MobileIron Email+ 3.16.0 for iOS Guide

for MobileIron Core and MobileIron Cloud

December 02, 2020

For complete product documentation see:
MobileIron Email+ for iOS Product Documentation

Contents

New features summary

This guide documents the following new features and enhancements:

- Email+ app feature and enhancement
- Email+ administrator features and enhancements

Email+ app feature and enhancement

- **Support for UIWebView is removed**: Now WKWebView is used for previewing the attachment and License screen.
- **Select multiple classification values**: Support for selecting multiple field values for the Email Classification implemented. This can be achieved with **selectionsMaxNumber** JSON property in **email_security_classification_json** configuration text. For more information see, Classification markers
- **"On behalf" info enabled**: On receiving a forwarded invite, the information about the event organizer is now displayed on the both message list and message details screens.
- **New "style" property added in Classification markers**: New "style" property defines text style in HTML format. When defined, "**color**" and "**alignment**" properties are ignored. Also **"\\n"** is resolved as a new line within the text. For more information see, Classification markers

Email+ administrator features and enhancements

- **New key-value pair added**: New key-value pair **report_phishing_address** is added to configure reporting a suspicious mail. For more information see, Key-value pairs for customizing Email+ for iOS (Cont.)

Overview of Email+ for iOS

MobileIron Email+ for iOS provides secure email, calendar, contacts, notes, and tasks on corporate-owned and BYOD iOS devices by communicating with an ActiveSync server in your enterprise.

About Email+ for iOS

Email+ for iOS is an AppConnect-enabled app. AppConnect is a MobileIron feature that containerizes apps to protect content on iOS and Android devices. Each AppConnect app becomes a secure container whose content is encrypted and, protected from unauthorized access. Because each user has multiple business apps, each app container is also connected to other secure app containers. This connection allows the AppConnect apps to share content. AppConnect apps are managed using policies configured in a MobileIron unified endpoint management (UEM) platform. The UEM platform is either MobileIron Core or MobileIron Cloud.

As an AppConnect app, all Email+ content is secured. The app interacts with other apps according to the data loss prevention policies that you specify. The app has the following secure features:

- **Secure apps passcode**: A secure apps passcode, if you require one, protects access to all secure apps. This is the AppConnect passcode, which you define in MobileIron UEM. The AppConnect passcode provides an additional layer of security for secure apps, beyond the device passcode.
- **Data encryption**: AppConnect encrypts all AppConnect-related data on the device, such as Email+ app data, app configurations, and policies. This means app data is secure even if a device is compromised.
- **Data loss prevention**: You determine whether Email+ for iOS can use the iOS copy/paste, open-in, and open-from features. AppConnect data loss prevention policies control if users can copy/paste data out of Email+ and control how email attachments can be shared with other apps via open-in and open-from.

For information about AppConnect features and configuration beyond Email+ for iOS, see the AppConnect and AppTunnel Guide.

Where to find Email+ for iOS

You can download Email+ for iOS from the Apple App Store.

About Email+ for iOS configuration

You configure settings for Email+ in the MobileIron UEM platform. Because MobileIron UEM provides these settings to the app, device users do not have to manually enter configuration details. By automating the configuration for device users, each user has a better experience when installing and setting up the app. Also, the enterprise has fewer support calls, and the app is secured from misuse due to configuration.

These settings include, for example:

- the ActiveSync server, or the Standalone Sentry that interacts with the ActiveSync server.
- the user ID for the ActiveSync server.
- the SCEP or certificate setting for the certificate that the device presents to the Standalone Sentry for authentication, if you are using certificates for authentication.
- Kerberos Constrained Delegation with Standalone Sentry, which provides a better user experience for device users.

What users can do in Email+ for iOS

When users launch Email+ for iOS, users can do the following from the main screen:

- Email: Send and receive their corporate email, and manage any sub-folders.
- Calendar: Manage and synchronize their corporate calendar data, including meetings and appointments in a daily, monthly, or list view.
- Contacts: Manage and synchronize their corporate contacts.
- Notes: Manage, synchronize, and create new notes.
- Tasks: Manage, synchronize, and create new tasks.
- Settings: Manage their certificates, keys, recognized certificate authorities, as well as alerts, sync period, S/MIME signing and encryption, and so on.

Configuring Email+ for iOS

You can configure Email+ for iOS using different componoents. It can be configured on both MobileIron Core and MobileIron Cloud.

Required components for an Email+ for iOS deployment

The following components are required for an Email+ for iOS deployment:

- MobileIron unified endpoint management (UEM) platform: MobileIron Core or MobileIron Cloud
- Sentry, with ActiveSync enabled (required if you want to secure access to the ActiveSync server using Sentry)
- An iOS device that is registered with a MobileIron UEM
- MobileIron client: Mobile@Work for MobileIron Core deployments, MobileIron Go for MobileIron Cloud deployments.

For supported versions see the MobileIron Email+ for iOS Release Notes.

A device user who launches Email+ for iOS without MobileIron's UEM platform will be running Email+ for iOS as an unsecured standalone app during a 30 day trial.

NOTE: If a device user has already launched Email+ for iOS as a standalone trial app, the device user must uninstall and reinstall Email+ for iOS to use it as a secure AppConnect-enabled app.

Before you configure Email+ for iOS

Before you configure Email+ for iOS:

- Ensure that all devices to which you plan to deploy Email+ must be able to access https://activate-emailplus.mobileiron.com. This URL enables the use of ActiveSync features in Email+. No identifiable information, however, is reported to the server.
- If you are using Sentry to allow access to your enterprise ActiveSync server, you must have either an Integrated Sentry (MobileIron Core only) or Standalone Sentry installed and configured for ActiveSync with the necessary device authentication set up.
- For related documentation see the following:
  - For information on how to install Standalone Sentry, see the MobileIron Standalone Sentry Installation Guide.
  - For information on how to set up Standalone Sentry for ActiveSync, see MobileIron Sentry Guide for MobileIron Cloud.
    OR

"Adding an entry for Standalone Sentry in MobileIron Core" in the MobileIron Sentry Guide for MobileIron Core.

