VMware AirWatch Telecom Guide

Workspace ONE UEM v9.6

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Chapter 1:
Telecom Management

Introduction to Telecom

Workspace ONE UEM allows you to manage individual policies for mobile devices in the Workspace ONE UEM Admin Portal under the Telecom tab. Workspace ONE UEM offers two solutions for Telecom Management: Telecom Foundational and Telecom Advanced.

Telecom Foundational solution is available as a standard feature of your Workspace ONE UEM console. Workspace ONE UEM preconfigures the data limits. Telecom Advanced solution provides more customization options. The Telecom Management capabilities for both foundational and advanced are detailed in the table below.

Functionality	Foundational	Advanced
Dashboard	✓	✓
List View	✓	✓
Telecom Device Details	✓	✓
Plans		✓
Compliance		✓

This guide details the various functionality of telecom management. As Telecom Advanced has more capabilities, this guide will often discuss functionality not available to Telecom Foundational users. Please contact Workspace ONE UEM support to discuss the best Telecom management solution for your organization.

Telecom Foundational

Telecom Foundational capabilities includes basic functionality such as the ability to:

- Track device data usage, voice usage, and SMS usage.

- Control roaming such as the ability to disable sync over the roaming.

- View dashboard analytics.

Telecom Advanced

You have the ability to track telecom data in some ways using custom settings, profiles, and compliance policies from the UEM console such as:

- Configure telecom plans with specific telecom data, voice, and messaging limits.

- Assign plans manually or automatically to mobile assets based on multiple device attributes.

- Configure telecom plans with pooled usage for calls, messages, and data.

- Perform compliance actions including end-user notifications, escalations, and device restrictions if usage limits are exceeded.

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Supported Platforms

Telecom monitoring and management capabilities differ based on the device model and operating system. Additional information on specific telecom data features that Workspace ONE UEM supports on devices and operating system version pairings can be found within the UEM console.

Platform	Platform Version	Usage Tracked
Android	3.2+	Voice, SMS, Data
iOS	4.1+	Data
BlackBerry	5.0	Voice, SMS

Limited support may be available for other devices or operating systems.

Refer to the User Guide of the relevant platform or contact Workspace ONE Support for more information.

Getting Started

Before getting started with the Workspace ONE UEM Telecom Management solution, you must know the pre-requisites to streamline the process. These pre-requisites help you to experience the complete benefits of the product:

- Telecom management can be enabled only in your topmost organization group.

- In Android devices, the communication between devices and console (that is, sending samples and telecom usage data from device to console) happens in presence of the telecom service application. This application gets installed automatically onto the device during Workspace ONE UEM Agent enrollment if the device is set to collect Telecom usage information.

- In iOS/Blackberry devices, the samples from the devices are sent through the agent.

More information on telecom management is explained in the following sections.

A Note About iOS Devices Reporting Data Usage

Please note that if you configure Telecom Management in the UEM console and then enroll iOS devices, in that order, then the AirWatch Agent should start reporting data usage immediately under device details.

However, if iOS devices are enrolled first, and then you configure Telecom Management, then the end user must select the AirWatch Agent from their device to receive the new settings (assuming the AirWatch Agent is running in the background). If the AirWatch Agent is not running on the device, the agent must be launched to receive the new settings and to start collecting Telecom usage data.

A best practice is to turn on the Background App Refresh setting in the Apple iOS Agent (**Groups & Settings > All Settings > Devices & Users > Apple > Apple iOS > Agent Settings**). This ensures the AirWatch iOS Agent, when running as a background app on the device, checks into the UEM console on a regular basis so that settings are updated and Telecom usage data is collected. The end user is not required to launch the AirWatch Agent. If the app is closed by the user or the device is rebooted, the app needs to be relaunched to remain in the background unless the device is rebooted or the app is stopped forcefully.

Querying or reporting of the cellular data usage follows a frequency of once per day only.

Chapter 2:
Telecom Wizard

Setup Deployment - Advanced

The Telecom Wizard guides you through the initial setup of your telecom settings. Access the Telecom Wizard by selecting Telecom from the main menu in the UEM console. Unlike Telecom Foundational, summary of the Telecom Management configuration is seen in Telecom Advanced.

To setup the deployment using the Telecom Wizard:

1. Select **Configure** to begin the setup process. The **Telecom Settings** page appears.

2. Configure the telecom data you want to collect for each supported platform. Select **Next**.

   - **Apple iOS** – Workspace ONE UEM uses the AirWatch Agent originally downloaded to the device for enrollment purposes to collect telecom data from iOS devices when telecom data collection is enabled. The agent runs in the background without the end-user interaction. You can only **Collect Cellular Data Usage** from iOS devices.

   - **Android** – Workspace ONE UEM uses a Telecom Service App to collect telecom data from Android devices. This application is installed automatically upon device enrollment when telecom is enabled and runs in the background without the end-user interaction. The three types of telecom data collected from Android devices are **Call Logs**, **SMS Logs**, and **Cellular Data Usage**.

3. Configure the privacy settings by specifying the telecom usage data to be collected and displayed in the UEM console. The settings may take a few hours to take effect.

   - You can make selections by telecom data element, and also by device ownership. For example, you can collect and display Roaming status for Corporate-Dedicated and Corporate-Shared devices, but ignore it for Employee-Owned devices.

   - The following telecom privacy settings are configurable in the UEM console:

     - Carrier/Country Code

     - Roaming Status

     - Cellular Data Usage

- ○ Call Usage

- ○ SMS Usage

- Point the cursor over the applicable radio button to run a selection pop-up window.

- Select the icon representing how to manage telecom data collection for the specific element and device ownership pairing.

4. Select **Next** to proceed to the **Summary** page.

5. Select **Save & Close** to save the settings and return to the **Telecom Management Settings** page. Select **Save and View Plans** to create and manage telecom plans.

