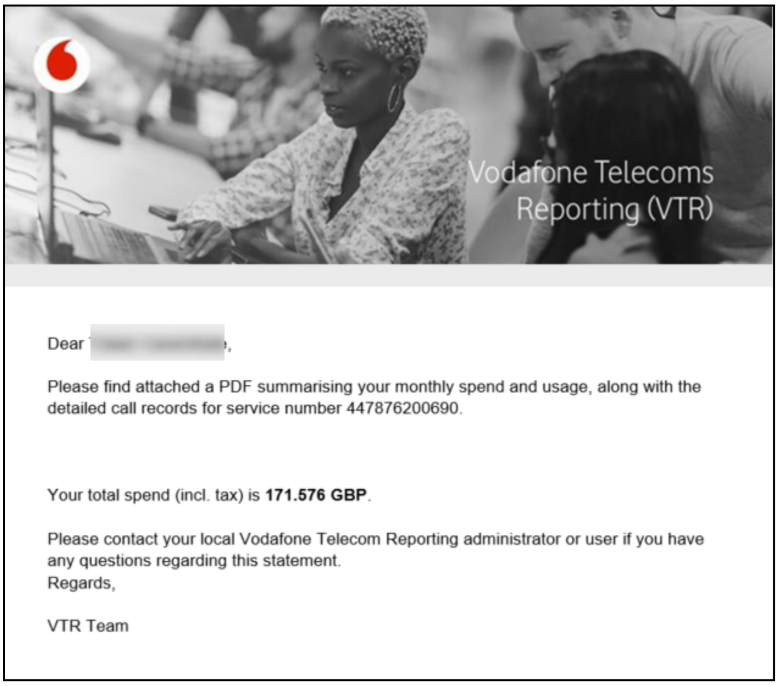
E-statements workflow

Once the e-statements have been enabled for you, you can set up the e-statement threshold in **Configuration** > **Accounts**. This threshold is the amount of the monthly spend after which VTR will send e-statements. This amount includes VAT and refers to the amount in the currency of the account based on the latest invoice.



VTR checks which accounts have the e-statement option enabled, to determine the ones that get the e-statements. The e-statement is sent only for the latest invoice on the account and only for the services enabled to receive e-statements in the Services module. The email is sent to the service owner and/or to the supervisor automatically, at the end of the month, with the following subject line: **Your Monthly Statement - <Service Owner name> . <Account Name 1> - <invoice date dd/mm/yyyy> to <invoice end date dd/mm/yyyy> - <customer schema>**.

> The service owner and the supervisor's names are taken from the Services list, so make sure these email addresses are provided in the Services list.



Dear [redacted],

Please find attached a PDF summarising your monthly spend and usage, along with the detailed call records for service number 447876200690.

Your total spend (incl. tax) is **171.576 GBP**.

Please contact your local Vodafone Telecom Reporting administrator or user if you have any questions regarding this statement.
Regards,

VTR Team

There are two documents attached to the email:

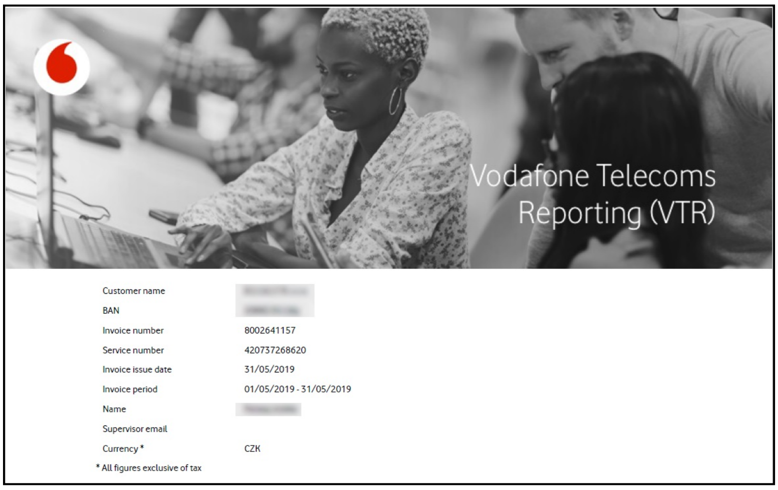
- **E-statement**: PDF document that includes a summary of the spend and usage for an invoicing period. It also includes your total spend, including tax.
- **CDR record**: XLSX document that includes call details only for the service number enabled to receive e-statements. This document can be used to compare the e-statement summary information against the actual call details.

E-statement details

The e-statement has the following title: **VTR_estatement_invoice<number>_<service<number>** and includes four sections:

1. **General information**: details for tracking purposes:
   - **Customer name**: The name of the user who exceeded the threshold.
   - **BAN**: The billing account number and account name of the service.
   - **Invoice number**: The invoice number for which the e-statement returns spend and usage details.
   - **Service number**: The service number for which the e-statement has been issued.
   - **Invoice issue date**: the issue date of the invoice.
   - **Invoice period**: the period for which the invoice has been issued.
   - **Name**: The service owner's name, as taken from the Service list.
   - **Supervisor email**: The supervisor's email address, if provided in the Services list.

- **Currency**: the currency in which the spend and usage are detailed.



2. **Your monthly spend report**:

- **Recurring charges (ex. Tax)**: The total sum, excluding tax, of charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.
- **Non-recurring charges (ex. Tax)**: The total sum, excluding tax, of charges identified as recurring or automatic charges on the invoice. An example is a subscription fee or paper bill fee. This charge includes monthly roaming fees.
- **Credits (ex. Tax)**: The total sum, excluding tax, of charges identified as credits on the invoice.
- **Total (ex. Tax)**: The net total of charges on the invoice, excluding tax.
- **Total (incl. Tax)**: The sum of all charges, including tax.

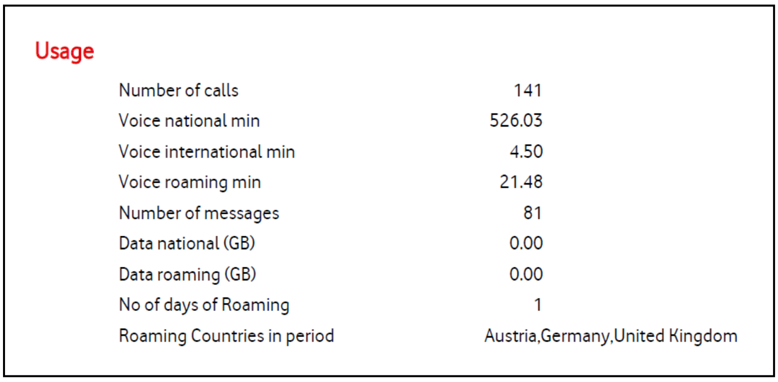
Your Monthly Spend Report

Recurring charges (ex. Tax)	360.00
Non-recurring charges (ex. Tax)	0.00
Usage charges (ex. Tax)	28.45
Credits (ex. Tax)	0.00
Total (ex. Tax)	388.45
Tax	0.00
Total (incl. Tax)	**388.45**

3. **Usage**:

- **Number of calls**: the total number of calls made by the customer during the invoice period.
- **Voice national min**: total number of minutes spent in national calls.
- **Voice international min**: total number of minutes spent in international calls.
- **Voice roaming min**: total number of minutes spent in calls while being outside of your home plan.

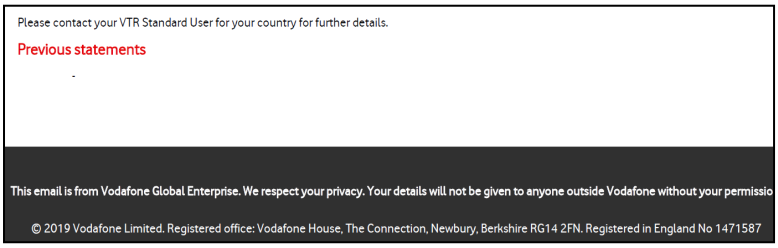
- **Number of messages**: total number of messages sent from this service number.
- **Data national (GB)**: total number in GB of data used within your home plan.
- **Data roaming (GB)**: total number in GB of data used outside of your home plan.
- **No of days of Roaming**: total number of days being outside of your home plan.
- **Roaming Countries in period**: countries the customer travelled to and where roaming was activated.



Usage

Number of calls	141
Voice national min	526.03
Voice international min	4.50
Voice roaming min	21.48
Number of messages	81
Data national (GB)	0.00
Data roaming (GB)	0.00
No of days of Roaming	1
Roaming Countries in period	Austria,Germany,United Kingdom

4. **Previous statements**: this section includes the previous two statement total spend amounts for the service number. If there's no such record, the section will be blank.



Please contact your VTR Standard User for your country for further details.

Previous statements

This email is from Vodafone Global Enterprise. We respect your privacy. Your details will not be given to anyone outside Vodafone without your permissio

© 2019 Vodafone Limited. Registered office: Vodafone House, The Connection, Newbury, Berkshire RG14 2FN. Registered in England No 1471587

Chapter 6: Technology funds

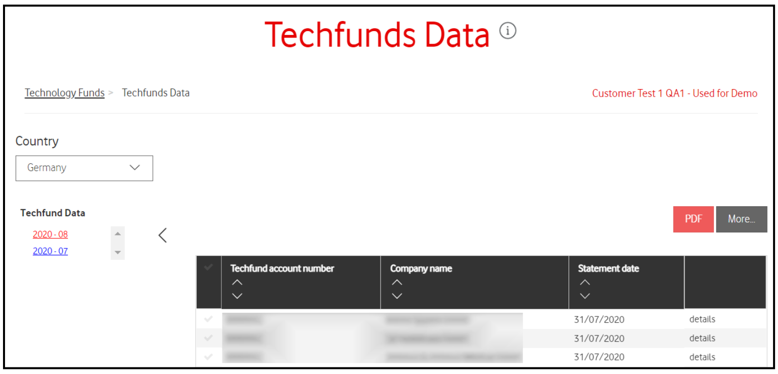
From the Technology funds/Equipment credit account (ECA) module, you can view the Germany, Ireland or United Kingdom hardware billing data to which you have access, export data in various formats, etc.

- **View ECA/Technology Funds**: View ECA/technology funds by country. See 'Viewing ECA/Technology funds' on page 203.
- **View PDF ECA/Technology Funds**: View attached PDF technology funds. See 'Viewing ECA/Technology fund PDFs' on page 209.

Viewing ECA/Technology funds

As a Customer standard or Customer Admin user, if your administrator has enabled data slicing, then your ECA/Technology funds will be restricted only to those accounts to which you have been given access. Additionally, you can see all Techfund data for UK only if you have access to all active UK Hardware accounts.

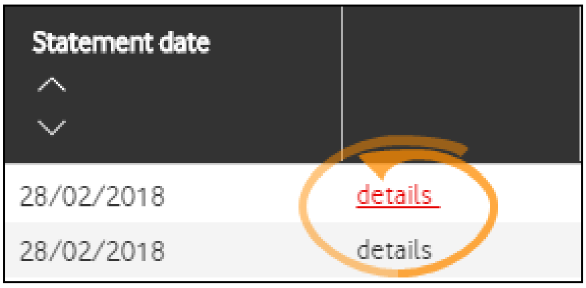
1. On the main VTR menu, click **Technology Funds**. From the ECA/Technology funds module, you can view hardware billing data by country.



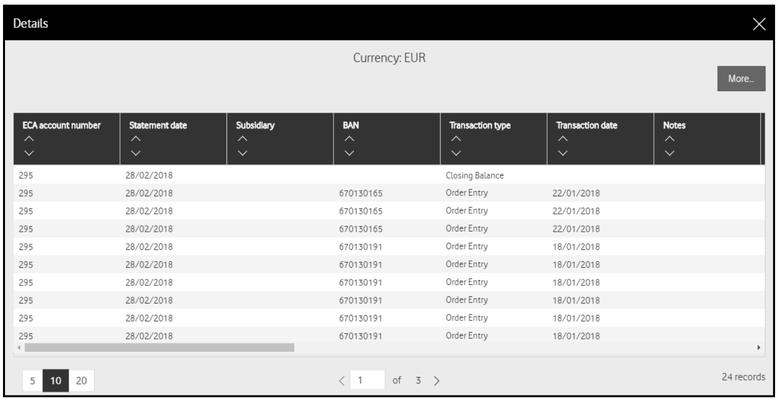
2. Select **Germany**, **Ireland** or **United Kingdom** from the **Country** drop-down above the grid. Depending on your customer schema, you may only have access to some of these countries, and the drop-down will be displayed accordingly. Based on your country selection, the module title and columns will reflect accordingly:

- **Germany**: Techfund Data
- **Ireland**: Techfund Data
- **United Kingdom**: ECA Data

3. Based on the country selected, you can view the ECA Data, Techfund Data or Techfund Summary details by clicking the **details** button on the right of the main grid view:



ECA Data Details: You can drill down to the United Kingdom ECA data details.



The details on the right update with the following invoice information. Note that the totals display up and down arrows to indicate the trending over last month:

ECA account number: Legacy Billing Id, which is mapped against billing account.

Statement date: Date of the statement in the format DD/MM/YYYY.

Subsidiary: Subsidiary ID of the Corporate. All Subsidiaries of a Corporate will be included, but a Corporate does not need to have a Subsidiary. Blank is valid for this field.

BAN: Billing account number (BAN) against the order or return which has adjusted the ECA balance. Blank is valid for this field.

Transaction type: Type of adjustment. Every line will contain a Transaction Type.

Transaction date: Date of the adjustment in the format DD/MM/YYYY.

Notes: When a Manual Adjustment is entered the agent must enter some free text. Blank is valid for this field.

Order/return: For detailed adjustments this will show the Carisma order number, or Carisma return number which has adjusted the ECA total. Will be blank for simple adjustments.

Order/return line: Line number of the order or return which has adjusted the ECA total. When a single order contains multiple devices the same line number will be output against each IMEI or CTN, resulting in multiple lines with the same order number and line number. Blank is valid for this field.

Subscription: The CTN of a device or SIM which has adjusted the ECA balance, either by accruing credit or drawing on credit. Will only be output if known. Blank is valid for this field.

IMEI Number: IMEI/Serial number of an item, or SIM Number of a SIM card which has adjusted the ECA balance. Will only be output if known.

Item: IMEI/Serial number of an item, or SIM Number of a SIM card which has adjusted the ECA balance. Will only be output if known. Blank is valid for this field.

Item description: Description of the SKU code taken from the Oracle Product Catalogue. Blank is valid for this field.

Net order price: Order Price of the order line which has adjusted the ECA balance output to 2 decimal places and with no currency symbol or leading zeroes. In the case of orders with multiple devices ordered on the same line this value will be the individual device cost, not the cost for the whole line. Each device will be output individually on the report. Can be zero for detailed adjustment.

Debit: Amount that has been debited from the ECA fund as a result of this adjustment, displayed to 2 decimal places and with no currency symbol. Will be blank for the Opening and Closing Balance.

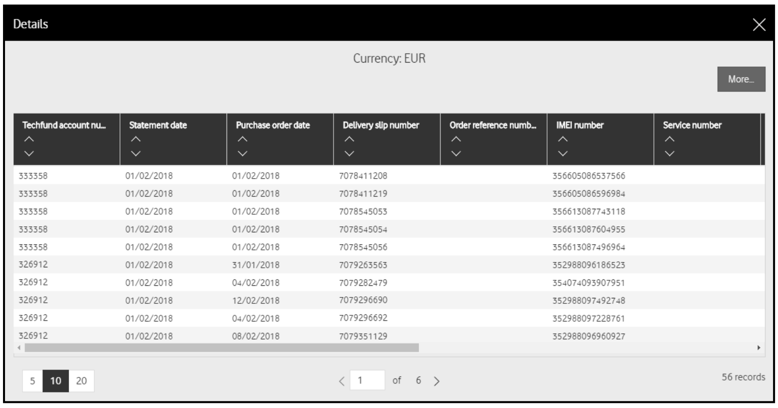
Credit: Amount that has been credited back to the ECA fund as a result of this adjustment, displayed to 2 decimal places and with no currency symbol. Will be blank for the Opening and Closing Balance.

Running balance: Running total of the ECA fund after the current line has been taken into account, displayed to 2 decimal places and with no currency symbol. Will be blank for the Opening and Closing Balance.

Opening balance: Opening balance at the start of the ECA scheme for the Corporate & Subsidiary, output to 2 decimal places and with no currency symbol. Only output for the Opening Balance new Transaction Type. Is assumed to be zero for all statements, as all ECA schemes will start from zero.

Closing balance: Closing balance as of the end of the previous month end for the Corporate & Subsidiary, output to 2 decimal places and with no currency symbol. Only output for the Closing Balance new Transaction Type.

Techfund Data Details: You can drill down to the Germany Techfund data details.


Details

Currency: EUR

More...

Techfund account nu...	Statement date	Purchase order date	Delivery slip number	Order reference numb...	IMEI number	Service number
333358	01/02/2018	01/02/2018	7078411208		356605086537566	
333358	01/02/2018	01/02/2018	7078411219		356605086596984	
333358	01/02/2018	01/02/2018	7078545053		356613087743118	
333358	01/02/2018	01/02/2018	7078545054		356613087604955	
333358	01/02/2018	01/02/2018	7078545056		356613087496964	
326912	01/02/2018	31/01/2018	7079263563		352988096186523	
326912	01/02/2018	04/02/2018	7079282479		354074093907951	
326912	01/02/2018	12/02/2018	7079296690		352988097492748	
326912	01/02/2018	04/02/2018	7079296692		352988097228761	
326912	01/02/2018	08/02/2018	7079351129		352988096960927	

5 10 20

1 of 6

56 records

The details on the right update with the following invoice information. Note that the totals display up and down arrows to indicate the trending over last month:

Techfund account number: Legacy Billing Id, which is mapped against billing account.

Statement date: Date of the statement in the format DD/MM/YYYY. Last day of the month in question.

Purchase order date: Date of the particular purchase order charge.

Delivery slip number: Serial number of the delivery slip (unique reference number).

Order reference number: Identifying number for the order.

IMEI number: Unique reference code of the hardware item.

Service number: Service number associated with the product.

Product number: Unique reference number of the product.

Product description: Description of the product.

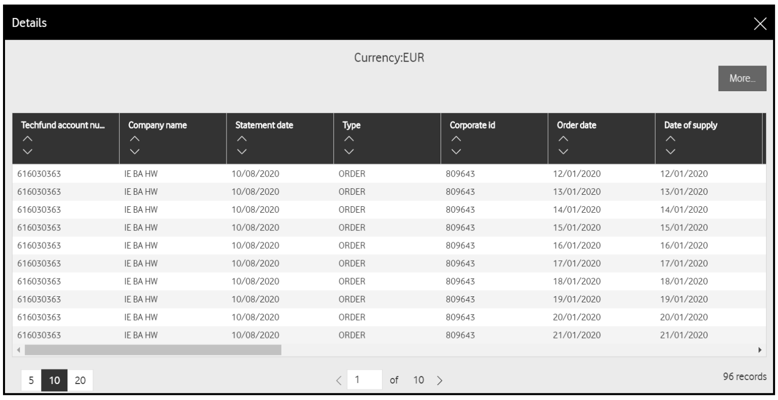
Quantity: Number of products in the order.

Unit price: Price per item applicable to the customer. Can be zero.

Net price: Final price paid for the product excluding tax.

Discount: Amount deducted from the usual cost.

Techfund Data Details: You can drill down to the Ireland Techfund Summary details.



Details

Currency:EUR

More...

Techfund account nu...	Company name	Statement date	Type	Corporate id	Order date	Date of supply
616030363	IE BA HW	10/08/2020	ORDER	809643	12/01/2020	12/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	13/01/2020	13/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	14/01/2020	14/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	15/01/2020	15/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	16/01/2020	16/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	17/01/2020	17/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	18/01/2020	18/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	19/01/2020	19/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	20/01/2020	20/01/2020
616030363	IE BA HW	10/08/2020	ORDER	809643	21/01/2020	21/01/2020

5 10 20   1 of 10   96 records

The details on the right update with the following invoice information. Note that the totals display up and down arrows to indicate the trending over last month:

Techfund account number: Legacy Billing Id, which is mapped against billing account.

Company name: The name of the company.

Statement date: Date of the statement in the format DD/MM/YYYY. Last day of the month in question.

Type: The type of the request, Order or Return.

Corporate id: Identifying Corporate ID number.

Order date: Date of the order request in the format DD/MM/YYYY.

Date of supply: Date of the particular supply in the format DD/MM/YYYY.

Order number: Number of the order request.

Purchase order number: Number of the particular purchase order charge.

Customer reference: Identifying reference for the order.

Service number: Service number associated with the product.

IMEI: Unique reference code of the hardware item.

Owner name: The End User's name.

Product description: Description of the product.

Quantity: Number of products in the order. Negative value, if the Type of request is Return.

Unit price: The billable unit price per item applicable to the customer. Can also be zero, if the Type of request is Order or it can be a negative value, if the Type of request is Return.

TAX: Value Added Tax applicable to this particular product. Negative value, if the Type of request is Return.

Total price: Final price paid for the product including tax. Negative value, if the Type of request is Return.

SIM free price: The SIM free price, value equal to the Unit price. Negative value, if the Type of request is Return.

BDF draw down: The item's Business Development Fund drawdown.

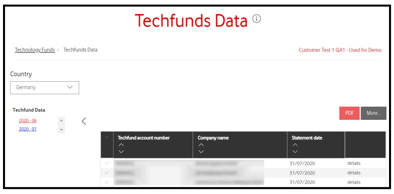
These fields will represent the minimum value, maximum value or the sum of the values for all bundled Purchase Order invoices if multiple Hardware Billing invoices have been grouped into one, which occurs when the invoice falls under the same account number and bill cycle.

5. To export invoice data, filter the list for the data you want to export. See Export the data as described on page 'Export the data' on page 14.

The exported data currency will be based on the currency in which you are currently viewing in the invoice module. You should toggle to the desired currency before exporting.

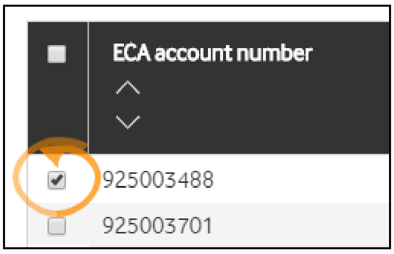
Viewing ECA/Technology fund PDFs

All users will have the ability to view the PDF ECA/Techfund Statements from within the ECA/Techfunds module.



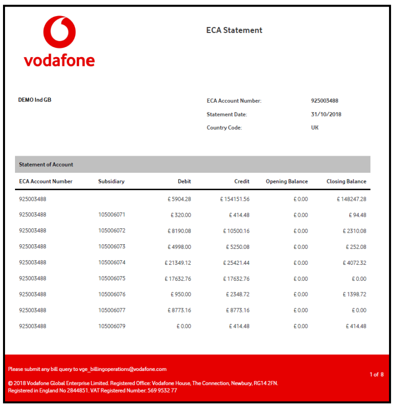
1. From the ECA/Techfunds module, the **PDF** button will be visible but disabled.

2. To enable the **PDF** button, select a single check-box at the beginning of an account row in the main grid.



3. When the **PDF** button is clicked, the PDF image will be displayed in a pop-up window.

ECA PDF



vodafone

ECA Statement

DEMO Ind GB

ECA Account Number: 925003488
Statement Date: 31/10/2018
Country Code: UK

Statement of Account

ECA Account Number	Subsidiary	Debit	Credit	Opening Balance	Closing Balance
925003488		£ 5904.28	£ 154151.56	£ 0.00	£ 148247.28
925003488	105006071	£ 320.00	£ 414.48	£ 0.00	£ 94.48
925003488	105006072	£ 8190.08	£ 10500.16	£ 0.00	£ 2310.08
925003488	105006073	£ 4998.00	£ 5250.08	£ 0.00	£ 252.08
925003488	105006074	£ 21349.12	£ 25421.44	£ 0.00	£ 4072.32
925003488	105006075	£ 17632.76	£ 17632.76	£ 0.00	£ 0.00
925003488	105006076	£ 950.00	£ 2348.72	£ 0.00	£ 1398.72
925003488	105006077	£ 8773.16	£ 8773.16	£ 0.00	£ 0.00
925003488	105006079	£ 0.00	£ 414.48	£ 0.00	£ 414.48

Please submit any bill query to vge_billingoperations@vodafone.com

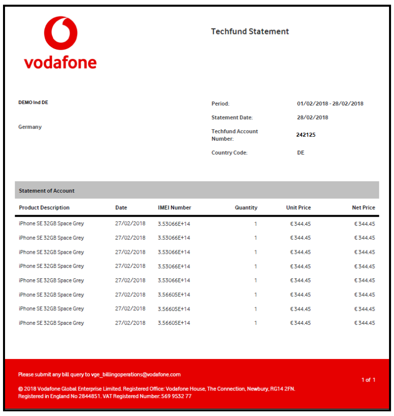
1 of 8

© 2018 Vodafone Global Enterprise Limited. Registered Office: Vodafone House, The Connection, Newbury, RG14 2FN.
Registered in England No 2844851. VAT Registered Number: 569 9532 77

The ECA PDF, available for United Kingdom, contains the following fields:

- **ECA Account Number**: Legacy Billing Id, which is mapped against billing account.
- **Subsidiary**: Subsidiary ID of the Corporate. All Subsidiaries of a Corporate will be included, but a Corporate does not need to have a Subsidiary. Blank is valid for this field.
- **Debit**: Amount that has been debited from the ECA fund as a result of this adjustment, displayed to 2 decimal places and with no currency symbol. Will be blank for the Opening and Closing Balance.
- **Credit**: Amount that has been credited back to the ECA fund as a result of this adjustment, displayed to 2 decimal places and with no currency symbol. Will be blank for the Opening and Closing Balance.
- **Opening Balance**: Opening balance at the start of the ECA scheme for the Corporate & Subsidiary, output to 2 decimal places and with no currency symbol. Only output for the Opening Balance new Transaction Type. Is assumed to be zero for all statements, as all ECA schemes will start from zero.
- **Closing Balance**: Closing balance as of the end of the previous month end for the Corporate & Subsidiary, output to 2 decimal places and with no currency symbol. Only output for the Closing Balance new Transaction Type.