- For information on how to set up Integrated Sentry, see "Adding an entry for Integrated Sentry in MobileIron Core" in the MobileIron Sentry Guide for MobileIron Core.

Note The Following:

- For MobileIron Cloud, you will configure the Exchange (ActiveSync) service as part of the Standalone Sentry setup for ActiveSync.
- In an Email+ deployment a separate Exchange configuration is not required. The Email+ configuration contains the necessary settings.

Main steps for Configuring Email+ for iOS (Core)

Following are the main steps for configuring Email+ for iOS on MobileIron Core:

Adding Email+ for iOS to MobileIron Core as a recommended app
Enabling third-party AppConnect apps
Configuring the AppConnect global policy
Configuring the AppConnect container policy
Creating an AppConnect app configuration for Email+
Configuring email attachment control with Standalone Sentry
Informing users to install Email+ for iOS

NOTE: You do not configure a separate Exchange setting for the device as you do for other email apps. The AppConnect app configuration provides the necessary information.

Adding Email+ for iOS to MobileIron Core as a recommended app

Device users can download Email+ for iOS directly from the Apple App Store. You can also distribute Email+ for iOS as a recommended app through Apps@Work.

Procedure

1. In the Admin Portal, go to **Apps > App Catalog**.
2. From the **Quick Import** drop-down list, select **iOS**.
3. Enter **MobileIron Email+** in the Application Name text box.
4. Click **Search**.
5. Select the app from the list that is displayed.
6. For MobileIron Email+, click **Import**.
7. Click **OK** on the pop-up message, and close the **Quick Import** dialog.
   MobileIron Email+ is now listed in the **App Catalog**. Information included in the app, such as the name, is automatically configured. All other settings, such as the App Category and whether the app is a free app, are set to default settings.

TIP: To view and edit the settings for the app, click on the app name in the **App Catalog**.

8. Select the app to apply the app to a label:
   a. Click **Actions > Apply to Label**.
   b. Select the label that represents the iOS devices for which you want the selected app to be displayed.
   c. Click **Apply**.

Next steps

Continue to Enabling third-party AppConnect apps on page 12.

Related topics

- For more information on adding iOS apps to the app distribution library, see "Working with apps for iOS devices" in the Apps@Work Guide. See also, "Setting per app VPN priority" in the Apps@Work Guide.
- For information on creating a MobileIron Tunnel VPN setting, see the MobileIron Tunnel for iOS Guide for Administrators.

Enabling third-party AppConnect apps

Email+ for iOS requires you to enable the licensing option for third-party and in-house AppConnect apps.

Procedure

1. In the Admin Portal, go to **Settings > System Settings**.
2. Click **Additional Products > Licensed Products**.
3. Select **AppConnect For Third-party And In-house Apps**.
4. Click **Save**.

Next steps

Continue to Configuring the AppConnect global policy on page 12.

Configuring the AppConnect global policy

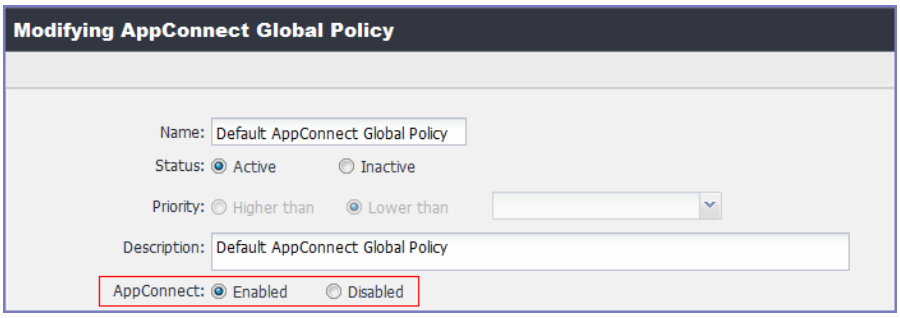
Because Email+ for iOS is an AppConnect app, **AppConnect** must be enabled in the AppConnect global policy if it has not yet been configured. The AppConnect global policy specifies AppConnect app settings such as AppConnect passcode and data loss prevention requirements. You can use the Default AppConnect Global Policy.

TIP: Most fields are set to suitable default values.

Procedure

1. In the Admin Portal, go to **Policies & Configs > Policies**.
2. Select the **Default AppConnect Global Policy** and click **Edit**.

FIGURE 1. ENABLE APPCONNECT IN THE APPCONNECT GLOBAL POLICY



3. For **AppConnect**, select **Enabled**.
4. (Optional) Scroll down to the **Data Loss Prevention Policies** section.
5. (Optional) For **Apps without an AppConnect container policy**, select **Authorize**.

NOTE: If you do not select this option, then you must create an AppConnect container policy for Email+.

6. (Optional) If you select **Authorize** for **Apps without an AppConnect container policy**, also select the data loss preventions options you want to enable.
7. Click **Save**.

NOTE: If you create a new AppConnect Global Policy, you must apply it to the appropriate labels. You do not need to apply the Default AppConnect Global Policy to a label.

Procedure: Applying to a label

1. Select the AppConnect global policy.
2. Click **More Actions > Apply To Label**.
3. Select the appropriate labels to which you want to apply the policy.
4. Click **Apply**.

Next steps

Continue on Configuring the AppConnect container policy on page 13.

Related topics

For more information about the AppConnect Global policy, see the "Configuring the AppConnect global policy" section in the AppConnect and AppTunnel Guide for detailed description of each field.

Configuring the AppConnect container policy

This task is only required:

- If you did not select **Authorize for Apps without an AppConnect container policy**, in the AppConnect Global Policy.
- If you want to configure a different set of data loss prevention policies for Email+.

The AppConnect container policy authorizes an AppConnect app and specifies the data loss prevention settings. The container policy overrides the corresponding settings in the AppConnect Global Policy.

NOTE: Make sure to apply only one AppConnect container policy for Email+ for iOS.