You can disable the Wizard in two ways:

- Proceed through the steps to complete the initial setup as detailed in this section. When you select **Finish**, the Wizard deploys your setup and turns itself off.

- Select **Don't show this message again** and close the Wizard.

Chapter 3:
Telecom Usage Monitoring

Telecom Dashboard

The **Telecom Dashboard** provides a view of all your deployment related analytics. The Dashboard displays usage and roaming analytics for your deployment that includes devices under the current Organization Group with Telecom plans assigned to them.

The Telecom dashboard is available for both Telecom Foundational and Telecom Advanced users. The functionality of this section varies based on your configuration and the differences are detailed in this section. To access the Telecom Dashboard, navigate to **Telecom > Dashboard** from the UEM console. Use the Dashboard to track calls, data, and SMS usage across different plans.

The **Telecom Foundational** dashboard displays the following information:

- Monthly usage ranging from low to high can be seen by hovering over the graph with their mouse pointer

- Roaming Status shows the number of devices that either are roaming or not.

The **Telecom Advanced** dashboard displays the following information:

- Plan Utilization for individual and pooled plans.

- Usage History for the three highest usage plans

- Roaming usage for all devices is shown here

- The three largest plans and device count

The data that displays on the Telecom Dashboard is subject to the Privacy Settings you configure in the System Settings. For example, if you do not collect or display any call, data or SMS usage statistics for employee-owned devices, then the Telecom Dashboard does not display this information.

The plan filter in the top-right corner of the screen filters all the graphs down to a particular plan.

Viewing the Telecom Foundational Dashboard

The Telecom Foundational dashboard has more simple telecom information. You can view usage and roaming details graphed here.

Usage

The **Usage** section shows the usage for calls, data, and SMS messages compared to the limits pre-configured by Workspace ONE UEM. The graph displays low to very high threshold values.

Devices listed as **Not Reported** have not reported any usage details to Workspace ONE UEM and may warrant further investigation if this is unexpected.

FEBRUARY USAGE

	📞 CALLS	% Devices	📶 DATA	% Devices	💬 SMS	% Devices
Very Low	17	70%	24	100%	17	70%
Low		0%		0%		0%
Medium		0%		0%		0%
High		0%		0%		0%
Very High		0%		0%		0%
Not Supported	7	29%		0%	7	29%
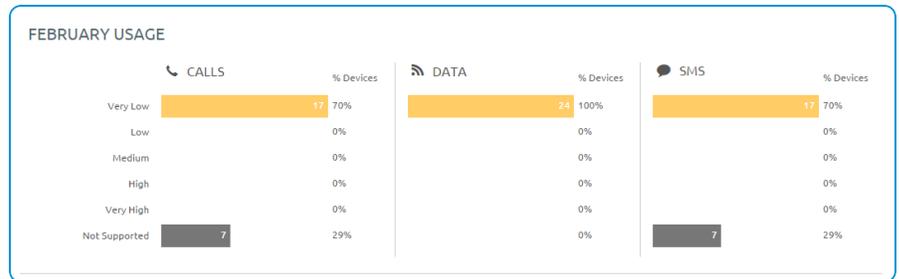
Usage limits are set by Workspace ONE UEM as follows:

Range	Calls	Data	Messages
Very Low	0 to 499 minutes	0 up to 1 GB	0 to 499 messages
Low	500 to 999 minutes	1 up to 2 GB	500 to 999 messages
Medium	1000 to 1499 minutes	2 up to 3 GB	1000 to 1499 messages
High	1500 to 1999 minutes	3 up to 4 GB	1500 to 1999 messages
Very High	2000+ minutes	4+ GB	2000+ messages

Hover over each individual usage section to expand the view.

Roaming

The **Roaming** section shows history, status, and data usage for all telecom-enabled devices.

Devices are grouped according to how much they have roamed. These devices are not roaming presently. For example, 4% of devices have roamed from 1-7 days, and 3% have roamed for between 1-4 weeks, in the past 30 days.
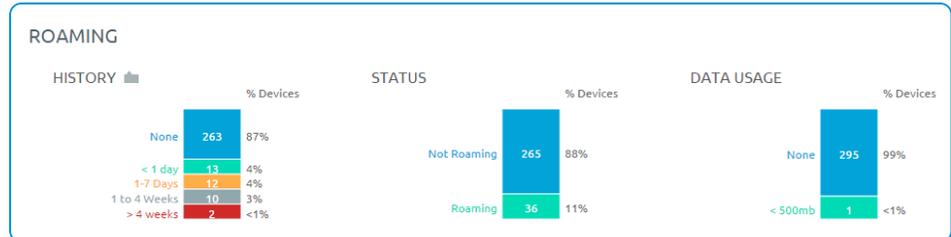
Viewing the Telecom Advanced Dashboard

The Telecom Advanced Dashboard displays more detailed information. You can view plan utilization, usage history, roaming, and tops plans for all telecom-enabled devices.

Plan Utilization

The **Plan Utilization** section shows the usage statistics for voice, data, and SMS message compared to the plan limits you configure as part of the telecom plan creation. Devices listed as **Not Reported** have not reported any usage details to Workspace ONE UEM and may warrant further investigation if this is unexpected.

There are two types of graphs shown here, Individual and Pooled. Individual is selected by default.