Techfund PDF



vodafone

Techfund Statement

DEMO Ind DE

Germany

Period: 01/02/2018 - 28/02/2018

Statement Date: 28/02/2018

Techfund Account Number: 242125

Country Code: DE

Statement of Account

Product Description	Date	IMEI Number	Quantity	Unit Price	Net Price
iPhone SE 32GB Space Grey	27/02/2018	3.53066E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.53066E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.53066E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.53066E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.53066E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.56605E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.56605E+14	1	€ 344.45	€ 344.45
iPhone SE 32GB Space Grey	27/02/2018	3.56605E+14	1	€ 344.45	€ 344.45

Please submit any bill query to vge_billingoperations@vodafone.com

1 of 1

© 2018 Vodafone Global Enterprise Limited. Registered Office: Vodafone House, The Connection, Newbury, RG14 2FN. Registered in England No 2844851. VAT Registered Number: 569 9532 77

The Techfund PDF, available for Germany and Ireland, contains the following fields as part of the **Statement of Account** section:

- **Product Description**: Description of the product.
- **Date**: The date the statement was issued.
- **IMEI Number**: Unique reference code of the hardware Item.
- **Quantity**: Number of products in the order.
- **Unit Price**: Price per item applicable to the customer. Can be zero.
- **Net Price**: Final price paid for the product excluding tax.

In addition to the above section, the PDF generated for Ireland also includes a **Returns** section, containing the following fields:

- **Product Description**: Description of the product.
- **Date**: The date the statement was issued.
- **IMEI Number**: Unique reference code of the hardware Item.
- **Quantity**: Number of products in the order. Negative value, as it is associated with a Return.
- **Unit Price**: Price per item applicable to the customer. Negative value, as it is associated with a Return.
- **Net Price**: Final price paid for the product excluding tax. Negative value, as it is associated with a Return.

4. A **Print** link at the top of the PDF, or in a menu option, allows you to print the PDF.

> If the associated PDF file is not available in the system, then the following download error message is displayed:
> *The PDF statement file has not been added yet, please contact your support administrator.*

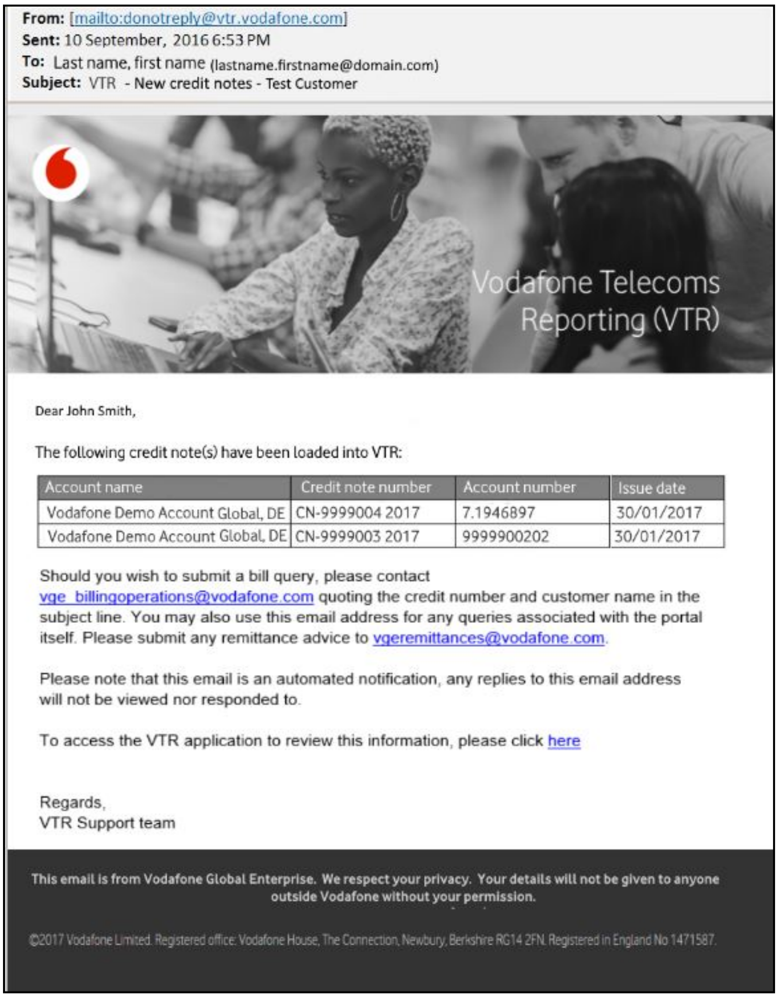
Chapter 7: Credit notes

From the Credit notes module, you can remove or view all credit notes for an invoice for all accounts to which you have access.

- **View Credit Notes**: View credit notes associated to invoices. See 'Viewing credit notes' on page 213.

Viewing credit notes

Once daily, VTR sends an email notification about Credit notes that were loaded into the system over the past 24 hours. You will receive this Credit note notification email for all accounts to which you have access, unless you have opted out of receiving invoice notifications, see 'Manage your profile' on page 16.


From: [mailto:donotreply@vtr.vodafone.com]
Sent: 10 September, 2016 6:53 PM
To: Last name, first name (lastname.firstname@domain.com)
Subject: VTR - New credit notes - Test Customer

Dear John Smith,

The following credit note(s) have been loaded into VTR:

Account name	Credit note number	Account number	Issue date
Vodafone Demo Account Global, DE	CN-9999004 2017	7.1946897	30/01/2017
Vodafone Demo Account Global, DE	CN-9999003 2017	9999900202	30/01/2017

Should you wish to submit a bill query, please contact vge_billingoperations@vodafone.com quoting the credit number and customer name in the subject line. You may also use this email address for any queries associated with the portal itself. Please submit any remittance advice to vgeremittances@vodafone.com.

Please note that this email is an automated notification, any replies to this email address will not be viewed nor responded to.

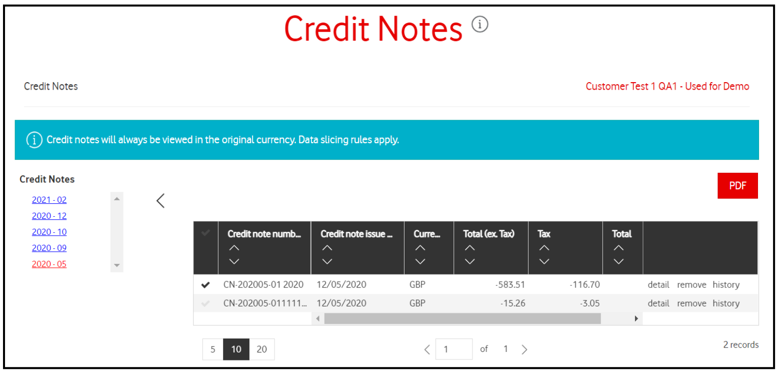
To access the VTR application to review this information, please click here

Regards,
VTR Support team

This email is from Vodafone Global Enterprise. We respect your privacy. Your details will not be given to anyone outside Vodafone without your permission.

©2017 Vodafone Limited. Registered office: Vodafone House, The Connection, Newbury, Berkshire RG14 2FN. Registered in England No 1471587.

1. On the main VTR menu, click **Credit notes**. From the Credit notes module, you can view credit notes grouped by the Credit note Issue date's year-month.



View Credit note year-month:

Credit note number: Unique number associated to the credit note.

Credit note issue date: Date the credit note was issued.

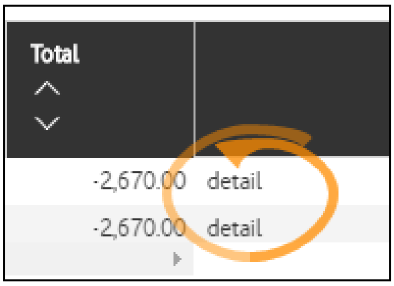
Currency: Currency of the credit note.

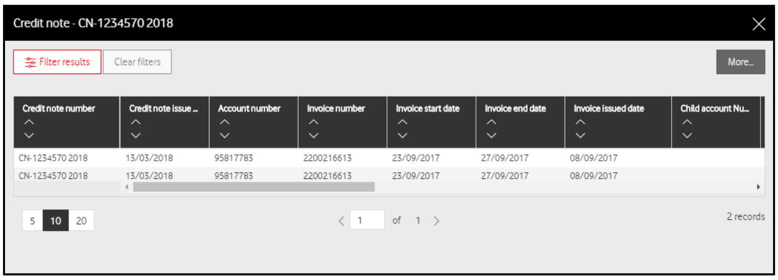
Total (ex. Tax): Total of the credit excluding tax.

Tax: Calculate tax for the credit value.

Total: Total of the credit.

2. To see more information on the Credit note, click the **detail** link at the end of the row to display the Credit note details pop-up.





View Credit note details:

Credit note number: Unique number associated to the credit note.

Credit note issue date: Date the credit note was issued.

Account number: Identifies the account the credit note is applicable to.

Invoice number: Identifies the invoice the credit applies to.

Invoice start date: The billing period start date identified on the invoice for which the credit note applies.

Invoice end date: The billing period end date identified on the invoice for which the credit note applies.

Invoice issue date: The issue date of the invoice the credit note applies to.

Child account number: Child account number associated to the main account.

User ID: User ID the credit record is associated with; this user is a valid user in the invoice. For account level charges, the User ID will be ACCOUNT.

Service number: Subscriber ID the credit record is associated with; this Subscriber ID is a valid subscriber ID in the invoice. For account level charges, the Subscriber ID will be ACCOUNT.

VGE code: This defines the specific VGE code for the credit.

Product code: The product code associated to the bill record.

Invoice label: The Invoice label associated to the credit.

Description: A description of the credit which comes from the description of the VGE code.

Currency: The currency of the credit.

Total (ex. Tax): Total of the credit excluding tax.

Tax rate: Tax rate for the credit value.

Tax: Calculate tax for the credit value.

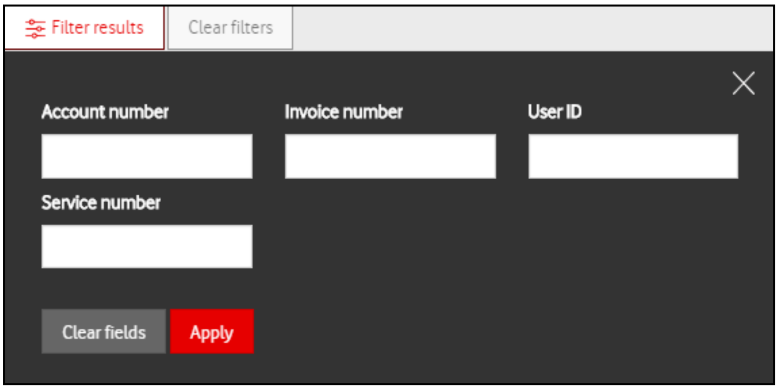
Total: Total of the credit.

Company name: Company name associated to the Account number.

Address: Street address associated to the Account number.

Country: Country associated to the Account number.

3. If you want to filter the credit note details that appear based on an account number, invoice number, service number, or user id, click the **Filter results** button.



This filters page functions the same as all other filters in VTR. For more information on how to use filter options, see 'Filter the results' on page 13.

4. To export credit note data, filter the list for the data you want to export. See 'Export the data' on page 14.

Credit notes will always be viewed in the original currency.

5. You may review the history of changes made to any record. Select the check box at the beginning of the row (if required), and then click **History**. If you don't see the item you want to review, then it might have been deleted: click **More**, and then choose **Show deleted records**. Deleted items appear in red; you can now select the deleted item and click the **History** button to see the audit trail. Click **More**, and then choose **Hide deleted records** to remove them from the grid-view. To learn more about the audit trail, see Audit a record's change history.

Chapter 8: Administrating customer data

From the VTR Administration page, you can administer customer details and setup. From here you can also manage your Vodafone Usage Manager. You have access to the following configuration:

- **Accounts**: Configure default values for location, device class, type and purpose, and assign cost centres. See 'Manage accounts' on page 218.
- **Services**: View and manage service information such as owner, device type, and location. See 'Manage services' on page 225.
- **Cost Centres**: Manage cost centre hierarchies. See 'View cost centre hierarchies' on page 246.
- **Reference Data**: Manage the reference data such as date format, service type, and language that appears in drop downs and is used through the application. See 'Work with reference data' on page 247.
- **Data Management Centre**: Add, update, and remove non-billing data in bulk. See 'Upload and manage data in bulk' on page 262.
- **Contacts**: Add, remove, or modify customer contacts. See 'Specify customer contacts' on page 276.
- **Vodafone Usage Manager**: Monitor real-time mobile data usage within your company. See 'Work with Vodafone Usage Manager' on page 279.

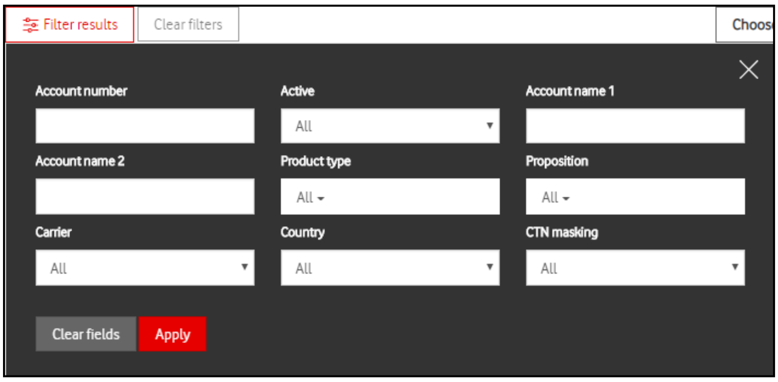
Manage accounts

Each carrier uses an Account Number to identify a service or group of services for billing.

From the Accounts page, you can view and edit existing accounts. You can also export the accounts list.

To work with accounts, you must be assigned to them. To learn more about these permissions, see 'Understanding data slicing' on page 221.

1. From the VTR menu, click **Administration.**
2. On the **Accounts** tile, click **Go**.
3. VTR retrieves all accounts for the selected customer and displays the first 10 (by default). To narrow down the number of accounts that appear, click **Filter results** and choose your criteria. See 'Filter the results' on page 13.



For **Product type** and/or **Proposition**, the default is all, but you may select one or more values in the drop-down to limit the results to the multiple values selected. The filter fields will indicate how many have been selected.

4. Review the following information that appears by default on the Accounts page.
   - **Account number**: The primary account number. Account number is not editable.
   - **Account name 1**: The primary account name.
   - **Account name 2**: The secondary account name.
   - **Product type**: The package or product for the account.
   - **Proposition**: The VGE proposition of a product for the account.
   - **Carrier**: The service provider of the account.
   - **Country**: The country associated with location of an account.
   - **Active**: Whether the account is being used in the system.

- **CTN masking**: **Yes**/**No**. For all services associated with this account, replaces the last four digits of the originating telephone number with asterisks to ensure privacy.
- **Block/unblock allowed**: Indicates whether or not users can use the block/unblock feature on the account.
- **Block/unblock status**: Meant to set block/unblock on all the active services for the account..
- **Display allocation codes 3/4**: Set to **No** by default. When set to **Yes**, the next Invoice and CDR reports will include the **MAX_ALLOCATION_CODE_3** and **MAX_ALLOCATION_CODE_4** columns. This column becomes available only if the **Display allocation codes 3/4 for gemini data** has been set to **Yes** in the **Customer Configuration** section by the admin.
- **Estatement**: **Yes**/**No**. If you click **edit** next to the account and set the column to **Yes**, this account will have e-statements generated automatically. The **Estatement** column becomes available on the Accounts page only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**. For more details on the process of enabling e-statements in VTR, refer to 'Manage e-statements' on page 198.

  Make sure that you have a service owner email address provided for this account in **Administration > Services** before setting **Estatements** to **Yes**, otherwise, VTR will return a warning.

- **Estatement threshold**: Click **edit** and provide in this column the amount of the monthly spend after which VTR will send e-statements. This amount includes VAT and refers to the amount in the currency of the account based on the latest invoice. This column becomes available only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.

5. To modify data , click **edit** at the end of the row and modify the highlighted cells. If the cell does not become highlighted when you click **Edit**, then you do not have permission to edit that property. When you have finished editing, click **save**. You can also update multiple services in bulk. Click **Group update** and make the changes you want to apply to all selected rows. See 'Update multiple table rows in bulk' on page 15.

6. To see additional account information, click the Choose columns button, and then by clicking the Check/Uncheck All button to select/clear all fields with one click, or select the check boxes beside any of the following:
    - **Address**: Address of the account.
    - **Autoadd cost centre code and percent 1-4**: The default allocation codes for new services on this account: 1 is the primary code, as well as the default percentage of charges associated with the named allocation code on the service. 0-100.
    - **Autoadd service class**: The default service class for services that are added automatically to this account during bill loading.
    - **Autoadd service purpose**: The default service purpose for services that are added automatically to this account during bill loading.
    - **Autoadd service type**: The default service type for services that are added automatically to this account during bill loading.
    - **City**: City of the account.
    - **Contract id**: Account contract id (editable by Vodafone Administrators).
    - **Exclude from gap check**: Setting to include/exclude account in Gaps and Overlap alert type. Exclude from gap check is not editable.
    - **Exclude from overlap check**: Setting to include/exclude account in Gaps and Overlap alert type. Exclude from gap check is not editable.
    - **Kenan billing account number**: Kenan (internal VF System) billing account number that is associated with the account. Kenan billing account number is not editable.
    - **OpCo billing account number**: OpCo billing account number (BAN) that is associated with the invoice account. This is an editable field.
    - **Post/zip code**: Post/zip code of the account.
    - **Region**: Region of the account. Region is not editable.
    - **Source account number**: The source account number. Source account number is not editable. This column will be present in the initial grid-view if the Customer Configuration setting **Account number display** is 2, otherwise you must click the **Choose columns** button and select it for display.
    - **Tariff type**: Account tariff version (Read-only).
    - **Tax identifier**: Tax identifier that is associated with the account.
    - **VCO (UK Only)**: Setting to automatically update services per VCO feed. Editing is only available if the account is in the United Kingdom. Editing the VCO flag will result in a pop-up warning message to let you know what your change will mean and will ask you to confirm the change.

- If the VCO flag is being changed from **No** to **Yes**, a warning message *This will overwrite any changes made here with the data from VCO from now on, are you sure you want to continue?*
- If the VCO flag is being changed from **Yes** to **No**, a warning message *This will ignore all VCO data from now on, are you sure you want to continue?*

- **VCO Exclude from CDR/Invoice report**: If the value is set to **Yes**, the VCO columns will not be included in the CDR extract and Invoice report for any newly loaded invoices. Therefore, it will not apply retrospectively, as any changes will not update the existing reports. For more details about the exluded VCO columns, refer to 'Download individual invoice reports' on page 177.

7. To assign users to an account, select the check box at the beginning of each account row to which you want to assign a specific user, then click the **Users** button. To learn more, see Manage accounts.
8. To assign cost codes to accounts, select the check box at the beginning of each account row to which you want to assign a cost code allocation, and then click the **Cost centre** button. To learn more, see 'Assign default cost code centre allocations to accounts ' on page 222.
9. To export account data, filter the list and choose the columns that you want to export. See 'Export the data' on page 14.
10. To export the filtered account data to the Accounts DMC Template format, which you can use to reimport through the Data Management Centre (DMC), click **More**, and then choose **Download to template**. Follow your browser's directions for saving the exported file.

Understanding data slicing

Using Data Slicing, you can restrict any user’s view of account billing data based on the country/region with which the data is associated. For example, you can restrict a user John Smith to view only United Kingdom based invoices and services by allocating all Accounts for the Vodafone UK Carrier to the user John Smith.

When 'data slicing' is on, you can assign specific users access to accounts; when it is off, all users will see all billing data for all accounts.

To enable data slicing configuration, go to Configuration>Customer Settings, and set **Allow users to see all data** to Yes or No. For more information, see Customer Settings. If you choose Yes, then all users will see all account data. If you choose No, then you must assign users to specific accounts. To assign access, you can either assign users to accounts or assign accounts to users.

When a user's role is **Customer Standard** or **Customer Admin** and the user's country is set to **Global**, when new accounts are added, the user will automatically be assigned to the account.

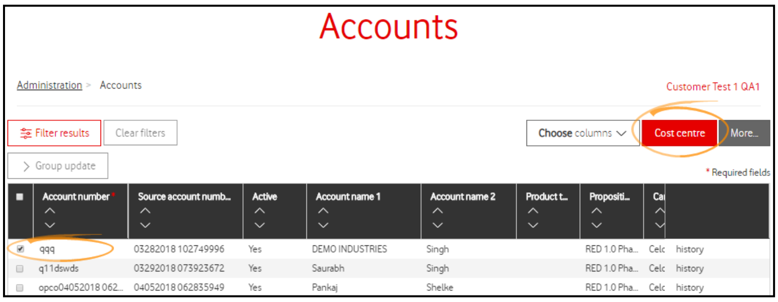
When a user’s role is **Customer Standard** or **Customer Admin** and the user's country is set to a specific country, when new accounts are added for that country, the user will automatically be assigned to the account.

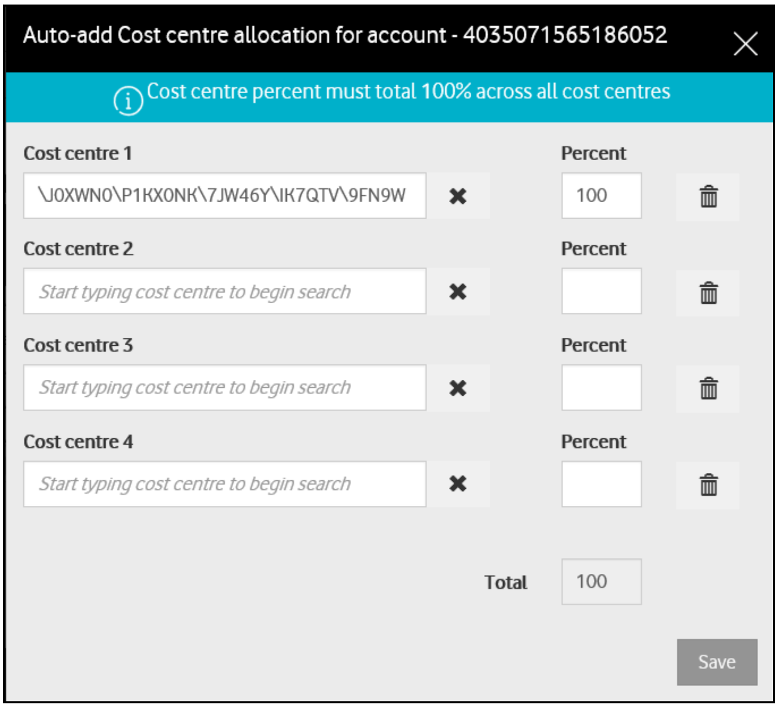
Assign default cost code centre allocations to accounts

You can choose a default cost centre for all charges associated with services automatically added to an account.

You must choose from existing cost codes. If you need a new cost code added, contact your administrator.

1. From the VTR menu, click **Administration**.
2. On the **Accounts** tile, click **Go**.
3. Locate the account to which you want to assign a default cost centre. To narrow the list of accounts displayed, 'Filter the results' on page 13



4. Select the check box at the beginning of the account row, and then click the **Cost centre** button.
   The Cost centre page appears.
   

5. In the **Cost centre 1** box, start typing the cost code to which you want to allocate all charges incurred by services automatically added to this account by default. Matching cost centres begin to automatically populate the list. Select the one you to which you want to allocate service charges.
6. In the **Percent** box, type the percentage of service charges that should be allocated to the selected cost centre. If this cost centre is responsible for all charges, type 100.
7. Repeat the previous 2 steps to allocate 100% of the charges across up to 4 cost centres.
8. You can edit or remove existing cost centre allocations by clicking the delete icon at the end of the row.
9. Click **Save**.
   You return to the Accounts page with the new cost centre allocations specified for the account. If you don't see these allocations, you may need to add the Cost centre columns: Click the **Choose columns** button, and then select **Cost centre code *n***.

Block or Unblock Zone 4 data for an entire Billing Account

Zone 4 Data Blocking

Contact your Vodafone Account Manager to advise if this feature is available for your Account.

The data blocking feature is not available to customers who are using Network Mobile Recording (NMR) or VONE-C.

Opt-in is required for **Zone 4 data Blocking/ Unblocking** feature to be enabled. The user receives a warning SMS when roaming in Zone 4 advising caution. End users must have SMS enabled to receive it. Voice Calls, SMS, MMS, and Wi-Fi calling are not impacted when a Block is applied.

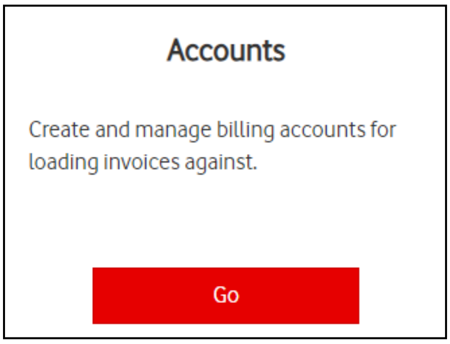
You can flag a VIP user who will never be blocked, even if the rest of the billing account is blocked.

Zone 4 Countries are detailed in your contract.

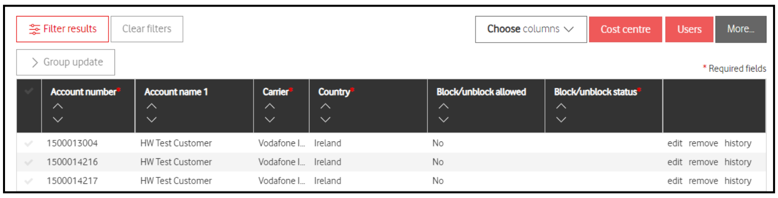
To work with accounts, you must be assigned to them. To learn more about these permissions, see 'Understanding data slicing' on page 221.

To block Zone 4 data for an entire account:

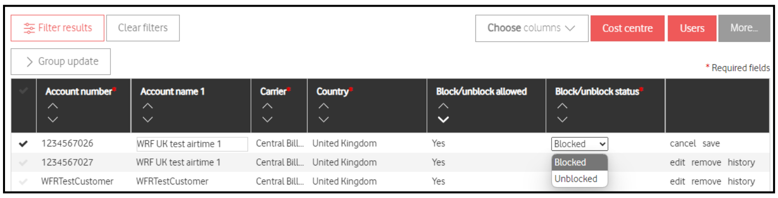
1. From the VTR menu, click **Administration.**
2. On the **Accounts** tile, click **Go**.



3. All Accounts are unblocked by default, until the VTR Administrator applies a block.
4. Filter the columns by clicking **Choose columns** to display: Account Name, Country, Block/ unblock allowed, and Block/ unblock Status. Other columns are displayed by default – identified with a red asterisk. For more details about filtering, see 'Filter the results' on page 13



5. To add a permanent block on the account, select the account from the table and click **edit**.
6. From the drop-down menu select **Blocked** and click **save**. The status will change to **Blocked**.



7. To remove the permanent Account Block, select **Unblocked** from the drop-down menu and click

save. The status will change to **Unblocked**.