Procedure

1. In the Admin Portal, select **Policy & Configs > Configurations**.
2. Select **Add New > AppConnect > Container Policy**.
3. Enter a name for the policy.
4. Enter a description for the policy.
5. In the Application field, enter the bundle ID for the app:
   `com.mobileiron.ios.emailplus`
6. Configure the iOS data loss prevention policies according to your requirements.
7. Click **Save**.
8. Select the container policy.
9. Select **More Actions > Apply To Label**.
10. Select the labels to which you want to apply the policy.
11. Click **Apply.**

Next steps

Continue on to Creating an AppConnect app configuration for Email+ on page 14.

Creating an AppConnect app configuration for Email+

Email+ for iOS requires an AppConnect app configuration in MobileIron Core. The AppConnect app configuration provides the type of information that is usually configured in an Exchange setting, such as the fully qualified domain name and user ID for the ActiveSync server, and certificate information. As such, Email+ for iOS does not require an Exchange setting.

The AppConnect app configuration for Email+ for iOS also includes the bundle ID for the app and key-value pairs used to configure app settings.

IMPORTANT: Make sure to apply only one AppConnect app configuration for Email+ for iOS to each device.

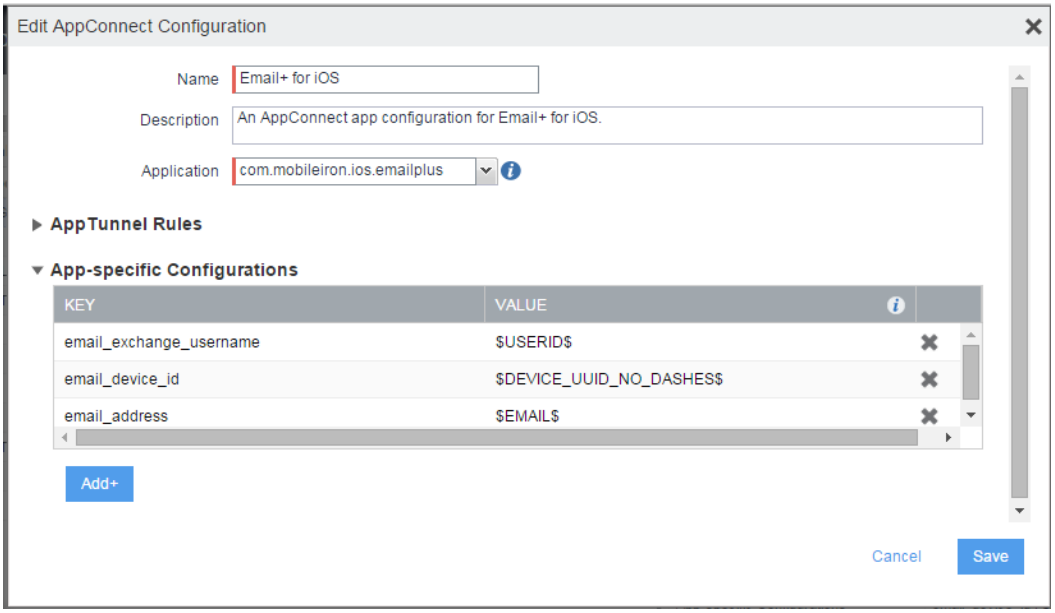
NOTE: If you make a mistake in the configuration, the app shows a message to the device user indicating an error in configuration.

Procedure

1. In the MobileIron Core Admin Portal, go to **Policy & Configs > Configurations**.
2. Click **Add New > AppConnect > Configuration** to create a new AppConnect configuration.
3. In the **Name** field, enter brief text that identifies this AppConnect app configuration.
   Example: Email+ for iOS
4. In the **Description** field, enter additional text that clarifies the purpose of this AppConnect app configuration.
5. In the **Application** field, enter the bundle ID for the app:
   `com.mobileiron.ios.emailplus`
6. In the **App-specific Configurations** section enter the following required key-value pairs:

Key	Value
email_exchange_host	Fully qualified domain name of your ActiveSync server or Sentry.
email_ssl_required	Enter true to secure communication using https to the server that you specified in email_exchange_host. Otherwise, enter false. Typically, set this field to true unless you are working in a test environment.

7. Click **Save**.
   When you save an app configuration with the bundle ID com.mobileiron.ios.emailplus, MobileIron Core automatically applies the following key-value pairs to the app configuration:
   - email_exchange_username with value $USERID$
   - email_device_id with value $DEVICE_UUID_NO_DASHES$
   - email_address with value $EMAIL$



8. Select the new AppConnect app configuration.
9. Click **More Actions > Apply To Label**.
10. Select the labels to which you want to apply the AppConnect app configuration.
11. Click **Apply**.

ActiveSync server synchronization due to app configuration changes

Email+ for iOS synchronizes all emails, contacts, calendar, and task items with the ActiveSync server when the device user first launches Email+ for iOS. It also does a full synchronization if you change the values of the following keys in the app configuration:

- email_address
- email_exchange_host
- email_exchange_username

After you have changed one of these values, the full synchronization occurs the next time Email+ for iOS receives the updated app configuration. Email+ for iOS receives the update the next time it runs after the AppConnect app checkin interval has expired.

WARNING: The first Email+ for iOS synchronization with the ActiveSync server may require considerable time and bandwidth, as does changing the values of the keys mentioned here.

Customize Email+ app behavior with key-value pairs

Administrators can customize Email+ app behavior by configuring key-value pairs in the **App-specific Configurations** section of AppConnect app configuration for Email+ for iOS. These key-value pairs define app behavior such as providing detailed notifications to device users and export contacts from Email+. See Additional configurations using key-value pairs on page 23 for the complete list of custom key-value pairs.

Configuring email attachment control with Standalone Sentry

With Email+ for iOS, you can configure Standalone Sentry to deliver emails with attachments to the secure app. The attachments can then only be shared with other apps according to your data loss prevention policies.

Therefore, when using secure email apps, you typically configure Standalone Sentry to use the email attachment control setting called **Open With Secure Email App**.