Not Reported, **Not Supported**, and **Private** columns display only if one of the three usages has devices to graph. If there are no devices that match this criteria is enrolled, then the category does not appear.
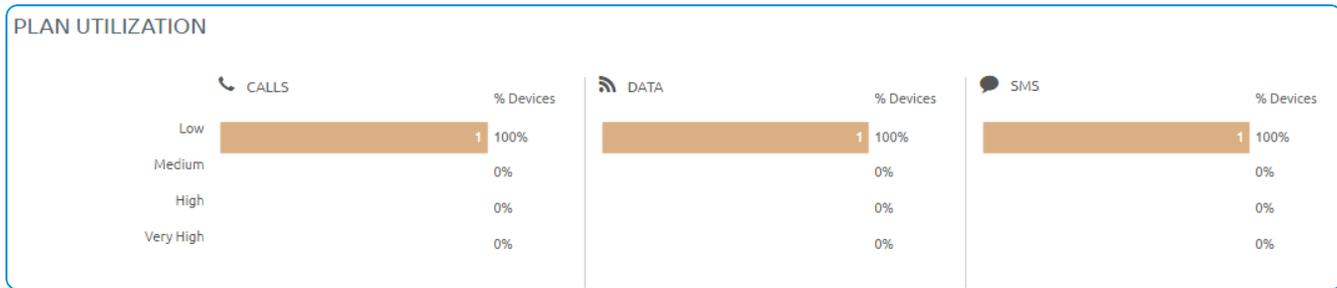
Configuring Pooled Data Limits

If you select to view **Pooled** data usage, the charts are updated to show pooled data usage. Pooled plan usage ranges can be configured from the System Settings pages.

Navigate to **Telecom > Settings** to view the Telecom **General** page. On the Telecom General page, configure usage limits in the **Pooled Plans Usage Ranges** section.

Changing the Pooled Plan Usage ranges in the System Settings menu only configures how users' plan consumption is displayed on the Telecom Dashboard, and is for reference purposes only. Data presented and configured in the UEM console may not reflect actual carrier billing.

Workspace ONE UEM default values for Usage Ranges are:

Range	Calls	Data	Messages
Very Low	0 to 499 minutes	0 up to 1 GB	0 to 499 messages
Low	500 to 999 minutes	1 up to 2 GB	500 to 999 messages
Medium	1000 to 1499 minutes	2 up to 3 GB	1000 to 1499 messages
High	1500 to 1999 minutes	3 up to 4 GB	1500 to 1999 messages
Very High	2000+ minutes	4+ GB	2000+ messages

- **Current Setting** – Select whether to **Inherit** or **Override** the displayed settings. Inherit means use the settings of the current organization group's parent OG, while Override enables the settings for editing so you can modify the current OG's settings directly.

- **Enable Telecom Management** - Disabling Telecom Management removes an administrator's ability to configure and monitor telecom usage.

- **Pooled Plan Usage Ranges** - Customize how your OG's telecom usage appears in the Dashboard.

- **Child Permission** – Select the available behavior of child organization groups that exist below the currently selected organization group. *Inherit only* means child OGs are only allowed to inherit these settings. *Override only* means they override the settings, and *Inherit or Override* means you can choose to inherit or override settings in child OGs that exist below the currently selected OG.

Usage History

The **Usage History** section shows the voice, data, and SMS message statistics for all devices assigned to a telecom plan in the UEM console. Pooled plans for calls, data, and SMS are represented by the red horizontal line, which indicates an overage for the plan. This section displays the past three billing cycles for each plan. Selecting a bar graph section displays the **Device List View** of each device that falls under the plan.

Hover over each individual column to expand the view.
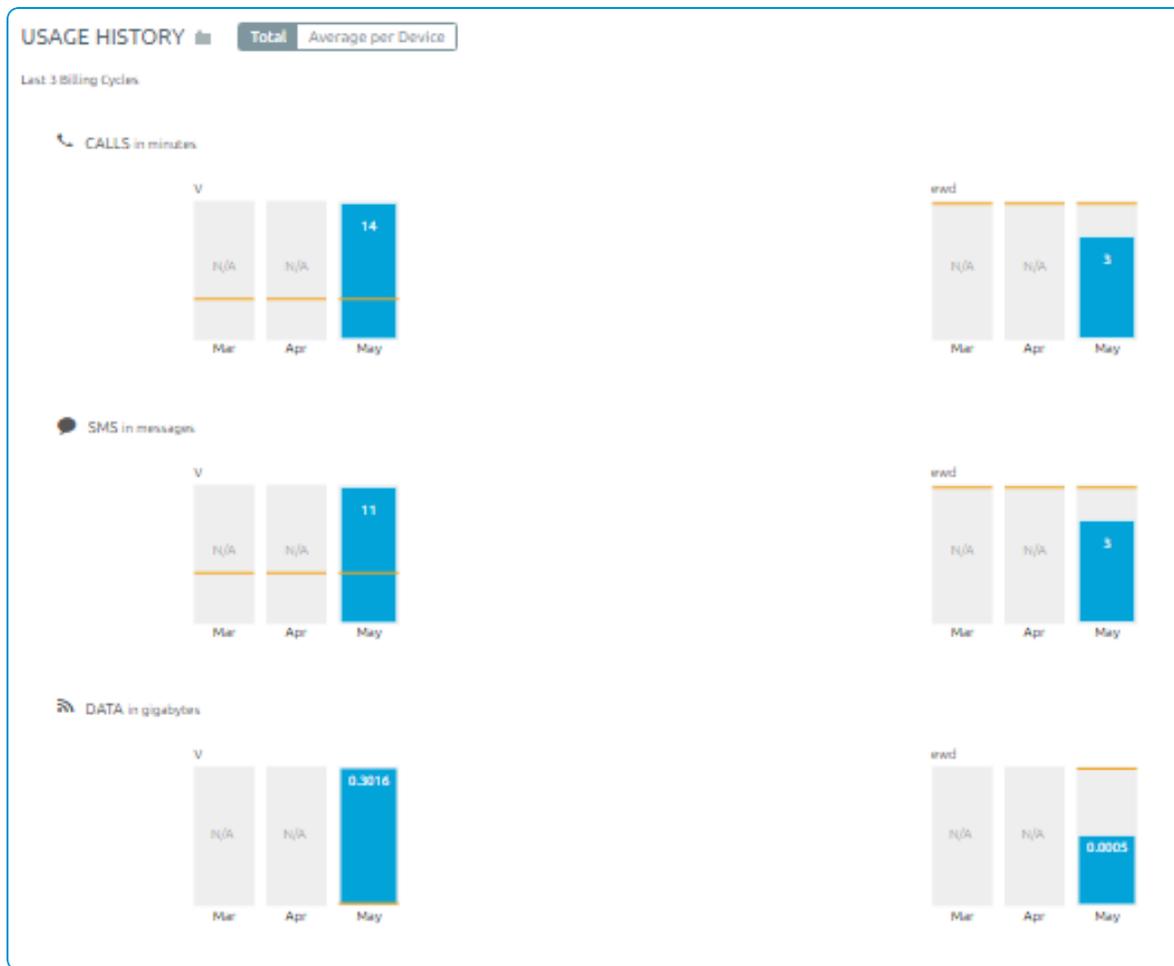
Top Plan

