# Quest® Unified Communications Analytics 8.8.1

# User Guide

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# Introducing Quest UC Analytics

This guide introduces Quest Unified Communications Analytics (UC Analytics) and provides basic information to get you started using the insights.

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UC Analytics provides dynamic analytics to unlock the business intelligence in your most important and widely-used corporate communication assets. Predefined and customized insights provide a simple way to view message volumes and individual message details between individuals, groups, and external entities. Gain insight into your on-premises, hybrid, or online UC environments (Microsoft Exchange, Lync/Skype for Business, Office 365, and Cisco Unified Communications Manager.

The UC Analytics insights enable you to:

- Understand and measure messaging within your organization, for on-premise Exchange, and for hybrid and native Office 365 (Exchange Online)

- View statistics and permissions for legacy (Exchange 2010) public folders and replicas, and for Exchange 2013/2016/2019 and Exchange Online public folders.

- View Exchange ActiveSync activity and Outlook on the Web (OWA) logons for mobile devices and users.

- Discover communication between employees, groups, and external parties

- Compare Skype for Business/Lync conference and peer-to-peer session activity for your employees.

- Identify Skype for Business/Lync servers, pools, departments, users, and devices that are experiencing poor quality calls and sessions.

- Compare Cisco peer-to-peer call and conference call activity for your employees.

For information about installing and configuring UC Analytics, see the *Quest Unified Communications Analytics Deployment Guide*.

## Supported environments

You can use UC Analytics to collect data from the following environments:

- Microsoft Exchange 2010 (SP1 and later)

- Microsoft Exchange 2013

- Microsoft Exchange 2016

- Microsoft Exchange 2019

- Exchange Online (Office 365 hybrid with on-premise Exchange)

- Exchange Online (native Office 365)

- Microsoft Lync 2010

- Microsoft Lync 2013

- Microsoft Skype for Business 2015

- Microsoft Skype for Business 2019

- Cisco Unified Communications Manager (CUCM) 10.5(2) and later with Active Directory integration

## Types of data collected

UC Analytics collects different types of data from these environments:

- User data and Data Loss Prevention (DLP) policy data from Active Directory

- Message traffic and DLP rule matches from your Exchange message tracking logs

- Exchange configuration including organization, server, DAG, database status, database copy, personal archive, and mailbox property data directly from the Exchange server

- Mailbox folder statistics through Exchange Web Services (EWS) from specified target mailboxes

- Message data through Exchange Web Services (EWS) from specified target mailboxes

- ActiveSync mobile device activity and Outlook on the Web (OWA) logons from your Exchange ActiveSync IIS logs

- Public folder information for legacy public folders (Exchange 2010) and for Exchange 2013/2016/2019 and Exchange Online public folders

- Exchange Online mailbox statistics such as mailbox size, permissions, and mobile devices from hybrid (on-premise and Office 365) and from native Office 365 environments.

- Exchange Online user and group configuration, and mailbox content collected from a native Office 365 deployment.

- Office 365 user subscription configuration information including licenses and subscribed services such as Exchange Online, Skype for Business Online, and SharePoint Online.

- Configuration data including server, user, and pool data directly from the Skype for Business/Lync server

- Peer-to-peer session and conference data from the Skype for Business/Lync CDR SQL database

- Quality of Experience (QoE) data from the Skype for Business/Lync QoE SQL database

- Cisco end-user data from the Cisco Unified Communications Manager server and from Active Directory (LDAP).

- Cisco peer-to-peer sessions and conference data from the Cisco CDR log files.

You configure the settings that determine how data is displayed and which users can access the data.

For information about installing the product, creating data collections and configuring user access to insights, see the *Quest Unified Communications Analytics Deployment Guide*.

# Viewing UC Analytics insights

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# Accessing the Analytics web site

You access the insights through the UC Analytics Welcome page at the following web site:

> http://<ServerName>/Analytics/

> **i** | **NOTE:** If UC Analytics is configured for a native Office 365 environment, you will be prompted for your credentials. You can specify either your Windows credentials or your Office 365 credentials, depending on how UC Analytics was configured for user authentication.

On the Welcome page, you have the option of

- getting a set of recommended insights
- accessing the insight library so you can select the insights you want.
- importing insights from a file containing previously exported insights. For more information, see Exporting insights from and importing insights to an insights home page on page 36.

On the Analytics web site, you can access the insight library at any time by clicking the library icon ![library icon] on the left border.

# Quick tip for getting started

When you first access the Analytics web site, you can quickly populate your My Insights home page by selecting **Give me the recommended insights**. The My Insights page is populated with a basic set of insights.

You can then access the library and add any other insights that you want. For more information, see Selecting insights from the library on page 13. Use the **Manage Insights** option to remove any unwanted insights from your My Insights page.

# Using a browser in 64-bit mode

If your insights will be displaying a large amount of data, it is recommended that your browser be in 64-bit mode due to the memory limitations of 32-bit mode.

Beginning with Chrome 58.0.3029.96, which was released on May 2017, Google automatically migrated users to 64-bit Chrome from the 32-bit version. The automatic upgrade occurred for users running 64-bit Windows with 4 GB or more RAM and had 32-bit Chrome installed.

### *Verifying browser mode for Internet Explorer*

If you are using Internet Explorer, you can first check to see if you are using the 32-bit version.

1    Use Internet Explorer to open the UC Analytics web site (only one tab opens).

2    Open the Microsoft Process Explorer tool and add the Image Type column.

     For information about Process Explorer, see https://docs.microsoft.com/en-us/sysinternals/downloads/process-explorer.

3    View the row that contains explorer.exe and see whether the content process in the Image Type column is 32-bit or 64-bit.

### *To enable 64-bit mode for Internet Explorer*

1    Open **Internet Options** and select the **Advanced** tab

2    Ensure that the **Enable Enhanced Protected Mode\*** and **Enable 64-bit processes for Enhanced Protected Mode\*** check boxes are selected.

     > **i** | **NOTE:** Internet Explorer 11 on Windows 7, does not have the **Enable 64-bit processes for Enhanced Protected Mode\*** option.

3    Select the **Security** tab and click the **Local Intranet** icon.

4    Ensure that the **Enable Protected Mode (requires restarting Internet Explorer)** check box for the zone to which the UC Analytics web site belongs is selected.

     By default, Internet zone is checked, while both Local intranet and Trusted sites zones are not selected.

5    Restart the computer.

# Changing formats for date, time, and digit separators

By default, the UC Analytics date and time formats are set to month/day/year (M/d/yyyy) and hour:minute:seconds am or pm (h:mm:ss tt). When displaying numeric values, UC Analytics uses a period (.) for decimal values and a comma (,) as digit separators for thousands.

You can modify these settings to match your locale. These settings are configured per user. An administrator cannot set these values for all users.

### To modify your date and time format and numeric separator settings

1   Click your user name that is displayed in top right corner.

2   Select **Edit Profile**.

3   Beside the Date Format or Time Format field, click ⌄ and select the format you want.

4   Enter the values you want for the Decimal Separator and the Thousand Separator fields.

5   Click **Save**.

# Overriding the time zone offset

UC Analytics determines the time zone that is used for scheduling and insights from the regional settings of the computer that is running the user browser. Each time you log in, your user profile's time zone offset is updated to the time zone of the client computer. The offset is used for running queries and affects the display of data, including subscriptions.

If you want your data queries to always run using a particular time zone offset regardless of your current location or whether Daylight Saving Time is active, you can set an override in your user profile page.

### To override the time zone setting

1   On the UC Analytics web site, click your user name that is displayed in top right corner.

2   Select **Edit Profile**.

3   Click the **Use Specific** button in the Time zone section.

4   In the field below, enter the value for the specific time zone offset that you want. For example, you might enter -5 or +2.

5   Click **Save**.

# Disabling automatic loading of data in insights

In previous versions, when you clicked an insight tile on a home page, the insight was displayed and data immediately loaded into the insight. In some cases, where there was a lot of data, an insight could take a long time to display.

In your user profile, you can enable a manual query option that delays the immediate loading of data. You can apply filters or reduce the time period for the data, then click Query on the right top of the insight and load the data. As of version 8.7, this option is enabled by default for new installations.

### To disable automatic loading of data in insights

1   On the UC Analytics web site, click your user name that is displayed in top right corner.

2   Select **Edit Profile**.

3   Under Insight, select **Enable manual Query** option.

4   Click **Save**.

# Excluding today's data in insights

For environments with a large amount of data in which data source collections can run for several hours or longer, you might want to exclude today's data from displaying in insights that show a relative date range such as 7 days or 28 days. The Exclude Today option is useful when the collection jobs for today have not completed which might result in incomplete data appearing in insights.

### To exclude today's data from displaying in insights

1   On the UC Analytics web site, click your user name that is displayed in top right corner.

2   Select **Edit Profile**.

3   Under Insight, select **Exclude Today** option.

4   Click **Save**.

NOTE: The Exclude Today option in the user profile only affects insights for an individual user. To set the option for all users, you can use the **Exclude Today** option in the **Admin Settings | Queries** page.

# Turning off or resetting pop-up tips

UC Analytics provides a tour of the different aspects of the My Insights home page and of insights through pop-up tips that guide you. The pop up tips are displayed the first time you access different areas of the web site. You can either turn off tips or reset tip in your user profile.

### To turn off or reset tips

1   Click your user name that is displayed in top right corner.

2   Select **User Profile**.

   ▪   To turn off tips, clear the check box beside **Show tips**.

   ▪   To reset tips so that they display again, select the **Show tips** check box and click **Reset Tips**.

3   Click **Save**.

# What is an insight?

A main insight contains one or more views that allow you to see different aspects of the relevant data. Each insight can be comprised of different charts and graphs that provide different views of the data. To see specific data values, hover over a data point on the chart or graph.

•   A line graph can show the number of values over time.

•   A bar chart can be used to compare values across categories or to compare the contribution of each value to a total across categories (for example, stacked bars)

•   A pie chart can show proportions or percentages. It can visually represent the contribution of each value to a total sum of data, or the component parts of a whole.

•   A table can provide details about individual messages, sessions, users, servers, and so on.

## Viewing the insight details

For each insight, there is a details browser that allows you to see the full data set that comprises the insight.

To access the details browser while viewing an insight, click the details browser icon [icon] in the top right corner. For more information about the details browser, see Drilling down to detailed information on page 19.

# What insights can I access?

The access rights that you are granted by the product administrator determine which insights you can access from the library or add to your My Insights home page. You can only view the insights that contain data for which you have specifically been granted access.

For each different type of data, individual or groups of users can be granted access to the aggregated and/or the detailed data. Generally, the following access types are available.

**Table 1. Viewing data in insights according to access rights.**

| If I have this type of access | I can see |
|---|---|
| Aggregate | Summary (aggregate) information about the collected messages from Exchange, Skype for Business/Lync peer-to-peer sessions and conferences, and Cisco peer-to-peer sessions and conferences. This security access does not include the details browser which shows the individual messages or individual sessions and conferences or information that is considered "private". By default, access to aggregate data is granted to everyone. |
| Unrestricted | Unrestricted access to the details of all the messages that everyone has sent or received in all the targeted mailboxes, and details about all the sessions and conferences in which the targeted users participated. It is recommended that this access be granted only to select personnel. |

For more information about what types of information can by viewed, depending on your access rights, see Viewing insights with aggregate or unrestricted access on page 20.

For information about how to grant a user access to different types of data, see the section titled "Granting users access to data" in the *UC Analytics Deployment Guide.*

# Viewing the My Insights home page

When you first access the Analytics web site, you have three options:

- loading a set of recommended insights to the My Insights home page
- accessing the library and selecting the insights that you want on the My Insights home page.
- importing insights from a file containing previously exported insights. For more information, see Exporting insights from and importing insights to an insights home page on page 36.

You can drag and drop the tiles to change their order on the home page. To group the insights by platform, select **Manage insights** in the top right corner and click **Group by platform**.

i | NOTE: As of release 8.8, insights are grouped by platform by default for new installations. You can still use the **Manage Insights** function to group or ungroup insights by platform.

## Viewing summary data in tiles

On the My Insights home page, if you hover over the right side of a tile, the actions icon [icon] is displayed. Click the icon to show the options that are available. If you select **Enlarge tile**, the tile shows scrolling summary data from the insight.

***To enlarge a tile and view summary data***

- Click the option icon and select **Enlarge tile**.

The larger tile displays the summary information for an insight. The data in the tile rotates through key information contained in the insight. Each time a tile finishes cycling through the data, it begins again using the cached data. Data is cached for 10 minutes before it is automatically updated.

# Selecting insights from the library

You access the insight library at any time by clicking the library icon  on the left border. Use the library to select the insights to be added to your home page.

The insight library lists all the insights that are available. If your user account does not have access to certain types of data, insights that contain that data will appear to be dimmed.

> **i** | **TIP:** If you do not have access to a certain insight (dimmed) and you want to know what type of access you need to see the insight, click the **Launch Default** button for the insight. A message is displayed that indicates what type of data access is required to view data in the insight.
>
> For information about how to grant a user access to different types of data, see the section titled "Granting users access to data" in the *UC Analytics Deployment Guide*.

Icons are used to identify the types of information provided by each insight.

**Table 2. Icons used to identify data included in the insight.**

| Icon | Types of data |
|---|---|
| <br>Cross Platform | Exchange, Skype for Business/Lync, and Cisco activity data for cross-platform comparisons. Also includes some of the Office 365 data. |
| <br>Active Directory | Includes users, groups, and mail contacts from Active Directory. |
| <br>Exchange | Exchange configuration information such as organizations, servers, DAGs, database status, database copies, and mailbox properties. |
| | Exchange mailbox folder statistics such as number of items and folder sizes. |
| | Exchange message traffic information including both message data and DLP rule matches from the Exchange message tracking logs. |
| | Exchange message information including participants, message subject, file attachments, response times, and localized send / receipt time of day from Exchange Web Services (EWS). Can include message body if configured. |
| | **NOTE:** To use "after hours" and "response time" filters on insights, you must run an Exchange mailbox contents (EWS) collection for the mailboxes for which you want the information. Recipient response time is available only if mailbox content data is collected for the message recipient. |
| | Exchange ActiveSync mobile user and mobile email activity from your Exchange IIS log files. |
| | Exchange public folder statistics and permissions or legacy public folders (Exchange 2010) and for new public folders (on-premises Exchange 2013/2016/2019 and Exchange Online) |
| | User configuration and message data for Exchange Online users and mailboxes in an Office 365 deployment. |

**Table 2. Icons used to identify data included in the insight.**

| Icon | Types of data |
|---|---|
| Skype for Business/Lync | Skype for Business/Lync configuration information such as server, service, user, and pool information. |
| | Peer-to-peer session, conference, and enterprise voice information from the Skype for Business/Lync Call Details Recording (CDR) database. |
| | Quality of Experience (QoE) data including call quality metrics from the Skype for Business/Lync QoE database. |
| Cisco | Cisco configuration information for end-users such as phone number, device ID, and SAM account. |
| | Cisco peer-to-peer session, conference, and enterprise voice information from the Cisco Call Details Recording (CDR) log files. |

# Using search to find specific insights

You can use the library search option [🔍] to quickly find the types of insights that you want.

For example, you could enter Lync in the Search field to display only insights that contain Lync information. If you want to see only the insights that contain detailed information, you could enter "details" as the search criteria.

**i** | **TIP:** When you are displaying the library, you can simply start to type and UC Analytics immediately initiates a search as you type.

Once you have located the insight that you want, you can either add the insight to the My Insights home page, or launch the insight to preview it. Once an insight is added to the My Insights home page (or to any other home page that you have created) you can customize it by inserting columns or adding filters. When you launch an insight from the library, the default version of the insight is always displayed.

## Can I search for MessageStats type insights?

If you have used MessageStats, you will notice that the library contains insights that seem the same as some of the MessageStats insights. These insights are tagged as being MessageStats insights.

If you want to display all the insights that contain the same data as MessageStats insights, type MessageStats in the library search field. All the MessageStats insights will be listed.

## How can I find specific types of insights?

You can use the [🔍] Search Library option on the library page to find insights for that contain specific types of data.

The following examples show how you could search for insights by platform or by granularity of data:

- To see all the Cisco insights, type Cisco in the Search Library field.

- To see the insights that contain Exchange ActiveSync mobile data, type ActiveSync in the Search Library field.

- To see which Exchange insights are relevant for an Office 365 (Exchange Online) deployment, type Office 365 in the Search Library field.