8. If you selected an incorrect Account, click **cancel**.

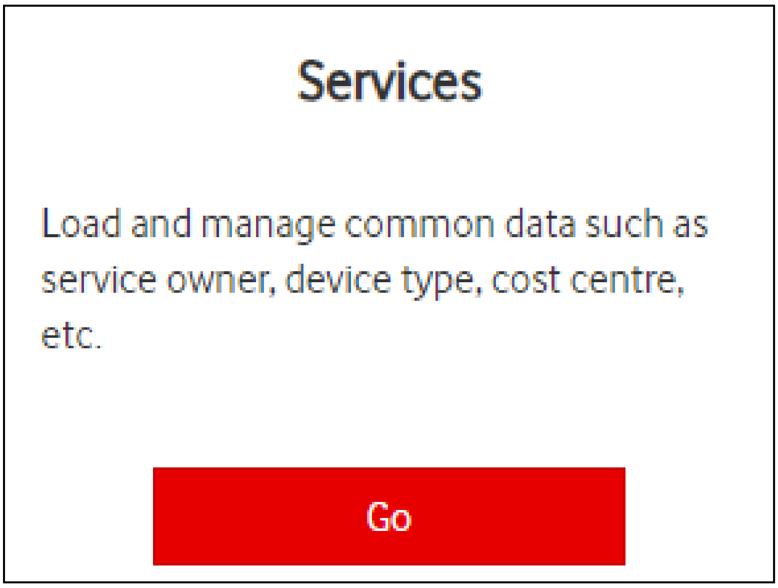
Customer Administrators, Billing and L1 Support Administrators may have limited functionality.

Manage services

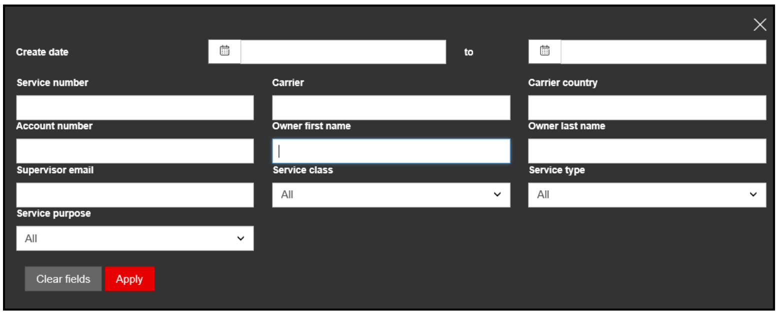
The Services page under Administration enables you to view and modify existing services associated with accounts to which you have access. These services have been added to the system automatically during invoice processing. You may not add or delete services.

Note that although you may mask service numbers from Services, the numbers themselves will always appear unmasked in this table. For more information, see 'Configure call masking for a service' on page 241.

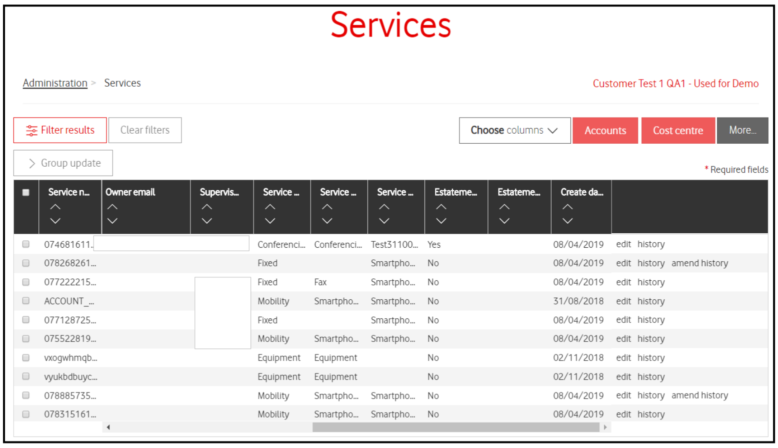
1. From the VTR menu, click **Administration**.
2. From the Administration page on the **Services** tile, click **Go**.



3. VTR retrieves all services and displays the first 10 (by default). You can also search for the date when the service has been created by providing a date range, using the **Create date** fields. To learn more about how to narrow your search, click **Filter results**. See 'Filter the results' on page 13



4. Review the following information that appears by default on the Services page.

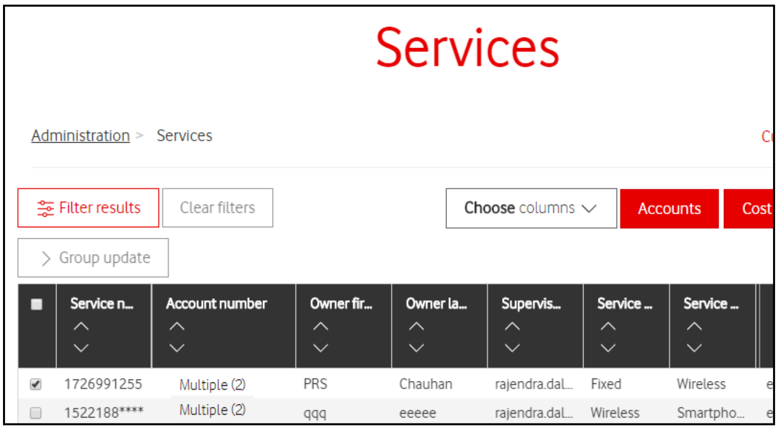


- **Service number**: The number attached to the service, for example, the phone number or conference identifier.
- **Account number**: The account(s) to which the service number is linked. If only one account, then that account number will appear. If more than one, then *Multiple (n)* appears, with N replaced by the number of accounts. This account association is added automatically at the same time that the accounts are added. To see all the accounts associated with a particular service, select the service, and then click the **Accounts** button. For more information , see 'View accounts associated with a service' on page 239.
- **Carrier**: The service provider identified on the invoice as the provider of the communications services. If the service has more than one carrier, than this shows *multiple*. You may not edit this value.
- **Carrier country**: The country associated with the carrier providing the service. If there is more than one country, then this shows *multiple*. You may not edit this value.
- **Owner first name**: The first name of the service owner, who is the person in charge of this service. This field can be edited, if the VCO (UK Only) on the account is false. Otherwise, this field will be disabled from editing.
- **Owner last name**: The last name of the service owner, who is the person in charge of this service. This field can be edited, if the VCO (UK Only) on the account is false. Otherwise, this field will be disabled from editing.
- **Supervisor email**: The email address of the supervisor of the service owner on the service.

- **Service class**: The class of service, such as *Wireless*, *Data*, or *Voice*.
- **Service type**: The type of service, which depends on the service class.
- **Service purpose**: How the service is going to be used, such as *Data Line*, *Fax Server*, or *Internet*.
- **Estatement**: **Yes**/**No**. If you click **edit** next to the service and set the column to **Yes**, this service will have e-statements generated automatically. The **Estatement** column becomes available on the Services page only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**. For more details on the process of enabling e-statements in VTR, refer to 'Manage e-statements' on page 198.

  Make sure that you have a service owner email address provided for this service before setting **Estatements** to **Yes**, otherwise, VTR will return a warning.

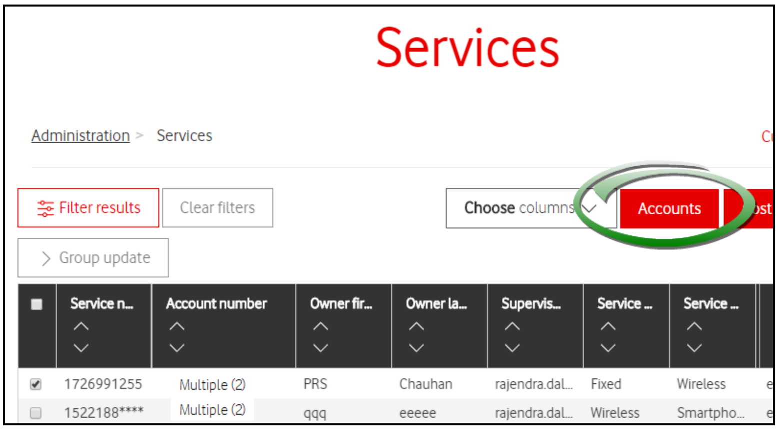
- **Estatement date**: The date when the e-statement has been issued last for this service.
- **Create date**: the service create date.



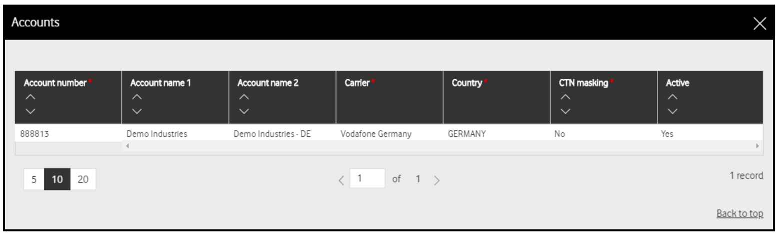
- **IMSI**: International Mobile Subscriber Identifier.
- **VIP**: Service that will not be blocked if the account is blocked.
- **Temporary block/unblock action**: Action to perform on the service to temporary block or unblock the service until the end of the current calendar month.
- **Temporary block/unblock reason**: The reason for temporary block or unblock of the service.
- **Temporary block/unblock start date**: The start date for the temporary block or unblock service. If the field is left blank, it will default to the current date. If the start date is next month, the end date will be the last day of that month. Once the temporary period has started, the date cannot be updated. However, if the start date is in the future, it is still possible to update it until the temporary block period begins.
- **Temporary block/unblock end date**: The end date for the temporary block or unblock service cannot be before the start date. If the field is left blank, it will default to the end-of-month date. Once the temporary period has started, the date cannot be updated. However, if the start date is in the future, it is still possible to update the end date until the temporary block period begins.

- **Current block/unblock status**: The block/unblock status of the service that changes automatically.

5. To view the account numbers associated with the service, select the service number, and then click the **Accounts** button.



6. The Accounts pop-up appears listing each individual account associated with the service.

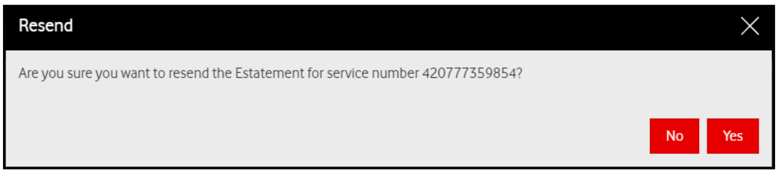


For more information on the account details that appear, see 'Manage accounts' on page 218.

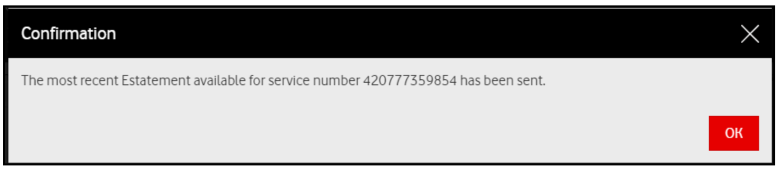
7. To resend manually the e-statement for a single service number, in case the automatic email hasn't reached the service owner, perform the following:

a. Click **resend** next to the service in the list.

b. On the Resend pop-up window that displays, click **Yes** to confirm the action.



c. Click **OK** when prompted to confirm that you have acknowledged that a new e-statement has been sent to the service owner.



The **resend** option becomes available only if an automatic e-statement has already been sent to this service owner AND if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.

8. To allocate service charges to one or more cost centres, select the check box at the beginning of a service row, and then click the **Cost centre** button. See 'Assign code centres to services' on page 243.

9. To see additional service information, click the **Choose columns** button, and then, click the **Check/Uncheck All** button to select/clear all fields with one click, or select the check boxes beside any of the following:
   - **Service number**: The unique number to identify the service.
   - **Account number**: Account number on the invoice where the service appears.
   - **Service class**: The class of service, such as *Wireless*, *Data*, or *Voice*.
   - **Contract end date**: The date when the contract ends.
   - **Contract start date**: The date on which the contract starts.
   - **Cost centre code 1-4**: Allocation codes on the service: 1 is the primary code.
   - **Cost centre percent**: The percent of the total charge that will be allocated to the cost centre.
   - **Create date**: The date in dd/mm/yyyy format when the service has been created in VTR.
   - **Custom attribute 1-4**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, these fields will be disabled from editing.
   - **Employee ID**: The Employee ID associated to a service.
   - **IMEI**: The international mobile equipment identity number of the device using this service.
   - **Location A Address 1**: The street address associated with Location A on the service.
   - **Location A Address 2**: The secondary street address associated with Location A on the service.
   - **Location A city**: The city associated with Location A on the service.
   - **Location A state** : The state associated with Location A on the service.
   - **Location A country**: The country associated with Location A on the service.
   - **Location A postal code**: The postal code associated with Location A on the service.
   - **Location A region**: The region associated with Location A on the service. This region will have a direct relation to the Country.
   - **Location B address**: The street address associated with Location B address on the service.
   - **Location B address 2**: The secondary street address associated with location B on the service.
   - **Location B city**: The city associated with Location B on the service.
   - **Location B state**: The state associated with Location B on the service.
   - **Location B country**: The country associated with Location B on the service.
   - **Location B postal code**: The postal code associated with Location B on the service.
   - **Location B region**: The region associated with Location B on the service.
   - **Manufacturer**: The Manufacturer of the device using this service.
   - **Model**: The device model associated with the reference.
   - **Operating system**: The operating system used by the service.
   - **Owner email**: The email address of the service owner.

- **Price plan code**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, this field will be disabled from editing.
- **Price plan description**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false.
- **SIM number**: The integrated circuit card identifier number on the SIM card in the device.
- **Warranty start date**: The date on which the warranty takes effect.
- **Warranty end date**: The date on which the warranty expires.

> If the Service is associated with more than one account, the VCO (UK Only) from the last account will be used to determine the business rules pertaining to editing.

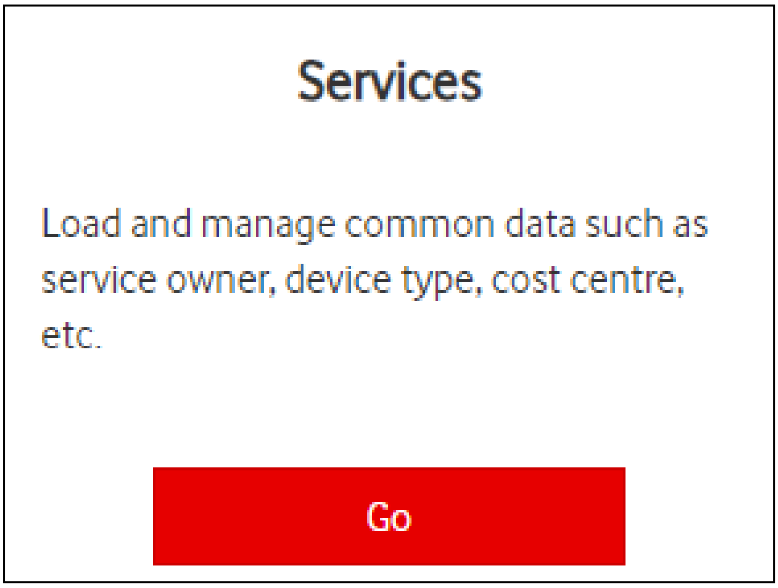
10. To export service number data, filter the list and choose the columns that you want to export. See 'Export the data' on page 14.
11. To modify service number data or historical service number data in bulk via the Data Management Centre (DMC), refer to 'Download services to template' on page 244.
12. You may review the history of changes made to any record. Select the check box at the beginning of the row (if required), and then click **History**. If you don't see the item you want to review, then it might have been deleted: click **More**, and then choose **Show deleted records**. Deleted items appear in red; you can now select the deleted item and click the **History** button to see the audit trail. Click **More**, and then choose **Hide deleted records** to remove them from the grid-view. To learn more about the audit trail, see Audit a record's change history.

> You can also edit services in bulk from the Data Management Centre. See 'Upload and manage data in bulk' on page 262.

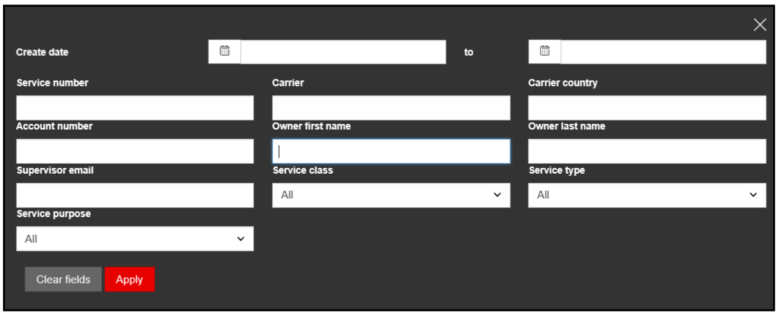
Update services

To modify any data except service number, you can follow the procedure of updating individual services, making changes going forward or making changes to historical information.

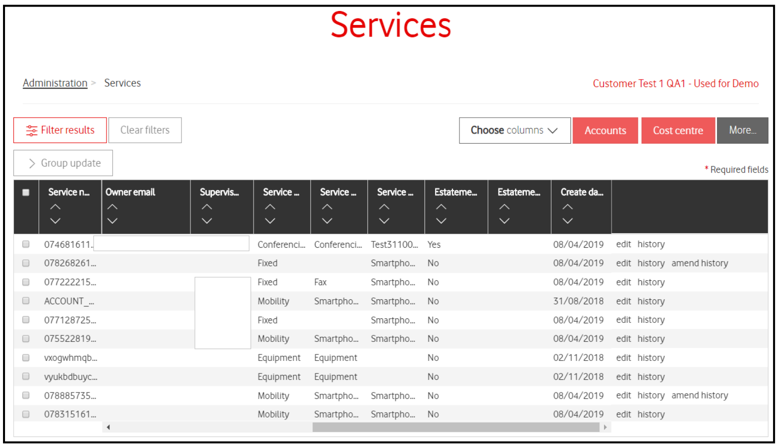
1. From the VTR menu, click **Administration**.
2. From the **Administration** page on the **Services** tile, click **Go**.



3. VTR retrieves all services and displays the first 10 (by default). You can also search for the date when the service has been created by providing a date range, using the **Create date** fields. To learn more about how to narrow your search, click **Filter results**. See 'Filter the results' on page 13



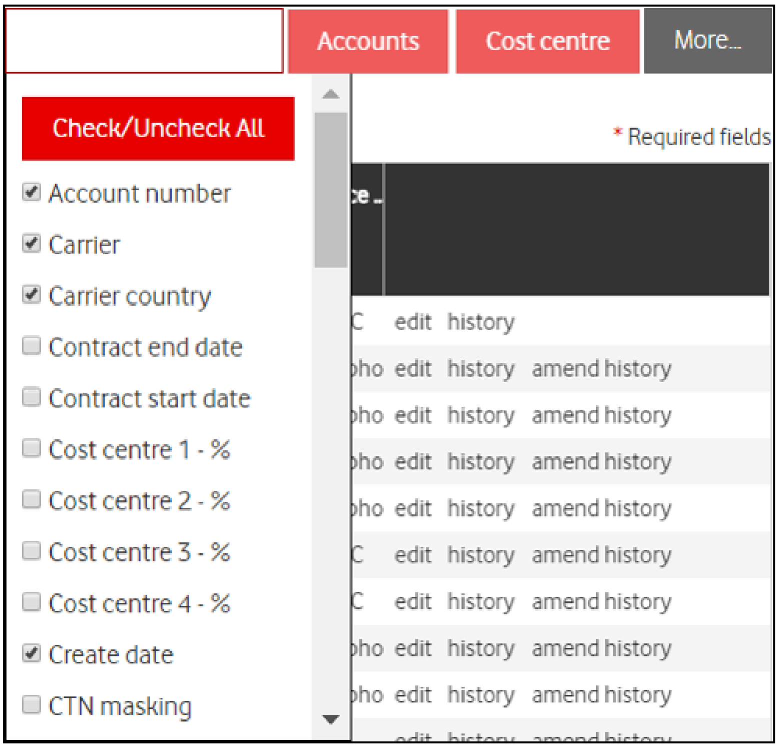
4. Review the information that appears by default on the **Services** page.



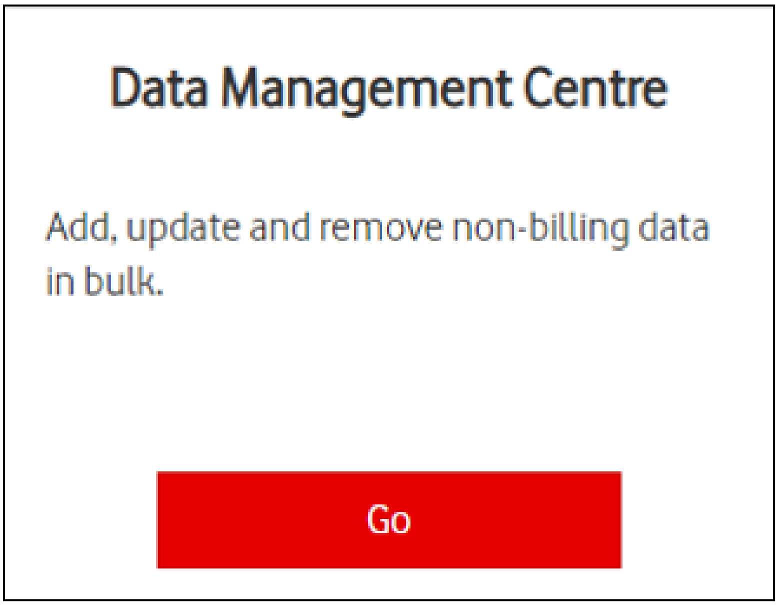
5. To edit the details of an individual service, click **edit** at the end of the row and modify the highlighted cells. After making the required changes, click **save**. When successful, you will be notified that the service has been updated.
6. You can also update multiple services in bulk. Click 'Update multiple table rows in bulk' on page 15 and make the changes you want to apply to all selected rows.

   Notes:

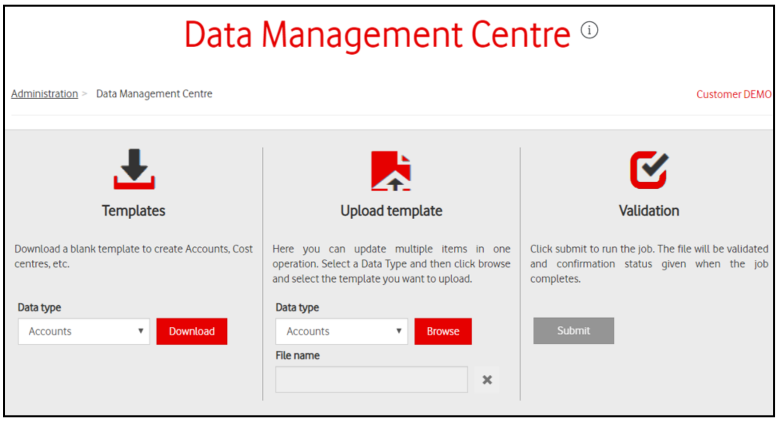
   - You may not edit the Service number.
   - The Service type is dependent on the Service class; therefore if you click the Service type drop down prior to choosing the Service class when in edit mode, the Service type list will be empty.
7. Alternatively, after accessing the **Services** page, click the **Choose columns** button and select the **Check/Uncheck All** option to enable all the columns.



8. Click the **More** button and select **Download to Template**. This generates an Excel spreadsheet containing all the data related to the services.
9. Open the Excel spreadsheet and update the document with additional content as required, such as owner first name and last name, employee id, cost centre. Save the updated file to your PC.
10. From the **Administration** page on the **Data Management Centre** tile, click **Go**.



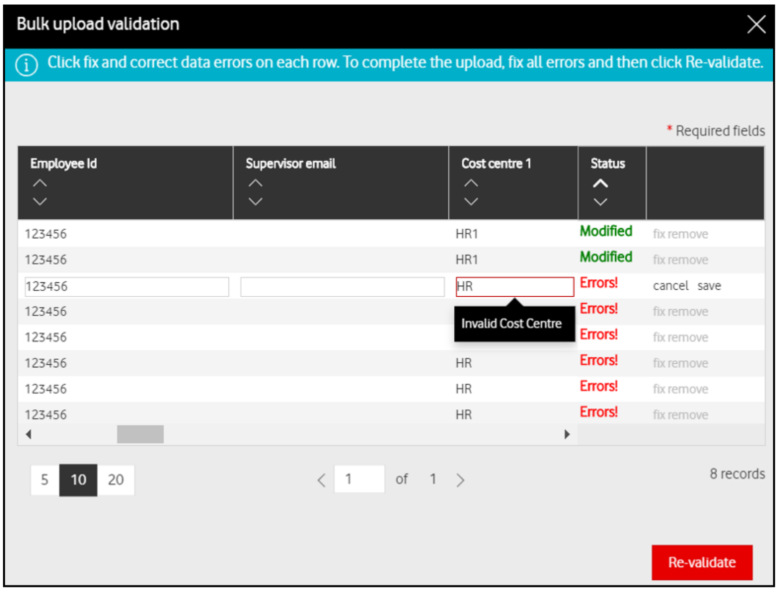
In the **Upload template** tile, select **Services** in the **Data type** dropdown. Browse to find the file that you have previously updated and saved on your PC, then select **Submit** in the **Validation** tile.



Notes:

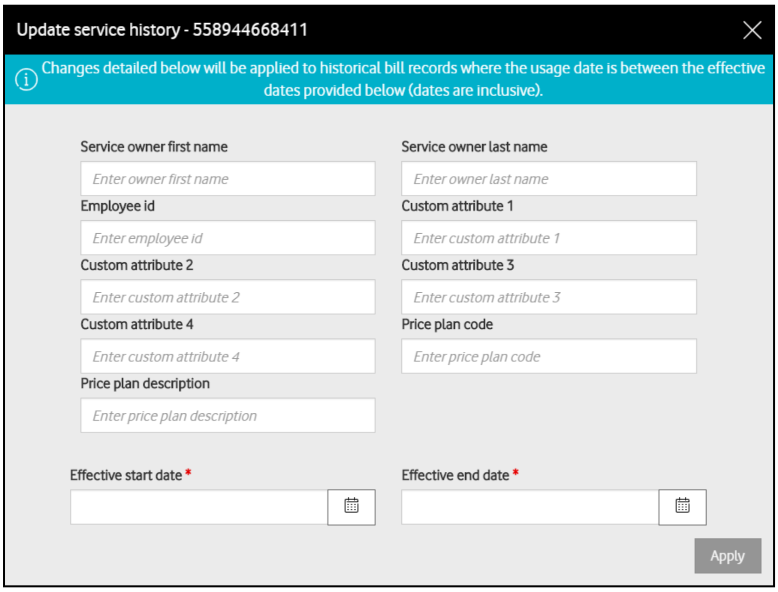
- Blank versions of the templates are available in the **Templates** tile
- No services will be listed, however they can be added.

11. The file will be validated. If there are any errors in the uploaded information, they will be flagged and you can select **fix** in the last column to view the error. Fix the individual errors and then **save**. When all the errors have been fixed, select **Re-validate** to resubmit the updated data.