The **Top Plan** graph shows the number of devices in your various assigned telecom plans. Selecting any one of these sections displays the **Device List View** of each device assigned to that plan.
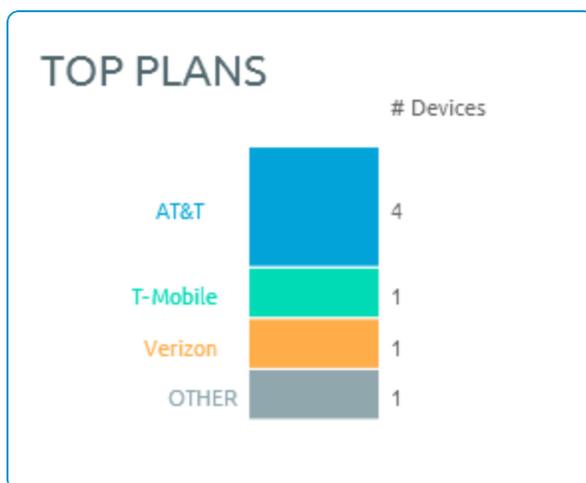
Roaming

The **Roaming** section shows roaming statistics of telecom-enabled devices.

- **History** – If any devices roam during the billing cycle, Workspace ONE UEM adds the duration, and this graph represents the total sum of all roaming time during the current billing cycle. For example, a device might show five days of roaming, but it may not be roaming currently. This means that the device roamed for one day two weeks ago, and four days last week. Devices listed as **Not Reported** have not reported any usage details to Workspace ONE UEM and may warrant further investigation if this is unexpected.

- **Status** – This graph shows the **current** roaming status across all devices during the billing cycle. The different statuses are:

  - **Approved** – Devices listed as **Approved** are those which Workspace ONE UEM flags as roaming and are allowed to roam. The devices are allowed to roam because the assigned telecom plan allows it to roam.

  - **Not Approved** – Devices listed as **Not Approved** are those which Workspace ONE UEM flags as roaming and are not allowed to roam. The devices are not allowed to roam because the assigned telecom plan does not allow it to roam.

    For more information about allowing (for Approved) or preventing (for Not Approved) devices from roaming, see [Disabling Roaming (iOS)](), [Default Roaming Settings Override (iOS)](), and [Roaming Prevention (Android)](). You can also approve Roaming when [creating a telecom plan]().

  - **Not Roaming** – Devices listed as **Not Roaming** are not in roaming presently.

  - **Not Reported** – Devices listed as **Not Reported** have not reported any usage details to Workspace ONE UEM and may warrant further investigation if this is unexpected.

- **Data Usage** – The data usage of the devices that was flagged as roaming during the billing cycle. Devices listed as **Not Reported** have not reported any usage details to Workspace ONE UEM and may warrant further investigation if this is unexpected.

Plan Usage Details for Telecom Assets

From the **List View** page, you can view detailed information on voice, messaging, data, and roaming of devices. Usage for voice, messages, and data that are registered into a pooled plan is indicated with a **Pooled** tag next to the data.

To view the above mentioned details, navigate to **Telecom > List View**. Telecom Foundational and Telecom Advanced users are able to view the **Device Details** page and **List View** discussed in this section. The available information between the two may differ.

The general columns for voice, messaging, data, and roaming tabs on the list view page are listed in the table below.

Column	Description
Last Seen	Displays the most recent date and the time during which the device was successfully queried by Workspace ONE UEM.
General Info	Displays the Name of the device and ownership type.
User	Displays user information including username and email address.

Column	Description
Peak Voice (Min)*	Displays the number of minutes used during the configured Peak Voice Time Interval.
Message	Displays the message usage of the device against the actual set limit.
Data (MB)	Displays the data usage of the device against the actual set data usage limit.
Plan Details*	Displays the telecom plan assigned to the device.
*Telecom Advanced only.	

The columns particular to the **Roaming** tab on the list view page are:

Column	Description
Roaming Data Usage (MB)	Displays the data usage
Roaming Status	The status of the device while in roaming: • **Unapproved Roaming** – Devices marked with an ❌ are those which Workspace ONE UEM flags as roaming during the billing cycle and are not allowed to roam due to the selected plan attribute in the UEM console. • **Not Roaming** – Devices marked with an ✅ are those which are not flagged as roaming presently. For more information about allowing (for Approved) or preventing (for Not Approved) devices from roaming, see Disabling Roaming (iOS), Default Roaming Settings Override (iOS), and Roaming Prevention (Android).
Current Country/Home Country	Displays the country where the device is connected.
Current Carrier/Home Carrier	Displays the name of the service provider to which the device is connected.
Plan Details*	Shows which plan the listed device is assigned to.
*Telecom Advanced only.	

Device Details

From the Device Details tab, you can view the telecom related data for that specific device, including call, data, message, and roaming statistics. Select a device from the Telecom List View page to open the Device Details Telecom Tab for the particular device.