- To see the insights that are comprised of tables of detailed data, type Details in the Search Library field. The "details" insights are not added by default to the My Insights home page if you loaded the recommended insights.

# Creating a customized home page

If you decide to select insights from the library, you can create a customized home page.

### To add insights to a home page

1  To access the insights library, click the library icon [icon].

2  For each insight that you want, click **Add to Home Page**.

   If you have created more than one insights page on your home page, select the page to which the insight is to be added. For more information, see Creating multiple pages on your home page on page 15.

3  When all the insights are selected, click the home page icon [icon].

   Your customized home page is displayed.

You can drag and drop the tiles to change their order on the home page. To group the insights by platform, select **Manage insights** and click **Group by platform**.

### To remove insights from a home page

1  On your home page. select **Manage Insights** in the right top corner.

2  Select the tiles for the insights that you want to remove.

3  Click **Delete** and click **Done**.


# Organizing a home page

If you want to group your insights by platform, click **Manage Insights** in the top right corner and select **Group by platform**. The insight tiles shown on your home page are grouped by platform such as Exchange, Active Directory, Skype for Business, and so on.

> **i** | **NOTE:** As of release 8.8, insights are grouped by platform by default for new installations. You can still use the **Manage Insights** function to group or ungroup insights by platform.


# Creating multiple pages on your home page

You can add new insights pages on your home page which allows you to group insights according to your own requirements.

For example, you could create a new page and title it Inventory. You could then either add inventory insights from the library, import insights from an insights file, or select insights on an existing page and move them to populate the Inventory page.

Use the tabs at the top of each insights page to display the individual pages on your home page.

### To create a new insights page on your home page

1  On the My Insights home page, click the plus sign [icon] beside Manage Insights.

2  Enter a name to identify the new page. For example, you could enter Inventory.

   The new page displays.

3 You can use one of three methods to populate the new page:

- Load the recommended insights.

- Select insights from the library.

- Import insights from a file containing previously exported insights. For more information, see Exporting insights from and importing insights to an insights home page on page 36.

The Manage Insights options can be used to organize the insights by platform or to remove specific insights from the page. For more information, see Creating a customized home page on page 15.

You can also add an insight to a home page from the insight itself.

### *To add the displayed insight to an insights page*

1 Click the library icon ⬛ on the left border.

2 Locate the insight that you want and click **Launch Default** for that insight.

3 When viewing the insight, click **Add to Home Page** in the top right corner.

4 Select the specific page on the home page to which the insight is to be added.

### *To rename an insights page*

1 On your home page, click the insights page tab to select it.

An insights page menu displays.

2 Select **Rename**.

### *To remove an insights page from your home page*

1 On your home page, click the insights page tab to select it.

An insights page menu displays.

2 Select **Delete**.

# Moving insights from one page to another

After you have created multiple pages on your home page and loaded insights onto the pages, you might want to move some insights from one page to another.

### *To move insights to a different page*

1 On the page that contains the insights that you want to move, click **Manage insights**.

2 Click one or more insight tiles to select them.

A check mark appears in the right top corner of each selected tile.

3 Click **Move insights** and select the insights page to which the insights are to be moved.

A message is displayed indicating that the insight has been moved.

You can also move an insight by clicking the Actions icon ▤ at the right corner of the insight tile and select **Switch pages** to move the insight to a different page.

# Can the same insight be on more than one page?

Suppose you have created multiple pages on your home page and loaded certain insights on each page. Now you might want to have one insight, such as Platform - Activity, appear on all the pages. You can add the same insight to more than one page by:

- Making a copy of the insight and moving it to a different page.

- Adding the insight to different pages from the library.

- Export an insight to a file and import the file to add the insight to different pages. For more information, see Exporting insights from and importing insights to an insights home page on page 36.

**To make a copy and move an insight to a different page**

1   To make a copy of an insight, click the Actions icon in the right corner of the insight tile.

2   Select **Save as**.

3   Save the insight under the same name or a different name.

4   Click **Manage insights**.

5   Click the copied insight tile to select it.

    A check mark appears in the right top corner of the tile.

6   Click **Move insights** and select the page to which the insights are to moved.

    A message is displayed that indicates the insights were moved to the different page.

**To add the same insight to multiple pages from the library**

1   Click the library icon .

2   Select the insight that you want and click **Add to Home Page**.

3   Select the specific page to which the insight is to be added.

    The insight is added to the selected page.

4   Repeat steps 2 and 3 for each page to which you want to add the insight.

# About the Company home page

In addition to the individual pages that each user can add to their home page, a product administrator can create a Company home page which contains insights that all UC Analytics users can view. A Company home page can contain customized insights that a product administrator wants to be available to all users.

If your product administrator has created a Company home page, click the Company page on the left to view the shared insights.

For information about enabling a Company home page, see the *Unified Communications Analytics Deployment Guide*.

# Viewing data in insights

When you click an insight tile on a home page, the insight is displayed. Depending on the data collections that were created and the type of user access that you have, you can see different levels of information.

Data in the insights is cached for 10 minutes. To update the data, refresh your browser.

User access settings also affect the types of data that you can view in the insights such as

- Cross-platform data
- Exchange messages, mobile user data, and Exchange public folder information
- ActiveSync activity and Oultook on the Web (OWA) logon information
- Skype for Business/Lync peer-to-peer sessions and conferences
- Exchange Data Loss Prevention (DLP)
- Skype for Business/Lync Quality of Experience (QoE).
- Cisco peer-to-peer sessions and conferences

For information about granting users access to the different types of data and to different levels of detail, see the *Unified Communications Analytics Deployment Guide*.

## What does <none> mean in an insight?

In some cases, certain information is missing and will show as <none>. For example, if a message is a system message or is sent through an SMTP address and does not have a corresponding user account in Active Directory (AD), the AD user attributes such as office, department, or sender name can display as <none> since they do not exist in Active Directory.

You can exclude <none> values for aggregated views and organizational grouped views in insights using the Admin Settings | Queries page. For more information, see "chapter 3 Configuring UC Analytics" in the *UC Analytics Deployment Guide*.

## Why are some numeric values in tables shown with colored underlines?

When UC Analytics is configured, thresholds can be set to identify minimum and maximum values that your organization wants to track. For example, for the Skype for Business/Lync Quality of Experience (QoE) data, thresholds can be set to flag the QoE metrics that result in poor calls.

Colors can be used to identify the severity of a poor call (red, yellow, or green), For Exchange, thresholds can be set for values such as mailbox size or the number of attachments uploaded in ActiveSync.

To see the value of the threshold that has been met, left-click on the underlined value and select **View threshold details**.

When you view the metrics in an insight table, if a threshold is met, the value is underlined in the color that was specified for the threshold. You can filter the results by the actual displayed value or you can filter for the configured threshold value.

For an example of filtering using a configured threshold value, see Filtering by a configured threshold on page 27.

For information about configuring thresholds, see the *Unified Communications Analytics Deployment Guide*.

## How can I find out the data source for an insight?

If an insight is missing information, it might mean that a required data source has not been configured for data collection. To see what data sources are required for a particular insight, click the INFO link on the top left of the insight.

**Table 3. Information provided when you click the INFO link.**

| Link | What information is available? |
|---|---|
|  | If you click the INFO link, information is displayed about what data the insight contains. The required data sources for the insight is also shown. |

## Viewing insights in multiple browser instances

You can view different insights simultaneously by opening multiple browser windows. When you open a second window, the session inherits the credentials that were used to authenticate the first session. When you log out, all simultaneous sessions using the same credentials are logged out.

# Drilling down to detailed information

If you have unrestricted data access, you can see both aggregate information and detailed information. When you launch an insight by clicking on the insight tile, the main view of the insight is displayed.

An insight can consist of composite views (charts, tables) such as summary insights or can consist of a single table view such as the details insights. When you first display an insight, you are looking at the main view of the insight.

You can drill down into the details of a specific item of data through the details browser.

**Table 4. View icons at the top right of an insight allow different views of data.**

| Icon | What is displayed |
|---|---|
|   Main view | Shows the insight main view of the data. For some insights, the top level view (main view) might be a composite view of aggregate data containing graphs and charts and tables. For other insights, the top level view might be a table with detailed individual records. |
|   Details browser | The details browser provides a detailed view of a specific item of data: <br>• A detailed view of the data in table format on the left. <br>• The individual information for the highlighted table row in the details panel on the right. <br>Click on any row in the table and all the detailed information for the data in that row is displayed in the details panel on the right. <br>To drill down to additional information in the details panel, click a value that is in blue text. |

**Figure 1. Displaying all the information for a line item in the details browser.**
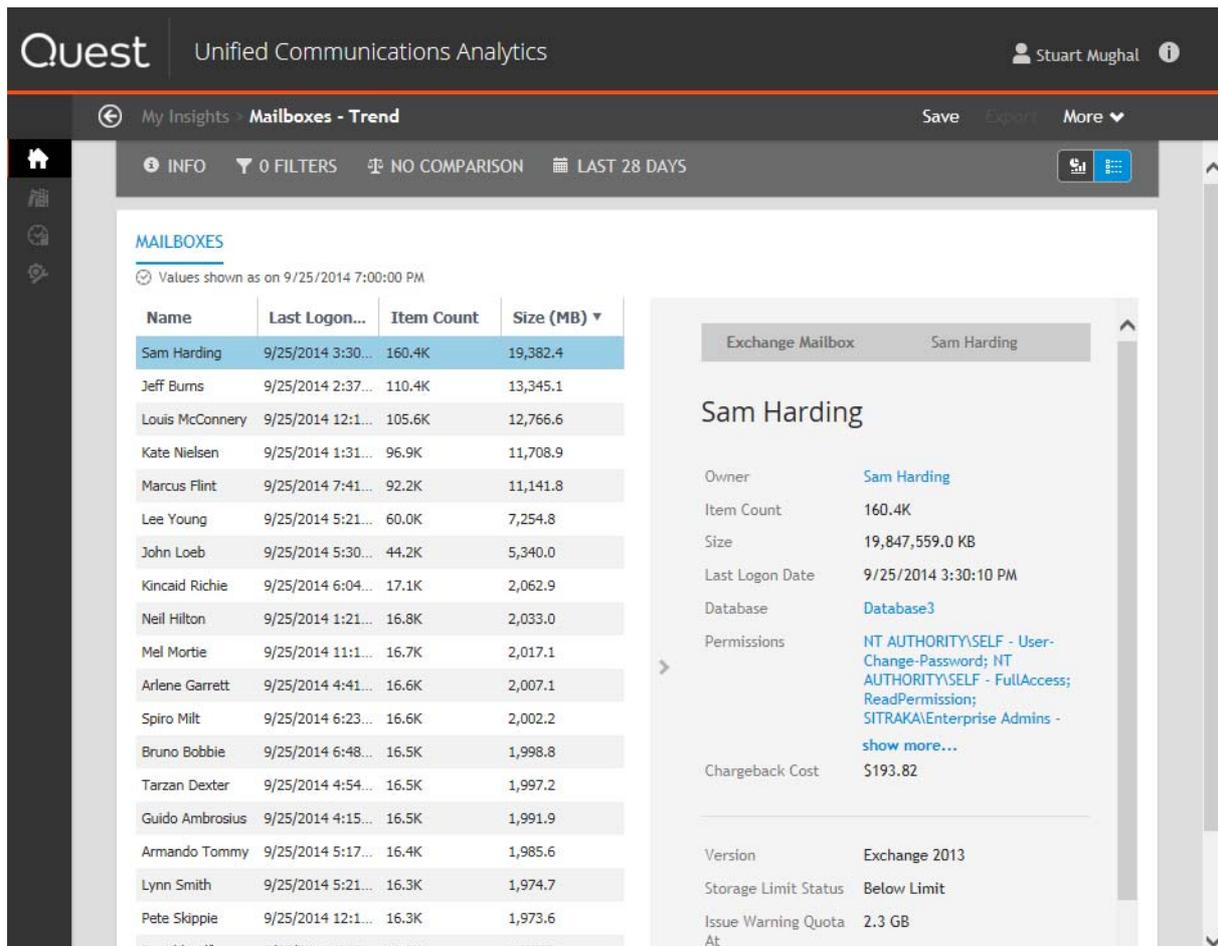


# Viewing insights with aggregate or unrestricted access

If you have aggregate data access, you can view "public" information in insights. Public information is information that does not specifically identify both individuals in a messaging transaction or does not include "private" information such as message subject, file attachment name, or message ID. If you are collecting message body information, the message body is also considered private.

Other information is considered "sensitive" and may be available for aggregate access depending on the filters you have set. Sensitive information can include:

- file attachment extensions
- subject keywords
- participants
- send and received time of day
- importance.

With aggregate access, you can view sensitive information in some insights. However, sensitive information is not available for specific individuals unless you have unrestricted access.

## Adding filters can change access

Generally, with aggregate access, you can add a filter for one sensitive item in a single insight but not for two or more sensitive items. For this reason, when you modify an insight, some information may become available or unavailable when you change the selected filters for entities (such as senders, receivers, messages, groups, sessions, conferences).

For example, if you have aggregate access to data, you can view insights that contain information such as

- How many emails were sent and received by your organization and who are the top senders?

- Which mail-enabled groups have not been active lately?

- How many emails were sent with file attachments and how big were they?

However, if you only have aggregate access, you cannot modify an insight to include private information such as

- what are the number of messages sent from one specific person to another specific person?

- what is the size of a specific mailbox and its last logon date?

- what are the details of a scheduled Exchange meeting and who are the attendees?

- which sent messages had a specific file attachment (such as "purchase.docx")?

- what are the number of messages from a department that contained a specific message subject? However, you can see the number of messages from a department that contain a specific subject keyword. For more information, see Specifying subjects and subject keywords on page 28.

Filters that are related to response time, such as delivery time, received time of day, was received after hours, and receipt date, are available only for the receivers of a message.

To see detailed and private information in insights, you must have an unrestricted security access.


# How can I find details insights?

The details insights are not shown by default (the recommended insights). You can add details insights to your home page using the library.

### *To add details insights to the home page*

1    Click the library icon ▥ to access the insights library.

2    In the library search option 🔍 field, enter "details".

3    For each details insight that you want, click **Add to Home Page**.

4    When all the insights are selected, click the home page icon 🏠 .

# Modifying UC Analytics insights

## Adding filters, including comparisons, and changing the date range

You can modify an insight by using the insight customization bar at the top of the insight. The customization bar allows you to

- apply filters to the insight data
- add comparison data from a previous date range
- change the date range for the displayed data

**Figure 2. Functions in the insight customization bar can be used to modify an insight.**



You can alter an insight to obtain a one-time result. However, if you want to keep your revisions, you can save the changes, either by updating the existing insight or saving it as a new insight.

After you have made changes using the customization bar, you can reset an insight back to its default values.

***To reset an insight to the default values***

- Click **More** at the top right of the insight and select **Reset to defaults**.

Any custom filters you applied to the insights are removed and the insight is reset to the library version of the insight.

> **ⓘ** | **TIP:** When you reset the insight, it is not saved. If there are saved changes that you want to remove, you must reset the insight and then save it.
>
> The **Reset to defaults** option only affects changes that you have applied from the customization bar. It does not reset any layout changes that you made to an insight. For information about changing an insight layout, see Modifying the layout of an insight on page 32.

# Adding comparison data to an insight

By default, most insights show data for the previous 28 days. You can add comparison data for the previous date range.

If the insight includes a trend view (graph), the previous period appears as a secondary trend line in the graph. For tables and pie charts, the comparison data is shown by red arrows (decrease from previous period) and green arrows (increase from previous period) and values that show the percentage difference from the previous period.

***To specify comparison data to an insight***

1   On the insight, click the date range function on the customization bar. By default it is set to Last 28 Days.

2   Select the date range for which you want to compare data.

3   Click the comparison function. By default it is set to No Comparison.

4   Click **Previous Date Range**.

# Viewing date ranges for different data

When viewing an insight, if you select a date range, you will notice that date ranges work differently for different types of data.

For example, suppose you select a date range (14 days) for data that continuously changes, such as Exchange Email - Activity or ActiveSync - User Activity. The insight will show the data for the selected date range.

However, if you select a date range for data that is fairly static (such as users, servers, policies, departments, and so on) and is gathered in a "once-day-snapshot" data collection, the insight shows only the most recent data as collected at the last date of the specified date range.

In some insights, there will be snapshot data over time, as in the Platforms - User Adoption insight. In this case, if you enter a date range, you will see snapshot data for each day in the range.