Procedure

1. Go to **Settings > Sentry** in the MobileIron Core Admin Portal.
2. Select the Standalone Sentry that handles email for the devices.
3. Click the edit icon.
4. In the section **Attachment Control Configuration**, select Enable Attachment Control.
5. For **iOS And Android Using Secure Email Apps**, select **Open With Secure Email App**.
6. Click **Save**.

Related topics

- For more information about email attachment control, see the MobileIron Sentry Guide for MobileIron Core.

Informing users to install Email+ for iOS

You can inform device users by sending an APNS (Apple Push Notification Service) notification that directs device users to the new or updated Email+ for iOS app in Apps@Work. Or, you can send an installation request directly to all devices in the labels applied to Email+ for iOS, bypassing Apps@Work entirely.

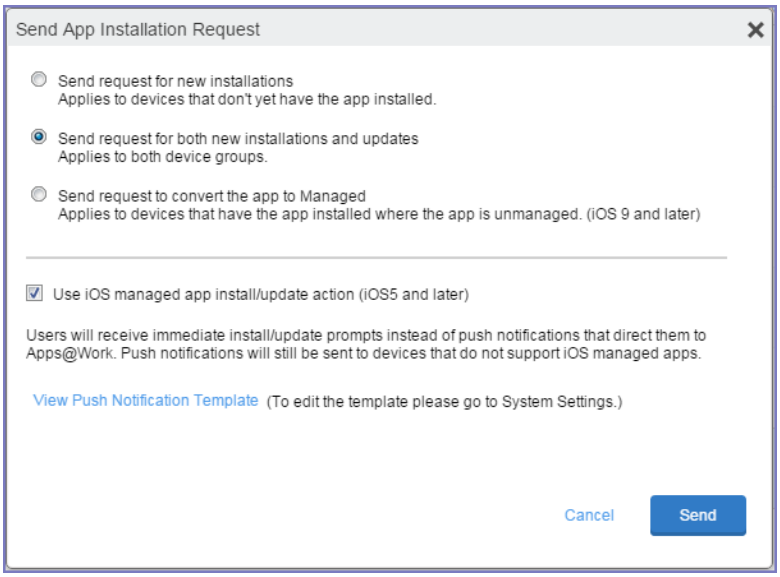
As with badge notifications, updates are determined by comparing the version number of the installed app with that of the update.

NOTE: The notification feature applies only to apps designated as Featured apps.

Procedure

1. In the Admin Portal, go to **Apps > App Distribution Library**.
2. Select **iOS** from the **Select Platform** list.
3. Select the featured app you want to work with.
4. Click **Message**.

FIGURE 2. SEND APP INSTALLATION REQUEST



5. Use the following guidelines to select the app installation option:

Item	Description
Send request for new installations	Prompts the device user to install the app if it is not already installed.
Send request for updates	Prompts the device user to update the app if it is not already updated.
Send request for both new installations and updates	Prompts the device user to install or update the app.
Use iOS managed app install/update action	Ignore the Apps@Work display and immediately install or update the app.

6. To check the content of the message prior to sending:
   a. Select the Push Notification template from the list.
   b. Click **View Messages**.
7. Click **Send**.
   The message is sent only for apps configured as featured apps in the app distribution library.

Main steps for configuring Email+ for iOS (Cloud)

You add Email+ from the MobileIron Cloud app catalog, and as part of the setup, you also specify the app configurations.

Following are the main steps for configuring Email+ for iOS on MobileIron Cloud:

Adding Email+ for iOS on MobileIron Cloud

Email+ for iOS is available in the app catalog in MobileIron Cloud.

Procedure

1. In MobileIron Cloud, go to **Apps > App Catalog > +Add**.
2. In **Business Apps**, click **Email+ (iOS)**.
3. Make any updates as necessary and click **Next**
   You can change the category and add a description.
4. Choose a distribution option for the app and click **Next.**
5. Update the default install settings or add install settings as necessary.
6. Update the promotion settings or add promotion settings as necessary.
7. For **Email+ configuration,** click + to add an Email+ configuration.

Next steps

- Configuring Email+ for iOS on MobileIron Cloud on page 18.

Configuring Email+ for iOS on MobileIron Cloud

The Email+ configuration provides the type of information that is usually configured in an Exchange setting, such as the fully qualified domain name and user ID for the ActiveSync server, and certificate information. As such, Email+ for iOS does not require an Exchange setting. The configuration for Email+ for iOS also includes the bundle ID for the app and key-value pairs used to configure app settings.

NOTE: Make sure that only one Email+ for iOS configuration is distributed to a device.

NOTE: If you make a mistake in the configuration, the app shows a message to the device user indicating an error in configuration.

Procedure

1. In the MobileIron Email+ configuration, enter a name for the configuration.
2. Configure the Email+ settings as needed.
3. Add any custom configurations for the app in **AppConnect App Configurations**.
4. Add any certificates that are required.

5. Choose a distribution option for the configuration and click **Done.**
   The configuration is distributed to the subset of the devices to which the app is distributed.

Related topics

- See Email+ configuration field description (Cloud) on page 20 for a description of the fields.
- See Additional configurations using key-value pairs on page 23 for a complete list of custom key-value pairs.
- See the Certificates and S/MIME sections in Additional configurations using key-value pairs on page 23.

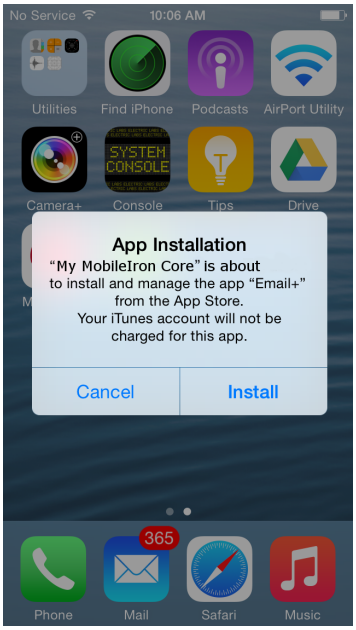
Email+ installation on an iOS device (Core and Cloud)

Device users can install Email+ from a notification they receive on their iOS device, or from the MobileIron app catalog on their device.