Android devices display calls, messages, data, and AW App usage details whereas iOS devices display only data. This feature is available only if there is Telecom Advanced settings.

Show Latest Usage - Advanced

UEM console Server stores the telecom usage statistics and these statistics are updated on a scheduled basis. Because of this, there may be a discrepancy between a device's usage statistics that have been stored in the Console Server and those that appear on the UEM console. By default, you see the data as it was reported at the time of the last scheduled update.

If you want to see the absolute latest updates, which may not yet have been processed, then you can select the Show Latest Usage option on each Device Details page. A message displays indicating that the data you now see may not be included in the calculations used for data usage limits or compliance policies.

Calls

From the **Calls** page you can view the call history of the last three billing cycles, in addition to the individual calls made and the duration of the calls.

Data

From the **Data** page you can view the data history of the last three billing cycles, in addition to the individual data transfers made and the amount of data sent and received.

Messages

From the **Message** page you can view the message history of the last three billing cycles, in addition to the individual messages sent and received. The calls, data, and messages graphs show if the plan is individual or pooled.

Roaming

From the **Roaming** page you can view the roaming history of a particular device. If there is roaming activity for the device, the activity displays under Roaming History. This section also displays the total number of days it was roaming, the roaming carrier, and the roaming country.

AW App Usage

From the **AW App Usage** page you can view the AW App usage history of a particular device. Details about different AW Apps being downloaded and used can also be viewed.

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Chapter 4:
Telecom Data Configuration

Configure Telecom Management for Apple iOS and Android

You must configure the Telecom Management settings that determines the types of data to collect and from whom to collect it, before creating and assigning telecom plans.

Configure the Agent Settings and telecom- specific Privacy Settings for both Apple iOS and Android platforms from the Telecom Management wizard.

To configure the settings:

1. Navigate to **Telecom > General**.

2. Select **Configure**. The **Telecom Management** wizard settings page appears. Select the type of data to be collected for each supported platform.

   - **Apple iOS** – Workspace ONE UEM uses the AirWatch Agent originally downloaded to the device for enrollment purposes to collect telecom data from iOS devices when telecom data collection is enabled. The agent runs in the background without the end-user interaction. You can only **Collect Cellular Data Usage** information from Apple iOS devices.

   - **Android** – Workspace ONE UEM uses a Telecom Service App to collect telecom data from Android devices. This application is installed automatically upon device enrollment when telecom is enabled and runs in the background without the end-user interaction. The three types of telecom data collected from Android devices are **Call Logs**, **SMS Logs**, and **Cellular Data Usage**.

3. Select **Next**. A **Privacy** settings page exclusive to telecom data appears.

   - Configure the privacy settings to specify exactly what data elements are collected and displayed within the UEM console. The settings may take a few hours to take effect.

   - You can make selections by telecom data element, and also by device ownership. For example, you can collect and display Roaming status for Corporate-Dedicated and Corporate-Shared devices, but ignore it for Employee-Owned devices.

- The following telecom privacy settings are configurable in the UEM console:

    ○ Carrier/Country Code

    ○ Roaming Status

    ○ Cellular Data Usage

    ○ Call Usage

    ○ SMS Usage

- Point your mouse over the applicable radio button to start a selection pop-up window.

- Select the icon representing how to manage telecom data collection for the specific element and device ownership pairing:

  ⊙ Collect And Display

  ◐ Collect Do Not Display

  ○ Do Not Collect

4. Select **Next**. The **Summary** page appears.

5. Select **Save and Close** or the **Save & View Plans** button to save the settings.

    - The **Save and View Plans** button links the user to the **Plans List** page to create or assign plans to your devices.

    - The **Save & Close** button saves the settings and send you back to the **Telecom Management Settings** page.

Configure Telecom Management - Blackberry

Unlike other mobile devices where telecom data collection is enabled using Agent Settings, BlackBerry devices use a dedicated profile deployed to the device from Workspace ONE UEM to manage telecom data collection.

To configure a Blackberry profile with a Telecom payload:

1. Navigate to **Devices > Profiles > List View**.

2. Select **Add** and select **BlackBerry** as the platform for the profile.

3. Configure the **General** settings for the profile to specify how the profile is deployed and which devices receives it.

4. Select the **Telecom** payload and select **Configure** to set the following:

Setting	Description
Redirect 411	Enter a phone number for the device to call if the end user dials 411.
Sample Enabled	Select this check box to enable SMS message sampling for time and destination.

Setting	Description
Track Content Enabled	Select this check box to enable SMS message sampling for content.
Number of Sampled Calls	Enter the number of calls to be completed prior to the device sending call data to Workspace ONE UEM for reporting purposes.
Number of Sampled SMS	Enter the number of SMS messages to be sent prior to the device sending SMS data to Workspace ONE UEM for reporting purposes.

5. Select **Save** to add the profile to Workspace ONE UEM or **Save & Publish** to add the profile and immediately deploy it to applicable BlackBerry devices.

An alternate way to configure agent settings and privacy settings for Telecom Management is to navigate to the **iOS Agent Settings**, **Android Agent Settings**, **Device Privacy Setting**s separately and configure it.

> **Note:** You must configure the Telecom Management settings that determines the types of data to collect and from whom to collect it, before creating and assigning telecom plans.

Telecom Plans

Telecom Foundational users cannot configure and assign telecom plans. Workspace ONE UEM pre-configures the usage limits, and can be viewed in the Dashboard. Contact Workspace ONE UEM support to discuss the best Telecom solution for your organization.

Individual and Pooled Plans

You can configure telecom plans for individual or pooled usage. You can view the plan type when you create or edit a plan, and when you view the usage details. When you create limits for individual plans, the usage limits apply to the assigned device.

For example, if you set the voice limit to 1,000 minutes, then that may mean 1,000 minutes per device registered within the plan. Pooled plans share usage for all devices that are registered. If you set a voice limit of 1,000 minutes, then all devices registered shares these minutes. Individual and pooled plans can be configured for voice, message, and data plan limits.