For more information about "snapshot" data collections, see the section titled "How often do collections update the data?" in the *Unified Communications Analytics Deployment Guide.*

# Preset date ranges include "today"

When you use Quick Dates: Last 7 Days filter, the results that are displayed by the insight include the day on which the Insight is run. So if you run an insight at 12 noon on Monday, the insight contains 6 1/2 days of data.

Alternately, you can use the Custom filter to set date ranges such as:

- During This Week = Monday through today

- During Last Week = Monday through Sunday, last week

- During This Month = First day of month through today

- During Last Month = First day of month through last day of month, last month

# How the filters work

If you click **FILTERS** in the customization bar at the top of the insight, you can apply various filters to the displayed insight.

On some insights, there may be pre-defined filters set. For example, on the Exchange - Meetings Summary insight, by default one filter is set for *Is Meeting equals Yes*. This restricts the insight to show only meetings that have attendees in addition to the meeting organizer. If you remove the filter, the insight will show both meetings and appointments (a calendar item that users create for themselves that have no attendees).

You can enter multiple values for a single filter. If you specify multiple values for a single filter, the results include values that have at least one of the specified values. For example, if you filter for Department and enter HR, R&D, and Accounts Receivable as the values, the results will include the employees who are in either the HR, R&D, or Accounts Receivable departments. You can enter multiple values in a single field with each entry separated by a semi-colon (**;**) as the delimiter.

> **i** | **NOTE:** If you apply a filter to a single view within an insight, the filter is applied to all views in the insight.

# Using Search to find a filter

You can use the Search function [icon] to find a specific filter for an insight. For example, suppose you are looking for Lync enterprise voice calls that are going out through an external PSTN (public switched telephone network). The following example shows how you could use the search option to filter for these calls.

If you define more than one search parameter in your insight, the data included must match all the filters. For example, in the Users - Inventory insight, if you filter for users that have a Department of HR and an Office of Manila, only users that have HR as the department and Manila as the office are included.

### *Example of using search to find a filter*

1   Display the Skype for Business / Lync Enterprise Voice - Activity insight.

2   Click **FILTERS** on the customization bar.

3   Click [icon] to display the Add Filter page and enter **PSTN** In the search field.

　　The following filter options are displayed:

　　　　Caller: Is PSTN Connection

　　　　Callee: Is PSTN Connection

　　　　Participant: Is PSTN Connection

4   Select the filter for **Callee: Is PSTN Connection** and click **Next**.

5   For Equals, select **Yes**.

6   Click **Add**.

You could use the same process to set these filters for the Skype for Business / Lync Enterprise Voice - Details insight as well.

# Filtering by counted values

If you select the **Show advanced fields** option in the Add Filters page, for many insights you can filter on counted values such as the number of recipients for a message. For example, in the Email - Activity insight, suppose you want to see all emails that had at least 3 recipients.

*Example of filtering by participant count*

1   Display the Email - Activity insights and click **FILTERS** in the customization bar.

2   Click ➕ to display the Add Filter page and select the **Show advanced fields** check box.

3   Scroll down, select **Recipients Count** and click **Next**.

4   Click ⌄ and select **Greater than or equal to**.

5   Enter 3 as the numeric value and click **Add**.

The insight now displays only the emails that had 3 or more recipients.

# Using an "after hours" filter

To get data when you use an "after hours" filter on insights, you must have run a mailbox contents (EWS) data collection for the specific mailboxes for which you want the information. For more information, see the *UC Analytics Deployment Guide*.

If you use an "after hours" filter in an insight, the following factors apply:

• The time of the message is the local time for the message participant, as determined by the time zone set for the participant in Outlook.

• When a message is received, the receipt time is based on the time zone that the recipient has set in Outlook.

• The work day is as defined in the participant's Outlook calendar.

• The time when the message was sent or received is set when the data is collected.

# Using a "response time" filter

To get data when you use a "response time" filter on insights, you must have run a mailbox contents (EWS) data collection for the specific mailboxes for which you want the information. Recipient response time is available only if mailbox content data is collected for the message recipient. For more information, see the *UC Analytics Deployment Guide*.

The "response time" filter allows you to filter messages based on the time that it takes a message recipient to respond to the sender, either by replying to the message or by including the sender in a forwarded message.

Response time is calculated as follows:

• Response time is the elapsed time from when the message arrived in the recipient mailbox to when the response was sent to the message sender.

• The time of the first response from each recipient is used to calculate the response time.

• If no recipients respond at all, no response time is set. Messages to such a recipient are not included in an insight in which response time is specified as greater than a certain value.

# Using Any or All to refine filtering

For a sub-attribute of a collection field you can set a filter where any or all the members in the collection must meet the filter criteria. Collection fields are fields that can contain multiple values such as File Attachments, Participants, Recipients (as opposed to scalar fields). Collection fields also have sub- attributes.

For example, in the Email - Activity insight, suppose you want to exclude system accounts (account name includes System) from the results.

If you set a filter for **Recipients | Name** *Not Equals* **System**, you can specify if the filters should include results where at least one recipient or all the recipients must meet the filter criteria. If you select **All**, only the results where all the recipients meet the filter criteria are included in the insight.

**Figure 3. Setting filters to All to restrict results to all values that meet filter criteria.**
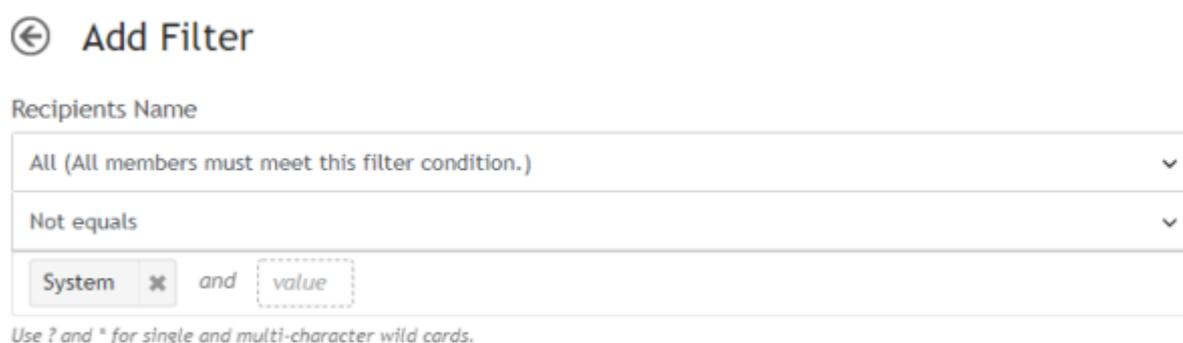


# Filtering by call classification

When you configure UC Analytics, you have the option to create call classifications for Skype for Business/Lync enterprise voice and peer-to-peer sessions and for Cisco peer-to-peer sessions and conferences. You can create call classifications to distinguish different call types such as internal, local, long-distance, toll-free, and international.

If call classifications have been created, you can filter the insights that display the Cisco and Skype for Business/Lync call data by call classification.

For example, when you display the Skype for Business/Lync Enterprise Voice - Details insight on your home page, click the FILTERS option on the customization bar. You can select Call Classification on the Add Filter page and filter the insight results by a one or more call classifications.

# Filtering by direction

You can filter the insights that show details for Exchange email messages, Skype for Business/Lync peer-to-peer sessions and voice calls, or Cisco peer-to-peer sessions by direction (internal, inbound, or outbound).

For example, you could display the Email - Details insight. In the Direction column, you could left-click a value that showed Outbound and select **Show only Outbound**. The insight would now show only outbound email messages.

# Filtering by overall call quality

If you have configured both the Skype for Business/Lync QoE Database and the Skype for Business/Lync CDR Database data sources to collect data, you can filter the Skype for Business/Lync details insights using the Overall Call Quality field to show the conferences, peer-to-peer sessions, or voice calls that had overall poor call quality.

For example, you could display the Skype for Business/Lync Conferences - Details insight. In the Overall Call Quality column, you could left-click a value that showed Poor and select Show only Poor. The insight would now show only the conferences that had poor quality.

> **i** | **NOTE:** For overall call quality, if one participant in a conference, session, or call had a poor call as defined by the QoE threshold values, the overall call quality for that conference, session, or call is flagged as poor. You can use the details browser to identify the specific participant or participants that experienced poor call quality.

**Figure 4. In the details browser, colored icons identify the individual participants that experienced good call quality or poor call quality.**
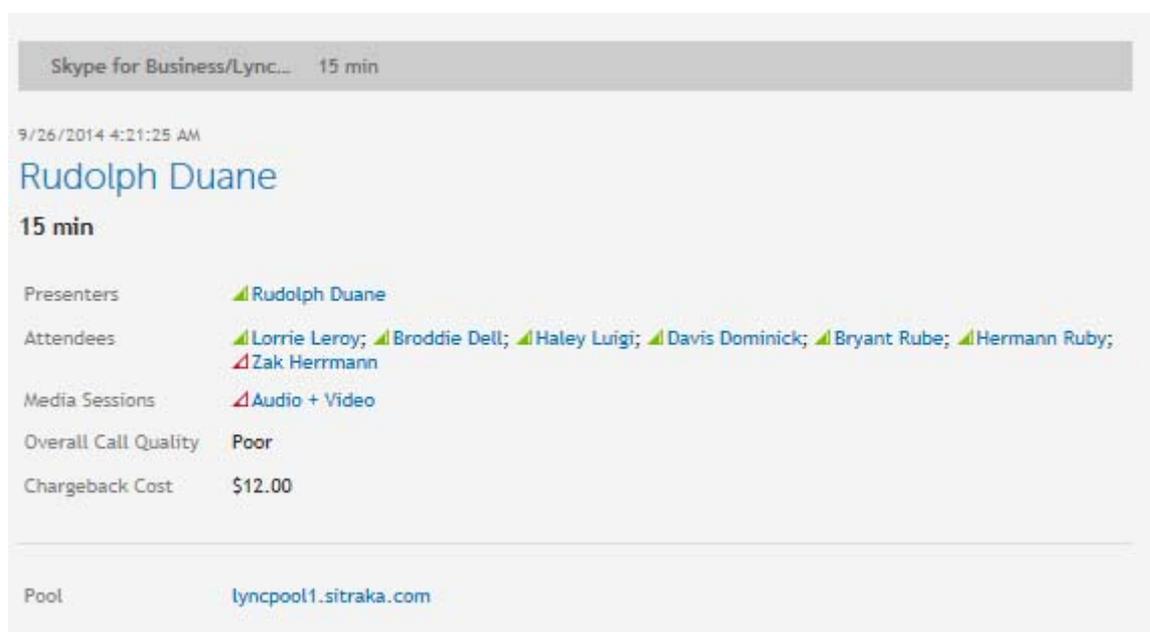


# Filtering by a configured threshold

When UC Analytics was configured, thresholds might be set to identify minimum and maximum values that your organization wants to track. For example, for the Skype for Business/Lync Quality of Experience (QoE) data, thresholds can be set to flag the QoE metrics that result in poor calls.

You can select a column that contains a value for which a threshold was configured and then filter on the threshold to show all the values that meet the threshold.

In the following example, thresholds have already been set for Average Jitter in the Admin Settings | Classifications | Threshold Classifications.

***Example of how to filter by a set threshold value***

1   Display the Skype for Business/ Lync QoE Stream Details insight.

2   Click **FILTERS** on the customization bar.

3   Click  to display the Add Filter page.

4   Select **Average Jitter** and click **Next**.

5  In the dropdown list, select **Meets Threshold**.

6  Since a threshold has been configured in the Admin Settings, you can select the threshold value and the threshold color in the field below (such as **red > 30 msec**) and click **Add**.

The insight displays only the streams that meet the specified threshold.

# Specifying subjects and subject keywords

For Exchange email insights such as Email - Details, you can filter the message subject data by filtering by the subject of the message or by subject keywords that appear in the subject.

If you select Subject as a filter, you must enter an exact match. For this reason, you normally use the Subject filter with wildcards. For example, to filter for messages that contain "bank" in the subject you would enter *bank* in the Subject filter dialog. The filtered messages could include subjects such as "annual banking forecast", "Bank of Geneva transactions", and "banker's acceptance".

If you select Subject Keyword as a filter, you can enter one or more words that appear in a message subject. You can use one of the following operators: Equals, Not equals, Contains, Does not contain, Starts with, Does not start with, Ends with, Does not end with, or Is set.

# Using shortcut filters

In addition to using the filters menu available by clicking FILTERS, you can use shortcut filters. To display a shortcut filter menu, left-click on a value in a table or on a data point on a trend line.

> **i** | **NOTE:** When you left-click on a value in a table, in addition to accessing the shortcut filters, you can also view any thresholds that have been configured (View threshold details). For information about setting thresholds see the *Unified Communications Analytics Deployment Guide*.

The following list provides example of how to use shortcut filters to filter data in an insight:

- **For table columns that display text information**, left-click on a specific value and filter on the value (show only, exclude), or browse to details for that value. You can also filter on the column type data.

- For example, on the Mailboxes - Inventory insight, you can left-click on a name in the User column to show only or include that user, or you can browse to details for that user. You can also filter the insight by User.

- **For a graph with multiple trend lines**, left-click on a data point on a trend line to filter by the trend (show only, exclude only), browse to the details view, or filter by the graph type data.

- For example, on the Skype for Business/Lync - Feature Adoption insight, you can left-click on the audio + video trend line in the Media Types graph to filter by audio + video (show only or exclude), or browse to the audio + video details. You can also filter by Media Types.

- **For table columns that display date information**, left-click on a date and filter by the date (show only), or browse to details for that date. You can also filter by the column type data.

- For example, on the Mail Contacts - Inactive insight, left-click on a date in the Last Modified Date column to filter by the date or browse to details for that date. You can also filter by the Last Modified Date.

- **For Inventory insights**, left-click on a numeric value in a table to filter on the value (greater than, less than, or equal to).

  > **i** | **NOTE:** If you apply a filter to a single view within an insight, the filter is applied to all the views in the insight.

# Shortcut filters in the details browser

When you display an insight and click the details browser icon , the details browser displays a table on the left and a details panel on the right. You can left-click on individual values in the details panel to filter by the linked value.

In most cases, you must have full access rights to display the insight details browser.

# Modifying insight graphs and charts

To see the options for a chart or graph within an insight, click  (View options) in the right corner of the graph or chart view.

For trend graphs, you usually have the following options:

* show or hide a trend line
* show or hide a projection line
* apply smoothing (over a seven-day period)

If smoothing has been applied to a graph or chart, the word **Smoothed** appears in the top right corner.

## How is smoothing applied to a graph?

The UC Analytics smoothing function uses a simple moving average calculation over a seven-day window. On a smoothed graph, each data point represents an average of the previous seven days including the current day.

As a result, a smoothed graph for a specified date range will include data points from before the date range to calculate the averages for the first six points on the graph.

By applying a moving average over a seven-day window, UC Analytics avoids weekly low points (such as weekends or other low activity periods) in your data. Since low points are averaged with periods of normal activity, the resulting trend line shows a more constant curve without recurring drops.

> **i** | **NOTE:** The total number of data points shown in the legend does not include the numbers from previous seven days. The total shows only the number for the selected date range.

# Customizing tables in insights

You can customize the tables in insights. This feature is available for insights that show tables, either as the entire insight or as a view within a main insight. You cannot customize tables in the details browser. For information about the details browser, see Drilling down to detailed information on page 19.

You use the customize option to modify tables including:

* specifying the number of rows to be included in the table
* inserting and removing columns
* renaming column headings
* changing the displayed units of measure
* rearranging the order of the columns in the table
* changing the sort order for columns that show numeric values
* showing or hiding columns that contain aggregate calculations.

An aggregation operation calculates a single value from a collection of values. An example of aggregated data would be the total volume of received email or the average duration of peer-to-peer calls.

You must add an insight to your home page to save your customizations (Add to Home Page).

***To access the customize options***

1 Click in the right corner of an main insight that consists only of a table or in the right corner of a table within an insight.

The table definition is displayed that shows the columns currently in the table, the units (if any), and the current sort order (ascending or descending).

# Inserting additional columns in tables

You can customize the tables in main insights by inserting additional columns of information or removing columns. This feature is available for main insights that show tables, either as the entire insight or as a view in a main insight.

***To add columns to an insight table***

1 Click in the right corner of the insight (or at the right corner of a table view in a composite insight).

A table definition is displayed that shows the columns and the table sort order currently set for the insight.