When successful, you will be notified that the services have been updated.

12. To change historical data, click **amend history** at the end of the row. An **Update service owner - nnnn** pop-up will appear. This feature is only available if VCO (UK Only) on the account is false (if more than one account, then the most recent setting will be used).



- **Service owner first name**: The first name of the person in charge of this service.
- **Service owner last name**: The last name of the person in charge of this service.
- **Employee ID**: The Employee ID associated to a service.
- **Custom attribute 1-4**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, these fields will be disabled from editing.
- **Price plan code**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false. Otherwise, this field will be disabled from editing.

- ◦ **Price plan description**: Primarily populated by the Gemini feed, but can be edited, if the VCO (UK Only) on the account is false.
- ◦ **Effective start date**:The start date of the changes for the service owner. You must specify the date in the format dd/mm/yyyy. This field is required.
- ◦ **Effective end date**: The end date of the changes for the service owner. You must specify the date in the format dd/mm/yyyy. This field is required.

  In addition to the effective start and end dates, at least one field must be updated for the **Apply** button to be enabled. Once you click **Apply**, a pop-up message will confirm the update of the service owner's first and last name on BILLING RECORDS for this service where the usage date falls within the effective start and end dates (inclusive). Updates will be audited.

Update VCO Data to VTR

To add details in **Vodafone Central Ordering** (VCO) that will then be processed and updated in VTR, follow the procedure below:

1. Log into VCO - https://www.vcol.co.uk.
2. Enter changes (e.g. Cost Centre, Subscriber Name etc.).
3. Save changes.

When will Vodafone process the updates in VTR?

The **Vodafone Processing Team** (CSA) receives daily updates from VCO. If all changes in VCO have been introduced correctly and validated, they will become available in VTR in approximately 40 days after they were made.

When can updates be seen in VTR?

Depending on the invoice issue date, the changes will be available in VTR by the end of the month if they were made in VCO before the invoice was issued. For example, if changes are added to VCO on 20th June and the invoice is issued on 21st June, then updates in VTR will be available by 30th June.

Helpful tips

1. Ensure that the changes are saved in VCO.
2. If the changes are not saved in VCO, make them again.
3. Contact VCO Help & Support, if:

- you have deactivated a user and it is not updated in VCO.
- you have activated a user and it is not updated in VCO.
- a user account is missing.

Contact and Support

If the changes have not been updated in VTR, please reach out to GlobalHelpdeskSolutions@vodafone.com.

Your email should include the following details:

1. Your company name
2. Billing Account Number (BAN)
3. The date you made the changes in VCO
4. A description of the changes you made in VCO
5. A description of the changes you expected to see in VTR

For questions and support regarding VCO, please contact VCO Help & Support.

Block or Unblock Zone 4 data for a Single Connection

Zone 4 Data Blocking

Contact your Vodafone Account Manager to advise if this feature is available for your Account.

The data blocking feature is not available to customers who are using Network Mobile Recording (NMR) or VONE-C.

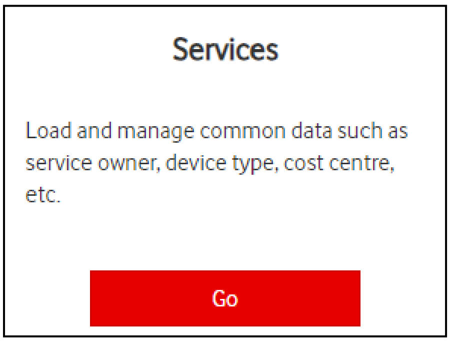
Opt-in is required for **Zone 4 data Blocking/ Unblocking** feature to be enabled. The user receives a warning SMS when roaming in Zone 4 advising caution. End users must have SMS enabled to receive it. Voice Calls, SMS, MMS, and Wi-Fi calling are not impacted when a Block is applied.

You can flag a VIP user who will never be blocked, even if the rest of the billing account is blocked.

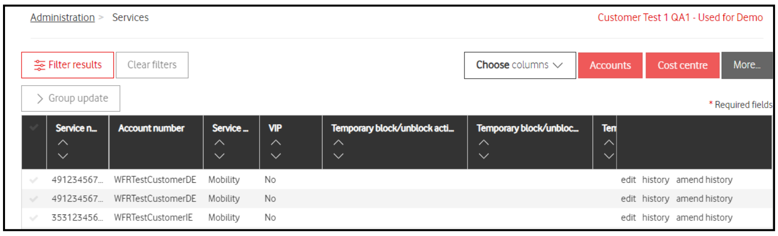
Zone 4 Countries are detailed in your contract.

To block Zone 4 data for a Single Connection:

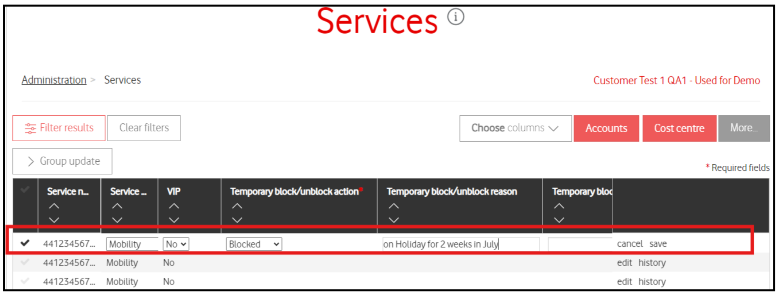
1. From the VTR menu, click **Administration**.
2. From the Administration page on the **Services** tile, click **Go**.



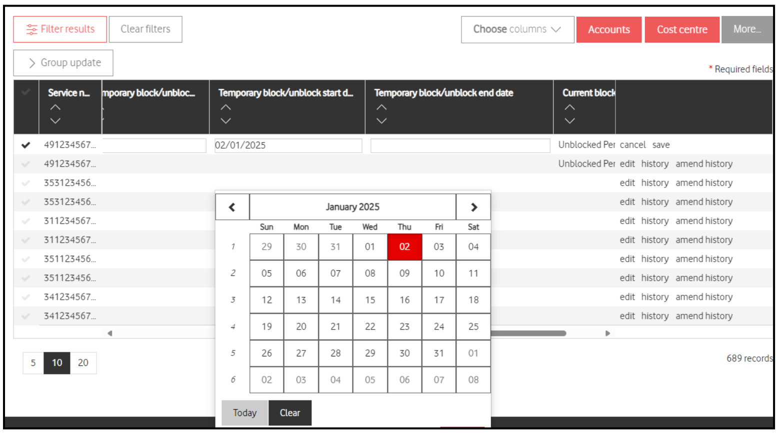
3. Filter the columns by clicking **Choose columns** to display: Service Number, VIP, Temporary block/ unblock action, Temporary block/ unblock reason, Temporary block/unblock start date, Temporary block/unblock end date, and Current block/ unblock status. For more details about filtering, see 'Filter the results' on page 13
4. You will see the status of all the Connections. To change the block status of one connection, click **edit**.



5. Select the new status from the **Temporary block /unblock action** drop-down.



6. Type the reason for the temporary block /unblock of the service.
7. Set the start date from the **Temporary block /unblock start date** drop-down. If the field is left blank, it will default to the current date. If the start date is next month, the end date will be the last day of that month. Once the temporary period has started, the date cannot be updated. However, if the start date is in the future, it is still possible to update it until the temporary block period begins.



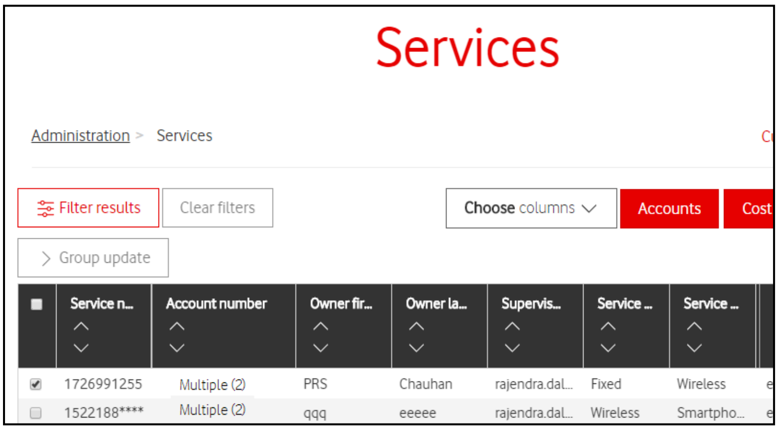
8. Set the end date from the **Temporary block /unblock end date** drop-down. The end date cannot be before the start date. If the field is left blank, it will default to the end-of-month date. Once the temporary period has started, the date cannot be updated. However, if the start date is in the future, it is still possible to update the end date until the temporary block period begins.
9. To save all the changes, click **save**.
10. Set to Temporary **Blocked** or **Unblocked** to override Account level setting for the remainder of current month (will auto revert to Account level setting thereafter).
11. A VIP is a connection that will never be blocked, thus select **Yes** from the VIP drop down menu if the connection can use unlimited data in Zone 4 at all times.

Customer Administrators, Billing and L1 Support Administrators may have limited functionality.

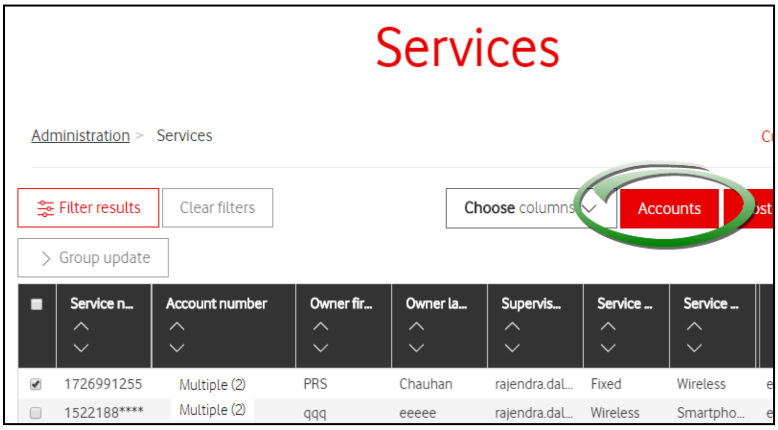
View accounts associated with a service

Each service may be associated with one or more accounts. Typically, this situation could occur with fixed line data. When an existing service is identified on a new account invoice, then that account number is added to the service number record automatically. If the service number already has a cost code allocation, then no changes will be made; if there are no cost code allocations associated with the service number, then it will inherit the cost code allocation of the account.

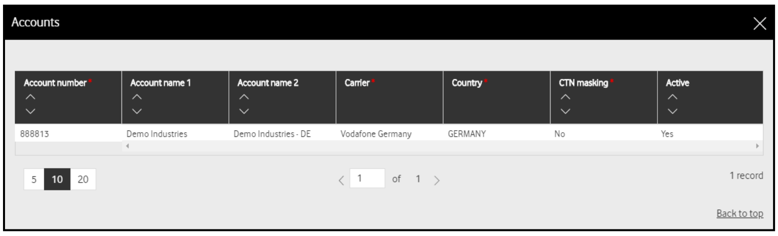
When more than one account is associated with a service, the Account number column in the Services screen will show *Multiple (N)*, with *N* representing the number of accounts.



To view the account numbers associated with the service, select the service number, and then click the **Accounts** button.



The Accounts pop-up appears listing each individual account associated with the service.



For more information on the account details that appear, see 'Manage accounts' on page 218.

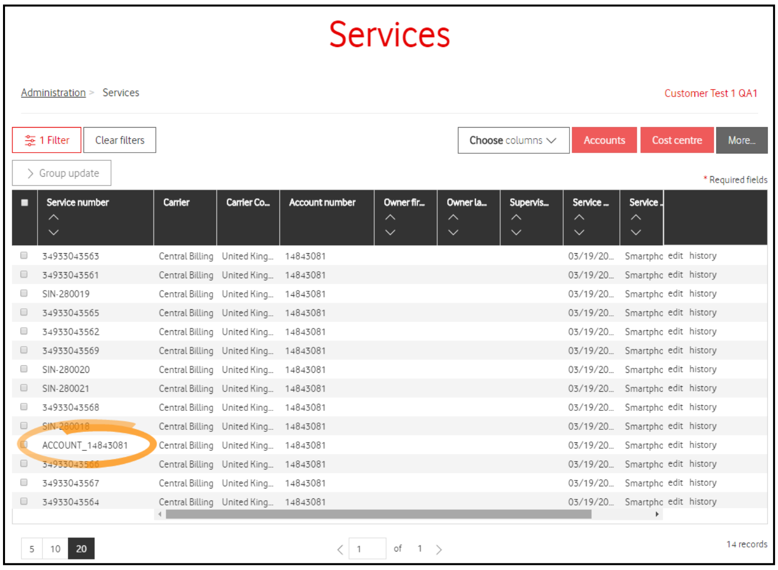
View account level charge service

Account level charges are flat charges that are not associated with individual services, but are shown on the invoices. All account level charges are assigned to a fictitious service number Account_ <Account_Number>.

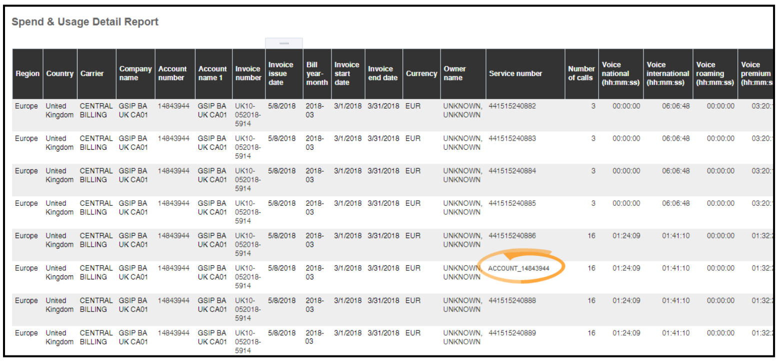
To view the service which will contain account level charges, go to Filters, type **ACCOUNT_<account number>** in the **Service number** field, and then click **Apply**.

The account level charges associated to this account can be found within the following reports:

- Spend & Usage Detail
- Services Report



To view the account level charges from the Spend & Usage Detail Report or the Services report, go the Reporting module and select the report and filter with the Account number associated with the service.



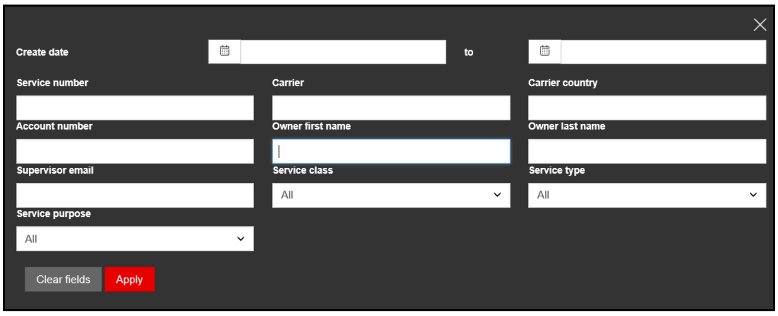
For more information on the account details that appear, see 'Manage accounts' on page 218.

Configure call masking for a service

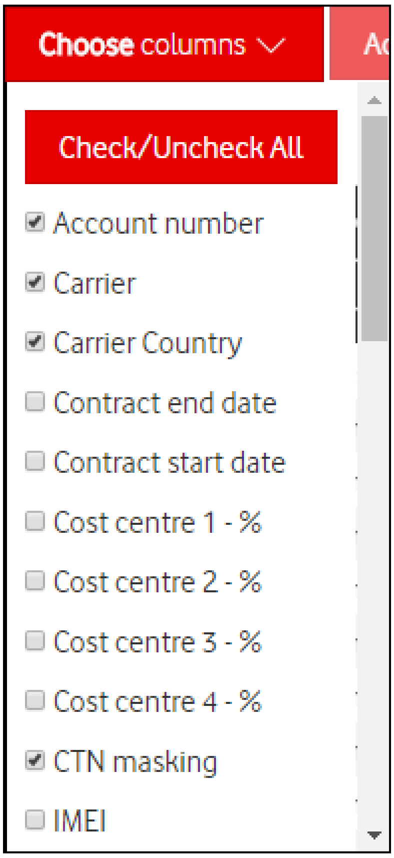
Call Masking hides the last four digits of the service number as displayed in the Spend Analysis and Services modules, as well as any data exports from the modules or reports. This masking protects the identity of the service owner during data analysis. However, note that even if your service number is configured for masking and will appear masked in reports , you will always be allowed to see your own service number.

Service numbers are not masked by default. Service number masking can be enabled from the VTR Administration section.

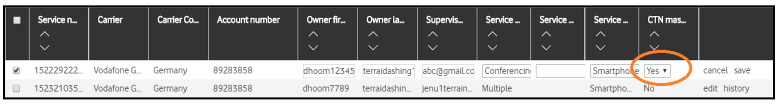
1. From the VTR menu, click **Administration**, and then on the **Services** tile, click **Go**.
2. Locate the service for which you want to mask calls. To narrow down the number of services that appears, click **Filter results** and choose your criteria. See 'Filter the results' on page 13



3. Make sure the **CTN masking** column is visible in the table. If not, click **Choose columns** and select the check box beside that option, and then click anywhere outside the Choose columns list to apply the change.



4. At the end of the service row, click **edit**. Cells in the selected row become editable.
5. To replace the last four digits of your service number with asterisks, drop down the **CTN masking** cell and choose **Yes**.



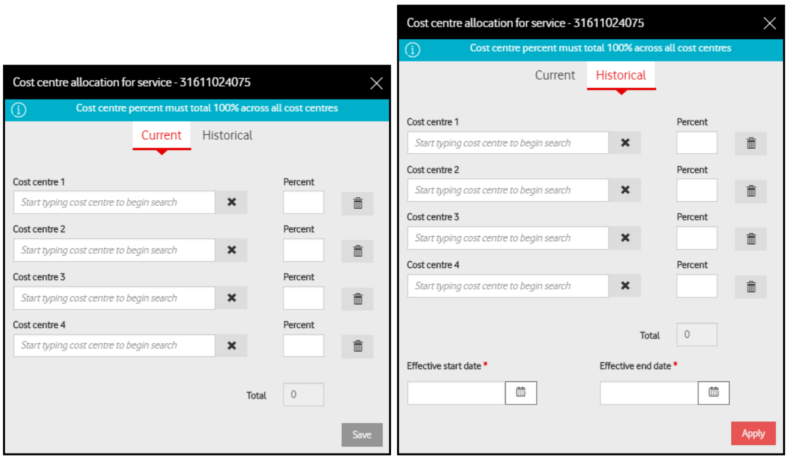
6. Click **Save**.

Assign code centres to services

By default, services inherit the cost centre allocations of their parent account. However, you may override this default and allocate charges to specific cost centres by assigning a cost code to the service or splitting the service among up to four cost codes. By splitting a service among cost codes, you can allocate service charges based on a percentage of use, but of course this must always total 100%. VTR maintains cost code history, including the dates when changes in cost code allocation occurred and the percentage of costs attributable to each cost code.

> You must choose from existing cost codes. If you need a new cost code added, contact your administrator.

1. From the VTR menu, click **Administration,** and then on the **Services** tile, click **Go**.
2. Locate the service to which you want to assign a cost code. To narrow the list of services displayed, use the filter options. See 'Filter the results' on page 13.
3. Select the check box at the beginning of the service row, and then click the **Cost centre** button. The Cost centre allocation for service page appears. You will have the option to update current Cost Centre values which will affect future invoices, or historical values which will affect past invoices.



4. In the **Cost centre 1** box, start typing the cost code to which you want to allocate this service's charges. Matching cost centres begin to automatically populate the list. Click the one you to which you want to allocate this service's charges.
5. In the **Percent** box, type the percentage of service charges that should be allocated to the selected cost centre. If this cost centre is responsible for all charges, type 100.
6. Repeat the previous 2 steps to allocate 100% of charges across up to 4 cost centres.
7. To update the historical Cost centre values, on the Historical tab view, enter the **Effective start date** and **Effective end date** for which you want these new values to apply.
8. You can edit or remove existing cost centre allocations by clicking the delete icon at the end of the row.

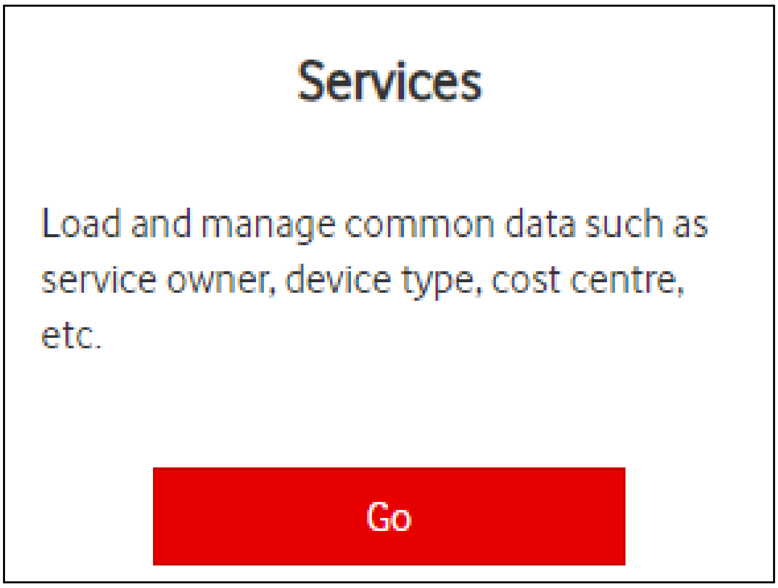
9. Click **Save**.
10. If you are updating Historical cost centres, you will receive a confirmation pop-up that historical Cost centre allocations have been applied. When successfully applied the service cost centre on BILLING RECORDS will be updated for this service where the usage date falls within the effective start and end dates (inclusive). Updates will be audited.
11. You return to the Services page.

Download services to template

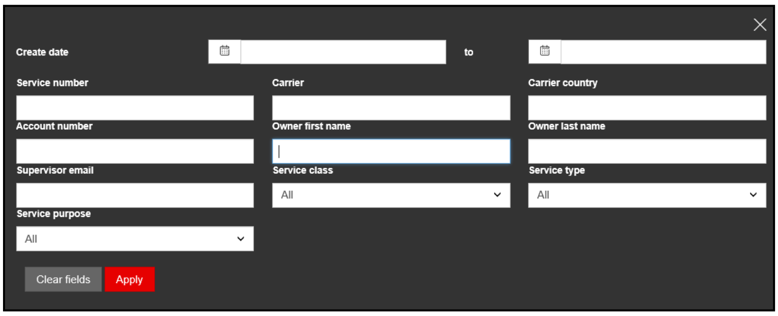
The Services page under Administration lets you filter and download all service data or all historical service data in the grid, and modify them for future upload via the Data Management Centre (DMC).

Note that although you may mask service numbers from Services, the numbers themselves will always appear unmasked in this table. For more information, see 'Configure call masking for a service' on page 241.

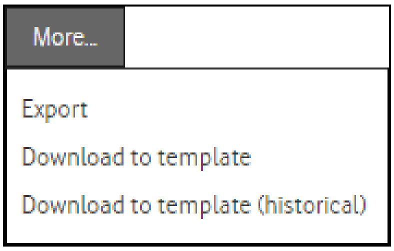
1. From the VTR menu, click **Administration**.
2. From the Administration page on the **Services** tile, click **Go**.



3. VTR retrieves all services and displays the first 10 (by default). To narrow down the number of services that appears, click **Filter results**. See 'Filter the results' on page 13



4. From the More button, click either the **Download to template** or the **Download to template (historical)** option.



This will result in a service template filled in with only the records in the services grid. The maximum number of records you can export is 30.000 by default, but you can modify this setting in Manage services.

Download to template

Choose this option to export the service number data to the Services Template format.

Follow your browser's directions for saving the exported file, which will be given the default name *VTR-Services Upload Template_mm-dd-yyyy* where mm-dd-yyyy is replaced with the actual system date.

You can then use this file as a template to modify the exported as described in 'Complete the Services upload template' on page 270.

Download to template (historical)

Choose this option to export the service number historical data to the Services (historical) Template format.

Follow your browser's directions for saving the exported file, which will be given the default name *VTR-Services-Historical-Upload Template_mm-dd-yyyy* where mm-dd-yyyy is replaced with the actual system date.

You can then use this file as a template to modify the exported as described in 'Complete the Services (Historical) upload template' on page 273.

> **Effective Start Date** and **Effective End Date** will always be blank when data is downloaded as this is data the user will need to input within the template; the data is not available in the database.

5. You may review the history of changes made to any record. Select the check box at the beginning of the row (if required), and then click **History**. If you don't see the item you want to review, then it might have been deleted: click **More**, and then choose **Show deleted records**. Deleted items appear in red; you can now select the deleted item and click the **History** button to see the audit trail. Click **More**, and then choose **Hide deleted records** to remove them from the grid-view. To learn more about the audit trail, see Audit a record's change history.

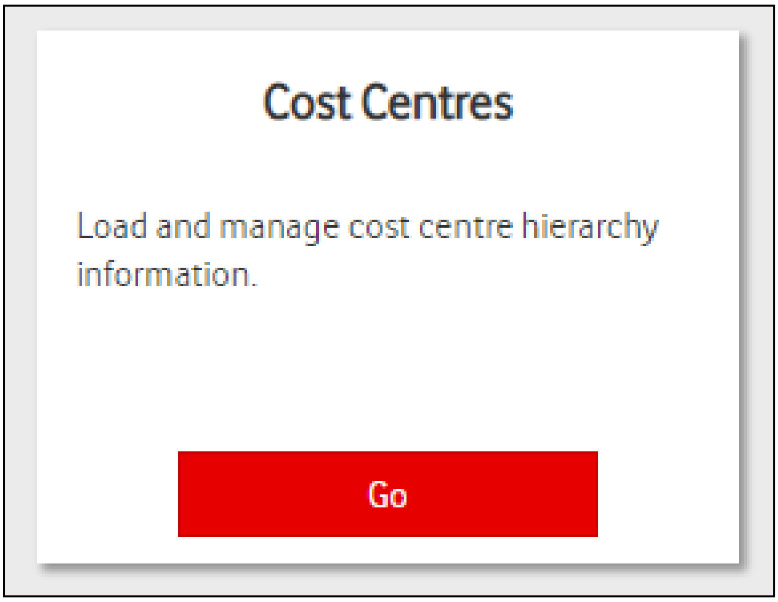
View cost centre hierarchies

A cost centre code assigns a code to a location, business, department, and/or individual for the purposes of tracking expenditures and chargeback. In VTR, cost codes are organized hierarchically based on the financial structure of the organization. Cost codes themselves may be numeric, alphanumeric, or in whatever form makes sense for your organization. Cost codes usually 'roll up' to summary levels within the hierarchy. You may view the cost code centre hierarchy in VTR, but you may not edit it.