Email+ for iOS installation from notification

After you send an installation request for Email+ for iOS, users receive a notification that prompts them to install the new or updated app.

FIGURE 3. EMAIL+ INSTALLATION FROM NOTIFICATION



By tapping **Install**, Email+ for iOS is installed to the device.

Email+ for iOS installation from the MobileIron app catalog

When a featured app or an update to an installed app is published to device users, those users see a badge that appears on the corresponding tab in the MobileIron app catalog. The number on the badge indicates the number of apps or updates available. The availability of an update is determined by comparing the version number for the installed app to that of the newly-published app.

After importing Email+ for iOS into the app distribution library, the app appears in Apps@Work on the device. Tap the entry for Email+ and follow the prompts to install the app.

Email+ configuration field description (Cloud)

To configure Email+ configuration on MobileIron Cloud, select the check box next to the configuration. The following table provides a description of the configuration fields for Email+ for iOS on MobileIron Cloud.

TABLE 1. EMAIL+ CONFIGURATION FIELD DESCRIPTION IN MOBILEIRON CLOUD

Item	Description
Email Address (Required)	Enter ${userEmailAddress}.
Email Password	Enter the user's password for the ActiveSync server. If you provide a password, Email+ for iOS does not prompt the device user for the password. You can use the variable ${PASSWORD}
Exchange Host (Required)	Enter the fully qualified domain name of the ActiveSync server or the external hostname or IP address for Standalone Sentry.
Exchange Username (Required)	Enter ${userUID}
SSL required	Check to secure communication to the ActiveSync server or Standalone Sentry using HTTPS. Select the check box unless you are working in a test environment.
Minimum Characters for GAL Search	Enter the minimum number of characters for Email+ for iOS to use for automatic Global Address List (GAL) lookup in Mail and Contacts. When the device user enters the specified number of characters of a particular name, Email+ for iOS searches the GAL and presents any matches to the device user. NOTE: To enable GAL search, you must set the minimum number

TABLE 1. EMAIL+ CONFIGURATION FIELD DESCRIPTION IN MOBILEIRON CLOUD (CONT.)

Item	Description
	of characters for GAL search in your Microsoft Exchange server to the same value you set for this Email+ for iOS key. The default is 4.
App Identity Certificate	Select the App Identity Certificate created for Sentry. This field is required only if you are deploying Standalone Sentry that uses an identity certificate for device authentication.
Trust All Certificates	Check if you want Email+ for iOS to automatically accept untrusted certificates. Typically, you select the check box only if you are working in a test environment.
Prompt for Password Before Connecting to Server	Check if Email+ for iOS should prompt the user for the email password *before* attempting to connect to the email server. When it first launches and connects to the email server, Email+ for iOS provides the user's email password to the email server. If the field is unchecked, when Email+ for iOS first launches and connects to the email server, it does not provide the device user's email password to the server. After establishing a connection with the email server, Email+ for iOS prompts the user for an email password. If the email server limits the number of password attempts, it counts the connection as one failed attempt. MobileIron recommends checking this field if the email server allows only a small number of password attempts. For example, if the email server allows only three login attempts, setting this value to true means the device user gets three login attempts as specified by the email server.
IBM Lotus Notes Traveler	Check if your email server is IBM Lotus Notes Traveler.
Allow Safari Browser	Check to open links in Email+ in Safari. NOTE: If the setting is checked, the values of `email_url_scheme_http` and `email_url_scheme_https` keys are ignored.
Allow Detailed Notifications (Required)	Check if you want Email+ for iOS to show the device user detailed notifications. The details can include sensitive information such as email subject, or event titles and times.
Show Pictures by Default	Check to enable the Show Pictures option. Device users automatically see images when opening an email. Device users can override the value you configure by toggling the Show Pictures option on or off.

TABLE 1. EMAIL+ CONFIGURATION FIELD DESCRIPTION IN MOBILEIRON CLOUD (CONT.)

Item	Description
	NOTE: When changing the value of this key, Email+ does not change the **Show Pictures** option until after completing a full synchronization. A full synchronization occurs only when you change certain fundamental key-value pairs, like `email_address`, or when the device user uninstalls and reinstalls Email+ for iOS.
Allow Export Contacts	Check if you want to allow Email+ for iOS users to export Email+ for iOS contacts to an Email+ for iOS contacts group on the personal side of the device. Otherwise, enter false. When device users export Email+ contacts, device users can see the caller ID of incoming calls from phone numbers in the list of corporate contacts. Third-party apps can also access the corporate contacts.
Limit Contact Export to Name and Number only	Check to limit export of Email+ contacts to only the name and number of the contacts. This option is available only if Allow Export Contacts is checked.
Allow Logging	Check if you want Email+ to log data to the device console, and allow the log file to be attached to a feedback email. This option is useful for problem diagnosis.
Default Email Signature	Enter the default email signature. The value of this key is the default email signature for all emails. However, the device user can define the default email signature at any time, overriding this value. After the user defines the default email signature, Email+ does not use the value, even if you update it.
Allow Send Feedback	Enter the email address to which app feedback is to be delivered. Use this key to send Email+ for iOS log messages to a particular email address.

Additional configurations using key-value pairs

The following describe how to customize Email+ for iOS app behavior:

Key-value pairs for customizing Email+ for iOS

Table 2 on page 24 describes the key-value pairs available to administrators to customize Email+ for iOS app behavior. These key-value pairs define app behavior such as providing detailed notifications to device users and export contacts from Email+.

TIP: Key-value pairs marked as Core only are not applicable to MobileIron Cloud. For MobileIron Cloud deployments, these key-value pairs are either provided as fields in MobileIron Cloud or are set automatically and do not require action from the administrator. See Email+ configuration field description (Cloud) on page 20 for a description of the fields in MobileIron Cloud.

NOTE: Some values can use MobileIron Core variables, such as `$EMAIL$`. MobileIron Core substitutes the device user's value when sending the app configuration to the device.