2 Click **Manage field columns** at the bottom of the COLUMNS list.

3 Select the columns you want from the list of fields and click **Apply**.

4 If you want to customize the column heading, click the display name and enter the column heading you want.

5 If you want to change the measurement units that are used for a particular field, click the unit.

For example, suppose a Size field is shown in MB and you want to change it to GB. Click **MB** in the table definition and select **GB** from the dropdown list.

6 To reorder the columns, drag a column to the position that you want.

7 When you have finished adding columns, click **Apply**.

The modified insight is displayed.

***To remove columns from an insight table***

1 Click in the right corner of the insight.

A table definition is displayed that shows all the fields and the sort order for the detailed table that comprises the insight.

2 Click beside the column that you want to remove from the insight table and click **Apply**.

# What are the different types of columns?

When you add columns to a table view in an insight, you can insert field columns and metric (calculated) columns.

When you click icon on a table view, the columns used in the view are displayed. The different column types are identified by an icon to the left of the column name when you are viewing the insight definition

page. In the COLUMNS list, the icons beside the column names indicate if the column is a field column or a metric (calculated) column.

A field column such as Company name has an icon consisting of two boxes connected by a right-angle:

 Company

A metric (calculated) column that shows a calculated total such as Received Messages has an icon of a stylized formula *F(x):*  Received Messages

On the table definition page, you can easily see all the metric (calculated) columns that are included in an insight by clicking **Show/hide calculation columns**.

# Inserting a chargeback cost column

If you have defined chargeback costs for entities such as Exchange email messages and mailboxes or Skype for Business/Lync peer-to-peer sessions, conferences, and voice calls, you can insert a column that shows the calculated chargeback cost in the detailed insights.

See the following procedure for an example.

### *To add a chargeback cost column in the Skype for Business/Lync Conferences - Details insight*

1    In the library, type **Details** in the Search field.

2    From the list of details insights, find the Skype for Business/Lync Conference - Details insight and click **Add to Home Page**.

3    Click  to display your home page.

4    Open the Skype for Business/Lync Conference - Details insight and click  in the top right corner.

5    Click **Manage field columns**.

6    Select the **Show advanced fields** check box.

7    Select **Chargeback Cost** from the list of fields and click **Apply**.

8    On the table definition page, click **Apply.**

The Chargeback Cost column is added to the insight.

# Inserting columns in grouped tables

In some table views, you can change the grouping for the aggregated data through a selection field at the top of the view. For example, in the Email - Activity insight, in the Messages by Internal Senders and in the Messages by Internal Recipients, you can select the "top" grouping for the data.

In the Messages by Internal Senders you can group by Top Sender Department, Top Sender Name, Top Sender Office, Top Sender Country or Region, and so on.

When you click  in the top right corner of the table view to customize it, you can insert additional columns in the table. However, in most tables, the insertable columns are attributes of an individual (such as sender or recipient). To have data appear in the columns, you must group by the individual (Top Sender Name or Top Recipient Name).

If you insert columns for individual attributes, such as Job Title or Telephone Number, into a table that is grouped by an aggregated entity (such as department, office, country, and so on), the aggregated entity does not have that attribute. The column is inserted but contains no data and the heading is dimmed. If you change the grouping to an individual, such as Top Sender Name, the columns are populated with data.

# Modifying the layout of an insight

Most insights consist of different views of the data that is shown in graphs, charts, and tables. You can modify an insight to rearrange how the views are displayed and to change the grouping for views. When you group multiple views, they appear side-by-side in the insight. You can remove views from an insight and you can also add removed views back into an insight. You must add an insight to your home page before you can save changes.

### To change the layout of an insight

1   Display the insight that you want to modify.

2   Click **More** in the top right corner and select **Manage layout**.

    UC Analytics displays representations of the views contained in the insight.

3   Select one or more views or groups and modify the insight using the available options. Options to modify the selected views are shown in the customization bar at the top and can include:

    - Show hidden view

    - Move up

    - Move down

    - Group

    - Remove from group

    - Ungroup

4   To remove a selected view from the insight, click **Hide**.

5   When you have completed your changes, click **Save**.

# Saving customized insights and renaming insights

By using options under the More menu, you can save insights to which you have applied filters, added comparison data, changed the date range, or customized tables. You can also rename existing insights.

> **NOTE:** After you rename an insight, you can view the insight original name in the INFO section at the top of the insight. This information can be useful if you need to troubleshoot an insight.

If you apply customizations to an insight that you launched from the library, you must add the insight to your home page to save the changes. Use the **Add to Home Page** option in the right corner of the displayed insight.

### To save changes and create a new insight

1   On the Analytics home page, click an insight tile to display an insight.

2   Use the customization bar to apply filters, add comparison data, or change the date range for the insight.

3   Click **More** at the top right of the insight and select **Save As**.

4   Enter the new name for the insight and click **Save**.

### To rename an insight

1   On the Analytics home page, click an insight tile to display an insight.

2   Click **More** at the top right of the insight and select **Rename**.

3   Enter the new name for the insight and click **Save**.

# Exporting and importing UC Analytics insights

- Types of exports
- Can I export data from an insight?
- Exporting insights from and importing insights to an insights home page

## Types of exports

In UC Analytics you have different options for exporting information:

- You can export data from a specific insight to a variety of formats such as pdf (Portable Document Format) or .csv (comma separated value).
- You can use the "pack and go" functionality to export a set of insights from a My Insights page or any other insights page you have created. The exported insights can then be imported to another user's insights page. This feature allows you to share customized insights with other users.or to provision customized My Insights pages.

## Can I export data from an insight?

You have several format options for exporting data from an insight. You can export all the data from an insight to one of the following file formats:

- .pdf
- Word (.docx)
- MHTML
- .csv (raw, formatted localized, or formatted UTC)
- .tsv (raw, formatted localized, or formatted UTC)

***To export data from an insight***

1  When you are displaying an insight, click **Export** at the top right of the insight.

2  If the insight is a composite insight (containing charts, graphs, and tables), select whether you want to export all the views in the insight or select a specific view.

    a  If you are exporting a specific view, select the view from the dropdown list.

3  Select the format to which you are exporting.

4  Select the layout (portrait or landscape) or leave as automatic.

5  Click **Export**.

When viewing an insight, you can export a specific view (such as a graph, chart, or table) by clicking (Export) at the right corner of the view.

Only data from a main insight can be exported. You cannot export the data viewed through the details browser. For more information about the details browser, see Drilling down to detailed information on page 19.

# Limitations when exporting data

There are certain limitations for exporting data for an entire insight, depending on the type of insight (aggregate or details) and the format to which you are exporting:

- If you are exporting a details insight (such as Email - Details) to .pdf or .docx format, the export is restricted to the first 100,000 records for performance reasons.

- Chrome does not support exporting to MHTML from an unsecured web site (http). If you export to MHTML using Chrome, Chrome blocks the download with a warning message. If you want to export to MHTML using Chrome, you can click the **Show All Downloads** link, select the exported insight from the list, and click **Recover malicious file**.

  Ideally, you should set security for the Analytics web site. For more information, see the section titled "Setting up the web site for HTTPS" in the *Unified Communications Analytics Deployment Guide*.

- By default, if you export an insight that shows aggregated data (such as Mailboxes - Summary), you are limited to the 1000 entries displayed by an aggregated insight. However, using the Customize option, you can modify the insight to display all the records. When you export the customized insight, all records are exported.

  > **i** | **NOTE:** When you export all the records for an insight that contains aggregated data, there may be a performance impact.

- If you export a details insight to a csv or .tsv format, there is no limitation on the number of records that can be exported.

> **i** | **NOTE:** Since an export can take a long time if there is a large amount of data, it is recommended that you filter your results to reduce the amount of data.

## How does export handle insights with wide tables?

If you are exporting to .pdf or .docx format, and you have select Auto as the Layout option, if an insight contains a table with more than eight columns, the export function automatically switches the page layout to landscape to improve any word wrapping. The font size may also be adjusted to fit the entire insight on the page.

If you have selected Landscape or Portrait as the Layout option, the specified layout is used.

## What is the difference between raw, formatted (localized), and formatted (UTC) .csv or .tsv formats?

If you export to .csv (raw) or .tsv (raw) output, the values in the exported file reflect the data exactly as it is stored in the data engine. The raw file does not contain the view titles, time is always UTC, and units of measurement are in base units.

Raw format is intended for third-party processing. It is not intended for viewing in a spreadsheet application such as Microsoft Excel. Excel will attempt to interpret the data according to your local operating system settings. The raw export always uses the English Invariant locale.

If you export to formatted (localized) or formatted (UTC) .csv or .tsv format, the values in the exported file are the same as viewed in the insight. Units of measurement will be scaled in the same way that they are scaled in the insight. Also, the header data in the formatted .csv or .tsv file would include the view titles from the insight and information about the insight such as insight title, Insight description, "generated by" information, the selected date range, insight generation date, and selected filters.

For example, if you exported an insight to a .csv (raw) file, the size values would show as bytes. However, if you exported the same insight to formatted (localized) or formatted (UTC) .csv format, the size values would show as MB if that is how the insight displays sizes. For the localized format, the export values use local time. For the UTC format, the values use UTC time.

The export feature uses your user profile settings to format data for the formatted (localized) and formatted (UTC) .csv or .tsv formats. Your user profile settings are also used for the pdf,.docx, or MHTML formats. For information about configuring your user profile, see Changing formats for date, time, and digit separators on page 9 and Overriding the time zone offset on page 10.

> **i** | **TIP:** Your UC Analytics user profile settings might be different from your operating system locale settings. If your operating system locale is different than your user profile settings, when you export to the localized .csv or .tsv format, the resulting file can appear malformatted when opened in Excel. It is recommended that you set your user settings to match your operating system locale.

## How can I open .csv files in Excel running on a European operating system locale?

You can export insights to three different .csv file formats: .csv formatted (localized), .csv formatted (UTC), and .csv (raw).

In a localized .csv file, the DateTime and numeric values are created based on the DateTime format and decimal/thousand separators settings that you specified in your UC Analytics user profile. For information about configuring your user profile, see Changing formats for date, time, and digit separators on page 9 and Overriding the time zone offset on page 10.

In a raw .csv file, numeric values are formatted in English Invariant locale. DateTime values are formatted using sortable date time format (yyyy-MM-dd HH:mm:ss).

When you open these files in a localized version of Microsoft Excel on a European operating system (such as German, French, and so on), the files appear to be malformatted.

To allow Excel to correctly interpret the data, use the following procedure.

***To configure Excel to correctly interpret UC Analytics data exported to .csv file format***

1  Open Microsoft Excel.

2  Click the **Data** tab and select the **From Text** option.

3  Select the exported .csv file in the Import Text File dialog.

4  In step 1 of the Text Import Wizard, ensure that the **Delimited** option is selected and click **Next**.

5  In step 2 of the Text Import Wizard, select **Comma** under Delimiters and click **Next**.

6  In step 3 of the Text Import Wizard, for each column that contains dates:

   a  In the data preview, select a column that contains DateTime data and specify the Date format for the .csv export format (either localized or raw) as follows:

      ▫ Select **DMY** for localized .csv format.

      ▫ Select **YMD** for raw .csv format

7  Click the **Advanced** button.

8  Specify the Decimal separator as **.** (period) and the Thousands separator as **,** (comma), and click **OK**.

9  Click **Finish**.

   The resulting data is displayed in the user system settings.

10  Save the file to preserve all the settings.

# Exporting insights from and importing insights to an insights home page

On an insights home page, such as the My Insights page, you can export one or more selected insights to a file. You can then import the file to add these insights to a different home page.

If you send the export file to other users, they can import these insights to their home pages. For example, suppose you have several customized insights that you want to provide to other users in your company. You would use the following steps to provide these insights to other users.

***To export insights from the My Insight home page.***

1   On a home page, click **Manage Insights**.

2   Click the insights you want to export.

    The selected insights display a check mark in the top right corner.

3   Click **Export**.

4   Select **Save** to save the file with the default name (insights.txt).

    - OR -

    Select **Save As** and specify a name for the .txt file.and the location to which the file is saved.

After you have exported the insights, you can send the .txt file to other users who can import the insights to their home pages.

***To import insights to a home page.***

1   On the home page to which you want to import the insights, click **Manage Insights**.

    ℹ   **NOTE:** If you have no insights on your home page, select **Import insights from an insights file** on the UC Analytics Welcome page.

2   Click **Chose File**.

3   Navigate to the location of the .txt file that contains the insights

4   Select the file and click **Open**.

5   Click **Import**.

    The insights now appear on your home page.

If you are trying to import an insight from a different version of UC Analytics, UC Analytics will check the insight definition, customize version, and upgrade the insight.

# Automatically exporting and sending insights (subscriptions)

- What are insight subscriptions?
- Enabling target outputs in Admin Settings
- About security access for subscriptions
- Creating and changing your subscriptions
- Viewing subscription run information

## What are insight subscriptions?

In addition to viewing insights on the Analytics web site, you can create subscriptions for insights. Subscriptions allow you to automatically export selected insights to a format such as .pdf, Microsoft Word (.docx), HTML, MTHTML, .csv (raw or localized), or .tsv (raw or localized). You can configure a subscription to send the exported insight to one or more email addresses or to a file share.

You create a schedule for each subscription so that the subscription insights are exported and sent on a regular basis.

> **i** | **NOTE:** For information about the difference between the raw and localized .csv and .tsv file formats, see What is the difference between raw, formatted (localized), and formatted (UTC) .csv or .tsv formats? on page 34. For information about how to configure Excel running on a European operating system to import .csv, see How can I open .csv files in Excel running on a European operating system locale? on page 35.

## Enabling target outputs in Admin Settings

Before you can create and send subscriptions, the types of target outputs that you want to use must be enabled (email target and file share target) in the Admin Settings for all subscriptions.

Also, if you are sending subscriptions by email, the SMTP relay server that is used to email the subscriptions must be specified. These setting are configured in Admin Settings under the Subscriptions tile. You must be a product administrator to access and configure Admin Settings.

For more information about Admin Settings, see the *Unified Communications Analytics Deployment Guide*.

# About security access for subscriptions

An insight included in a subscription is run as the user who created the subscription, not as the users to whom the subscription email is addressed.

If you have unrestricted access and you create subscriptions for insights with sensitive data, ensure that the insight has appropriate content for all the subscription recipients.

# Creating and changing your subscriptions

You can add a new subscription at any time and include one or more insights in each subscription. You can enable a subscription when you create it or you can create a disabled subscription that will not do a scheduled run until it is enabled at a later date. (You can use Run Now to run a disabled subscription.)

UC Analytics determines the time zone that is used for scheduling subscriptions from the regional settings of the computer that is running the user browser. You can override the time zone that is used through your user profile. For more information see Overriding the time zone offset on page 10.

***To add a new subscription***

1   On the UC Analytics web site home page, click the subscriptions icon  .

2   Click  beside **Manage subscriptions**.

3   Enter a name to describe the subscription.

    By default, a new subscription is set as enabled. If you want to schedule a subscription but not have it run, you can clear the **Enable this subscription** box.

4   Select or enter a date on which the subscription starts.

5   Specify the repeat interval for the subscription by specifying:

    ▪   Whether it runs once, daily, weekly, or monthly.

    ▪   The time at which the subscription runs.

    ▪   The interval between subscription runs such as every x number of days (daily) or every Wednesday (weekly) or the 10th day of every month (monthly)

6   Click **Next**.

7   Select the insights that are to be included in the subscription.

    You can select from a list of the insights that are currently on your home pages (Home Page) or select insights from the insight library (Library),

8   Click **Next**.

9   Select the delivery method (send to) for the subscription:

    ▪   sent by email

    ▪   posted to a file share

10  From the dropdown list, select the format to which the insight is exported:

    ▪   PDF Attachment

- DOCX Attachment
- Inline HTML (email body)
- MHTML Attachment
- CSV Attachment (localized)
- CSV Attachment (UTC)
- CSV Attachment (raw)
- TSV Attachment (localized)
- TSV Attachment (UTC)
- TSV Attachment (raw)

> **i** | **TIP:** If you select HTML, the insight is included in the email, not as an attachment. In some configurations, your SPAM filter might inadvertently filter out HTML subscription messages. In this case, add the subscription sender to your "allowed" senders.

For information about most of the supported formats, see Can I export data from an insight? on page 33.

11  If you selected an attachment format, you can leave the layout option set to automatic or select a specific page layout for the subscription: portrait or landscape.