Telecom Plan List

The Telecom Plan List allows you to view, edit, or manage Telecom plans. Navigate to Telecom > Plan List to view the list of available plans.

The general columns for the plan list are listed in the table below.

Setting	Description
General Info	Displays the plan name, country, and carrier.

Setting	Description
Voice Limit	Displays the total number of voice minutes used for all devices in the plan.
Message Limit	Displays the number of messages used for all devices in the plan.
Data Limit	Displays the data used in **MB** or **GB** per device for individual plans.
Voice Utilization	Displays the number of minutes used for all devices enrolled in the plan.
Message Utilization	Displays the number of messages used for all devices enrolled in the plan.
Data Utilization	Displays the total data usage for all devices enrolled in the plan. Data utilization is calculated for the current billing cycle based on monthly usage for all devices enrolled in the plan.
Billing Cycle Resets	Shows the date the billing cycle resets.
Active/Assigned	Details how many devices are active or assigned within the plan.

For pooled plans, the voice, message, and data limit columns show as Shared limits between all devices.

If the voice, message, and data plans are pooled plans, the utilization columns for each shows a percentage of used data between all devices (the limit is shown in parentheses).

Create a Telecom Plan

Use Workspace ONE UEM Telecom Management functionality to create and assign the telecom plans both to currently enrolled devices and to any devices yet to be enrolled. Configure plans with specified carriers, usage limits, peak usage intervals, and billing cycle dates.

You can allocate mobile assets to plans through device search, list entry, or bulk upload. For devices with no assigned telecom plan, use automated rule-based dynamic assignment to assign plans by country, carrier, organization group, and user group. Once configured and assigned, compliance policies can be enforced for telecom plans.

To create a Telecom plan:

1. Navigate to **Telecom > Plan List** and select **Add a Plan** or select the check box next to a current plan. Select **Copy** to copy the details of an existing plan.

2. Configure the Telecom plan details.

Setting	Description
Plan Name	Enter a name for the telecom plan.
Country	Select the country in which the telecom plan originates.
Carrier	Select the name of the mobile service provider for the telecom plan.
Roaming Partners*	Add roaming partners so that connections to listed networks do not trigger roaming status and count as normal usage for the plan. Select **All Carriers** to whitelist all carriers available in your country.
*The roaming partner feature can whitelist the status of iOS and GSM/LTE Androids.	

3. Configure the Telecom **Plan Limits**:

   For voice, data, and messages, select the **Individual Plan** or **Pooled Plan** to set whether the data usage limits apply for individual or pooled data plans. For individual plans, the usage applies to each device in the plan. For pooled plans, admins can specify the threshold of usage or an unlimited amount of usage to be shared among all devices in the plan. Plan usage can contain only up to 2048 GB.

   For voice and SMS usage, you can select which direction of usage is monitored. These selections allow Workspace ONE UEM to collect and display the usage information for which you are billed in your country or region.

Setting	Description
Voice Limit	Enter the maximum number of minutes allowed per billing cycle. Select the **Unlimited** check box if there is no voice limit. Select the **Usage Type** based on what usage is billed in your region or country: • Select **Total** to monitor usage for all incoming and outgoing calls. • Select **Outgoing** to monitor usage only for outgoing calls. • Select **Incoming** to monitor usage only for incoming calls.
Message Limit	Enter the maximum number of text messages allowed per billing cycle. Select the **Unlimited** check box if there is no messaging limit. Select the **Usage Type** based on what usage is billed in your region or country: • Select **Total** to monitor all messages, incoming, and outgoing. • Select **Outgoing** to monitor only outgoing messages. • Select **Incoming** to monitor only incoming messages.
Data Limit	Enter the maximum data usage allowed per billing cycle in either megabytes or gigabytes and use the drop-down menu to select MB or GB, as needed. Select the **Unlimited** check box if there is no data limit.

4. Configure the Telecom plan **Billing Details**.

Settings	Description
Peak Voice Time Interval	Use the drop-down menu to set the time-frame that Workspace ONE UEM monitors for voice usage, or select the No Peak Interval check box if you like Workspace ONE UEM to monitor for calls made throughout the day.
Billing Cycle Resets	Use the drop-down menu to select which calendar day of each month resets the monthly billing cycle for the telecom plan. All usage and telecom-related compliance rules reset on the selected day each month.
Roaming Approved	Use the drop-down menu to specify if roaming internationally is allowed for the telecom plan. This helps Workspace ONE UEM to accurately graph the device in the dashboard to show the approval status of any currently roaming devices.

5. Select **Save** to add the telecom plan to Workspace ONE UEM or **Save & Assign** to add the plan and immediately assign it to devices. If you select **Save & Assign**, skip to step 4 of the following section **Assigning a Telecom Plan**.

The limits can be changed but the plan type (individual or pooled) cannot be changed.

Configure Dynamic and Static Assignment

Dynamic assignment is a feature that automatically assigns the telecom plans to enrolled devices that do not have a current plan, unless Allow Plan Replacement is selected. The telecom plan is dynamically assigned to the devices based on the criteria you determine while creating the dynamic assignment rules.

To configure dynamic assignment rules:

1. Navigate to **Telecom > Dynamic Assignment**.

2. Select **Add**.

3. Configure the settings mentioned in the table below.

Settings	Description
Rank	The sequence in which Workspace ONE UEM checks and assigns the dynamic rule against the enrolled devices. Workspace ONE UEM checks if the device meets the criteria of the rule with Rank 1. If the criteria does not match, then Workspace ONE UEM checks the same device against the rule with Rank 2. When all the criteria match, the device is assigned to the associated telecom plan. The rank is automatically populated when new rules are created.
Organization Group	The devices enrolled to the selected organization group are assigned with the telecom plan.
User Group	The devices enrolled to the selected user group are assigned with the telecom plan.
Country/Carrier	The devices with the selected carrier for the selected **Country** is assigned with the plan.
Plan	The telecom plan to be assigned to the device.
Actions	Select **Delete Rule** in the column of any rule to remove it from the dynamic assignment list.
Allow Plan Replacement	Check this box to allow the UEM console to reassign devices based on changes in any of the above criteria. When a device's plan is replaced, the device's stored usage history is removed.