You can configure and customize the following features with key-value pairs:

- Required key-value pairs
- Background email check and user notifications
- Certificates
- S/MIME
- Manage contacts
- Syncing
- Maximum size for email
- Email attachments
- Open links in a browser
- Default signature
- IBM Lotus Notes Traveler
- SSL
- GAL search

TABLE 2. KEY-VALUE PAIRS F CONFIGURING

Key	Value: Enter/ Select one	Description
Required key-value pairs		
email_address (Core only)	*Email address of the device user*	Typically, this field uses the MobileIron Core variable $EMAIL$. You can also use combinations of these MobileIron Core variables, depending on your ActiveSync server requirements: $USERID$, $USER_CUSTOM1$, $USER_CUSTOM2$, $USER_CUSTOM3$, $USER_CUSTOM4$.
email_device_id (Core only)	$DEVICE_UUID_NO_DASHES$	Identifies the device to the ActiveSync server. IMPORTANT: Always use the MobileIron Core variable `$DEVICE_UUID_NO_DASHES$`.
email_exchange_host (Core only)	*FQDN of the ActiveSync server or Standalone Sentry*	The fully qualified domain name of the ActiveSync server. If you are using a Standalone Sentry, enter the fully qualified domain name (FQDN) of Standalone Sentry. Example: `mySentry.mycompany.com` Note The Following: • When using Standalone Sentry with Lotus Domino server 8.5.3.1 Upgrade Pack 1, set the server address to *Standalone Sentry FQDN*`/traveler`. • When using Standalone Sentry with a Lotus Domino server earlier than 8.5.3.1 Upgrade Pack 1, set the server address to *Standalone Sentry FQDN*`/servlet/traveler`. • If you are using an IBM Lotus Notes Traveler server **without** a Standalone Sentry, append the IBM Lotus Notes Traveler server FQDN to the host path of the IBM Lotus Traveler server. If you use a custom path, append the custom path to the FQDN.
email_exchange_username (Core only)	*User ID for the ActiveSync server*	The user ID for the ActiveSync server. Typically, you use the MobileIron Core variable `$USERID$`. If your ActiveSync server requires a domain, use <*domain name*>`\$USERID$. For example: mydomain\$USERID$`. You can also use combinations of these MobileIron Core variables, depending on your ActiveSync server

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		requirements: `$EMAIL$`, `$USER_CUSTOM1$`, `$USER_CUSTOM2$`, `$USER_CUSTOM3$`, `$USER_CUSTOM4$`.
Background email check and user notifications		
allow_detailed_ notifications (Core only)	• true • false	true: Device user sees detailed notifications. The details can include sensitive information such as email subject, or event titles and times. false: Notifications do not include any details. Default if key-value is not configured: false.
should_cache_ tunneling_config	• true • false	Use the key should_cache_tunnelling_config along with the key allow_device_keychain. true: The configuration will be cached by AppConnect, as a result device user sees detailed push notifications and badge count (number of unread mails) after force closing the app. false: The configuration is not cached. Default if key-value is not configured: false.
Certificates		
allow_certificate_ revocation_check	• true • false	true: Allows CRL check. Default if key-value is not configured: false
allow_device_keychain	• true • false	true: Email+ stores the decryption key received from the UEM client in the device keychain. This allows Email+ to access its credentials and check email when iOS launches it in the background, thus improving background email notifications. false: The AppConnect content decryption key is not stored on the device. MobileIron recommends that customers set this to true in conjunction with a strong device passcode. For more information see Background email checks and user notifications on page 47. Default if key-value is not configured: false
email_login_certificate (Core only)	From the dropdown list	The device uses the certificate for authentication. See the MobileIron Core Device Management Guide for your deivce platform for information on configuring **Certificate Enrollment** settings.

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		If the certificate is password-encoded, MobileIron Core automatically also sends another key, `email_login_certificate_MI_CERT_PW`, with the password as the certificate's value. This key is required if Sentry is configured to require certificates. Default if key-value is not configured: Certificates are not used.
email_trust_all_certificates (Core only)	• true • false	true: Email+ automatically accepts untrusted certificates. Typically, you enter true only when working in a test environment. false: Email+ does not accept untrusted certificates. Default if key-value is not configured: false.
email_user_certificate_self_service (Core only)	From the dropdown list	Allows the administrator to distribute certificates to device users. Users can then upload the certificates manually to the MobileIron Core user portal.
email_certificate_X where X is 1 through 10	From the dropdown list	You can designate up to ten certificate authority (CA) root certificates as trusted. Email+ imports the certificate into its keychain of trusted certificates, and trusts any certificates derived from the CA root certificate in its keychain. Designating a CA root certificate as trusted is necessary for the following: • You have configured device authentication in Standalone Sentry to require a certificate whose certificate authority is not a trusted CA. A common scenario for this case is if you are using a self-signed certificate or a certificate that is not derived from a well-known certificate authority. NOTE: You specify this certificate to Email+ in the key email_login_certificate. It corresponds to the certificate you specified for device authentication in Standalone Sentry configuration in the MobileIron Core Admin Portal. • You have configured certificates for encrypting or signing S/MIME emails and these certificates are self-signed or not derived from a well-known certificate authority. NOTE: You specify these certificates in the keys email_encryption_certificate and email_signing_

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		certificate. NOTE: Use .DER format instead of normal .PEM format for email_certificate_X certificates.
S/MIME		
email_encryption_ certificate	From the dropdown list	Specifies the certificate to use for encrypting S/MIME emails. The MobileIron UEM sends the contents of the certificate as the value. Email+ imports the key into the keystore and selects the certificate as the encryption certificate. If you change the certificate, Email+ imports the new certificate into the keychain and selects the new certificate as the encryption certificate. It leaves the previous certificate in the keychain. If you delete the key-value pair, Email+ leaves the certificate in the keychain, while changing its settings to specify that no certificate is selected as the encryption certificate. For more information about configuring S/MIME for Email+ for iOS, see S/MIME support in Email+ for iOS on page 44. Default if key-value is not configured: Certificate is not configured. NOTE: For S/MIME certificates use .DER format instead of normal .PEM format.
email_signing_ certificate	From the dropdown list	Specifies the certificate to use for signing S/MIME emails. The MobileIron UEM sends the contents of the certificate as the value. Email+ imports the key into the keychain and selects the certificate as the signing certificate. If you change the certificate, Email+ imports the new certificate into the keychain and selects the new certificate as the signing certificate. It leaves the previous certificate in the keychain. If you delete the key-value pair, Email+ leaves the certificate in the keychain and changes its settings to specify that no certificate is selected as the signing certificate. For more information about configuring S/MIME for Email+ for iOS, see S/MIME support in Email+ for iOS on page 44.