If you need to add cost centre hierarchies, you may do so from the Data Management Centre. See 'Upload and manage data in bulk' on page 262.

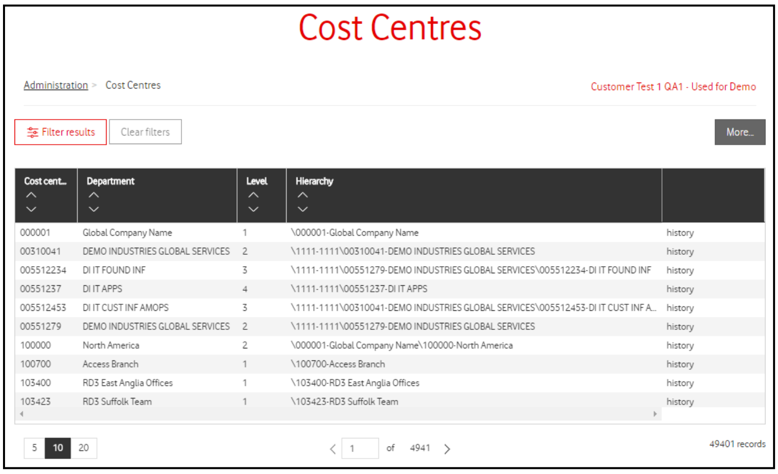
You may also assign default cost centre allocations to accounts and specific cost centres to service numbers.

1. From the VTR menu, click **Administration**.
2. On the **Cost Centres** tile, click **Go**.



3. To narrow down the number of accounts that appear, click **Filter** and 'Filter the results' on page 13.

4. The Cost centres page appears:

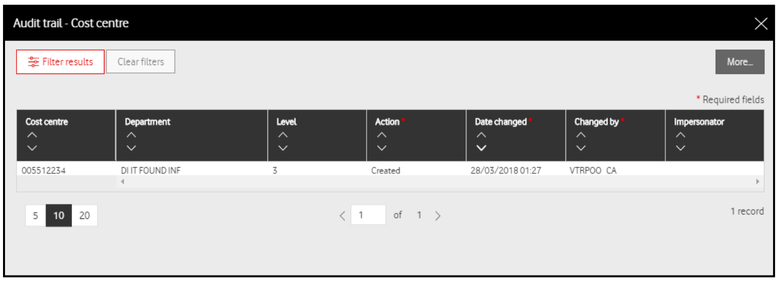


5. Each cost centre may have up to four levels in the hierarchy.

   The following fields are featured in the grid:

- **Cost centre**: The location, business, department, and/or individual code.
- **Department**: The department for the level in the hierarchy.
- **Level**: The level in the hierarchy.
- **Hierarchy**: The entire cost centre hierarchy with each level separated by a **** (backward slash).

6. (Optional) To export cost centres, filter the list to display just those cost centres you need. See 'Export the data' on page 14.
7. Click **history** to open the Audit trail - Cost centre page and view the updates to cost centres via the Data Management Centre.



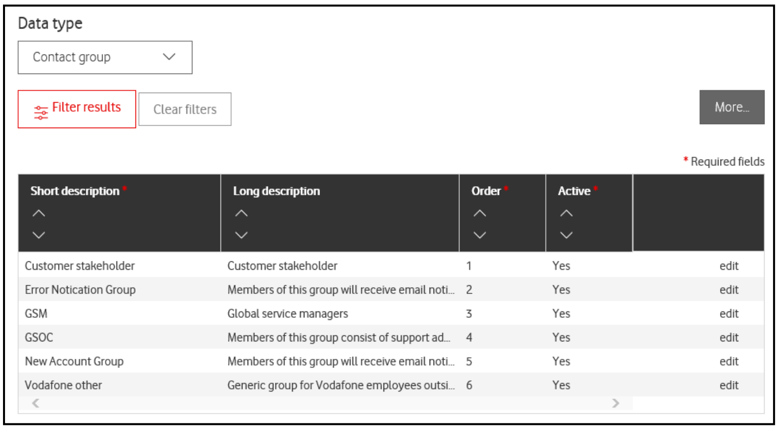
Work with reference data

In VTR, reference data refers to the selectable values that appear in customizable drop down fields throughout the application. Changes to reference data apply only to the active customer during the session in which the changes are made.

During the onboarding process, Support Administrators configure the reference data per the customer requirements. Do not modify this data unless necessitated by customer request.

To work with reference data

1. From the VTR menu, click **Administration**.
2. On the **Reference Data** tile, click **Go**.



3. Drop down the **Data Type** list and choose which reference data you want to work with. You have the following choices:
   - 'Work with contact group settings' on page 249: view and edit details about contact groups, such as Support or GAM.
   - 'Work with available contact methods' on page 251: view and edit details about methods to contact people, such as Email, Phone, or Mobile
   - 'Work with the list of available countries' on page 252: view and edit details about available countries.
   - 'Work with currency data' on page 253: view and edit details about the set of currencies used in the system as well as define the order in which they appear in drop down lists
   - 'Work with exchange rate data' on page 254: view and edit details about custom exchange rates for this customer.
   - 'Work with available languages' on page 255: view and edit details about the set of languages used in the system as well as the order in which they appear in drop down lists.
   - 'Work with locales' on page 255: view and edit details about the system locale watch determines date and number formats by your country and language of choice.
   - 'Work with the list of available regions' on page 256: view and edit details about geographical regions.
   - Work with product type data: view and edit details about product types, such as DLM, GSIP, Wireless.
   - Work with proposition data: view and edit details about propositions, such as Bespoke, VONE C.
   - 'Work with service class data' on page 257: view and edit details about the class of service, such as Wireless, Data, or Voice.
   - 'Work with service purpose data' on page 258: view and edit details about the purpose of a service, such as Calling Card, Broadband, or Circuit.

- 'Work with service type data' on page 259: view and edit details about inventory such as Private Line, DID Number, and Access.
- 'Work with the list of available states' on page 260: view and edit details about international province names and United States state names.
- 'Work with user groups settings' on page 260: view and edit details about groups to identify users by type or role.

4. View or update the reference data.

> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

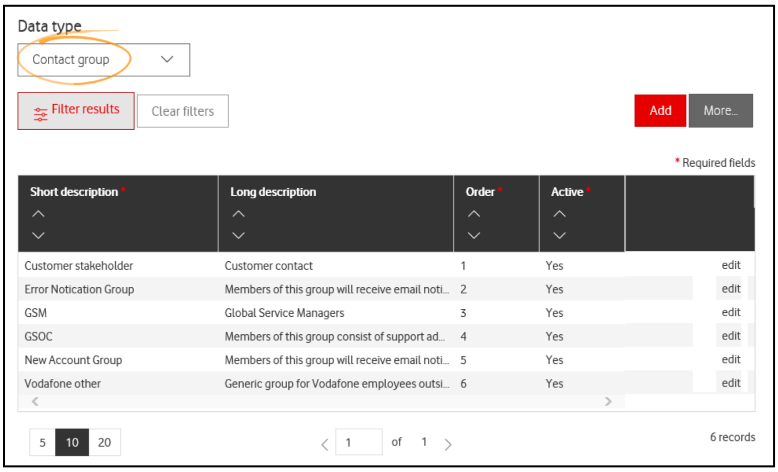
Work with contact group settings

Use the Contact Group Reference Data to view, add, and edit details about contact groups, such as Support or GAM.

> You may not edit the Error Notification Group because this group is used to identify people who will receive auto-generated notifications from VTR.

To work with contact groups

1. Go to the **Contact Groups** Reference Data page as described in 'Work with reference data' on page 247.
2. The Contact Groups grid displays the following information about the available values:



  - **Short description**: Up to 100 characters to describe the data type. This value must be unique.
  - **Long description**: Up to 255 characters of more detailed information.
  - **Order**: The order in which the value will appear in the drop down list.
  - **Active**: Yes/No Whether the value is used to populate drop downs throughout VTR. If you choose **No**, making this data inactive, then you will not be able to choose this value for any new records you add. If you change it from a previously active state to an inactive state, then you will not be able to modify the values that are already attached to records until you modify this setting back to **Active**.
  - **Locked**: Whether any changes can be made to this reference data. If locked, then the Edit and Remove options will not be available.

3. From here, you can add, edit, or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

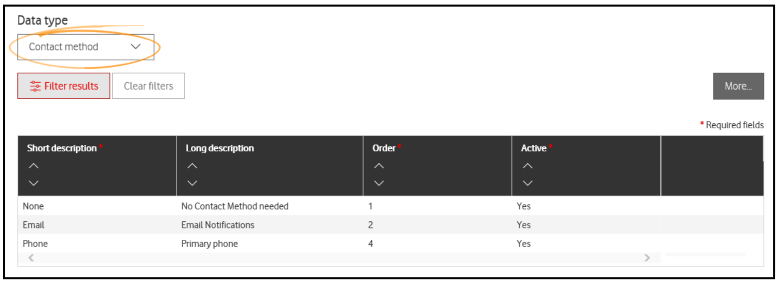
> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with available contact methods

Use the Contact Method Reference Data to view and edit details about methods to contact people, such as Email, Phone, or Mobile.

To work with contact methods

1. Go to the **Contact Methods** Reference Data page, as described in 'Work with reference data' on page 247. The Contact Methods grid displays the following information about the available values:



   - **Short description**: Up to 100 characters to describe the data type. This value must be unique.
   - **Long description**: Up to 255 characters of more detailed information.
   - **Order**: The order in which the value will appear in the drop down list.
   - **Active**: Yes/No Whether the value is used to populate drop downs throughout VTR. If you choose **No**, making this data inactive, then you will not be able to choose this value for any new records you add. If you change it from a previously active state to an inactive state, then you will not be able to modify the values that are already attached to records until you modify this setting back to **Active**.

Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

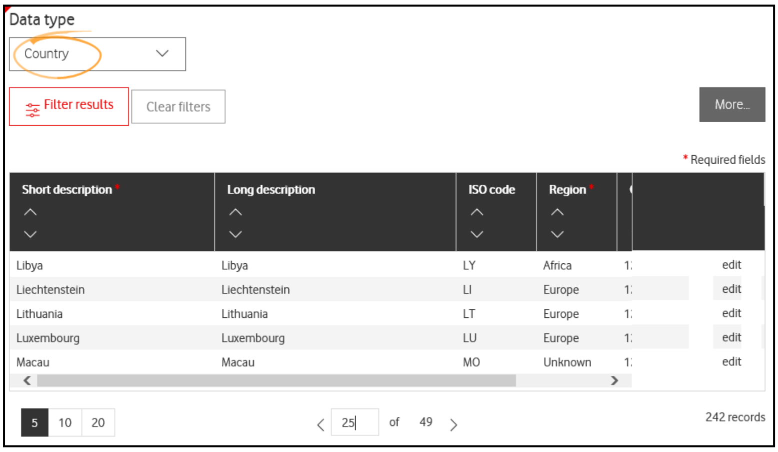
Work with the list of available countries

Use the Country Reference Data to view and edit details about available countries.

Note that there is a default entry Global to represent all countries; you may not edit this value. Although the Global value will be set to inactive, when you associate users with a county, you may select Global for any user with access to more than one country. In all other cases, the Global value will be hidden from the Country list.

To work with country data

1. Go to the **Country** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

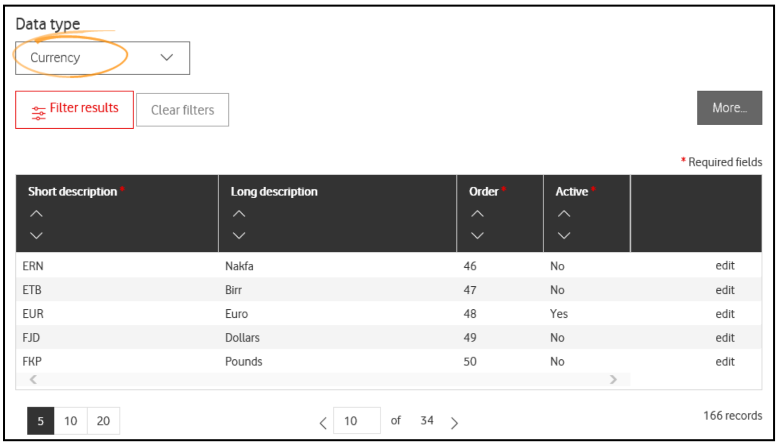
> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with currency data

Use the Currency Reference Data page to view and edit details about the set of currencies used in the system as well as define the order in which they appear in drop down lists. Each user has a default currency configured on their My Profile page. See 'Manage your profile' on page 16.

To work with currency data

1. Go to the **Currency** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with exchange rate data

Use the Exchange Rate Reference Data to custom exchange rates for this customer. Exchanges rates are always calculated against the base currency value of the Euro.

```
[(Amount in Euros) * (Conversion Rate)]
```

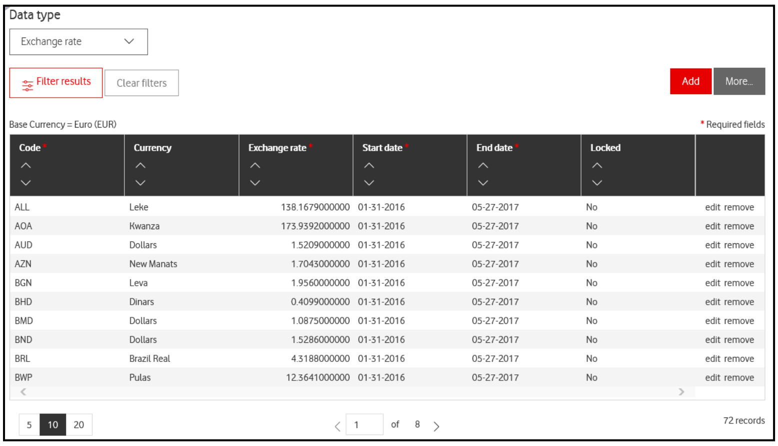
For example if the bill was received as 150 Euros, then the conversion to US Dollars is

```
150 * (1.09/100)= 163.50
```

These values appears throughout VTR, wherever monetary values appear; however, the exchange rate itself does not appear. The values you see in VTR are calculated based on the exchange rates defined here. You can also upload exchange rates from the Data Management Centre: see 'Upload and manage data in bulk' on page 262.

To work with exchange rate data

1. Go to the **Exchange rates** Reference Data page as described in 'Work with reference data' on page 247.



2. The Exchange Rate grid displays the following information for each exchange rate:
   - **Code**: The 2 or 3 letter code associated with the selected currency,
   - **Currency**: The currency for which you are defining the exchange rate.
   - **Exchange rate**: The numeric value of the exchange rate against one Euro. Specify up to 10 decimal places.
   - **Start date**: The date on which the exchange rate will be first applied.
   - **End date**: The date on which the exchange rate ends.
   - **Locked**: Whether any changes can be made to this reference data. If locked, then the Edit and Remove options will not be available.
3. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

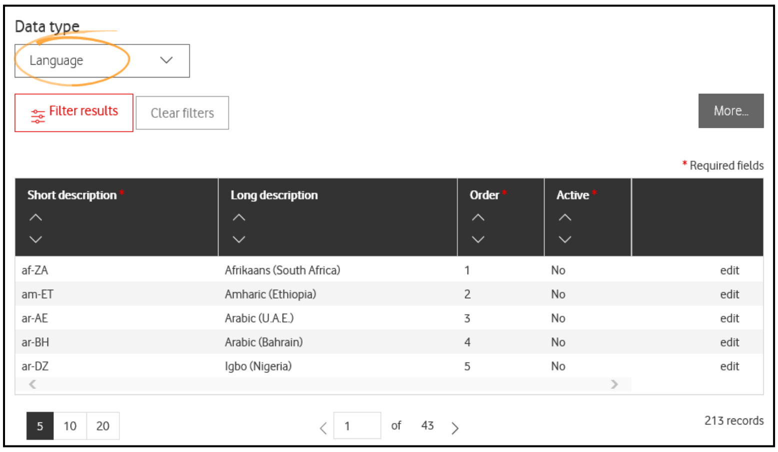
Level 1 Support Administrators or customers who have Vodafone manage their Exchange Rates may only view reference data; Customer Administrators, Level 2 Support Administrators, and Level 3 Super Administrators may edit reference data.

Work with available languages

Use the Language Reference Data page to view and edit details about the set of languages used in the system as well as the order in which they appear in drop down lists. Each user has a default language configured on their 'Manage your profile' on page 16 page

To work with language data

1. Go to the **Language** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

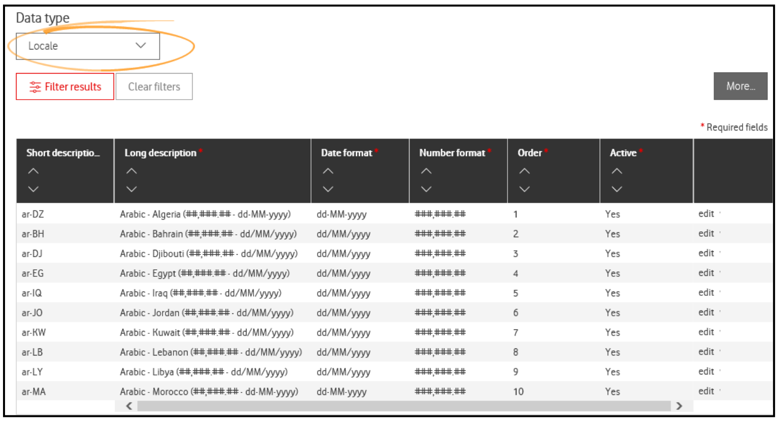
Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with locales

Use the Locale Reference Data to view and edit the system locales that are available. The system locale defines the language, number, and date formats used throughout VTR. Each user has a default locale configured on their 'Manage your profile' on page 16 page

To work with the locale

1. Go to the **Locale** Reference Data page as described in 'Work with reference data' on page 247.
2. The Locale grid displays the following information about the available values:



3. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

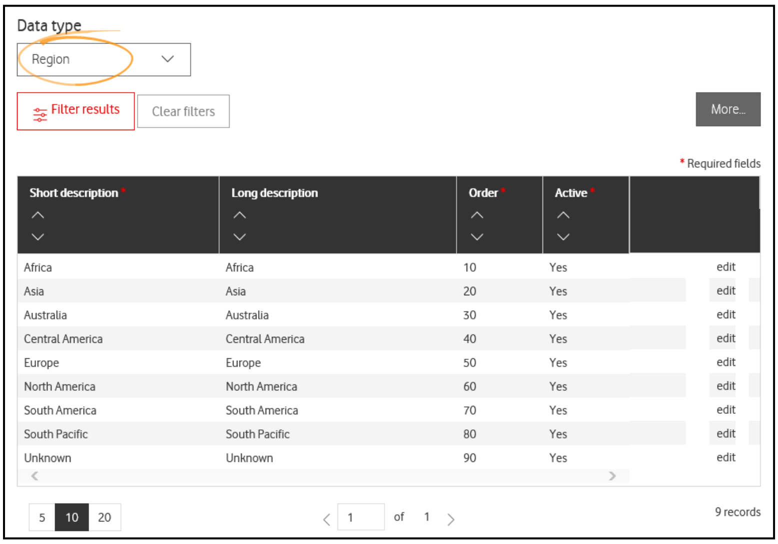
> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with the list of available regions

Use the Region Reference Data to view and edit details about geographical regions.

To work with region data

1. Go to the **Region** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

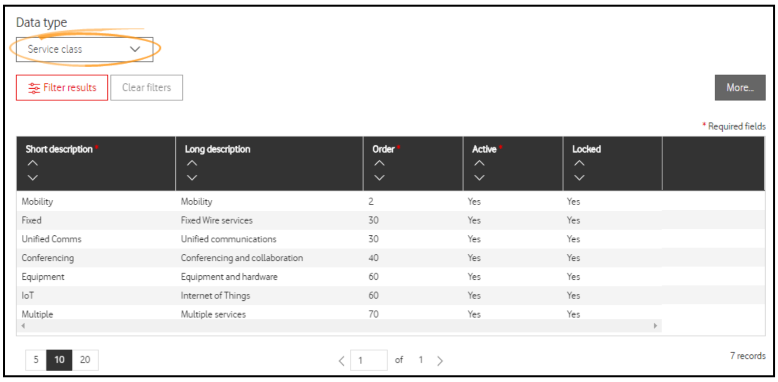
> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with service class data

Use the Service Class Reference Data to view and edit details about the class of service such as *Wireless*, *Data*, or *Voice*.

To work with service class data

1. Go to the **Service class** Reference Data page as described in 'Work with reference data' on page 247.
2. The Service Class grid displays the following information about the available values:



Short description *	Long description	Order *	Active *	Locked
Mobility	Mobility	2	Yes	Yes
Fixed	Fixed Wire services	30	Yes	Yes
Unified Comms	Unified communications	30	Yes	Yes
Conferencing	Conferencing and collaboration	40	Yes	Yes
Equipment	Equipment and hardware	60	Yes	Yes
IoT	Internet of Things	60	Yes	Yes
Multiple	Multiple services	70	Yes	Yes

3. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

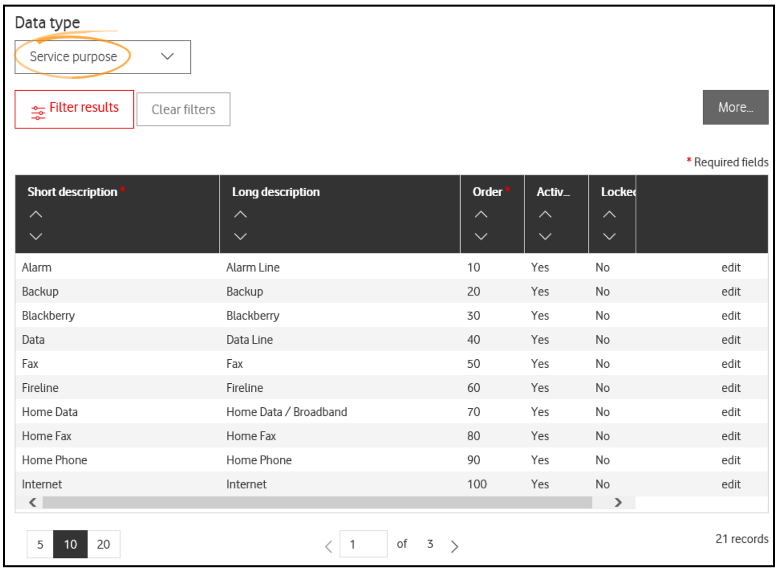
> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with service purpose data

Use the Service Purpose Reference Data to view and edit details about the purpose of a service, such as Calling Card, Broadband, or Circuit.

To work with service purpose data

1. Go to the **Service Purpose** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

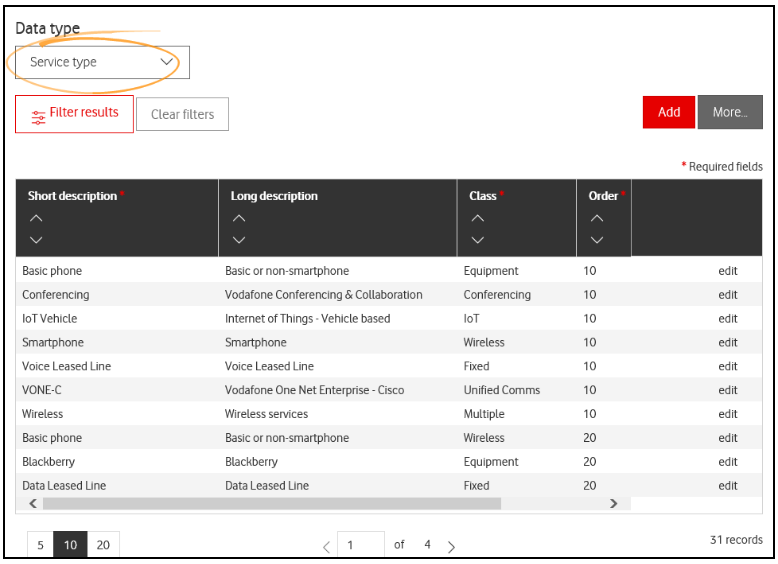
Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with service type data

Use the Service Type Reference Data to view and edit details about inventory such as Private Line, DID Number, and Access. Within VTR, the Service Types available depend on the selected Service Class. Therefore, when you define Service Types, you must also define the Service Class to which they belong.

To work with service type data

1. Go to the **Service type** Reference Data page as described in 'Work with reference data' on page 247.



2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

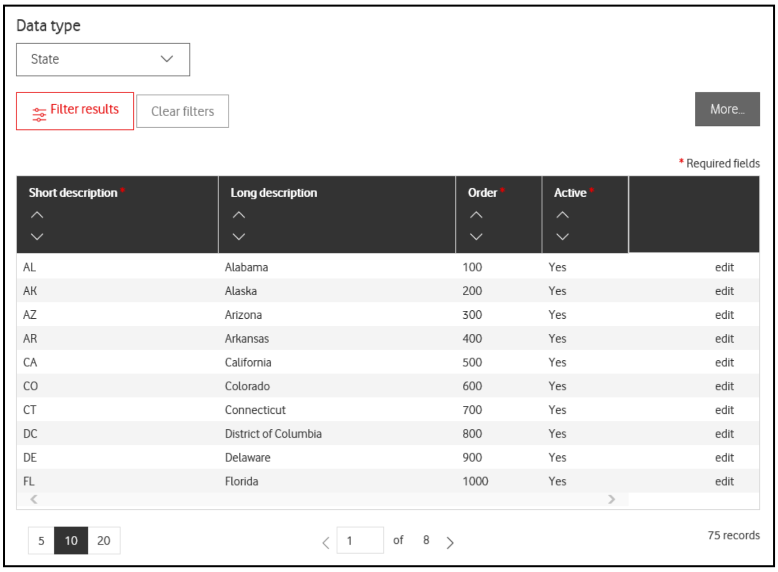
Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with the list of available states

Use the State Reference Data to view and edit details about international province names and United States state names.

To work with state data

1. Go to the **State** Reference Data page as described in 'Work with reference data' on page 247.



Short description *	Long description	Order *	Active *	
AL	Alabama	100	Yes	edit
AK	Alaska	200	Yes	edit
AZ	Arizona	300	Yes	edit
AR	Arkansas	400	Yes	edit
CA	California	500	Yes	edit
CO	Colorado	600	Yes	edit
CT	Connecticut	700	Yes	edit
DC	District of Columbia	800	Yes	edit
DE	Delaware	900	Yes	edit
FL	Florida	1000	Yes	edit

2. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

> Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Work with user groups settings

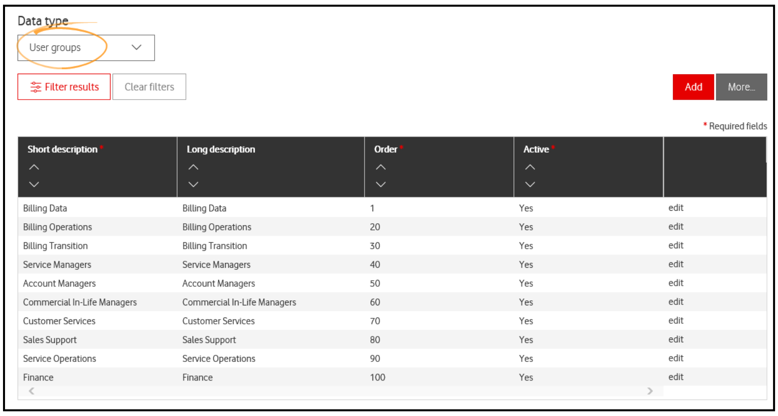
Use the User Groups Reference Data to view and edit details about groups which will be used to identify types of users by role or department.