12  Click **Next** and enter the target information.

**For email subscriptions**

13  Enter the email address to which the exported insight is sent and any other addressees (To, CC, Bcc).

14  Enter the text that should appear in the email subject line.

15  If required, enter any text that must appear in the email body at the top (header) or at the bottom (footer). For example, if there is classification or disclaimer text that must appear in the email body, you can enter it here.

16  Select whether all selected Insights in a subscription should be sent in a single email or whether a separate email should be sent for each insight.

**For file share subscriptions**

17  If you are exporting an insight to a file share, enter the file share location.

   a   If you want to add a timestamp to the file share subscription, select **Append time to file share name**.

   > **i** | **TIP:** For a subscription to a file share, the file name is the name of the insight. To keep the older copy of an exported insight and not allow the newest exported file to overwrite the previous insight file, select the **Append time to file share name** option.

18  Click **Save and close**.

### To modify an existing subscription

1  On the UC Analytics web site home page, click the subscriptions icon .

2  Click the subscription name in the list.

3  Select the section heading you want and enter your changes in the appropriate fields.

4  Click **Save and close**.

### To delete an existing subscription

1  On the UC Analytics web site home page, click the subscriptions icon .

2  In the list of your subscriptions, click the ✕ that appears beside the subscription that you want to delete.

**Table 5. General subscription options,**

| Icon | Meaning |
| --- | --- |
|  | Create a new subscription. |
| **Refresh subscription statuses**  | Refreshes the currently displayed list of subscriptions. |
| **Retry all failed**  | Rerun all subscriptions that previously failed. This option is visible if at least one subscription has failed. |

# Doing a test run

After you have created a subscription, you might want to run the subscription immediately so that you can review the results. You can use the Run Now option for either an enabled or disabled subscription.

### *To run a subscription now*

- On the Subscriptions main page that lists all the subscriptions that you have created, click the  (Run now) icon beside the subscription you want to run.

# Viewing subscription run information

After you have created several subscriptions, you can view the list of subscriptions and the subscription run status on the Manage Subscriptions page.

In the list of subscriptions, the subscription's most recent run status is displayed beside the subscription name.

**Table 6. Subscription run statuses**

| Icon | Meaning |
| --- | --- |
|  | Subscription is currently running. |
|  | Subscription run completed successfully. |
|  | Subscription run partially succeeded. A subscription can have a partially succeeded status if: <br> • One or more of the subscription insights were not generated but at least one insight was successfully generated. <br> • The subscription could not be sent to one or more recipients but was successfully sent to at least one recipient. |
|  | Subscription run failed. Can be caused by network problems or errors in the subscription settings such as an incorrect share name or an incorrect Exchange server name. For a list of errors, see Errors that can cause a subscription to fail. |
|  | Subscription has never been run. |

# Viewing subscription launch history

You can view the subscription launch history for a subscription by clicking the ![icon] (Display history) icon on the right beside the subscription name in the Subscriptions list.

The launch history shows each date and time that a subscription was run and whether the run (launch) was successful. You have the option of exporting the launch history for a subscription to one of the .csv or .tsv file formats. For information about the available .csv and .tsv formats, see Can I export data from an insight? on page 33.

To see the details for a specific subscription launch, click on a specific launch status line. The following details are shown for each subscription launch:

**Table 7. Subscription launch history information**

| Launch details | Information provided |
|---|---|
| Target | The type of target output that was set for the subscription such as file share or email attached PDF file. |
| Launch start time | Date and time that the subscription run started. |
| Launch complete time | Date and time that the subscription run was completed. |
| Errors occurred | Indicates the type of error that occurred. |
| Exceptions | Shows the detailed system error messages and exceptions. Only displayed when the logged in user is an UC Analytics administrator. |

# Errors that can cause a subscription to fail

The following list shows the errors that can cause a subscription to fail:

- Unable to write to the file share - access is denied
- Not enough disk space available in file share location
- Recipient mailbox is unavailable
- Unable to connect to the SMTP server
- Sending email failed by timeout
- Subscription sending was ended due to server fault

# Appendix A:
# Questions and Answers for UC Analytics insights

- Can I use an "OR" filter to get all email activity for a single mailbox?
- How can I view all external email activity for a single mailbox?
- Why don't the message activity numbers match the number of items in a user mailbox?
- What are unique messages in the Mailboxes / Mailbox Activity / Summary insight?
- How can I see which mailboxes are shared mailboxes?
- How can I see the SMTP address for a mailbox owner?
- Where can I see mailbox white space?
- How can I change the default date range for an insight?
- Why is the Send Date missing for some messages?
- Which ActiveSync devices are associated with Office 365 mailboxes?
- What does Is Encrypted mean in a email?
- How does UC Analytics determine message direction in insights?
- What insights can I use for my executive insights?
- What information is shown in the DLP insights?
- Why do totals sometimes vary on different insights for certain date ranges?
- How is a logical Exchange message different from a unique (physical) message?

## Introduction

This section includes common questions and provides detailed answers to help you understand and use the UC Analytics insights. It provides specific examples of how to use filters or customizations to view specific types of information.

## Can I use an "OR" filter to get all email activity for a single mailbox?

I want to generate an insight that shows all inbound and outbound email traffic for a single mailbox. However I cannot find under the Filters option how to create a filter that says "Sender = Bob OR Receiver = Bob". I want to create this insight so I can use the detailed browser to see all the message header information for each individual email. Can this be done?

## Answer

UC Analytics has two types of email activity insights – unidirectional and bidirectional.

In unidirectional insights (such as Email – Activity), there are two separate fields for the email participants ("Sender" and "Recipient") so there is no way to set an OR filter between fields. The Email – Activity insight shows the sent and received email traffic separately. However, if you want to view only the email that included a specific person or email address, you could set a filter for Participant and select a specific person. The resulting insight would only include email messages in which the selected person was a participant (sender or receiver).

In bidirectional insights (like Email – External Activity), instead of "Sender" and "Recipient", UC Analytics has two different fields: "Sender or Recipient" for an the internal participant and "Recipient or Sender" for an external participant. So if you add a filter "Sender or Recipient = Bob" the filter should create the insight you want and you can view the insight using the details browser to see the individual messages.

In the Email - Bi-Directional Activity insight, you can use the "Sender or Recipient" filter to see all the incoming and outgoing email activity for a single mailbox.

# How can I view all external email activity for a single mailbox?

I want to see all the messages sent to or received from external email addresses for a single internal mailbox. Can I use filters to get this information?

## Answer

You can use the Email - Bi-Directional Activity insight and two filters to get this information.

***To see external email activity for a single mailbox***

1   Add the **Email - Bi-Directional Activity** insight to your home page.

2   Click **FILTERS** and click **+** beside Email Messages Between Users to expand the filter list.

3   Expand **Recipient or Sender | Person** and select the **Name** check box.

4   Click **Next**.

5   Below Equals, enter the name of the mailbox owner and click **Add**.

6   Click **+** beside Email Messages Between Users to expand the filter list.

7   Expand **Sender or Recipient | Domain** and select the **Is External** check box.

8   Click **Next**.

9   Below Equals, select **Yes**.

10  For the Messages by First Participant table, select **Top Name** as the grouping.

11  For the Messages by Second Participant table, select **Top Email Address** as the grouping.

To see the individual messages sent to or received from external email addresses, click the details browser ▦.

# Why don't the message activity numbers match the number of items in a user mailbox?

I am trying to collect all the items in a user mailbox but the message numbers that are shown in the message activity insights don't match the native tools. Why are the numbers different?

## Answer

Insights that show Exchange message activity do not track the message state once a message has arrived in a mailbox. The message arrival in a mailbox is reported, but UC Analytics does not track a specific message after it has arrived (whether it was stored or deleted).

UC Analytics counts messages in a manner similar to how Exchange handles a message. When a user opens Outlook, creates a message with five recipients and clicks Send, there is **one** message that Exchange tries deliver to each recipient. In the same manner, UC Analytics counts a message that is sent to multiple users, such as to a distribution list, as one message. If you have a message that is both in your Sent folder and in your Inbox folder, UC Analytics only counts that as one message. If you have a message in your Drafts folder, it is not counted since it has not been sent.

Also, UC Analytics counts only messages, not the other mailbox items such as calendar items, appointments, and other associated items in a user mailbox. These items are counted as mailbox items in the Microsoft native tools. However, in an insight such as the Mailbox Inventory insight you can view the total number of items in a mailbox, which includes items calendar entries and appointments, but the insight does not break down the totals to show each type of item.

For a more detailed explanation of what Exchange message data is gathered through the Exchange Mailbox Contents (EWS) and the Exchange Tracking Logs data sources, see the *UC Analytics Deployment Guide*.

# What are unique messages in the Mailboxes / Mailbox Activity / Summary insight?

In the Mailboxes / Mailbox Activity / Summary insight, the totals in the Messages Sent and Messages Received columns do not always match the Unique Messages columns.

The Messages Sent column counts the number or messages sent from the mailbox. The Messages Received column counts the messages received by the mailbox. If you have sent a message that includes your own mailbox as a recipient, it is counted both as a sent message and as a received message, but there is only one message so it is counted as one unique message.

# How can I see which mailboxes are shared mailboxes?

Is there an insight that shows shared mailboxes? This type of mailbox is visible under the column heading of Recipient Type Details in the Exchange Console.

## Answer

To see all shared mailboxes, you can filter the mailbox user by Object Type of Shared Mailbox. See the following example of using a filter to see shared mailboxes in the Mailboxes Inventory insight.

***To see shared mailboxes on the Mailboxes Inventory insight***

1   Click **FILTERS** and click **+** to display the Add Filter page.

2   Expand **Owner** and select **Object Type**.

3   Click **Next**.

The default value is Equals Owner Object Type.

4   From the dropdown list, select **Shared Mailbox** and click **Add**.

The insight displays shared mailboxes.

# How can I see the SMTP address for a mailbox owner?

How can I see the SMTP addresses that are associated with mailboxes and the corresponding mailbox owners?

## Answer

You can customize an insight and insert a column that contains the messaging address (SMTP address). See the following example of inserting a column to include the SMTP address in the Mailboxes - Inventory insight.

### *To insert a column that shows the SMTP address of a mailbox owner*

1   Click ✏️ (Customize) in the right corner of the Mailboxes - Inventory insight.

A table definition is displayed that shows the table fields and the table sort order for the insight.

2   Click ➕ **Manage field columns** at the bottom of the column name list.

3   Expand **Owner | Primary Email Address**.

4   Select **Messaging Address** from the list of fields and click **Apply**.

5   On the table definition page, click **Apply.**

The insight displays the SMTP address for each mailbox owner in the insight.

# Where can I see mailbox white space?

Is there an insight that shows mailbox white space (available new mailbox space) for my on-premise Exchange environment?

## Answer

You can customize the Inventory / Stores insight and add a column to show available new mailbox space for the mailbox database.

### *To insert a column that shows available new mailbox space*

1   Click ✏️ (Customize) in the right corner of the Inventory / Stores insight.

A table definition is displayed that shows the table fields and the table sort order for the insight.

2   Click ➕ **Manage field columns** at the bottom of the column name list.

3   Select **Available New Mailbox Space** from the list and click **Apply**.

4   By default, the size is in Bytes. Click **Bytes** and select the size value you want, such as MB, and click **Apply**.

5   Click **Apply**.

You can also insert a column to show the available new mailbox size for a DAG.

# How can I change the default date range for an insight?

Most of the insights that I have on the home page under My Insights have a default date range of Last 28 Days. Is there a way to change the default date range for insights to Last 7 Days?

## Answer

The date range is set individually for each insight. For example, some insights use Last 28 Days, Last 7 Days, or Yesterday.

You can modify and save the default date range for your individual insights. Add the insight to your home page, change the date range to Last 7 Days, and save the insight.

The insight on your home page will use the saved date range that you have specified.

# Why is the Send Date missing for some messages?

Why is the Send Date show missing for some messages but not others? And for other messages, why does the Send Date sometimes not match the Outlook Send Date?

## Answer

The Send Date is affected by the types of data collections you have scheduled, the sources from which you are collecting, and by the message origins. If you only collect from the Exchange Tracking Logs data source, but do not collect from mailboxes using the Exchange Mailbox Contents data source, the Send Date may be approximate for some messages or missing for some messages.

If you collect from both the Exchange Mailbox Contents and the Exchange Tracking Logs data sources, the Send Date is always set by the Mailbox Contents data collection. To always collect the exact Send Date, you must collect using both the Tracking Logs and the Mailbox Contents data sources.

### Send Date is missing

If you collect only from the Exchange Tracking Log data source, the Send Date may not be collected if you are not collecting all the tracking logs from all your Exchange mailbox and hub servers.

> **i** | **NOTE:** Messages without a Send Date can temporarily be displayed for a message that is sent on one UTC day but is not delivered until a subsequent UTC day. The message is recorded twice:
> - First, with a Send Date, for the message submission event in the Exchange message tracking log.
> - Second, with no Send Date, for the message delivery event.
>
> When the Database Consistency job runs, the two records are combined into one record with a Send Date.

### Send Date is approximate

If you collect only from the Exchange Tracking Logs data source, the Send Date for SMTP or inbound messages is approximate. For messages submitted through SMTP or originating from outside your Exchange organization, the Delivery Time is not calculated until the Exchange Calculation job has run.

For multi-hop message delivery, a message might appear in the tracking logs on several Exchange servers. Since the Send Date will be set by an event (StoreDriver Submit or SMTP Receive) which can appear in any one of the tracking logs, the Send Date is approximate.

# Which ActiveSync devices are associated with Office 365 mailboxes?

Many of my employees are remote workers who work from home and have mailboxes in Office 365. How can I see which ActiveSync devices are associated with on-premise mailboxes and which devices are associated with mailboxes that are in the cloud (Office 365 Exchange Online)?

## Answer

In insights that show information about ActiveSync devices, such as Mobile Devices - Inventory or Exchange ActiveSync / Devices / Active Devices, you can use the customize option to insert a column that shows the location of the associated mailbox, either on-premise or Office 365.

***To insert a column that shows the mailbox location***

1   Click in the right corner of the Mobile Devices - Inventory insight.

    A table definition is displayed that shows the table fields and the table sort order for the insight.

2   Click ![icon] **Manage field columns** at the bottom of the column name list.

3   Expand **Mailbox**.

4   Select **Location** from the list of fields and click **Apply**.

5   On the table definition page, click **Apply.**

    The insight displays the location for each mailbox in the insight.

# What does Is Encrypted mean in a email?

When viewing a specific email in the details browser in the Email Details insight, I noticed that the Is Encrypted value for the attachment is Yes. Does it mean that the message is encrypted in the user mailbox or that the message arrived encrypted?

## Answer

The Is Encrypted field value is determined from the item class of the messages in the user mailbox. If the item class of a message has either .SMIME or .Secure in it, it is viewed as an "encrypted" message. This includes all the digitally encrypted, digitally signed or RMS-protected messages.

This data is available only if you collect using the Mailbox Contents data source. The Is Encrypted data is not available if you collect only from the Exchange Tracking Logs data source.

# How does UC Analytics determine message direction in insights?

In some insights, such as the Email - Details insight, message direction is shown as inbound, outbound, or internal. Sometimes the direction is shown as unknown. How does UC Analytics determine the direction of s specific message?

# Answer

UC Analytics uses the sender and receiver information to determine the direction for a message. In normal conditions, there should be sender and recipient data for each message.

However, in some situations, such as when there are gathering issues or if a required data source collection is not run, the sender or recipient information is missing and is shown as <none>.

The following rules are applied to classify message direction as internal, outbound, inbound, or unknown.