4. Select **Save**.

Static Assignment

To configure Static Assignment:

1. Navigate to **Telecom > Plan List**.

2. Locate the telecom plan you want to assign. Select the check box to the left and select **Assign** to edit its current assignment.
   From this view, you can view, edit, copy, or delete the telecom plan by selecting the appropriate button if allowed.

3. Select **Add Assets**.

4. Select the telecom plan assignment method.

Setting	Description
Insert Asset List	Enter a list of Integrated Circuit Card Identifiers (ICCIDs) representing applicable devices separated by commas manually. Hardware identifiers (IMEI) may be used as an alternative where removable SIM cards do not apply.
Search for Assets	Use the drop-down menus to select a specific platform, model, device ownership type, organization groups, or User Groups.

5. Select **Next**. The window displays which assets reflect your assignment criteria.

6. Select the check box to the left of each asset to be assigned to the telecom plan and then select **Save**.

Manage Telecom Plans

Once a plan is created, you can manage the plan in the Plan List using the available actions for each plan. You can View, Edit, Assign, Copy, or Delete each plan. All the plans in the list, if selected, can be deleted at once.

To manage a plan, perform any of the following:

- Select the pencil icon to **Edit** the plan.

- Click anywhere in the line item to **View** the plan.

- Select the check box for a single plan to perform any action.

- Select the checkboxes relevant to multiple plans to **Delete** in bulk.

Chapter 5:
Telecom Policy Enforcement

Compliance Policy Rules by Platform

Not all compliance policy rules apply to all platforms. The **Add a Compliance Policy** page is platform-based so you see only the compliance policy rules and actions that apply to your device.

Use the following table to determine which rules are available to deploy to your devices.

Compliance Policy	Android	Apple	Apple macOS	Chrome OS	QNX	Windows Rugged	Windows 7	Windows Phone	Windows Desktop
Application List	✓	✓	✓						
Antivirus Status									✓
Cell Data Usage	✓	✓							
Cell Message Usage	✓								
Cell Voice Usage	✓								
Compliance Attribute									✓
Compromised Status	✓	✓							✓
Device Last Seen	✓	✓	✓	✓	✓	✓	✓	✓	✓
Device Manufacturer	✓								
Encryption	✓	✓	✓				✓	✓	✓
Firewall Status			✓						✓
Free Disk Space		✓							
iBeacon Area		✓							
Interactive Certificate Profile Expiry	✓	✓							
Last Compromised Scan	✓	✓							
MDM Terms of Use Acceptance	✓	✓	✓			✓	✓	✓	✓

Compliance Policy	Android	Apple	Apple macOS	Chrome OS	QNX	Windows Rugged	Windows 7	Windows Phone	Windows Desktop
Model	✓	✓	✓					✓	
OS Version	✓	✓	✓	✓			✓	✓	✓
Passcode	✓	✓					✓	✓	✓
Roaming *	✓	✓							✓
Roaming Cell Data Usage *	✓	✓							
Security Patch Version	✓								
SIM Card Change *	✓	✓						✓	
Windows Automatic Update Status									✓
Windows Copy Genuine Validation						✓			

> *** Note:** Only available for Telecom Advanced Users.

Configure Telecom Rules for SAFE Devices

Samsung SAFE devices use a dedicated profile deployed to the device from Workspace ONE UEM to set data limits and other settings. Although Samsung offers their own plan limits for SAFE devices, use the standard plan management feature to enforce plan limits with compliance policies.

To configure an Android profile to specify Samsung SAFE settings:

1. From the UEM console, navigate to **Devices > Profiles > List View**.

2. Select **Add** and select **Android** as the platform for the profile.

3. Configure the General settings for the profile to specify how the profile gets deployed and which devices receive it.

4. Select the **Restrictions** payload and select **Configure**.

5. Scroll down to **Maximum Data Usage** and select **Add**.

   - Use the drop-down menus that appear to configure the following settings:

     - **Frequency** - Restrict data usage by Day, Week, or Month.

     - **Size** - Restrict data usage by kilobytes, megabytes, or gigabytes.

     - **Maximum** - Enter the amount of data the end user may not exceed.

6. Scroll down to Call and SMS Limit and select **Add**.

   - Use the drop-down menus that appear to configure the following settings:

     - **Direction** – Indicate whether this is for **Outgoing** or **Incoming** calls/SMS.

     - **Type** – Indicate whether this is for **Calls** or **SMS**.

- **Frequency** – Indicate whether to restrict by the **Day**, **Week** or **Month**.

- **Maximum** – Indicate the maximum call/SMS limit allowed.

7. Scroll down to Call and SMS Restriction and select Add.

   - Use the drop-down menus that appear to configure the following settings:

      - **Direction** – Indicate whether this is for **Outgoing** or **Incoming** calls/SMS.

      - **Type** – Indicate whether this is for **Calls** or **SMS**.

      - **Restriction** – Indicate the action to perform when a particular number that you identify calls or sends a text.

8. Select **Add** and configure more telecom restrictions for any of these settings in the same manner, if required.

9. Select **Save** to add the profile to Workspace ONE UEM or **Save & Publish** to add the profile and immediately deploy it to applicable Samsung SAFE devices.

When configured limits for a SAFE device are reached, admins can set a restriction to silently deactivate SMS, calls, and data features. This helps to enforce plan limits within compliance policies so that overages do no occur.