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		Default if key-value is not configured: Certificate is not configured. NOTE: For S/MIME certificates use .DER format instead of normal .PEM format.
S/MIME- Support for Retired Certs		
email_escrow_ certificates	Each dictionary consists of the following two keys: • email_escrow_ certificates • email_escrow_ certificates_ MI_CERT_PW	Use this option to use the multiple retired certificate for decrypting older messages. This value corresponding to this KVP is an array of dictionaries. • email_escrow_certificates: Is a base64 encoded p12 archive with certificate and private key. • email_escrow_certificates_MI_CERT_PW: Is a password string to unpack archives.
Manage contacts		
allow_export_contacts (Core only)	• true • false	true: Allows Email+ users to export Email+ contacts to an Email+ contacts group on the personal side of the device. When device users export the contacts, they can see the caller ID of incoming calls from phone numbers in the list of corporate contacts. Third-party apps can also access the corporate contacts. false: Device users cannot export the Email+ contacts. They see the caller ID only for personal contacts. Default if key-value is not configured: false.
limit_contact_export_to (Core only)	• name_number • all	• name_number: limits the exported contact information to each contact's name and number. • all: exports all contact information for each contact. This field is used only if `allow_export_contacts` is set to true. NOTE: If you enter a value other than `all` or `name_number`, Email+ for iOS uses the value `all`. Default if key-value is not configured: all
email_safe_domains	*A comma-separated list of safe domains*	Ensure that there are no spaces before or after the comma. A wildcard in the domain name is supported. The only format supported for domain names with a wildcard is *.*domainname*.com. Entering * only will make all domains

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		safe. Base domain is not included in the wildcard domain, it needs to be added explicitly if required. For example, *.domainname.com, domainname.com. Email addresses not in the safe domain list are displayed in red color in Email+. This configuration minimizes the risk that a user will accidentally send internal emails to external email addresses. You may want to use this key-value pair: • if your company policy requires this risk mitigation step. • if your company has multiple domains and you want to identify your company's domains as opposed to domains that are not your company domains. Example: mycompany.com,mycompany.net,internal.mycompany.com Default if key-value is not configured: Only the domain of the email account is safe.
email_alert_unsafe_ domains	• true • false	true: Users see an alert if the recipients in an email or calendar invite include addresses that are not in a safe domain. For the alert to be displayed, the email_safe_ domains key must also be configured. false: An alert is not displayed for addresses not in a safe domain. Default if key-value is not configured: false.
Syncing		
email_max_sync_ period	• 0 • 1 • 2 • 3 • 4 • 5	Controls the maximum number of days for which emails are synced: • 0 = Download all emails. • 1 = Download emails received over the last day. • 2 = Download emails received over the last 3 days. • 3 = Download emails received over the last week. • 4 = Download emails received over the last 2 weeks. • 5 = Download emails received over the past month. Default if key-value is not configured: 0 Device users can change the interval to a value less than the default maximum. This feature is useful for regulatory purposes, if an organization requires device users to have no

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		more than *n* days of emails on their devices. NOTE: If the maximum email synchronization (email_max_sync_period) period is less than the default email synchronization period, then the maximum value is used.
email_default_sync_period	• 0 • 1 • 2 • 3 • 4 • 5	Controls the default time interval for which emails are downloaded: • 0 = Download all emails. • 1 = Download emails received over the last day. • 2 = Download emails received over the last 3 days. • 3 = Download emails received over the last week. • 4 = Download emails received over the last 2 weeks. • 5 = Download emails received over the past month. Default if key-value is not configured: 2 NOTE: MobileIron does not recommend setting the value as 0, as downloading all emails could take a very long time, and take up too much space on the device.
Maximum size for email		
email_max_body_size	*A number*	Specifies the maximum size in megabytes permitted for each email that is received. This feature allows administrators to manage bandwidth and memory consumption on devices by restricting the maximum size of individual emails. If the size of the email is greater than the default or configured size, users are presented with the following message and the email cannot be downloaded: **Email+ maximum message size exceeded**. Default if key-value is not configured: 4 MB.
Email attachments		
email_max_attachment	*A number*	Specifies the maximum size in megabytes permitted for each email attachment for incoming emails. The key-value pair is applied to incoming emails only.

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		If you set the maximum value to 10MB, a device user who receives an email that includes attachments of 3MB, 9MB, and 10MB will be able to download each attachment. If, however, a device user receives an email with an 11MB attachment, the following alert is displayed and users cannot download the attached file: Failed To Retrieve Attachment Email+ maximum attachment size exceeded. NOTE: If users try to send an attachment larger than 10 MB, the following alert is presented: **Warning: The message size exceeds 10 MB. Please confirm you would like to continue.** Users have the option to either **Cancel** or **Proceed**. If users tap **Proceed**, the email is successfully sent. This feature allows administrators to manage bandwidth and memory consumption on devices by restricting the maximum size of individual email attachments. Default if key-value is not configured: 10 MB.
calendar_attachments	• true • false	Enabled viewing of files attached to calendar meeting invites.This feature requires Exchange Web Services to be configured. Email+ fetches calendar attachments via an EWS API. If Email+ is configured through MobileIron Sentry, then additional key-value pair email_ews_host is needed with server address. The email_exchange_host is used automatically, but it is configured through MobileIron Sentry email_ews_host. Default if key-value is not configured: false
MI_SHARED_ GROUP_ID	*A unique, sufficiently complex alphanumeric string*	Required to enable attaching of files from Docs@Work. Ensure that the key-value pair is configured in the Docs@Work configuration as well and that the value is identical (including case) in both Email+ and Docs@Work configurations. The key is case sensitive. Enter the key in upper case.