The default user groups are

- Account Managers
- Billing Data
- Billing Operations
- Billing Transition
- Commercial In-Life Managers
- Customer Services
- Finance
- Sales Support
- Service Managers
- Service Operations

To work with user groups

1. Go to the **User groups** Reference Data page as described in 'Work with reference data' on page 247.
2. The User groups grid displays the following information about the available values:



Short description *	Long description	Order *	Active *	
Billing Data	Billing Data	1	Yes	edit
Billing Operations	Billing Operations	20	Yes	edit
Billing Transition	Billing Transition	30	Yes	edit
Service Managers	Service Managers	40	Yes	edit
Account Managers	Account Managers	50	Yes	edit
Commercial In-Life Managers	Commercial In-Life Managers	60	Yes	edit
Customer Services	Customer Services	70	Yes	edit
Sales Support	Sales Support	80	Yes	edit
Service Operations	Service Operations	90	Yes	edit
Finance	Finance	100	Yes	edit

3. From here, you can edit or export data. Note that you cannot remove data. If you no longer want to use the data, click **edit**, and then set **Active** to **No**.

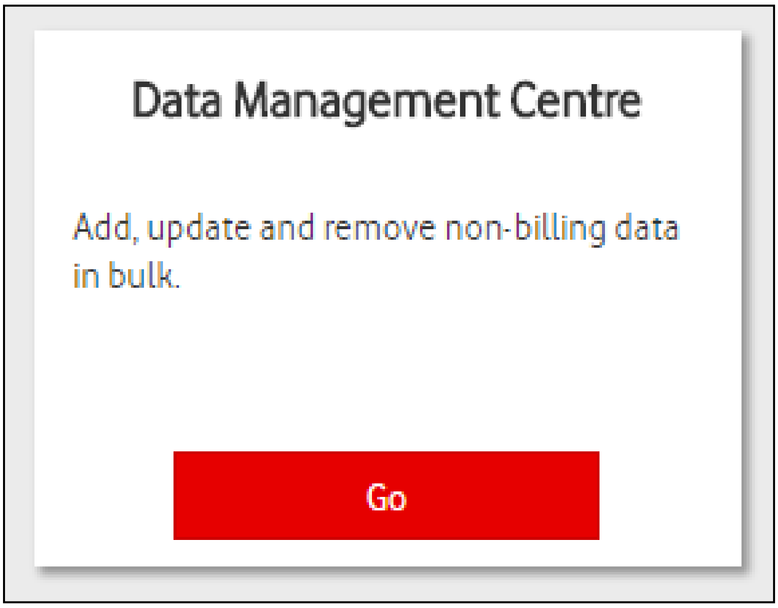
Customer Administrators, Commercial Administrators, Billing Administrators and Level 1 Support Administrators may only view reference data; Level 2 Support Administrators, and Level 3 Super Administrators may be able to add or edit certain reference data.

Upload and manage data in bulk

After initial customer set-up, you can upload credit notes, services, services (historical) and cost codes to your customer schema using the Data Management Centre (DMC). This bulk upload process enables you to populate your schema with a large amount of data quickly, rather than just one item at a time.

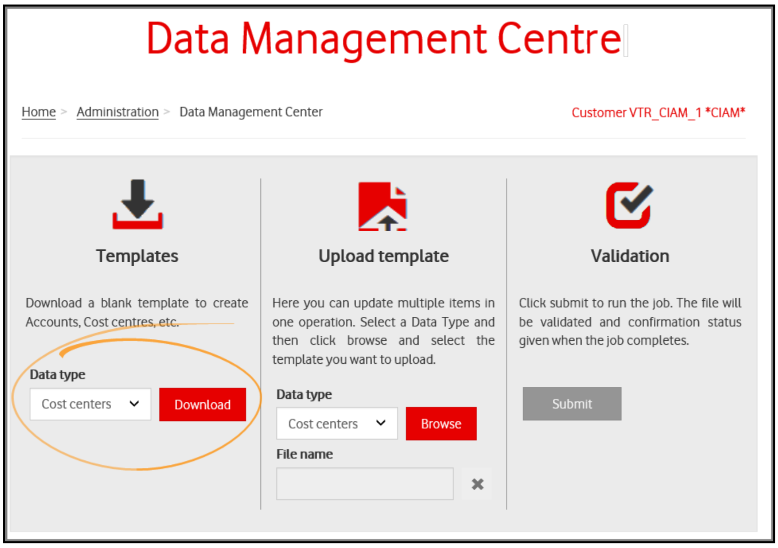
To upload data in bulk

1. From the VTR menu, click **Administration**.
2. On the **Data Management Centre** tile, click **Go**.



3. Download a template for the data you want to add to your schema. You may work with Users, User-Accounts, Services, Cost Code data or Exchange Rate data.

   On the **Templates** panel of the Data Management Centre, drop down the **Data type** list and choose the desired template, and then click **Download**.
   In the Save as dialog box that appears, choose the path where you want to save the file, and then click **Save**.

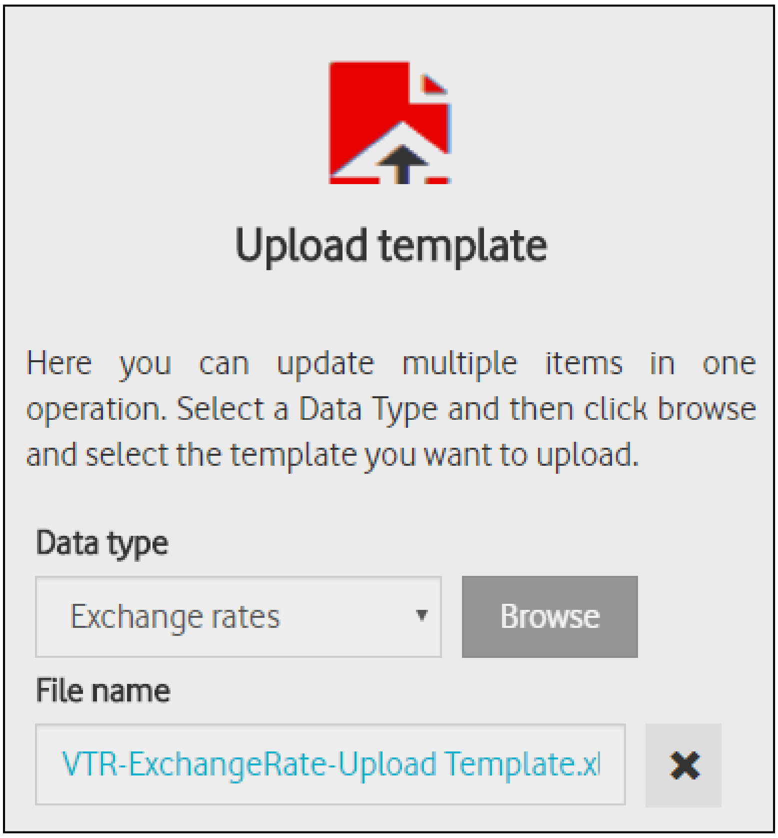


4. Complete the data template. For more information, see:
    - 'Complete the Accounts upload template' on page 265
    - 'Complete the Cost centre upload template' on page 267
    - 'Complete the Exchange rate upload template' on page 269
    - 'Complete the Services upload template' on page 270
    - 'Complete the Services (Historical) upload template' on page 273

If VTR is configured to accept Vodafone's update of exchange rates in the Configuration>Customer Configuration>Customer Information page, then you will not have the option for upload Exchange Rates here.

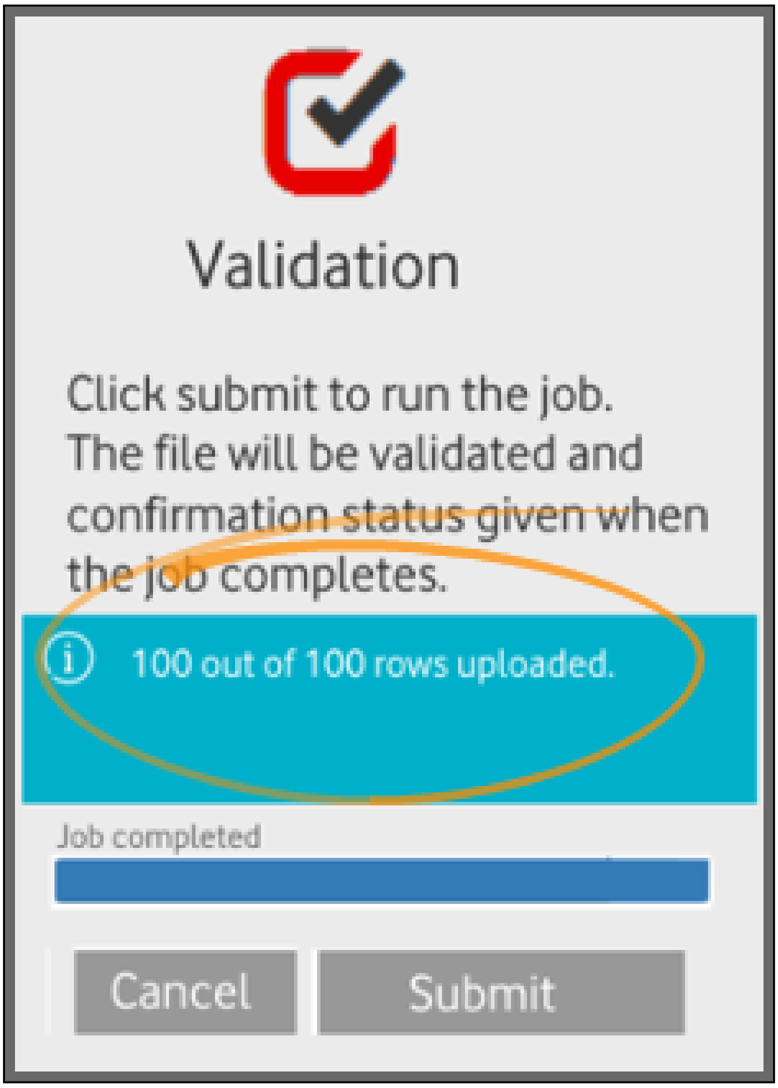
If you see the error, "This value doesn't match the data validation restrictions defined for this cell," then you have typed more characters in the cell than are supported: for example, 150 for first name and last name and 256 for supervisor email.

5. Once the template is complete, you can upload the data into a staging area where it will be stored until VTR validates the data, gives you the opportunity to fix problems, and then imports the data into the active schema.
   On the middle Upload Template panel, drop down the **Data type** list and choose the type of data you are uploading, and then click **Browse**. Navigate to the location of the file you want to upload, and then click **Open**. The file name appears in the **File name** box. VTR supports import of xlsx files from Microsoft® Excel 2007 and later.



6. To begin validating the data, click **Submit**. VTR launches a job to verify all required data and displays a status bar to indicate that job's progress. Note that you can submit only one validation job per data type at a time. If you attempt to submit a second, you will see a warning message.

- If the data passes the validation check, then VTR immediately imports it into the active schema, and you will see a message indicating the number or rows successfully imported. This data will be available right away.



- If any of the data fails the validation check, you will see the Bulk upload validation window which lists all errors. Correct the errors to continue with the upload. To learn how, see 'Correct data errors in your bulk upload' on page 274 on page 'Correct data errors in your bulk upload' on page 274Once corrected, click **Submit** to push that data into the active schema. The data will be available right away.

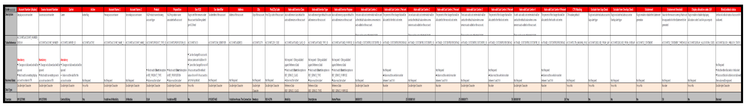
Complete the Accounts upload template

Using the Data Management Centre (DMC), you can upload account information in bulk. Download the Accounts template as described in 'Upload and manage data in bulk' on page 262, and then complete it with the information that you want to upload into your customer schema.

> If this is your second upload, then new data will be appended. You may use a blank template each time you upload data; existing data will not be removed.

1. Open the Accounts template in Microsoft Excel.

   The template is pre-populated with sample data and the following information about each data field that is available for specification.

   - **Description**: A brief description of the data you are uploading for adding/deleting/updating.
   - **Table Reference**: The internal database table into which the data will be imported.
   - **Business Rules**: How to properly specify the data. For example, whether the field is mandatory, what format it should be in, and what information it should contain. If your data does not follow the business rules, it will fail validation once you try to import it.
   - **Data Type**: For example, reference data, numeric data, or alpha-numeric text.
   - **Example**: An example of a valid data entry (there may be more than 1 row of examples).
2. To upload data, add a new row for each Account you want to add (starting on row 7), and then specify the following required information in each column.
   WARNING: When entering data (including copy-paste) into the template, it is important that the data be in the proper format. Data types are included below.
   - **B Account Number (display)**: Type the displayed account number. This field is required. Data type is *Text*.
   - **C Source Account Number**: Type the source account number. This field is required. Data type is *Text*.
   - **D Carrier**: Type the carrier for the account. This field is required. Data type is *Text*.
   - **E Active.** Indicate if this is an active account, **Yes** or **No**. Data type is *Text*.
   - **F Account Name 1**: Type the primary account name. Data type is *Text*.
   - **G Account Name 2**: Type the secondary account name. Data type is *Text*.
   - **H Product.**: Type the package or product for the account. This field is required. Data type is *Text*.
   - **I Proposition.**: Type the VGE proposition of a product for the account. This field is required. Data type is *Text*.
   - **J Use VCO.**: Type the Setting to update services per VCO feed, **Yes** or **No**. This field is required. Data type is *Text*.
   - **K Tax Identifier.**: Type the tax identifier that is associated with the account. Data type is *Text*.
   - **L Address.**: Type the address of the account. Data type is *Text*.
   - **M City.**: Type the city of this account. Data type is *Text*.
   - **N Post/Zip Code.**: Type the postal or zip code of this account. Data type is *Text*.

- **O Auto-add Service Class.**: Type the default service class for services that are added automatically to this account during bill loading. Data type is *Text*.
- **P Auto-add Service Type.**: Type the default service type for services that are added automatically to this account during bill loading. Data type is *Text*.
- **Q Auto-add Service Purpose.**: Type the default service purpose for services that are added automatically to this account during bill loading. Data type is *Text*.
- **R-Y**: [Optional] Repeat for each Cost Centre/Percent level in the hierarchy sequentially, specifying up to 4 cost centre|percent pairs in total. Type the default allocation cost centre codes for new services on this account, and then type the percentages for those cost centres. Data type is *Text/Numeric*.
- **Z CTN Masking.**: Type the CTN masking default for this account. Data type is *Text*.
- **AA Exclude from Gap Check.**: Type **Yes** or **No** to indicate this account is excluded from gap checking. Data type is *Text*.
- **AB Exclude from Overlap Check**: Type **Yes** or **No** to indicate this account is excluded from overlap checking. Data type is *Text*.
- **AC E-statement**: Indicates whether e-statements will be sent for this account. This column will be populated only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.
- **E-statement threshold**: Value (in the invoice currency) that must be surpassed in for the E-statement to be generated.
- **Display allocation codes 3/4**: Flag to enable or disable displaying allocation codes 3 and 4 in your reports.
- **Block/unblock status**: Set block/unblock status of the account, if allowed.

> ⓘ Before exporting data from the Account page to the template, make sure you have **E-statements** column available in the Accounts list. Otherwise the **E-statement** column will not be populated in the template.

3. Save the file, and then upload according to the instructions in 'Upload and manage data in bulk' on page 262.

Complete the Cost centre upload template

Using the Data Management Centre (DMC), you can upload cost centre information in bulk. Download the Cost centre template as described in 'Upload and manage data in bulk' on page 262, and then complete it with the information that you want to upload into your customer schema.

> ⓘ If this is your second upload, then new data will be appended. You may use a blank template each time you upload data; existing data will not be removed.

1. Open the Cost centre template in Microsoft Excel.

   The template is pre-populated with sample data and the following information about each data field that is available for specification.

Guide	Cost Centre 1	Cost Centre 1 Dept	Cost Centre 2	Cost Centre 2 Dept	Cost Centre 3	Cost Centre 3 Dept	Cost Centre 4	Cost Centre 4 Dept	Cost Centre 5	Cost Centre 5 Dept
Description:	Cost Code for first level	Department name for first level	Cost Code for second level	Department name for second level	Cost Code for third level	Department name for third level	Cost Code for forth level	Department name for forth level	Cost Code for fifth level	Department name for fifth level
Table Reference:	ALLOCATION_CODES.Allocation_Code	ALLOCATION_CODES.Department								
Business Rules:	Mandatory	Mandatory	Not Required	"**Unknown**" will be the default for null values	Not Required	"**Unknown**" will be the default for null values	Not Required	"**Unknown**" will be the default for null values	Not Required	"**Unknown**" will be the default for null values
Data Type:	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character	Double-byte Character
Example:	000001	Global Company Name	100000	North America	200000	US	210000	California	IT-Dept	210123

- **Description**: A brief description of the data you are uploading for adding/deleting/updating.
- **Table Reference**: The internal database table into which the data will be imported.
- **Business Rules**: How to properly specify the data. For example, whether the field is mandatory, what format it should be in, and what information it should contain. If your data does not follow the business rules, it will fail validation once you try to import it.
- **Data Type**: For example, reference data, numeric data, or alpha-numeric text.
- **Example**: An example of a valid data entry (there may be more than 1 row of examples).

2. To upload data, add a new row for each Cost centre hierarchy you want to add (starting on row 7), and then specify the following required information in each column.
   WARNING: When entering data (including copy-paste) into the template, it is important that the data be in the proper format. Data types are included below.

- **B Cost Centre 1**: Type the name of the Cost Code for the first level in the hierarchy. This field is required. Data type is *Text*.
- **C Cost Centre 1 Dept.**: Type the department name for this first level. This field is required. Data type is *Text*.
- **D-K**: [Optional] Repeat for each Cost Code level in the hierarchy sequentially, specifying up to 5 cost centre|department pairs in total. Data type is *Text/Text*.

> Each child level in a hierarchy can have only one parent cost centre. So if the cost centre already exists, and you want to create new level in the cost centre hierarchy, repeat the parent, and specify a new child entry. For example:
> CC1>cca
> BB1>cca
> Is not valid. "cca" must have only one parent, either CC1 or BB1, not both.
> Valid entries are
> CC1>cca
> CC1>cca>BBB

3. Save the file, and then upload according to the instructions in 'Upload and manage data in bulk' on page 262.

Complete the Exchange rate upload template

Using the Data Management Centre (DMC), you can upload exchange rate information in bulk Download the Exchange Rate template as described in 'Upload and manage data in bulk' on page 262, and then complete it with the information that you want to upload into your customer schema.

1. Open the Exchange rate upload template in Microsoft Excel.

   The template is pre-populated with sample data and the following information about each data field that is available for specification.

Guide	Currency Code	Exchange rate	Start date	End date
Description:	ISO Currency Code	Exchange Rate conversion for EUR	Date when rate goes into effect	Date when rate expires
Table Reference:	CURRENCY_EXCHANGE_RATES.Conversion_**Currency_ID**	CURRENCY_EXCHANGE_RATES.**Exchange_Rate**	CURRENCY_EXCHANGE_RATES.**Start_Date**	CURRENCY_EXCHANGE_RATES.**End_Date**
Business Rules:	Mandatory - (String validated against Reference Data) • Currency code must not equal EUR as this is the base currency in the system. • Must match Short description in REF_CURRENCY	Mandatory	Mandatory • Format must be (dd/mm/yyyy)	Mandatory • Format must be (dd/mm/yyyy)
Data Type:	Reference Data - (REF_CURRENCY)	Numeric. Suppports up to 10 decimals	Date	Date
Example:	AUD	1.5209	01/03/2017	31/03/2017

   - **Description**: A brief description of the data you are uploading for adding/deleting/updating.
   - **Table Reference**: The internal database table into which the data will be imported.
   - **Business Rules**: How to properly specify the data. For example, whether the field is mandatory, what format it should be in, and what information it should contain. If your data does not follow the business rules, it will fail validation once you try to import it.
   - **Data Type**: For example, reference data, numeric data, or alpha-numeric text.
   - **Example**: An example of a valid data entry (there may be more than 1 row of examples).
2. To upload data, add a new row for each Exchange Rate you want to add (starting on row 7), and then specify the following information in each column. All fields are required for each row, **WARNING**: When entering data (including copy-paste) into the template, it is important that the data be in the proper format. Data types are included below.
   - **B Currency Code**: Type the three letter **Currency code**. This code must match one specific in Currency Reference Data. See'Work with currency data' on page 253. Note that if you add a new currency code, then the start and end dates must not overlap those of the existing code. If they do, VTR will issue a validation error and you will have to either change the dates or remove the entire exchange rate entry before you can upload. Data type is *Text*.
   - **C Exchange Rate**: Type the **Exchange Rate** conversion with the Euro. You may use up to 10 decimal places. Data type is *Numeric*.
   - **D Start Date**: Type the **Start date** on which the new rate takes effect. You must specify the date in the format mm/dd/yyyy. Data type is *Date*.
   - **E End Date**: Type the **End date** in which the new rate expires. Data type is *Date*.
3. Save the file, and then upload according to the instructions in 'Upload and manage data in bulk' on page 262

Warning: You may not update the Euro currency exchange rate. If you add Euro to the template, then VTR will trigger a validation error upon Upload. To correct that error on the Bulk Upload Validation page, click the remove link on the Euro row.

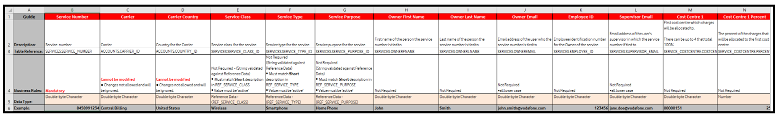
Complete the Services upload template

Using the Data Management Centre (DMC), you can upload service information in bulk. Download the Services template as described in 'Upload and manage data in bulk' on page 262, and then complete it with the information that you want to upload into your customer schema.

If this is your second upload, then new data will be appended. You may use a blank template each time you upload data; existing data will not be removed.

1. Open the Services template in Microsoft Excel.

   The template is pre-populated with sample data and the following information about each data field that is available for specification. Note that there is a large amount of metadata associated with services; therefore, you will need to scroll horizontally to see all the available columns.

   - **Description**: A brief description of the data you are uploading for adding/deleting/updating.
   - **Table Reference**: The internal database table into which the data will be imported.
   - **Business Rules**: How to properly specify the data. For example, whether the field is mandatory, what format it should be in, and what information it should contain. If your data does not follow the business rules, it will fail validation once you try to import it.
   - **Data Type**: For example, reference data, numeric data, or alpha-numeric text.
   - **Example**: An example of a valid data entry (there may be more than 1 row of examples).
2. To upload data, add a new row for each service you want to modify (starting on row 7), and then specify the following required information in each column.
   WARNING: When entering data (including copy-paste) into the template, it is important that the data be in the proper format. Data types are included below.
   - **B Service Number**: The unique number to identify the service. This field is required. Data type is *Text*.
   - **C Carrier**: The service provider identified on the invoice as the provider of the communications services. You may not edit this value. Data type is *Text*.
   - **D Carrier country**: The country associated with the carrier providing the service. You may not edit this value. Data type is *Text*.

- **E Service Class.**: The class of service, such as Wireless, Data, or Voice. Click in the cell to drop down a list of available choices. Data type is *Text*.
- **F Service Type**: The type of service, which depends on the service class. Maximum 100 characters. Data type is *Text*.
- **G Service Purpose**: How the service is going to be used, such as Data Line, Fax Server, or Internet. Maximum 100 characters. Data type is *Text*.
- **H Owner First Name**: The first name of the person to whom the service is tied. Maximum 150 characters. Data type is *Text*.
- **I Owner Last Name**: The last name of the person to whom the service is tied. Maximum 150 characters. Data type is *Text*.
- **J Owner Email**: The Email address of the person to whom the service number is tied. Use lower case, Maximum 256 characters. Data type is *Text*.
- **K Employee ID**: The Employee ID associated to a service. Data type is *Text*.
- **L Supervisor Email**: The email address of the service owner's supervisor. Use lower case. Maximum 256 characters. Data type is *Text*.
- **M-T Cost Centre 1-4/Cost Centre Percent 1-4**: [Optional] Repeat for each Cost Centre/Percent level in the hierarchy sequentially, specifying up to 4 cost centre|department pairs in total. Data type is *Text/Numeric*.
- **U Location A Address 1**: The street address associated with Location A on the service. Maximum 150 characters. Data type is *Text*.
- **V Location A Address 2**: The second street address associated with Location A on the service. Maximum 150 characters. Data type is *Text*.
- **W Location A City**: The city associated with Location A on the service. Maximum 50 characters. Data type is *Text*.
- **X Location A State**: The state or province associated with Location A on the service. Click in the cell to drop down a list of available choices. Data type is *Text*.
- **Y Location A Postal Code**: The postal code associated with Location A on the service. Maximum 50 characters. Data type is *Text*.
- **Z Location A Country**: The country associated with Location A on the service. Click in the cell to drop down a list of available choices. Data type is *Text*.
- **AA Location B Address 1**: The street address associated with Location B on the service. Maximum 150 characters. Data type is *Text*.
- **AB Location B Address 2**: he second street address associated with Location B on the service. Maximum 150 characters. Data type is *Text*.
- **AC Location B City**: The city associated with Location B on the service. Maximum 50 characters. Data type is *Text*.
- **AD Location B State**: The state or province associated with Location B on the service. Click in the cell to drop down a list of available choices. Data type is *Text*.