> **Important:** The functionality discussed in this section is only available to Telecom Advanced users. If you are a Telecom Foundational user, you will not see these features. Discuss the best Telecom management solution for your organization by contacting VMware Support.

Create Network Usage Rules

Network usage rules enable you to control the applications that can access data based on the network connection type or roaming status of device. These rules help you to manage data charges when employees are using their devices. Use granular controls to apply different rules to different apps as needed.

To create network usage rules:

1. Navigate to **Profiles > List View > Add**. Select **Apple iOS**.

2. Configure the profile's **General** settings. These settings determine how the profile is deployed and who receives it. For more information on **General** settings, refer to the **VMware Workspace ONE UEM Mobile Device Management Guide**.

3. Select the **Network Usage Rules** payload from the list.

4. Add or select the public, internal, or purchased applications.

5. Choose to **Allow Cellular Data** and **Allow Data Roaming**. Both options are selected by default.

6. Select **Save & Publish**.

This feature is applicable only for iOS 9 platform.

Chapter 6:
Telecom Data Roaming Mitigation

Disable Roaming for iOS

You can set the roaming and hotspot settings for devices in your organization groups by configuring the Default Cellular Settings in the UEM console.

To configure default settings.

1. Navigate to **Devices > Device Settings > Devices & Users > Apple > Apple iOS > Managed Settings > Default Managed Settings**.

2. Configure which devices the settings affect according to ownership type, including Corporate - Dedicated, Corporate - Shared, Employee Owned and Unknown.

3. Enable or disable:

   - Voice Roaming (iOS 5+)

   - Data Roaming (iOS 5+)

   - Personal Hotspot (iOS 7)

   - Activation Lock (iOS 7 and Supervised)

4. Select **Save** to save the settings to devices in the current organization group.

Configure Default Roaming Settings Override for iOS

Modifying iOS settings to manage roaming status does not apply a permanent restriction. End users are able to make changes to these settings manually if needed.

To override default settings in order to modify roaming permissions for an individual iOS device.

1. Navigate to **Devices > List View**. Filter by **Platform** to locate your desired device. Select its **Friendly Name** to launch the Device Control Panel.

2. Select **More > Managed Settings**.

3. Select the **Enable** or **Disable** radio button to override current **Voice Roaming Allowed**, **Data Roaming Allowed**, and **Personal Hotspot Allowed** settings.

4. Click **Save**.

Prevent Roaming for Android

Roaming capability is restricted on Android devices using a dedicated profile deployed to the device from Workspace ONE UEM. Specific roaming functionality can only be prevented on supported platforms and operating system versions. Supported devices are listed to the right of the individual roaming function in the profile window.

To configure an Android profile with a Restrictions payload:

1. Navigate to **Devices > Profiles > List View**.

2. Select **Add**.

3. Select **Android** as the platform for the profile.

4. Select **Device** as the profile configuration type.

5. Configure the **General** settings for the profile to specify how the profile is deployed and which devices receive it.

6. Select the profile payload type by selecting **Restrictions** from the menu at left and select **Configure**.

7. Scroll down to **Roaming** and select the applicable check boxes to allow/prevent the following roaming functions:

   a. Allow Data Usage on Roaming

   b. Allow Automatic Sync on Roaming

   c. Allow Roaming Voice Calls

8. Select **Save** to add the profile to Workspace ONE UEM or **Save & Publish** to add the profile and immediately deploy it to applicable Android devices.

Chapter 7:
Telecom Reports

Access Telecom Report Data

The Telecom Data report provides information about data usage, call usage, SIM card details and roaming status of devices. The acquired data is required to understand the billing details and device usage details.

To access a telecom report:

1. Navigate to **Hub > Reports & Analytics > Reports > List View**.

2. Select the **Category** drop-down at the top of the screen to filter the **Reports List** view. Select **Telecom** and the following Telecom reports are displayed:

   - Call Log Verbose History

   - Call Usage

   - Data Usage

   - Device Roaming

   - Device Roaming Detail

   - Device Roaming Summary

   - SIM Card Change

   - SIM Daily WWAN Data Usage

   - SIM Inactive Detail

   - SIM Inactive Summary

   - SIM Summary

   - SIM Usage Detail

   - SMS Log History

   - SMS Usage

- Telecom Daily Usage

- Telecom Monthly Usage

- WLAN Data

- WWAN Data

3. Select the ⬜ icon to launch the report configuration view.

4. Select the specific criteria for your report and select **Download**. Report configuration criteria is dependent upon the type of report being generated.

Subscribe to a Report

Workspace ONE UEM allows you to subscribe to reports so that they are automatically generated and sent to you through email in your desired format at regular intervals of your choosing. You can configure your report subscription and distribute it.

To subscribe to a report:

1. Locate the report for which you may like to configure a subscription.

2. Select the ⬜ icon to run the Report Subscriptions window.

3. Enter the General information about the report and delivery email and then select **Next**.

Field	Description
Description	A brief description of the report or subscription.
Render Format	The desired format for the report output.
Reply To	The email address to use for report delivery.
Subject	The subject for the report delivery email.
Message Body	Enter a message for the report delivery email.

4. Enter the parameters of the report as required and select **Next**.

5. Configure the recurrence and range for the report and then select **Next**.

- **Recurrence** - Select **Once**, **Daily**, **Weekly**, or **Monthly** and specify the day and frequency of the recurrence.

- **Range** - Enter the **Start** date and time and **End By** date and time. You can alternately select **No End Date**.

6. Configure the report distribution list and select **Save**.

Field	Description
Choose Roles	Select the configured roles to automatically receive the report.
Choose Users	Select individual end users to automatically receive the report.

Field	Description
Add Email	Enter the email address of anyone external of Workspace ONE UEM to automatically receive the report. You can select the ⊕ icon to add more external report recipient email addresses.
Emails List	Select a preconfigured email list to automatically receive the report.