**Table 8. Message direction is determined to be outbound.**

| Sender | Recipients | Direction | Comments |
| --- | --- | --- | --- |
| Internal | One or more external recipients | Outbound | |
| Internal | Both internal and external recipients | Outbound | Though there are both internal and external recipients, the message direction is shown as outbound since most companies consider monitoring messages sent out over the internet a higher priority. |
| External | One or more external recipients. | Outbound | Though the sender is external, for the message to gathered it must have been forwarded through the internal organization before it was sent out to external recipients. |
| None | One or more external recipients. | Outbound | Even though the sender data is missing, since the message was gathered by UC Analytics, we know that the message originated from or passed through the organization before being sent to external recipients. Therefore it is considered outbound. |

**Table 9. Message direction is determined to be inbound or internal.**

| Sender | Recipients | Direction | Comments |
| --- | --- | --- | --- |
| External | One or more internal recipients | Inbound | |
| External | Both internal and external recipients | Inbound | The message direction is set as inbound since messages sent from external users to external recipients are not of interest. Only messages sent to internal mailboxes are in scope. |
| Internal | One or more internal recipients | Internal | |

**Table 10. Message direction is marked as unknown.**

| Sender | Recipients | Direction | Comments |
| --- | --- | --- | --- |
| None | None | Unknown | Could be internal, inbound, or outbound. |
| None | One or more internal recipients | Unknown | Could be internal or inbound. |
| None | Both internal and external recipients | Unknown | Could be inbound or outbound. |
| Internal | None | Unknown | Could be internal and/or outbound. |
| External | None | Unknown | Could be inbound and/or outbound (Fwd). |

# What insights can I use for my executive insights?

I am looking for information for the following types of insights:

- Security auditing of executive mailboxes
- Analysis trending for storage/mailbox growth
- Mail flow statistics including highs/lows/averages
- Mobile device access insight, which device type/agent type

Can UC Analytics provide this information?

## Answer

Here are some insights that may cover your needs:

For a insight that covers security auditing of executive mailboxes, you can use these insights:

- Mailboxes - Permissions Inventory
- Mailboxes - Delegates Inventory
- Mailboxes / Mailbox Security / Mailbox Security

For a insight that shows analysis trending for storage/mailbox growth, you can use these insights:

- Inventory / Mailbox Growth
- Mailboxes / Sizes And Quotas / Mailbox Sizes
- Organizations / Departmental Reporting / Mailbox Sizes
- Storage / Stores

For a insight that shows mail flow statistics including highs, lows, and averages, you can use these insights:

- Email - Activity
- Email - External Activity

    You can enable smoothing or trend lines to show averages.

For a insight that shows mobile device access including device type/agent type, you can use these insights:

- Mobile Devices - Summary
- Mobile Devices - Inventory

# What information is shown in the DLP insights?

If we implement Data Loss Prevention (DLP) policies in our Exchange environment, what information is shown in the DLP insights?

## Answer

Data Loss Prevention (DLP) policies are packages containing sets of conditions which are made up of transport rules, actions, and exceptions. You create DLP policies in the Exchange Administration Center (EAC) and activate them to filter email messages and attachments.

DLP information gets written to the Exchange message tracking logs. These logs contain data from the Agents that are involved in processing mail flow content. For DLP, the Transport Rule Agent [TRA] is used to scan message content and to apply the policies defined as part of the Exchange Transport Rules [ETRs].

The DLP Matches - Activity insight shows a summary of the DLP matches in your organization. You can see the number of Exchange DLP matches generated and the top senders associated with the DLP matches.

The DLP Matches - Details insight provides information about the email messages that have matched the defined DLP rules including the name of the rule that was matched, the DLP Policy in which the rule resides, and the actions that were taken on the message because of the rule. The insight also shows the sender, receiver, and subject of the message that triggered the rule match.

**Table 11. Fields in the DLP matches insights**

| Fields | Definition |
|---|---|
| Match Date | The sent date of the message that triggered the DLP rule match event. |
| Sender | The email address or display name for the sender of the message that triggered the DLP rule match event. |
| Recipients | The email addresses or display names of the recipients of the message that triggered the DLP rule match event. |
| Subject | Data found in the subject field of the message that triggered the DLP rule match event. |
| Policy Name | Name of the DLP policy for which the rule match was made. |
| Rule Name | Name of the DLP rule that the message violated. |
| Severity | Audit severity of the rule hit; displays the highest severity if multiple rules were hit. Severity can be low, medium, or high. |
| Actions Taken | Action taken by a rule. There can be multiple actions per rule such as audit, audit-and-notify, or enforcement. |
| Data Classification Confidence (%) | Based on the algorithm implemented by Microsoft, this value shows, as a percentage, the confidence level of the data classification accuracy. |
| Data Classification Count | Shows the number of instances of sensitive information found in the message. |
| Data Classification ID | Shows the data classification ID that is associated with the data classification. |
| Data Classification Name | Identifies the sensitive information type that was detected. |
| Directionality | Shows if the message was originated or received. |
| Justification for Override | Justification is only logged when the end user insights an override. |
| Override | Displays whether an override was reported for the message, and the justification of the override if provided. The Override field is present when an end-user insights either an override or a false positive for a rule. |
| Policy ID | Shows the ID for the DLP policy. If there is no Policy ID then the rule that was matched does not belong to a DLP Policy. |
| Rule ID | Shows the ID for the rule associated with the DLP rule match. |
| Rule Last Modified Date | Shows the date when you last modified the rule. |
| Rule Mode | State of the rule when the message matched the rule (enforcement, audit, or audit-and-notify). |

# Why do totals sometimes vary on different insights for certain date ranges?

If I specify a specific date range and compare certain totals on different insights, sometimes the numbers vary. Why does that happen?

## Answer

There are two different types of data stored in the Storage Engine, snapshot data which is collected once a day by data source collections such as Domain Controller and Exchange Configuration, and continuous data which is collected on an ongoing basis by data sources such as Exchange Tracking Logs and Exchange Mailbox Contents.

Some insights display data on a snapshot (a specific point in time) basis. These insights typically have the following text displayed in the date range selection section at the top of the view.

> Some views in the insight show values only for a specific point in time. If you select a date range, the data shown (as on) is the most recent data as determined by the end date of the date range.

In these insights, UC Analytics occasionally runs metrics against continuous data which is data that is not stored once per day. In some situations, the numbers returned in the snapshot insight may not match the numbers in a non-snapshot (continuous data) type insight for the same date range, such as for a single day.

The reason for the discrepancy is because the selected date range for the continuous data actually spans across two daily snapshots. The records for each snapshot day are returned and aggregated into the total/count. A snapshot insight that shows continuous data will include the all continuous data in all the UTC days that are spanned (partially or fully) by the date range, instead of only the continuous data in the partial UTC days in the date range.

For example, if you select a date range of August 1 to August 2 (UTC -5). The snapshot insight should include the continuous data in the following UTC date range:

> August 1 05:00:00Z ≤ t ≤ August 3 04:59:999Z

Instead, the continuous data includes:

> August 1 00:00:00Z ≤ t ≤ August 3 23:59:59.999Z

So when you are looking at Total Peer-to-Peer sessions, there could be a discrepancy in numbers between a snapshot type of insight (such as the Skype for Business / Lync / Organizational Summaries / User Activity) and a continuous data type of insight (such as Skype for Business / Lync / Peer-to-Peer Sessions - Details) for the same date range.

To see which insights are snapshot type insights, see Appendix B: List of UC Analytics insights on page 52. A hash tag (#) beside the insight name identifies insights that display data on a snapshot (point in time) basis

# How is a logical Exchange message different from a unique (physical) message?

How is the Email - Logical Message Activity insight different from other UC Analytics insights in the way it counts Exchange messages?

## Answer

With the exception of the Email - Logical Message Activity insight, the UC Analytics Exchange insights show unique (*physical*) message counts. *Physical messages* provide message counts in a manner similar to how Exchange handles messages. When a user opens Outlook, creates a message with five recipients and clicks Send, there is one *physical* message that Exchange delivers to each recipient.

Exchange can create copies of the message so that each recipient can receive the message. This process is called bifurcation and is performed when different recipients receive copies of the same message. A *logical* message is a message in which each recipient is counted as a separate message. For example, if a mail message is created in Outlook and is sent to nine recipients, that would count that as one physical sent message and nine logical sent messages.

The Email - Logical Message Activity insight lets you view logical message activity for individual message recipients and shows a summary of logical email activity in your organization including the top senders and effective recipients.

# Appendix B:
# List of UC Analytics insights

- Cross Platform Insights and their required data sources
- Active Directory Insights and their required data sources.
- Exchange Insights and their required data sources
- Skype for Business/Lync Insights and their required data sources.
- MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources
- Cisco Insights and their required data sources.

# Insights and the data sources that provide the data

The following table lists all the UC Analytics insights and shows the data sources that are collected to populate each insight.

- An asterisk (*) identifies those insights that will also include mailbox and user data from Office 365 if you have also configured data sources to collect data from Exchange Online.
- A hash tag (#) identifies insights that display data on a snapshot (point in time) basis.

To see detailed information when viewing an insight, click the details browser icon [icon] in the top right corner. For information about the details browser, see Drilling down to detailed information on page 19.

## About collecting user configuration data

Many insights include Exchange user configuration data. When you collect the user data, the required data sources depend on whether you are collecting from an on-premise Exchange environment, from an Exchange Online hybrid environment, or from an Exchange Online native environment.

In the required data sources column in the table that lists all the insights, it may say the following:

Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration are required.

The required data source is different depending on the environment from which you are collecting.

**Table 12. Data sources for collecting user configuration data in different environments.**

| Exchange environment | Data sources required |
| --- | --- |
| Exchange on-premise | Domain Controller |

**Table 12. Data sources for collecting user configuration data in different environments.**

| Exchange environment | Data sources required |
|---|---|
| Exchange Online hybrid | Domain Controller AND Exchange Online Hybrid User Configuration |
| Exchange Online native | Exchange Online Native User Configuration |

# UC Analytics insight descriptions

The following table lists all the UC Analytics insights and provides information about the data sources that must be configured to populate each insight.

**Table 13. Cross Platform Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Corporate at a Glance * # | Provides a high-level overview of the Active Directory, ActiveSync, Exchange, and Skype for Business / Lync environments in your organization. The insight provides the number of Active Directory objects (such as groups, users, rooms), Exchange message and mailbox activity, Exchange inventory numbers, ActiveSync events, and information about Lync/Skype for Business conferences and sessions for different media types.<br><br>By default, four filters are set for the insight:<br><br>Active Directory Users for Skype for Business / Lync<br><br>• Object Type Equals **User**<br><br>• Is Enabled Equals **yes**<br><br>Skype for Business / Lync Configuration<br><br>▪ Is User Skype for Business/Lync Enabled Equals **yes**<br><br>Mobile Devices<br><br>• Mailbox<br><br>Owner<br><br>Name Is **set** | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br><br>• Exchange Configuration AND/OR Exchange Online Native Mailbox Configuration AND/OR Exchange Online Hybrid Mailbox Configuration<br><br>• Exchange IIS Logs<br><br>• Skype for Business/Lync Configuration<br><br>• Skype for Business/Lync CDR Database |
| Platforms - Activity * | Shows the amount of activity generated by your organization across different platforms, including Exchange email messages, Skype for Business/Lync conferences and peer-to-peer sessions, and Cisco conferences and peer-to-peer sessions. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br><br>• Skype for Business/Lync CDR Database<br><br>• Cisco CDR |

**Table 13. Cross Platform Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Platforms - Activity Chargeback * | Calculates the chargeback amount for your organization by totaling the cost of each email message, conference, peer-to-peer session, and enterprise voice call based on the cost settings defined in the UC Analytics Admin Settings. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Skype for Business/Lync CDR Database<br>• Cisco CDR |
| Platforms - User Adoption * # | Shows the number of enabled users who have been recently active. Active is defined as sending an email, participating in a conference, or participating in a peer-to-peer session.<br><br>For a given day, recently means that the user was active during the previous 14 days. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Skype for Business/Lync CDR Database<br>• Cisco CDR |
| Skype for Business/Lync vs. Cisco Conference Usage | Shows a summary of all the Skype for Business/Lync and Cisco conference activity in your organization | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Cisco CDR |
| Skype for Business/Lync vs. Cisco Peer-to-Peer Usage | Shows a summary of all the Skype for Business/Lync and Cisco peer-to-peer activity in your organization | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Cisco CDR |
| Office 365 User Licenses and Services * # | Shows a summary of Office 365 license types and user services including:<br>• Number of users that have each type of license<br>• Number of users that have access to each service type.<br>• Status information including service provisioning status. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Office 365 User Subscription Configuration |

**Table 13. Cross Platform Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Office 365 Users * # | Shows a list of individual Office 365 users, showing the type of services and subscription that each user has. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Office 365 User Subscription Configuration |
| Office 365 Users - Exchange Online Inactive * # | Shows a list of Office 365 Exchange Online users in your organization that are not sending email. If there was no email sent from the Exchange Online mailbox during the insight date range, the user is shown in the insight. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Office 365 User Subscription Configuration<br>• Exchange Online Mailbox Contents |

**Table 14. Active Directory Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Equipment - Inventory * # | Shows the list of equipment in your organization. An equipment mailbox is a resource mailbox that is assigned to a resource that is not location specific such as a laptop and projector. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Groups - Empty Mail-Enabled Groups Inventory * # | Shows the list of mail-enabled security, distribution, and dynamic distribution groups that contain no user or group members. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Groups - Inventory * # | Shows the list of security, distribution, and dynamic distribution groups in your organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Groups - Summary * # | Shows a summary of the security, distribution, and dynamic distribution groups in your organization.<br><br>Active groups are groups that have received email within the selected date range of the insight. If a group contains child groups, any messages sent to the parent group are included in the messages that were sent to the child groups. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs OR Exchange Mailbox Contents OR Exchange Online Mailbox Contents |
| Mail Contacts - Inventory * # | Shows the list of mail contacts in your organization. Mail contacts are mail-enabled directory service objects that contain information about people or organizations that exist outside your Exchange organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |

**Table 14. Active Directory Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mail-Enabled Groups - Inventory * # | Shows the list of your mail-enabled security, distribution, and dynamic distribution groups. Member counts are provided for direct and indirect membership (expanding the groups that are members). Mail-enabled public folders are not included in member counts. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Mail-Enabled Groups - Membership * # | Shows the membership list of mail-enabled security, distribution, and dynamic distribution groups, grouped by organizational unit (OU). | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Mail-Enabled Groups - Summary * # | Shows a summary of mail-enabled security, distribution, and dynamic distribution groups. Member counts are provided for effective membership (expanding the groups that are members). Mail-enabled public folders are not included. If a group contains child groups, messages sent to the parent group are included in the messages sent to the child groups. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs OR Exchange Mailbox Contents OR Exchange Online Mailbox Contents |
| Rooms - Inventory * # | Shows the list of rooms in your organization. Rooms are resource mailboxes assigned to meeting locations. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Users - Inventory * # | Shows a list of enabled users in your organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |

**Table 14. Active Directory Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Users - Recent Changes * # | Shows a list of user accounts that were recently created or disabled in your organization. If the user account creation date is within the insight date range, the account is determined to be recently created. If the user account was disabled within the insight date range, the account is determined to be recently disabled.<br><br>During initial data collection, historical data is not available so users with recently disabled accounts cannot be calculated retroactively. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Users - Summary * # | Shows a summary of users with enabled accounts in your organization. If the user account creation date is within the insight date range, the account is considered to be recently created. If the user account is currently disabled but was enabled within the insight date range, the account is considered to be recently disabled.<br><br>During initial data collection, historical data is not available so users with recently disabled accounts cannot be calculated retroactively. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| ActiveSync - Event Details | Shows a list of individual user ActiveSync events in your organization. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| ActiveSync - Server Activity | Shows a summary of ActiveSync server activity in your organization. Sync times do not include ping commands. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| ActiveSync - User Activity | Shows a summary of ActiveSync user activity in your organization. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| DLP Matches - Activity | Shows a summary of data loss prevention (DLP) matches in your organization. DLP is only available in Exchange 2013 or later. | • Domain Controller<br>• Exchange Tracking Logs |
| DLP Matches - Details | Shows the details of data loss prevention (DLP) matches in your organization. DLP is only available in Exchange 2013 or later. | • Domain Controller<br>• Exchange Tracking Logs |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Email - Activity * | Shows a summary of user email activity in your organization including the top senders and recipients. New thread percentages and after-hours statistics are calculated only for messages that were collected using the Mailbox Contents data source. All messages collected using the Exchange Tracking Logs data source are assumed to be new threads. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Bi-Directional Activity * | Shows a summary of user email activity, both sent and received messages, between two groups or individuals. Since the tables for first participants and second participants include both senders and receivers, both tables show the same values until you apply a filter. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Chargeback * | Calculates the chargeback amount for your organization by totaling the cost of each email message based on the cost settings defined in the UC Analytics Admin Settings. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Delivery Times * | Show a summary of delivery times of messages in your organization. The delivery time is calculated as the difference between the message send date and receipt date for each recipient. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Details * | Shows a list of individual user messages that were sent and received by your organization, including sender, recipient, and subject line.<br>**NOTE:** You can see the internet header information for email messages if the Exchange (Exchange Online) Mailbox Contents data source was configured to collect Internet Message Headers. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - External Activity * | Shows a summary of messages sent outside your organization, or received from outside your organization. Internal domains are defined in the UC Analytics Admin Settings. A domain that is not defined as internal is considered external. An external message is a message with at least one participant from an external domain. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Email - File Attachment Activity * | Shows a summary of all file attachments that were sent and received by your organization. Only messages that were collected using the Mailbox Contents data source have file attachment details. | • Domain Controller AND/AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - File Attachment Details * | Shows the list of individual user messages with file attachments sent and received by your organization. Only messages retrieved from the Mailbox Contents data source have file attachment details. | • Domain Controller AND/AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Inter-Department Activity * | For each department, the insight shows the other five departments to which or from which the most email messages were sent or received. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Inter-Office Activity * | For each office, shows the top five offices to which or from which email messages were sent or received. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - Logical Messages Activity * | Shows a summary of logical email activity in your organization including the top senders and effective recipients. A logical message is one in which a single message is sent to multiple recipients and each recipient message is counted as a separate message. For details, see How is a logical Exchange message different from a unique (physical) message? on page 51.<br><br>New thread percentages and after-hours statistics are calculated only for messages that were collected using the Mailbox Contents data source. All messages collected using the Exchange Tracking Logs data source are assumed to be new threads. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Email - Response Time * | Shows a summary of response times in your organization. Response time is calculated as the difference between the receipt date of the original message and the send date of the first reply. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Tracking Logs |
| Email - Size Distribution * | Provides a summary showing the distribution of message sizes for the messages sent in your organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Email - System Activity | Shows a summary of all system message activity in your organization. | • Domain Controller<br>• Exchange Tracking Logs |
| Exchange - Adoption * # | Shows the number of enabled users who have been recently active. Active is defined as sending an email message. For a given day, recently means that the user was active during the previous 14 days.<br>Only mailboxes that are collected by the Exchange Configuration data source are counted. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Exchange - Inactive Users * # | Shows the list of users who have not sent an email during the insight date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Exchange - Inventory # | Shows a list of Exchange servers and databases in your organization. | • Exchange Configuration |
| Exchange Meetings - Details * | Shows a detailed list of the Exchange (Outlook) meetings organized by your users for the specified time period. Includes information about location, subject, the number of required attendees, and the duration of each meeting.<br>By default, the insight shows only meetings (*Is Meeting equals yes* filter). To view all meetings and appointments, you can remove the filter set on the insight. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br>• Exchange Calendar AND/OR Exchange Online Calendar |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Exchange Meetings - Summary * | Shows a summary of Exchange user meeting activity in the specified time period. Identifies the users who organized the most meetings and the average number of required attendees. You can group top meeting organizers by name, city, department, country, job title, and so on.<br><br>By default, the insight shows only meetings (*Is Meeting equals yes* filter). To view all meetings and appointments, you can remove the filter set on the insight. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br>• Exchange Calendar AND/OR Exchange Online Calendar |
| Exchange Meetings - Room Usage | Shows the room usage and statistics for Exchange meetings during the specified time period. Mailbox targets must include the Organizer and Room mailboxes. You also must configure Room Working Hours in the Admin Settings to define the working day. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br>• Exchange Calendar AND/OR Exchange Online Calendar |
| Exchange Meetings - Unused Rooms | Shows the rooms for which no meetings were held during the specified time period. Mailbox targets must include the Organizer mailboxes. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br>• Exchange Calendar AND/OR Exchange Online Calendar |
| Exchange - Summary * # | Shows an overall summary of users, messages, servers, and mailboxes in your organizations.<br><br>In the Messages table, messages are broken into categories based on message direction. For information about how direction is determined, see "How does UC Analytics determine message direction in insights?" on page 47. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Configuration OR Exchange Online Hybrid Mailbox Configuration OR Exchange Online Native Mailbox Configuration |
| Groups - Inactive * # | Shows the list of security, distribution, and dynamic distribution groups that have not received any email within the selected date range of the insight.<br><br>If a group contains child groups, any messages sent to the parent group are included in the messages that were sent to the child groups. | • Domain Controller Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Groups - Usage * | Shows a summary of the top groups and top group users in your organization. Includes data for your security, distribution, and dynamic distribution groups.<br><br>If a group contains child groups, any messages sent to the parent group are included in the messages that were sent to the child groups. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Legacy Public Folders - Inactive # | Shows the list of inactive Exchange 2010 public folders in your organization. If the last modification date is earlier than the insight date range, the public folder is considered to be inactive. | • Exchange Public Folders<br>• Exchange Configuration |
| Legacy Public Folders - Inventory # | Shows the list of individual Exchange 2010 public folder replicas in your organization. | • Exchange Public Folders<br>• Exchange Configuration |
| Legacy Public Folders - Permissions Inventory # | Shows a list of permissions for each Exchange 2010 public folder in your organization. You can see who has permissions to specific public folders. | • Exchange Public Folders<br>• Exchange Configuration<br>**NOTE:** The **User permissions (Client permissions)** option must be selected in the Exchange Public Folders data source. |
| Legacy Public Folder Replicas - Inventory # | Shows the list of individual Exchange 2010 public folder replicas in your organization. | • Exchange Public Folders<br>• Exchange Configuration |
| Legacy Public Folder Replicas - Trend | Shows a trend of the Exchange 2010 public folder replicas in your organization. | • Exchange Public Folders<br>• Exchange Configuration |
| Legacy Public Folders - Summary # | Shows a summary of the legacy Exchange 2010 public folders in your organization. | • Exchange Public Folders<br>• Exchange Configuration |
| Mail Contacts - Inactive * # | Shows the list of mail contacts that have not received email recently. If email was received within the insight date range, it is considered to be recent. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mail Contacts - Usage * | Shows a list of the top mail contacts who receive the most email. You can also see the top departments, offices, or users who send the most email to mail contacts. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mailboxes - Active and Inactive Summary * | Shows the full list of individual mailboxes and their recent activity or lack of activity. The insight only shows message activity or inactivity for the specified date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Activity Summary * # | Shows a list of individual mailboxes in your organization and their recent activity. Only the messages that were sent or received during the insight date range are included. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Chargeback * # | Calculates the chargeback amount for your organization by totaling the cost of each mailbox based on the cost settings that you defined in the UC Analytics Admin Settings. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Delegate Access Inventory * # | Provides a list of mailboxes and shows the accounts that have delegate rights to access the mailbox. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Delegates Inventory * # | Shows a list of the delegates for each mailbox in your organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mailboxes - Folder Inventory * # | Shows statistics for user mailbox folders, grouped by mailbox owner, including size, item count, subfolder count, unread item count, and folder path location. | • Exchange Configuration<br>• Domain Controller OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Mailbox Content Summary AND/OR Exchange Online Mailbox Content Summary |
| Mailboxes - Inactive * # | Shows the list of inactive mailboxes for the enabled users in your organization.<br>If no messages were sent during the insight date range, the mailbox is considered to be inactive. | • Active Directory Domain Controllers AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration<br>• Exchange Tracking Logs OR Exchange Mailbox Contents OR Exchange Online Mailbox Contents OR Exchange Mailbox Content Summary OR Exchange Online Mailbox Content Summary |
| Mailboxes - Inactive (Advanced) * # | Shows a list of inactive mailboxes for the enabled users in your organization. If no messages were received and read, or sent during the insight date range, the mailbox is considered to be inactive.<br>NOTE: At least one of Last Message Sent Date or Last Message Read Date options must be selected in the Exchange (or Exchange Online) Mailbox Content Summary data sources. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration<br>• Exchange Mailbox Content Summary OR Exchange Online Mailbox Content Summary |
| Mailboxes - Inventory * # | Shows the list of individual mailboxes in your organization. Only mailboxes that are collected using the Exchange Configuration data source are shown. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration<br>• To include recoverable items, you must configure the Exchange Mailbox Content Summary AND/OR Exchange Online Mailbox Content Summary and select **Recoverable Items Folder.** |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mailboxes - Mailbox Activity by Active Directory Group * | Based on the Group attribute in Active Directory (AD), shows the AD groups whose members send and receive the most emails in the specified date range. Provides information the maximum size and average size of the emails. | • Domain Controller or Exchange Online Hybrid User Configuration or Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs or Exchange Mailbox Contents or Exchange Online Mailbox Contents |
| Mailboxes - Permissions Inventory * # | Shows the list of permissions for each mailbox in your organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Size & Item Count Trends * # | Shows the trends for mailbox sizes and item counts, providing daily values per mailbox for a specified time frame. You can view the mailbox size and item count trends grouped by total storage or total item count, storage limit status, Exchange version, location (on-premise or Office 365), or by the mailbox owner with the largest mailbox or most items. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Summary * # | Shows a summary of the mailboxes in your organization. Only mailboxes that are collected using the Exchange Configuration data source are shown. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes - Trend * # | Shows a trend of the mailboxes size and item count in your organization. You can group the mailbox owner information by values such as department, office, city, country, domain, and location (on-premise or Office 365), | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mobile Devices - Active Devices History * | Shows the number of ActiveSync mobile devices that were synchronized within the specified date range. You can view active device history by device type, device model, operating system, and other groupings to determine which types of mobile devices had any activity within the specified time frame. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mobile Devices - Inactive * # | Shows a list of inactive ActiveSync mobile devices in your organization. If a mobile device was not synchronized within the insight date range, it is considered to be inactive. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mobile Devices - Inventory * # | Shows the list of ActiveSync mobile devices in your organization including device owner. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mobile Devices - Summary * # | Shows a summary of ActiveSync mobile devices in your organization, grouped by device type, operating system, department, city domain, and so on. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Organizations / Mailbox Activity * | Provides a graphical view of the aggregated messages sent and received by your mailboxes, grouped by the Active Directory attribute you select. You can group by Company, Department, Office, City, Country or Region, or Job Title, You can also group by Internal Domain Name (as defined in your Admin Settings | Classifications | Domain Classifications). | • Domain Controller AND/OR Exchange Online Hybrid User Configuration AND/OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Outlook on the Web (OWA) - Activity | Shows the number of successful logons through Outlook on the Web (OWA) by on-premise users. You can group the results by top department, top user, and so on. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| Outlook on the Web (OWA) - Logon Details | Shows the details for Outlook on the Web (OWA) successful logons by on-premise users including browser and server used. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Outlook on the Web (OWA) vs. ActiveSync Unique Usage | Shows a summary of email client usage such as OWA and ActiveSync, for your Exchange on-premise environment.<br>• Trend view shows how many unique users accessed their email using Outlook on the Web (OWA) or ActiveSync on a daily basis.<br>• Pie chart shows how many unique users accessed their email using Outlook on the Web (OWA) or ActiveSync for the selected date range. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs<br>**NOTE:** To see OWA data in the insights, you must have selected the **Logons for Outlook on the Web (OWA)** option in the Exchange IIS Logs data source. You must also have configured your Exchange IIS servers to collect the necessary fields. See the *UC Analytics Deployment Guide* for details. |
| Personal Archive Mailboxes - Inventory # | Shows the list of individual personal archive mailboxes in your Exchange on-premise and/or Exchange Online (hybrid / native) organization. | • Domain Controller OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Personal Archive Mailboxes - Summary # | Shows a summary of the personal archive mailboxes in your Exchange on-premise and/or Exchange Online (hybrid / native) organization. | • Domain Controller OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Public Folders - Inactive * # | Shows the list of inactive Exchange 2013/2016/2019 and Exchange Online public folders in your organization. If the public folder has a last modification date earlier than the insight date range, the public folder is considered to be inactive. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Exchange Configuration |
| Public Folders - Inventory * # | Shows the list of individual Exchange 2013/2016/2019 and Exchange Online public folders in your organization. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Exchange Configuration |
| Public Folder Mailboxes - Summary * # | Shows summary information for each of your public folder mailboxes including the number of folders, mail-enabled folders, items, deleted items, total and average folder sizes, and last modified date. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Domain Controller<br>**NOTE:** To include public folder mailboxes that do not contain public folders, you must select **Empty Public Folder Mailboxes** in the Exchange and Exchange Online Public Folders data sources. |
| Public Folders - Migration Trend * | Shows the trend for the number of public folders and for the number of mail-enabled public folders across all the Exchange versions in your organization. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Exchange Configuration |

**Table 15. Exchange Insights and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Public Folders - Permissions Inventory * | Shows a list of user permissions for each Exchange 2013, Exchange 2016, Exchange 2019 and Exchange Online public folder in your organization. You can see who has permissions to specific public folders. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>**NOTE:** The **User permissions (Client permissions)** option must be selected in the Exchange (Online) Public Folders data source.<br>• For on-premises deployments, the Domain Controller data source is needed. |
| Public Folders - Summary * # | Shows a summary of the Exchange 2013/2016/2019 and Exchange Online public folders in your organization. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Exchange Configuration |
| Public Folders - Trend * | Shows the trends for number of items, size, and number of deleted items for the Exchange 2013/2016/2019 and Exchange Online public folders in your organization. | • Exchange Public Folders AND/OR Exchange Online Public Folders<br>• Exchange Configuration |

**Table 16. Skype for Business/Lync Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Skype for Business/Lync - Chargeback | Calculates the chargeback amount by totaling the cost of each Skype for Business/Lync conference or peer-to-peer session based on the cost settings defined in the UC Analytics Admin Settings. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync - Feature Adoption | Shows a summary of which Skype for Business/Lync features are being used by your users. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync - Inactive Users # | Shows the list of users who have not participated in a peer-to-peer session or conference during the insight date range. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync - Inventory # | Shows the list of Skype for Business/Lync servers and pools in your organization. | • Skype for Business/Lync Configuration |
| Skype for Business/Lync - Skype for Business Client Adoption # | Shows the number of users who have used Lync or Skype for Business recently. Users might be double-counted if they use both Skype for Business and Lync on different devices. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |

**Table 16. Skype for Business/Lync Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Skype for Business/Lync - User Adoption # | Shows the number of users who have been active in Skype for Business/Lync recently. Active is defined as participating in a conference or peer-to-peer session. For a given day, recently is defined as the user having been active within the last 14 days. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Archiving Policies - Inventory # | Shows the list of users in your organization and their associated Skype for Business/Lync archiving policy information. | • Skype for Business/Lync Configuration |
| Skype for Business/Lync Conferences - Activity | Shows a summary of Skype for Business/Lync conference activity in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Conferences - Details | Shows the list of individual Skype for Business/Lync conferences in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Lync Configuration |
| Skype for Business/Lync Conferences - Server Usage | Shows a summary of the Skype for Business/Lync conference activity in your organization by server or pool. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Conferencing Policies - Inventory # | Shows the list of users in your organization and their associated Skype for Business/Lync configuration information. | • Skype for Business/Lync Configuration |
| Skype for Business/Lync Enterprise Voice - Activity | Shows a summary of Skype for Business/Lync enterprise voice calls in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Enterprise Voice - Chargeback | Calculates the chargeback amount for your organization by totaling the cost of each enterprise voice call based on the cost settings defined in the UC Analytics Admin Settings. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Enterprise Voice - Details | Shows the list of individual Skype for Business/Lync enterprise voice calls in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Enterprise Voice - Server Usage | Shows a summary of the Skype for Business/Lync enterprise voice activity in your organization by server or pool. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |

**Table 16. Skype for Business/Lync Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Skype for Business/Lync External Access Policies - Inventory # | Shows the list of users in your organization and their associated Skype for Business/Lync external access policy information. | • Skype for Business/Lync Configuration |
| Skype for Business/Lync Peer-to-Peer Sessions - Activity | Shows a summary of Skype for Business/Lync peer-to-peer session activity in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Peer-to-Peer Sessions - Details | Shows the list of individual Skype for Business/Lync peer-to-peer sessions in your organization. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Peer-to-Peer Sessions - External Domain Activity | Shows a summary of Skype for Business/Lync peer-to-peer session activity with external domains. You define the list of internal domains in the UC Analytics Admin Settings. Any domain that is not defined as internal is considered external. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Peer-to-Peer Sessions - Server Usage | Shows a summary of the Skype for Business/Lync peer-to-peer session activity in your organization by server or pool. Includes enterprise voice activity. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync QoE - Devices | Shows a summary of Skype for Business/Lync QoE device information for your organizations. | • Domain Controller<br>• Skype for Business/Lync QoE Database |
| Skype for Business/Lync QoE - Location | Shows a summary of Skype for Business/Lync QoE information with tables that group sessions by location (subnet site, subnet region, subnet IP address). | • Domain Controller<br>• Skype for Business/Lync QoE Database |
| Skype for Business/Lync QoE - Network | Shows a summary of poor calls by network subnet or region for your organization. | • Domain Controller<br>• Skype for Business/Lync QoE Database |
| Skype for Business/Lync QoE - Session Details | Shows a list of individual QoE sessions for conferences and peer-to-peer sessions with the quality information for each session. | • Domain Controller<br>• Skype for Business/Lync QoE Database |
| Skype for Business/Lync QoE - Stream Details | Shows a list of individual QoE streams for conferences and peer-to-peer sessions quality information for each media stream. | • Domain Controller<br>• Skype for Business/Lync QoE Database |