- **AE Location B Postal Code**: The postal code associated with Location B on the service. Maximum 50 characters. Data type is *Text*.
- **AF Location B Country**: The country associated with Location B on the service. Click in the cell to drop down a list of available choices. Data type is *Text*.
- **AG IMEI**: The international mobile equipment identity number of the device using this service. Maximum 50 characters. Data type is *Text*.
- **AH SIM Number**: The integrated circuit card identifier number on the SIM card in the device. Maximum 50 characters. Data type is *Text*.
- **AI Manufacturer**: The Manufacturer of the device using this service. Maximum 255 characters. Data type is *Text*.
- **AJ Model Type**: The device model, such as iPhone or Galaxy. Maximum 255 characters. Data type is *Text*.
- **AK Operating system**: The operating system used by the device. Maximum 50 characters. Data type is *Text*.
- **AL Contact Start Date**: The date on which the contract starts. dd/mm/yyyy. Data type is *Date*.
- **AM Contract End Date**: The date on which the contract ends. dd/mm/yyyy. Data type is *Date*.
- **AN Warranty Start Date**: The date on which the warranty takes effect. dd/mm/yyyy. Data type is *Date*.
- **AO Warranty End Date**: The date on which the warranty expires. dd/mm/yyyy. Data type is *Date*.
- **AP CTN Masking Rule**: Indicates the masking rule for the CTN. Yes/No. When this value is **Yes**, the last four digits of the customer telephone number will be replaced with asterisks, to ensure privacy. Data type is *Text*.
- **AQ-AT Custom Attribute 1-4**: Represents any data, but typically represents an Allocation code from Gemini. These fields can only be updated if the **VCO (UK only)** flag on the Account is set to **No**. Data type is *text*.
- **AU Price Plan Code**: The code for the price plan. This field can only be updated if the **VCO (UK only)** flag on the Account is set to **No**. Data type is *text*.
- **AV Price Plan Description**: The description of the price plan. This field can only be updated if the **VCO (UK only)** flag on the Account is set to **No**. Data type is *text*.
- **AW Estatements**: Indicates whether e-statements will be sent for this service. This column will be populated only if in **Configuration > Customer configuration**, the **Customer uses e-statements** option is set to **Yes**.
- **VIP**: Indicates if this service is VIP and therefore will not be blocked if the account is blocked.
- **Temporary block /unblock action**: Temporary action to block or unblock service.
- **Temporary block /unblock reason**: Reason for temporary block or unblock service.
- **Temporary block /unblock start date**: The start date for the temporary block or unblock service.
- **Temporary block /unblock end date**: The end date for the temporary block or unblock service.

> ⓘ Before exporting data from the Services page to the template, make sure you have **E-statements** column available in the Services list. Otherwise the **Estatement** column will not be populated in the template.

> ⓘ If the Service is associated with more than one account, the VCO (UK Only) from the last account will be used to determine the business rules pertaining to editing.

3. Save the file, and then upload according to the instructions in 'Upload and manage data in bulk' on page 262.

   You will be able to view the changes made in the Services audit trail. See Audit a record's change history.

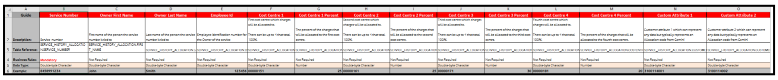
Complete the Services (Historical) upload template

Using the Data Management Centre (DMC), you can upload service (historical) information in bulk. Download the Services (Historical) template as described in 'Upload and manage data in bulk' on page 262, and then complete it with the information that you want to upload into your customer schema.

> ⓘ If this is your second upload, then new data will be appended. You may use a blank template each time you upload data; existing data will not be removed.

1. Open the Services (Historical) template in Microsoft Excel.

   The template is pre-populated with sample data and the following information about each data field that is available for specification. Note that there is a large amount of metadata associated with services; therefore, you will need to scroll horizontally to see all the available columns.

   - **Description**: A brief description of the data you are uploading for adding/deleting/updating.
   - **Table Reference**: The internal database table into which the data will be imported.
   - **Business Rules**: How to properly specify the data. For example, whether the field is mandatory, what format it should be in, and what information it should contain. If your data does not follow the business rules, it will fail validation once you try to import it.
   - **Data Type**: For example, reference data, numeric data, or alpha-numeric text.
   - **Example**: An example of a valid data entry (there may be more than 1 row of examples).
2. To upload data, add a new row for each service you want to modify (starting on row 7), and then specify the following required information in each column. Up to 10K rows can be imported from a single template.
   WARNING: When entering data (including copy-paste) into the template, it is important that the data be in the proper format. Data types are included below.

- **B Service Number**: (Mandatory) The unique number to identify the service. Data type is *Text*.
- **C Owner First Name**: The first name of the person to whom the service is tied. Maximum 150 characters. Data type is *Text*.
- **D Owner Last Name**: The last name of the person to whom the service is tied. Maximum 150 characters. Data type is *Text*.
- **E Employee Id**: The employee id associated to the service. Data type is *Text*.
- **F-M Cost Centre 1-4/Cost Centre Percent 1-4**: (Optional) Repeat for each Cost Code level in the hierarchy sequentially, specifying up to 4 cost centre/percentage pairs in total. Data type is *Text/Numeric*.
- **N-Q Custom Attribute 1-4**: Customer attribute which can represent any data, but typically represents an Allocation code from Gemini. . These fields can only be updated, if the VCO (UK Only) on the account is set to **No**. Otherwise, these fields will be disabled from editing. Data Type is *Text*.
- **R Price Plan Code**: The code for the price plan. This field can only be updated if the **VCO (UK only)** flag on the Account is set to **No**. Data type is *text*.
- **S Price Plan Description**: The description of the price plan. This field can only be updated if the **VCO (UK only)** flag on the Account is set to **No**. Data type is *text*.
- **T Effective Start Date**: The start date for the historical owner first and last name, or cost centre | percentage change. You must specify the date in the format dd/mm/yyyy. Data type is *Date*.
- **U Effective End Date**: The end date for the change of historical owner first and last name, or cost centre |percentage. You must specify the date in the format dd/mm/yyyy. Data type is *Date*.

> If the Service is associated with more than one account, the VCO (UK Only) from the last account will be used to determine the business rules pertaining to editing.

3. Save the file, and then upload according to the instructions in 'Upload and manage data in bulk' on page 262.

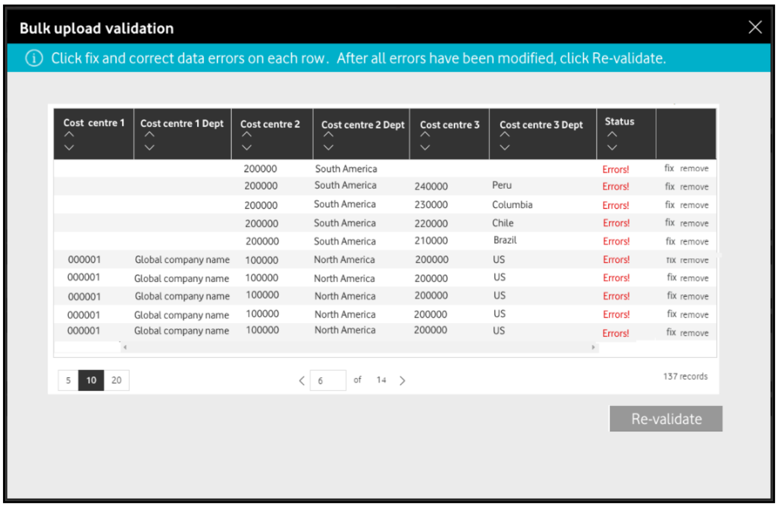
4. Click **Submit** to begin the validations. When the DMC upload completes successfully, the service cost centre(s) or service owner first and last name will be updated on BILLING RECORDS for this service where the usage date falls within the effective start and end dates (inclusive). Updates will be audited.

You will be able to view the changes made in the Services audit trail. See Audit a record's change history.

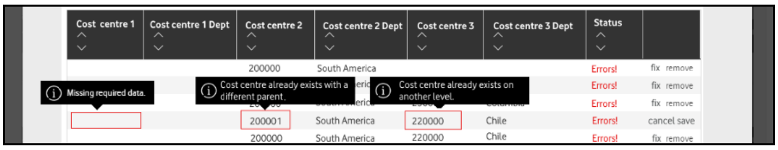
Correct data errors in your bulk upload

If VTR detects errors while validating your bulk upload of data from the DMC as described in 'Upload and manage data in bulk' on page 262 it will present those errors in a table, giving you the opportunity to correct them and resubmit the upload job.

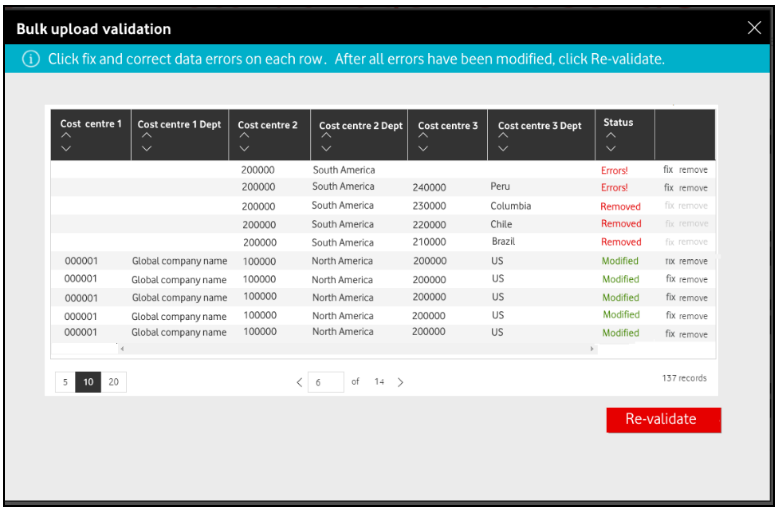
1. Review the errors that appear on the Bulk upload validation screen.



2. At the end of the first row that you want to correct, click **fix**.
   Data validation errors are outlined in red with a call out message describing the error, such as "Missing required data".



3. Correct the incorrect data or enter the missing data. For more information on what data should appear, see
   - 'Complete the Accounts upload template' on page 265
   - 'Complete the Cost centre upload template' on page 267
   - 'Complete the Exchange rate upload template' on page 269
   - 'Complete the Services upload template' on page 270
   - 'Complete the Services (Historical) upload template' on page 273
4. At the end of the edited row, click **save**. The status of the row changes from Error to Modified.



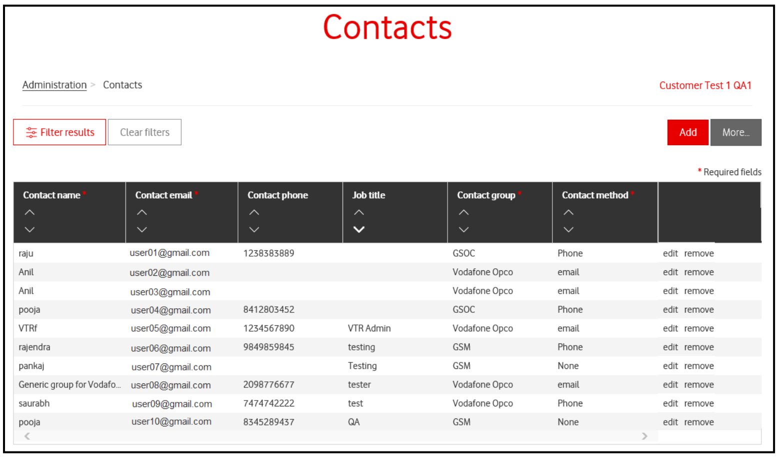
5. If you want to delete the erroneous data, click the **remove** link at the end of the row.

6. When you have corrected or removed all bad data, click **Re-validate**. VTR re-validates all data. If it detects more errors, you will return to this page to correct them, If not, then VTR uploads the data into the customer schema immediately.

Specify customer contacts

From the Contacts page, you can add, edit, and remove key contacts in the company.

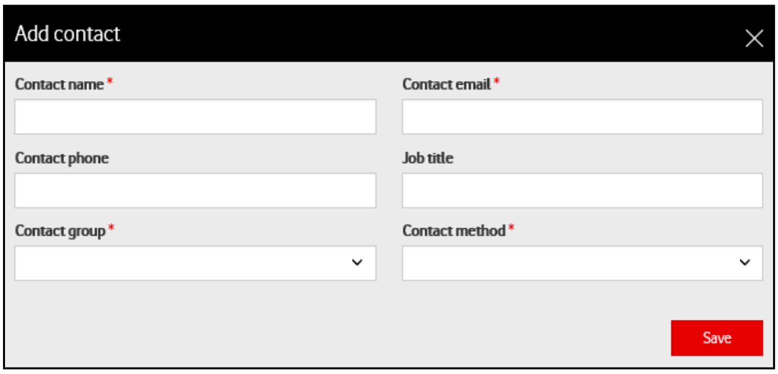
1. From the VTR menu, choose **Administration**.
2. On the Administration page **Contacts** tile, click **Go**.



3. Review the following information about existing contacts:
   - **Contact name**: The name of the contact.
   - **Contact email**: The email address of the contact person.
   - **Contact phone**: The phone number of the contact person.
   - **Job title**: The contact's job title.
   - **Contact group**: The type of contact, such as support, admin, or stakeholder.
     - **Customer stakeholder**: The customer's service desk contacts and/or authorized contacts.
     - **Error notification group**: The internal operational support teams' contacts who should be notified when an error occurs. This group does not receive any automatic notifications.
     - **GSM**: The Global Service Manager. Global Account Manager, National Service Manager, and National Account Manager contacts.
     - **GSOC**: Contacts in the Global Service Operations Centre.
     - **Vodafone other**: Any other internal contacts directly related to the customer's VTR solution and services who would like their information to be registered in the customer's schema.
   - **Contact method**: The person's preferred method for being contacted, such as phone or email.
4. To narrow down the number of contacts you see, you can filter the list. Click the **Filter results** button and choose your criteria. See 'Filter the results' on page 13.
5. From here, you can add, edit, or remove contacts.

To add a contact

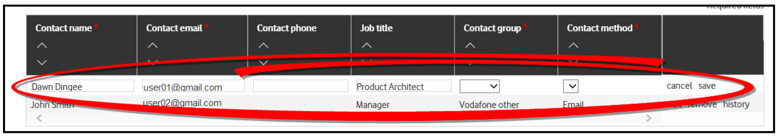
1. Above the Contacts grid, click **Add**.



2. On the Add Contact page, type the **Contact name** and **Contact email** in the boxes provided.
3. You can also type an optional **Contact phone** and **Job title**.
4. Drop down the **Contact group** list and choose from the available options.
5. Drop down the **Contact method** list and choose the preferred method of contacting this person: Phone or Email.

6. Click **Save**.
   The new contact is added to the Contacts grid.

To edit a contact's information

1. On the Contacts page of Customer Settings, locate the contact that you want to modify, and then click the **edit** link at the end of the row.
   Editable information is highlighted with an edit box.
   

2. Click in each box and delete, add, or edit text as desired.
3. In the **Contact group** column, you can drop down the field and choose from the available options.
4. Click the **save** link at the end of the row.

To delete a contact

1. On the Contacts page of Customer Settings, locate the contact that you want to delete, and then click the **remove** link at the end of the row.
2. On the confirmation message that appears, click **Yes**.

Work with Vodafone Usage Manager

Vodafone Usage Manager (VUM) enables you to monitor real-time mobile data usage within your company. The Vodafone Usage Manager package includes the following:

- **Vodafone Usage Manager (VUM)** - mobile app, available for iOS and Android. It enables employees to monitor the data usage against thresholds and receive alerts across different roaming zones. The features of the VUM mobile app are described in a separate guide, available upon request.
- **Vodafone Telecoms Reporting (VTR)** - reporting tool that enables customer admins to configure the Vodafone usage at company level by setting up thresholds and alerts.

Once VUM has been enabled at company level, you can start managing and configuring it:

- 'Configure Vodafone Usage Manager' on page 280
- 'Manage your user groups' on page 288
- ' View your usage zones' on page 293

Configure Vodafone Usage Manager

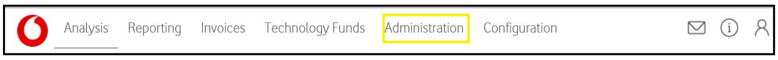
As a customer admin, VUM enables you to manage your company alerts and users, to create user groups or to view the usage zones. You can also configure VUM to send emails to alert the users of the mobile or their supervisors, as well as other contacts about high mobile data usage. This configuration will apply to all company employees registered to use the mobile VUM app.

Set up company alerts

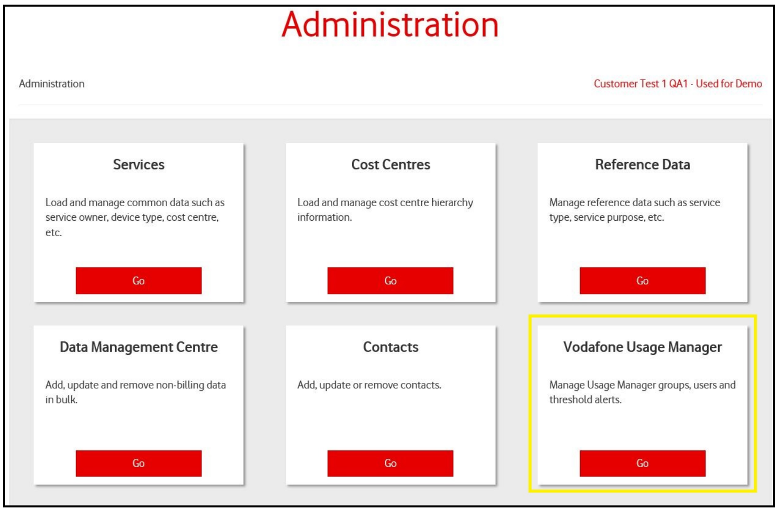
You need to configure the monthly thresholds and thresholds percentage alerts for all the usage zones within your company's tariff. Depending on the threshold and the percentage alerts set up at this level, the mobile VUM app will warn employees of their usage by colour codes:

- **green**: the predicted usage by the end of the month is less than the threshold.
- **amber**: the predicted usage is above the threshold. Users are likely to go beyond the threshold if the usage increases at the same rate.
- **red**: if the actual usage is already above the threshold.

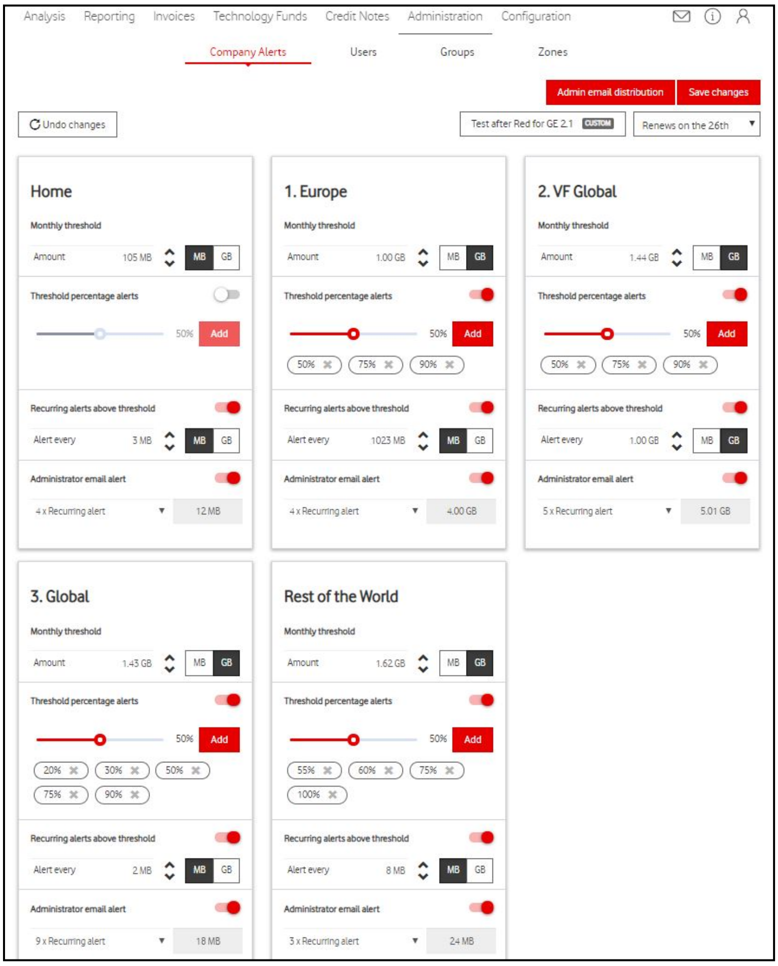
1. On the VTR Home page, click **Administration**.



2. On the Administration page, **Vodafone Usage Manager** tile, click **Go**.

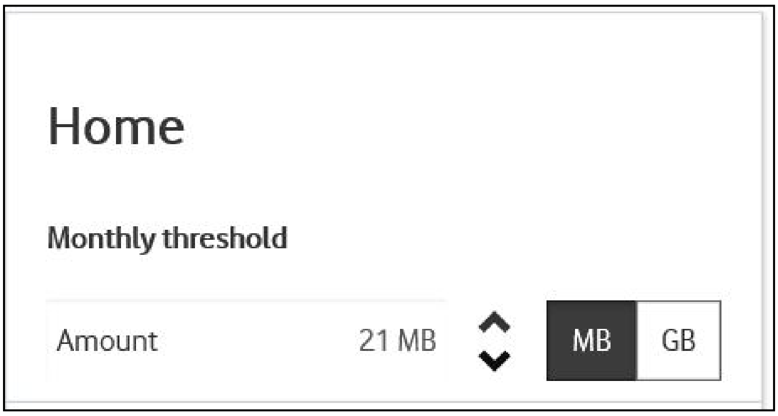


On the Usage Manage page, the **Company Alerts** tab opens, displaying the current alerts and thresholds for all zones.

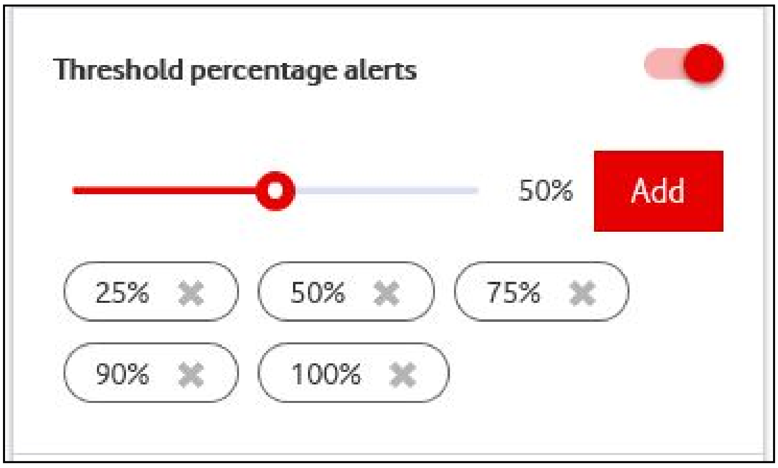


3. To change the settings, perform the following:

a. Click the up or down arrow to set up the monthly threshold for the Home plan:



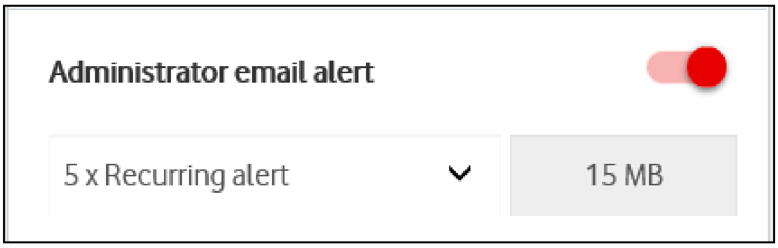
b. Use the selection bar to set up the percentage at which the VUM app will send usage notifications compared with the threshold, and then click **Add**.



c. Set up the recurring alert above threshold. For example, if this threshold is 500 MB, the VUM app will send alerts for every 500 MB consumed above the Home monthly threshold.

d. Set the **Administrator email alert** toggle to **Yes** to enable the VUM app to generate email alerts for high mobile data usage to the distribution list that you set up.

e. Drop down the list and select how often you want email alerts to be sent to the distribution list. For example, if the toggle is set to **Yes** and you select **5 x Recurring alert**, and your recurring alert is set to every 10 MB, the admin alerts will be sent every 50 MB of usage.



4. Set up the same monthly thresholds and their percentages for the roaming zones that have not been set to use the Home plan.
5. Click **Save Changes** to keep the new configuration.

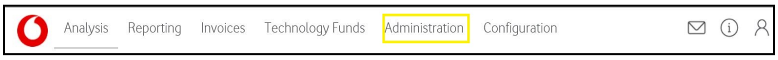
Manage admin alert email distribution

Alert emails are emails that VTR sends whenever an employee has exceeded the threshold set up at company, group or BAN level. As a Customer admin, you can create a distribution list that can receive email alerts, you can update it by adding or removing recipients, or you can delete the list altogether. You can also send the alert emails to the owner of the mobile and/or to their supervisor, if their email addresses have been provisioned. To learn how to provision the supervisor email, refer to 'Complete the Services upload template' on page 270.

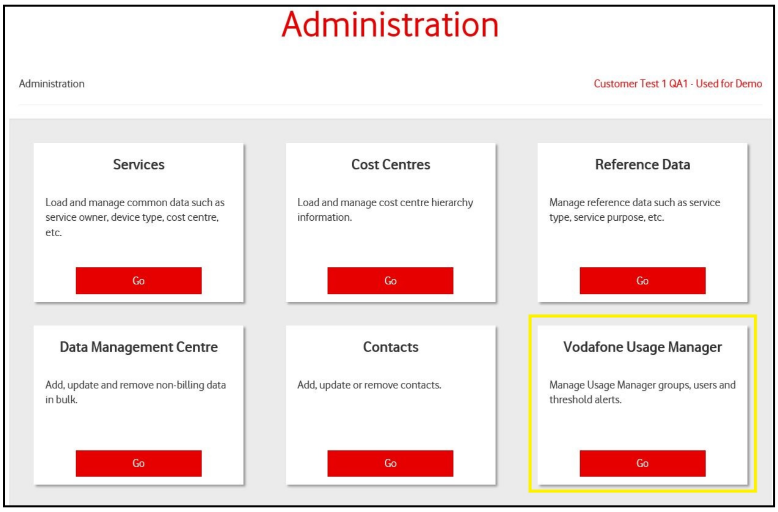
The **Admin email distribution** button is enabled on the Usage Manager page if the **Administrator email alert** toggle has been enabled for at least one usage zone. To learn how to enable the alerts toggle, refer to 'Set up company alerts' on page 280.

To create the email distribution list, follow these steps:

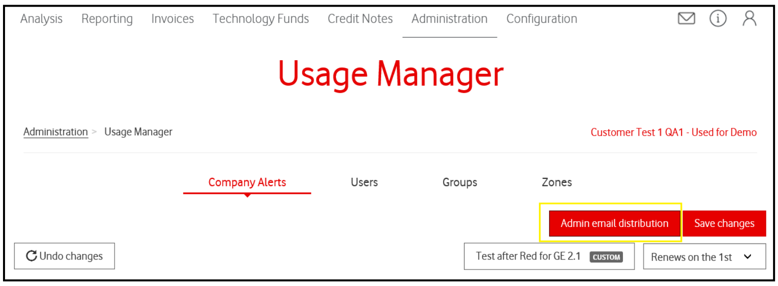
1. On the VTR Home page, click **Administration**.



2. On the Administration page, **Vodafone Usage Manager** tile, click **Go**.



3. On the Usage Manager page, click **Admin email distribution**.

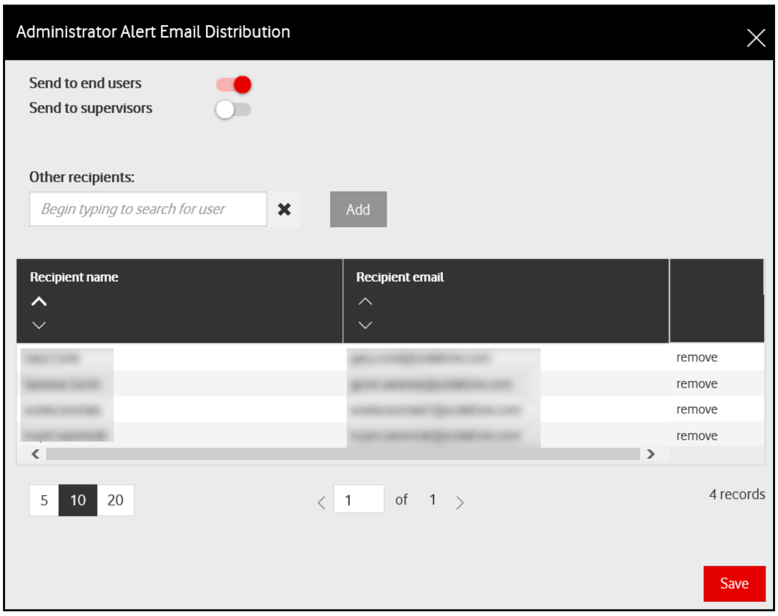


4. On the Administrator Alert Email Distribution page that opens, perform the following:

a. Slide the button to the right to send the alert email to end users and/or supervisors.

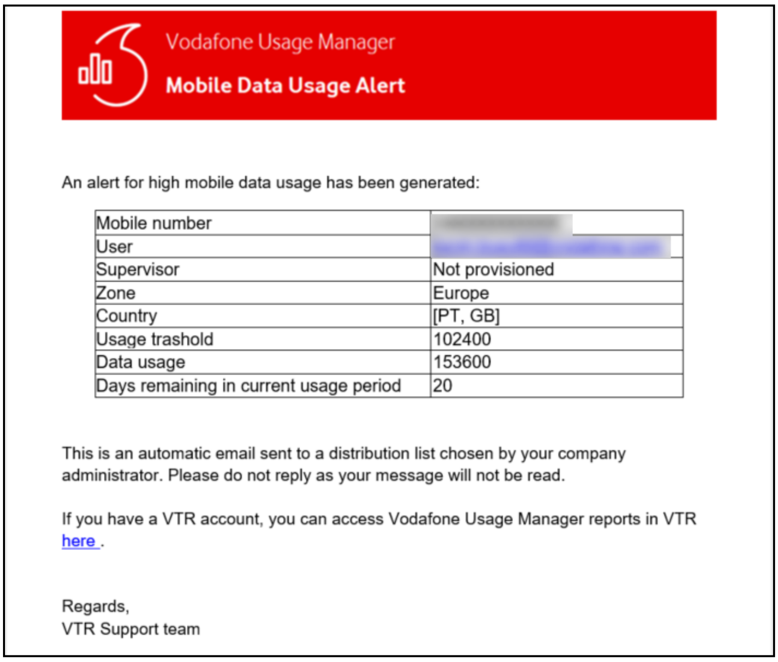
b. In the **Other recipients** field, start typing the name of the user you want to add as recipient, and then click **Add**.

The new recipient is added to the list.



c. (Optional) To remove any of the recipients, next to the name, click **remove**.

d. The recipients that you have set up will receive such an email alert:


Vodafone Usage Manager

Mobile Data Usage Alert

An alert for high mobile data usage has been generated:

Mobile number	[illegible]
User	[illegible]
Supervisor	Not provisioned
Zone	Europe
Country	[PT, GB]
Usage trashold	102400
Data usage	153600
Days remaining in current usage period	20

This is an automatic email sent to a distribution list chosen by your company administrator. Please do not reply as your message will not be read.

If you have a VTR account, you can access Vodafone Usage Manager reports in VTR here .

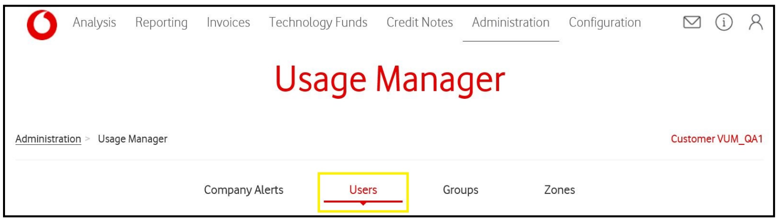
Regards,
VTR Support team

Manage VUM users

All the employees provisioned to use the mobile VUM app can be viewed on the **Users** tab. You can manage these users by allocating them to a user group or by changing the group they are part of. Alert settings in VUM are created at user group level so that all users in that group can have the same alerts applied. From this tab you can also send registration reminders to individual unregistered users or you can configure SMS reminders to be sent in bulk to unregistered users or to users who have been provisioned but have not registered.

To manage users, follow these steps:

1. Access VUM as described in 'Set up company alerts' on page 280.
2. The Usage Manager page opens on the **Usage Manager** tab by default. Click **Users**.

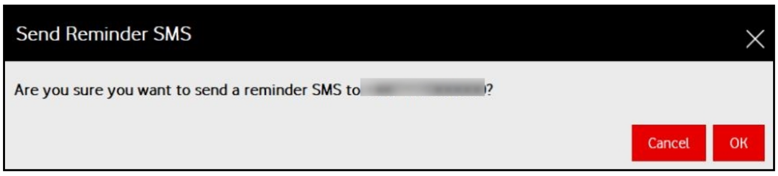


The Users tab displays a list of all the VUM users, with the following details:

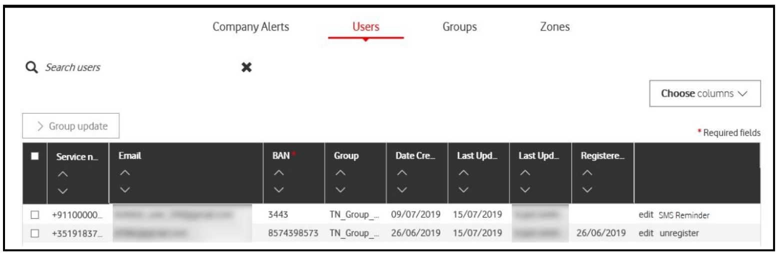
- **Service number** - The number attached to the service, for example, the phone number or conference identifier. This number is not masked by default. For details about call masking, refer to 'Configure call masking for a service' on page 241.
- **Email** - The email address of the user owning the service number.
- **BAN** - The Billing Account Number associated with the user.

- **Group** - The user group to which the employee belongs. Alert settings in VUM are created at this user group level.
- **Date Created** - The date when the user was added to the list of VUM users to be provisioned.
- **Last Update** - The last date when changes were applied to this user.
- **Last Updated by** - The VTR user who applied changes last to this user.
- **Registered since** - The date when the user has registered to the mobile VUM app.
- **Unregistered since** - The date when the user has unregistered from the mobile VUM app.

3. (Optional) Click **SMS reminder** next to the user you want to send a registration reminder to, and then click **OK** to confirm the action when prompted. Note that the **SMS reminder** option becomes available only if the **Registered since** column is not populated for this user.



4. Click the **edit** field to add/change the group for the user.
5. Drop down the **Group** list and select the user group/the new user group for this user, and then click **save**. The changes are applied in real time and the employee will be moved to the new user group, thus inheriting the new settings.
6. (Optional) To block a user that has already registered to the VUM mobile app, click **unregister**. This may be the case for an employee that is on maternity leave or has left the company. The employee will still be able to use the VUM mobile app, but the default company settings will no longer apply to him/her.



Manage SMS reminders

You can send registration reminders to two types of users:

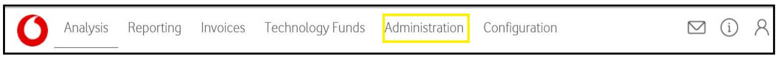
- Users who have been provisioned to use VUM, but have never registered;
- Users who have registered at some point to use VUM, but who are now unregistered.

You can send two types of SMS reminders:

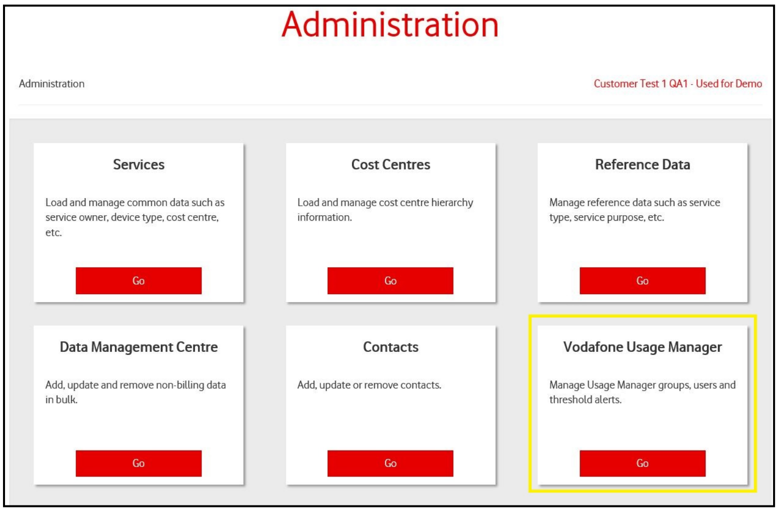
- Separately, to each individual user that has been provisioned to use VUM, but has not registered, from the Usage Manager screen. For details, refer to 'Manage VUM users' on page 285.

- Bulk monthly scheduled job for all users who have not registered to use VUM, but have been provisioned, or to unregistered users (that have been registered at some point). To schedule reminders in bulk, follow these steps:

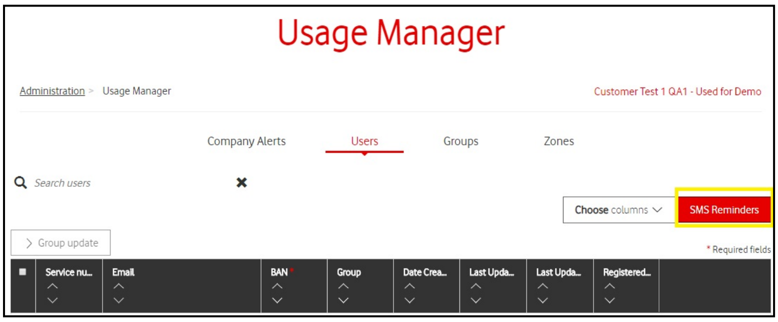
1. On the VTR Home page, click **Administration**.



2. On the Administration page, **Vodafone Usage Manager** tile, click **Go**.



3. On the Usage Manager page, click **SMS Reminders**.



4. On the Registration reminders page, perform the following:

a. Toggle **Send SMS Reminders to users who have not been registered?** to the right.

b. Toggle **Send SMS reminder to users who are unregistered?** to the right.

c. Drop down **Day of month to send reminders** and select the day of the month when the previously mentioned users will be notified.

5. Click **Save**. VTR will send the SMS registration reminder according to your configuration.

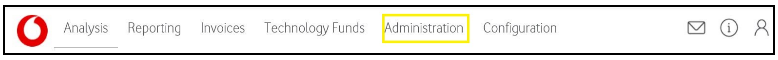
Manage your user groups

Alert settings in VUM are created at user group level. Therefore, you need to group users so that they have the same alerts applied. For example, you can have a user group, like **Executives**, with higher thresholds.

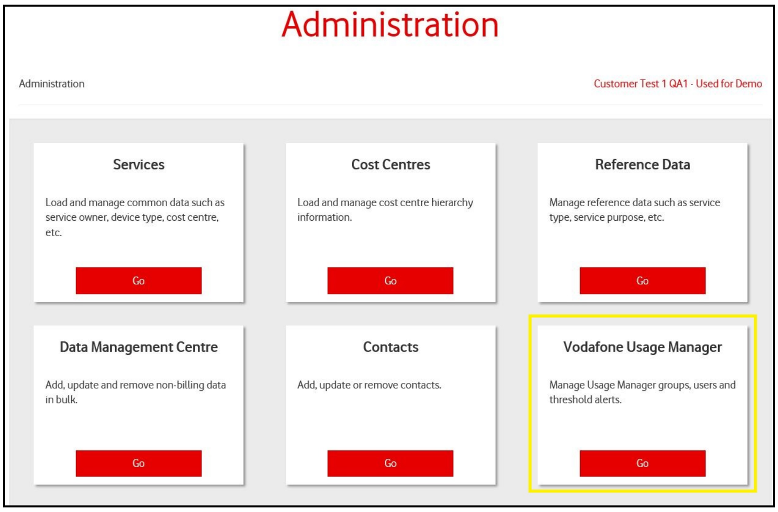
Create user group

Before grouping the users, you need to create the user group.

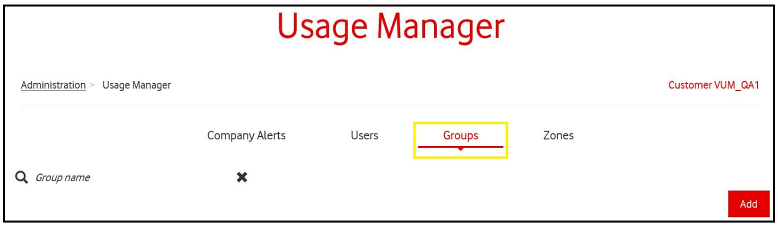
1. On the VTR Home page, click **Administration**.



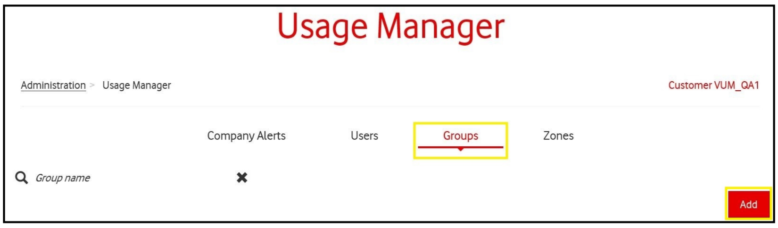
2. On the Administration page, click **Go** in the **Vodafone Usage Manager** tile.



3. The Usage Manager page opens on the **Usage Manager** tab by default. Click **Groups**.

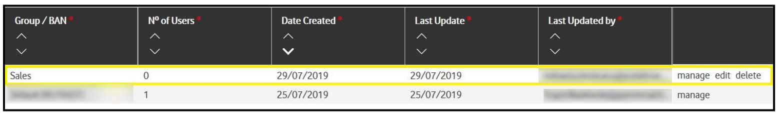


4. On the Groups tab, click **Add**.



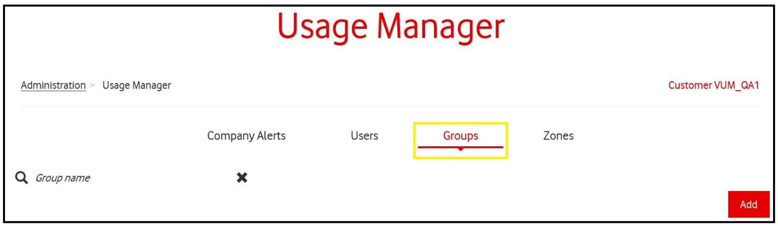
5. On the Add group page, enter the group name or the BAN ID allocated to the group you want to create, and then click **Save**.

6. The group is added to the list, together with the creation date and the person who created it.

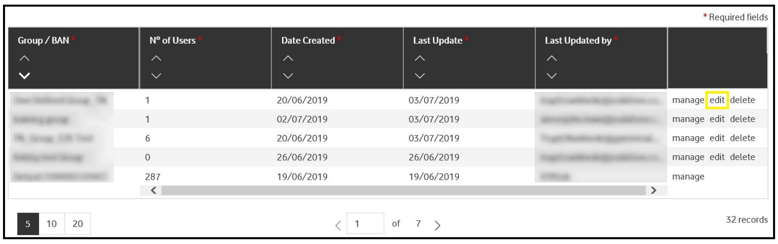


Rename user group

1. Access VUM as described in 'Create user group' on page 288.
2. The Usage Manager page opens on the **Usage Manager** tab by default. Click **Groups**.



3. Next to the group that you want to rename, click **edit**.



4. The Group/BAN column becomes editable. Enter the new name/BAN ID, and then click **save**. You have changed this group's name.

Manage user group

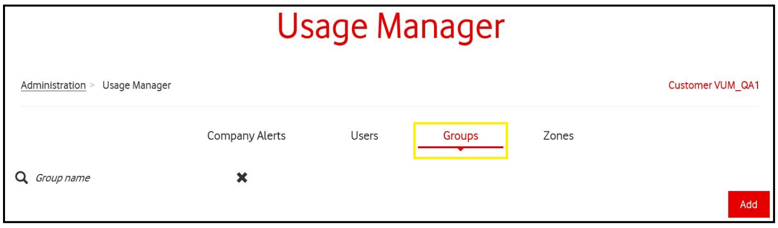
Once created, you can manage the user group's details by changing its name, by removing users or by modifying the group thresholds and alerts. You can also delete the group altogether.

The **Groups** tab on the Usage Manager page displays the following information:

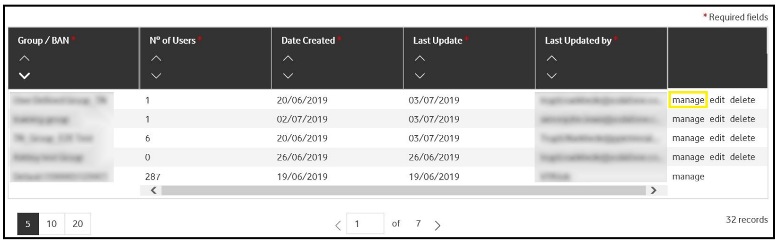
- **Group name/BAN** - the name of the group. Alternatively, this column can display the Billing Account Number allocated to this group.
- **No of Users** - the number of users added to this group.
- **Date Created** - The date when the group was created.
- **Last Update** - The date when the group's details were last modified.
- **Last Updated by** - The name of the person that last modified the group's details.

Remove users from user group

1. Access VUM as described in 'Create user group' on page 288.



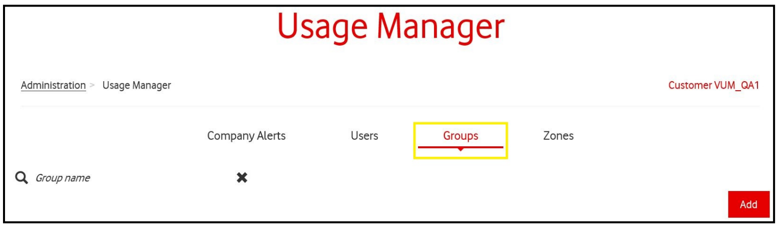
2. Next to the user group from which you want to remove users, click **manage**.



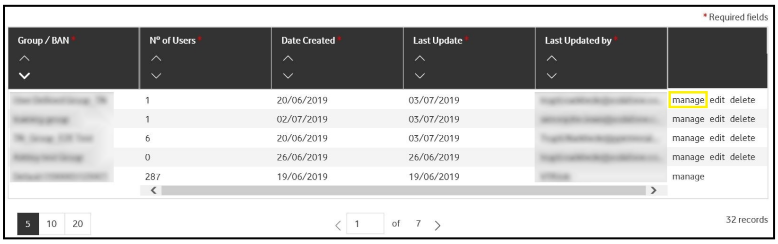
3. The user group details opens on the **Users** tab. Next to the user you want to remove from the group, click **Remove**. The group settings will no longer apply to the removed user.

Modify user group alerts

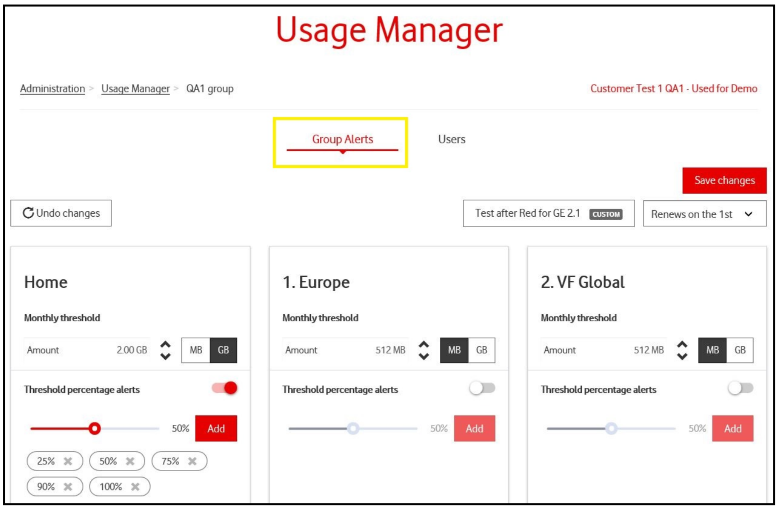
1. Access VUM as described in 'Create user group' on page 288.
2. The Usage Manager page opens on the **Usage Manager** tab by default. Click **Groups**.



3. Next to the user group that you want to change alerts for, click **manage**.



4. The user group details opens on the **Users** tab. Click **Group Alerts**.



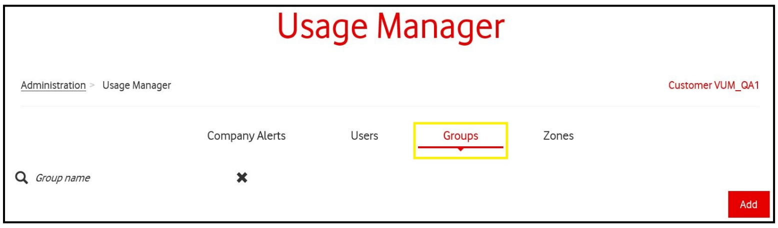
5. Modify the alerts as described in 'Manage your user groups' on page 288.
6. Click **Save changes** to keep the new configuration. All the users in this group will be impacted by the changes.

Delete user group

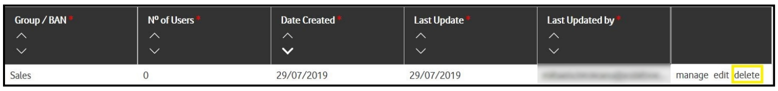
When you no longer need a user group in your company, you can delete it.

Even if you delete a user group, all the users included in it are still grouped by BAN. However, they will no longer be part of the deleted group.

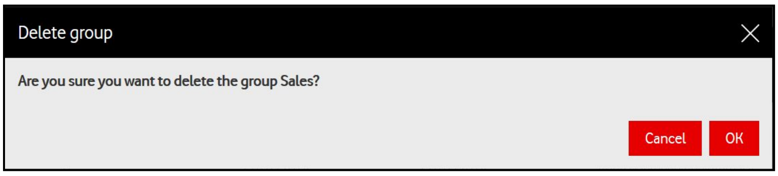
1. Access VUM as described in 'Create user group' on page 288, and then click **Groups**.



2. Next to the group you want to remove, click **delete**.



3. A pop-up screen displays, asking you to confirm you want to delete the user group. Click **OK**.

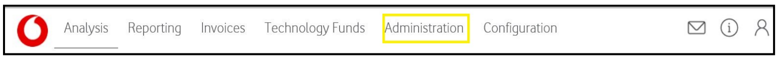


You are taken back to the User Groups list. Notice that the group is no longer displayed in the list.

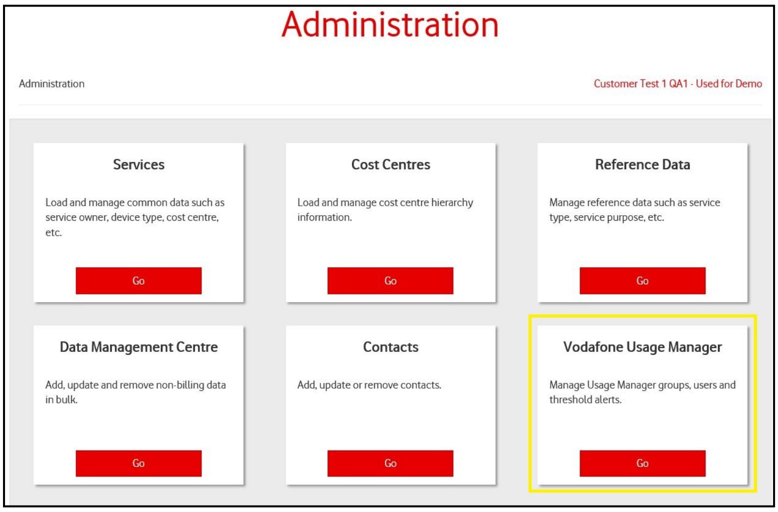
View your usage zones

The tariff that applies to your company is split into a Home zone and several roaming zones. Every country in the world is associated with a zone in VUM, as defined in the contract. You can view your zones and the countries included in them on the Usage Manager page, **Zones** tab.

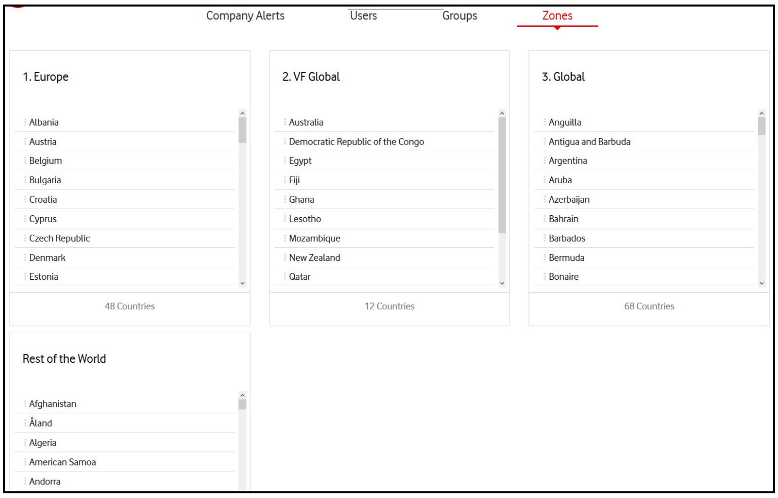
1. On the VTR Home page, click **Administration**.



2. On the **Administration** page, click **Go** in the **Vodafone Usage Manager** tile.



3. On the Usage Manager page, click **Zones**.



The Zones tab displays all the roaming zones that have been set up at your company level, apart from the Home plan, which is used in your own country.