**Table 16. Skype for Business/Lync Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Skype for Business/Lync QoE - Summary | Shows a summary of Skype for Business/Lync QoE information for your organizations. | • Domain Controller<br>• Skype for Business/Lync QoE Database |
| Skype for Business/Lync User Policies - Inventory # | Shows the list of users your in organization and their associated Skype for Business/Lync configuration information. | • Skype for Business/Lync Configuration |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Corporate Exchange At A Glance * # | Provides a quick high-level view of your Exchange organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Configuration |
| Distribution Groups / Group Access * # | Indicates the last use of a distribution group during the specified date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Distribution Groups / Inactive Groups / By Distribution Group * | Shows the list of security, distribution, and dynamic distribution groups that have not received email within the selected date range of the insight.<br><br>If a group contains child groups, any messages sent to the parent group are included in the messages sent to the child groups. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Distribution Groups / Top Group Users * | Shows the users that use distribution groups most often during the insight date range, grouped by the number of messages sent to a group. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Distribution Groups / Top Groups * | Shows the distribution groups that are used most often during the insight date range, grouped by the number of messages sent to each group. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Exchange ActiveSync / Devices / Active Devices * # | Provides a list of devices that were synchronized within the specified number of days. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Exchange ActiveSync / Devices / Inactive Devices * # | Provides a list of devices that were not synchronized within the specified number of days. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Exchange ActiveSync / Devices / Inventory / Device Inventory * # | Lists the mobile devices used within the organization. Each mobile device is listed along with its user identification. If a mobile device has been used by multiple users, it is only listed once with its most recent user. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Exchange ActiveSync / Servers / Server Activity | Provides an overview of the ActiveSync email traffic handled by each Exchange ActiveSync server. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| Exchange ActiveSync / Servers / Server Sync Times | Indicates the average amount of time taken to perform a synchronization operation. All ActiveSync protocol commands are included in this calculation except the PING command. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| Exchange ActiveSync / Users / Email Activity / Attachments | Provides statistics for the number of email attachments downloaded to Exchange ActiveSync devices per user per day. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Exchange ActiveSync / Users / Email Activity / Departmental Summary | Provides statistics for the number of messages that were sent and received by Exchange ActiveSync devices belonging to users in a specific department. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents |
| Exchange ActiveSync / Users / Email Activity / Summary | Provides statistics for emails sent and downloaded per user per day from the user's ActiveSync device. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents |
| Exchange ActiveSync / Users / Top Email Senders and Receivers | Provides a list of the users that send or receive the most emails with their Exchange ActiveSync devices. | • Domain Controller<br>• Exchange Configuration<br>• Exchange IIS Logs |
| Executive Summaries / Capacity | Provides composite information about email storage trends, message volume distribution for internal and external users, and volume summaries. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Configuration |
| Executive Summaries / Financials * # | Provides information about financial metrics related to your Exchange environment. Use this insight to calculate departmental operational costs, including the cost of sending and receiving Internet email messages and storing data. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Executive Summaries / Organization Traffic Usage * | Provides composite information about the email traffic in and through an Exchange organization from an Exchange server perspective. It provides usage metrics from a server perspective to identify usage trends for capacity planning. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Executive Summaries / Recipient Traffic Usage * | Provides composite information about the email traffic in and through an Exchange organization from the perspective of recipients in the organization. It provides relevant usage metrics from a mailbox perspective to identify usage trends. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Internet / Internet Domain Auditing / Domain Inbound Audits * | Displays individual messages, including the subject, sender, and receiver, submitted to the Exchange server by internet domains for the insight date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Internet / Top Internet Domains * | Provides a list of the internet domains that appear most often as either originator or recipient in an email. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Internet / Top Internet Domains Users * | Shows the mailboxes that most frequently send messages to or receive messages from Internet domains during the specified date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Inventory / Chargeback / Mailbox Sizes * # | Similar to the Mailboxes Mailbox Sizes insight, this insight provides a list of mailboxes and their associated sizes. It also contains a Cost field that contains the storage cost incurred by the specific mailbox. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Inventory / DAGs # | Provides statistical information about Database Availability Groups (DAGs) in your organization. | • Exchange Configuration |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Inventory / Disabled Accounts * # | Provides a list of mailboxes for which the associated account is disabled. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Inventory / Distribution Groups * # | Provides a list of the security, distribution, and dynamic distribution groups that exist in your Exchange organization. Member counts are provided for direct and indirect membership (expanding the groups that are members). | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration |
| Inventory / Inactive Mailboxes * # | Lists the mailboxes from which no messages were sent during the specified time period. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Inventory / Mailbox Growth * | Allows you to see growth trends in the number of mailboxes within an organization over time. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Inventory / Mailbox Owners * # | Shows the owners of mailboxes, mailbox sizes, number of messages, and owner department. You can insert a Location column to show which mailboxes are on-premise and which are Office 365. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Inventory / Mailboxes / Primary Mailboxes * # | Provides a list of the primary mailboxes in the organization and provides details about each mailbox. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Inventory / Servers # | Lists the Exchange servers in the organization and provides information about the server, including the Exchange version. It shows the number of mailboxes and mailbox databases. | • Exchange Configuration |
| Inventory / Stores # | Lists the databases in an Exchange organization, indicating the member servers associated with each database. The insight shows the number of mailboxes in each database.<br>**NOTE:** The insight includes only mailboxes that are set as target mailboxes in the Exchange Configuration data source. | • Exchange Configuration |
| Inventory / Summary # | Provides summarized information for each Exchange organization, including information about the number of servers, mailbox databases, and mailboxes. | • Exchange Configuration |
| Mail Activity / Internal vs. External * | Shows a day-to-day account of sent and received messages for a user or group and provides details of internal and external message traffic. External (inbound and outbound) traffic is traffic with senders and receivers outside of your Exchange organization. (You identify your internal domains when you set domain classifications during UC Analytics configuration.) | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mail Contacts / Top Contact Users * | Shows the users that most often use mail contacts, during the insight date range, grouped by the number of messages sent. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mail Contacts / Top Contacts * | Shows the mail contacts which are used most often during the insight date range in your enterprise. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Activity / Daily * | Provides mailbox usage data that detail the user activities. The insight does not indicate whether the message source is internal or external, nor does it specify the number of intended recipients. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Activity / Internal vs. External / Daily * | Provides a detailed breakdown of mailbox usage that shows user message activities on a daily basis. The insight includes details about internal and external message traffic. Internal traffic is identified when you configure the Classifications \| Domain Classifications in the Admin Settings to identify your internal domains. By default, the top 100 users are shown but you can customize the insight to show all results. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Activity / Internal vs. External - Received Mail * | Provides a day-to-day account of the received messages for a mailbox and includes details about internal message and external message traffic. External (inbound) traffic is traffic that is received from senders who are external to your Exchange organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Activity / Internal vs. External - Sent Mail * | Provides a day-to-day account of the sent messages for a mailbox and includes details about internal message and external message traffic. External (outbound) traffic is traffic that is sent to recipients who are external to your Exchange organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br><br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mailboxes / Mailbox Activity / Summary * | Provides mailbox usage data that details the users' activities. This insight does not indicate whether the message source is internal or external, nor does it record or specify the number of intended recipients. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Auditing / Mailbox Sent Audits * | Shows a list of all messages sent by a mailbox during the insight date range. Details include subject, recipient sent date, and message size. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Mailbox Security / Mailbox Security * # | Provides a list of mailboxes and shows the accounts that have permissions to access each mailbox. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes / Message Sizes / Received Distribution * | Provides a breakdown of the distribution of message sizes for messages received by your Exchange mailboxes and summarizes this information at the mailbox level. By default, the insight shows only mailboxes belonging to enabled users. To view all mailboxes, including those belonging to users with disabled accounts, you can remove the filter set on the insight. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Message Sizes / Sent Distribution * | Provides a breakdown of the distribution of message sizes for messages sent by Exchange mailboxes and summarizes this information at the mailbox level. By default, the insight shows only mailboxes belonging to enabled users. To view all mailboxes, including those belonging to users with disabled accounts, you can remove the filter set on the insight. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Mailboxes / Sizes And Quotas / Mailbox Quotas * | Shows the quotas that are set for the largest mailboxes across your Exchange organization. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes / Sizes And Quotas / Mailbox Sizes * # | Shows the largest mailboxes in your organization and their associated sizes. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Mailboxes / Top Internet Senders and Receivers * | Shows the mailboxes that sent the most email to internet domains and received the most email from internet domains during the insight date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Mailboxes / Top Senders and Receivers * | Shows the mailboxes that sent and received the most email during the insight date range. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Organizations / Delivery Time Threshold Summary<br><br>*Prerequisite*: Before you view the insight, navigate to **Admin Settings \| Classifications \| Threshold Classifications** and add a red threshold for Exchange Email Message Participant - Delivery Time. | Shows a summary of the delivery times of messages in your organization. Delivery time is calculated as the difference between the message send date and receipt date for each recipient. If you collect only from the Exchange Tracking Logs data source, the Send Date for most messages is approximate. To collect the exact Send Date you must also collect from the Exchange (Online) Mailbox Contents data sources.<br><br>By default, the insight has the following filters applied:<br><br>Delivery Time i**s set**<br><br>Domain \| Is External Equals **no** | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Organizations / Departmental Reporting / Mailbox Activity * | Based on the Department attribute in Active Directory, this insight provides an aggregated view of messages sent and received on a department-by-department basis, providing a view of the overall traffic for each department. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Organizations / Departmental Reporting / Mailbox Sizes * # | Based on the Department attribute in Active Directory, the insight provides an aggregated view of mailbox storage on a department-by-department basis, showing the mailbox storage consumption by each department. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Configuration OR Exchange Online Native Mailbox Configuration OR Exchange Online Hybrid Mailbox Configuration |
| Organizations / Organizational Traffic * | Presents an overview of inbound and outbound messages, showing the volume of internal and external traffic, across multiple Exchange organizations. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Organizations / Subject Auditing / Subject Sent Audits * | Lists mailboxes and shows message header details such as the originator, receiver, and subject line for sent messages. | • Domain Controller AND/OR Exchange Online Hybrid User Configuration OR Exchange Online Native User Configuration<br>• Exchange Tracking Logs AND/OR Exchange Mailbox Contents AND/OR Exchange Online Mailbox Contents |
| Servers / Server Activity /Summary | Shows the message activity on your Exchange servers for user and system messages. When you click the Details browser icon, a list of individual messages is displayed.<br>**NOTE:** To collect server activity from the Exchange tracking logs, you must select **Server Activity** when configuring the Exchange Tracking Logs data source. | • Exchange Configuration<br>• Exchange Tracking Logs |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Storage / Stores # | Lists the Exchange servers in the organization and provides details about the databases on each server, including the database size and the number of mailboxes in each store.<br><br>If the insight period is one day, then a graph provides a comparison of servers. If the insight period is greater than one day, then a graph shows the trend over the period. | • Exchange Configuration |
| Skype for Business/Lync / Conferences / All Conferences | Provides information about the different types of conference sessions including chat, audio/video, web conferencing, and application-sharing.<br><br>The insight shows meeting lengths and the number of participants for each conference. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Configuration / Lync Enabled Users # | Provides a list of Skype for Business/Lync-enabled users and shows their configuration settings. | • Skype for Business/Lync Configuration |
| Skype for Business/Lync / Enterprise Voice / Enterprise Voice Usage | Shows the number of voice calls handled by the Skype for Business/Lync servers. Voice call counts are broken down to show the distribution of outgoing and incoming calls. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Enterprise Voice / Outgoing Calls | Provides details about outgoing voice calls. For each call, the insight shows the call duration, the user who initiated the call, the "from" number, the connected number, and the start time and end time for each call. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Enterprise Voice / Top Calls By User # | Shows the users that have the most Skype for Business/Lync enterprise voice call usage. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Instant Messages / Instant Message Usage | Shows the number of instant messages handled by the Skype for Business/Lync servers. Message counts are broken down to show the distribution of internal and public instant messages. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Instant Messages / Top Internal Senders And Receivers By Messages # | Provides a list of the top internal senders and receivers of instant messages, showing counts for internal and external messages. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Lync Configuration |

**Table 17. MessageStats Insights (includes Active Directory, Exchange, and Skype for Business/Lync insights) and their required data sources**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Skype for Business/Lync / Organizational Summaries / Top Usage by User # | Shows the users that have the highest usage for instant messaging, file transfers, peer-to-peer sessions, enterprise voice calls, and conferences.<br><br>Usage statistics include:<br>• peer-to-peer instant messages and file transfers sent and received by the user<br>• enterprise voice calls initiated or received by the user<br>• peer-to-peer sessions initiated by the user<br>• conferences organized by the user. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync / Organizational Summaries / User Activity # | Shows all Skype for Business/Lync Server activities for individual users including instant messaging, file transfers, peer-to-peer sessions, voice calls, and conferences. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business / Lync Peer-to-Peer Sessions & Conferences - User Activity * # | Provides user activity for peer-to-peer sessions and conferences, including duration totals for incoming and outgoing audio sessions and desktop sessions. Conference information shows the number of conferences attended, conferences organized, and durations for individual users. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |
| Skype for Business/Lync Server At A Glance # | Provides a high-level quick view of your Skype for Business/Lync usage with departmental summaries. | • Domain Controller<br>• Skype for Business/Lync CDR Database<br>• Skype for Business/Lync Configuration |

**Table 18. Cisco Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Cisco - Activity | Shows a summary of all Cisco sessions in your organization. | • Cisco CDR |
| Cisco - Adoption # | Shows the number of users who have been active in Cisco recently. Active is defined as participating in a Cisco activity. For a given day, recently means that the user was active during the previous 14 days. | • Cisco CDR |
| Cisco - Chargeback | Calculates the chargeback amount for your organization by totaling the cost of each Cisco conference or peer-to-peer session based on the cost settings defined in the UC Analytics Admin Settings. | • Cisco CDR |

**Table 18. Cisco Insights and their required data sources.**

| Insight Name | Description | Required Data Sources |
|---|---|---|
| Cisco - Inactive Users # | Shows the list of users who have not used Cisco peer-to-peer session or conference during the insight date range. | • Cisco CDR |
| Cisco - Inventory # | Shows the list of Cisco servers, gateways and endpoints in your organization. | • Cisco Configuration |
| Cisco - Summary # | Shows an overall summary of users, sessions, and servers in your organizations. | • Cisco CDR<br>• Cisco Configuration |
| Cisco Conferences - Activity | Shows a summary of Cisco conference activity in your organization. | • Cisco CDR |
| Cisco Conferences - Details | Shows the list of individual Cisco conferences in your organization. | • Cisco CDR |
| Cisco Conferences - Server Usage | Shows a summary of the Cisco conference activity in your organization by server or endpoint. | • Cisco CDR |
| Cisco Peer-to-Peer Sessions - Activity | Shows a summary of Cisco peer-to-peer sessions in your organization. | • Cisco CDR |
| Cisco Peer-to-Peer Sessions - Details | Shows the list of individual Cisco peer-to-peer sessions in your organization. | • Cisco CDR |
| Cisco Peer-to-Peer Sessions - External Activity | Shows a summary of Cisco external peer-to-peer sessions in your organization. | • Cisco CDR |
| Cisco Peer-to-Peer Sessions - Server Usage | Shows a summary of the Cisco peer-to-peer session activity in your organization by server or endpoint. | • Cisco CDR |
| Cisco Top External Numbers Dialed | Shows a summary of external outgoing Cisco sessions in your organization | • Cisco CDR |

# About us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

## Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request.
- View Knowledge Base articles.
- Sign up for product notifications.
- Download software and technical documentation.
- View how-to-videos.
- Engage in community discussions.
- Chat with support engineers online.
- View services to assist you with your product.