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		IMPORTANT: Configure mi_enable_doc_sharing with value true in the Docs@Work configuration.
MI_AC_ACCESS_ CONTROL_ID	*A unique, sufficiently complex alphanumeric string*	Required to enable attaching of files from Docs@Work. Ensure that the key-value pair is configured in the Docs@Work configuration as well and that the value is identical (including case) in both Email+ and Docs@Work configurations. The key is case sensitive. Enter the key in upper case. IMPORTANT: Configure mi_enable_doc_sharing with value true in the Docs@Work configuration.
Open links in a browser Links in Email+ are opened by default in Web@Work. If Web@Work is not installed on the device, Email+ for iOS displays an error. However, administrators can specify the default browser to use when device users click links in Email+. Administrators can configure the default browser to be used for both HTTP and HTTPS links, using customized URL schemes. This allows finer control over the browser used to open HTTP and HTTPS links, respectively. Additionally, this key can be used to configure a customized browser as the one that launches when a device user clicks a link in Email+.		
allow_safari_browser (Core only)	• true • false	true: Allows Email+ to open URLs (included, for example, in an email) in Safari. NOTE: If the `allow_safari_browser` key is configured, the values of `email_url_scheme_http` and `email_url_scheme_https` are ignored. Default if key-value is not configured: false.
email_url_scheme_http	• mibrowser • googlechrome • opera-http	• mibrowser: Default value. Opens links in Web@Work for iOS • googlechrome: Opens links in Chrome. • opera-http: Opens links in Opera. Default if key-value is not configured: mibrowser
email_url_scheme_	• mibrowsers	• mibrowsers: Default value. Opens links in Web@Work

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
https	• googlechromes • opera-https	for iOS. • googlechromes: Opens links in Chrome. • opera-https: Opens links in Opera. Default if key-value is not configured: mibrowsers.
webatwork_install_link (Core only. Not supported on Cloud)	*URL for Web@Work*	If Web@Work is not installed on the device, device users are prompted to install Web@Work when they click on a webpage link in an email in Email+. If users accept the prompt, they are redirected to Apps@Work for installing Web@Work. TIP: The Web@Work URL is available in the app catalog in the MobileIron Core Admin Portal. In MobileIron Core, go to **Apps > App Catalog**, click on the Web@Work app, and then click **Global**. In the global settings, for **App URL**, click **Copy Link to Clipboard**. Paste the link as the value.
Default signature		
email_default_signature (Core only)	*The default email signature*	The value of this key is the default email signature for all emails. However, the device user can define the default email signature at any time, overriding this key's value. After the user defines the default email signature, Email+ does not use the value in the key, even if you update it. Default if key-value is not configured: Sent by Email+ for iOS managed by MobileIron
IBM Lotus Notes Traveler		
email_enable_lotus (Core only)	• true • false	Enter true only if your email server is IBM Lotus Notes Traveler. Default if key-value is not configured: false
SSL		
email_ssl_required (Core only)	• true • false	true: Secures communication using https to the server specified in `email_exchange_host`. Typically, set this field to true unless you are working in a test environment. Default if key-value is not configured: false
GAL search		
gal_search_minimum_characters (Core only)	*A number*	The minimum number of characters Email+ uses for automatic Global Address List (GAL) lookup in Mail and Contacts.

TABLE 2. KEY-VALUE PAIRS F CONFIGURING (CONT.)

Key	Value: Enter/ Select one	Description
		When device users enter the specified number of characters of a name, Email+ searches the GAL and presents the matches that it finds. IMPORTANT: On your Exchange server, set the minimum number of characters for GAL search to the same value you set for this key. If you do not, GAL search will not work properly in Email+. Default if key-value is not configured: 4
gal_search_display_ name	• true • false	true: Enables **Display Name** in Email+ **Settings > Contacts** by default. false: Disables **Display Name** in Email+ **Settings > Contacts** by default. Default if key-value is not configured: true
contacts_display_order	• first_last • last_first	Sets the default display order for contact names in search results. Device users can change the display order in Email+ in **Settings > Contacts**. The values are case sensitive; enter in lower case. first_last: Contact names in search results are displayed with first name followed by the last name. last_first: Contact names in search results are displayed with last name followed by the first name. Default if key-value is not configured: first_last.
Classification Markers		
email_security_ classification_json	Is equal to JSON representation of JSON configuration. Is equal to JSON representation of classification configuration. For JSON. sample format. See, Classification markers section.	Allows the admin to configure Email Classification Markers, for secure sharing of Mail and Calendar events. The mail is marked with a marker that defines security of the mail. You can add any of the following markers to a mail: • Unofficial • Official • Secret • Protected • Top secret

Key-value pairs for customizing Email+ for iOS (Cont.)

You can configure and customize the following features with key-value pairs:

- Prompt the device user for password
- Keyboard extension
- Enable Show Pictures
- Photo library
- Calendar customization
- Notes customization
- Default network timeout
- App feedback
- Troubleshooting
- Miscellaneous

TABLE 3. KEY-VALUE PAIRS F CONFIGURING

Key	Value: Enter/ Select one	Description
Prompt the device user for password		
prompt_email_pass-word (Core only)	• true • false	true: Email+ prompts the user for the email password *before* attempting to connect to the email server. When Email+ first launches and connects to the email server, Email+ provides the user's email password to the email server. false: When Email+ first launches and connects to the email server, it does not provide the device user's email password to the server. After establishing a connection with the email server, Email+ prompts the user for an email password. If the email server limits the number of password attempts, it counts the connection as one failed attempt. Set the value of this key to true if the email server allows only a small number of password attempts. Example: It he email server allows only three attempts, setting this value to true ensures that device users get three attempts, not two attempts. Default if key-value is not configured: false
allow_prompt_pass-word	• 0 • 1	0 = users are allowed access without a prompt for a password. 1 = users are prompted for a password to access email. Default if key-value is not configured: 1.
email_password (Core only)	*User's password for the ActiveSync server*	You can use the MobileIron Core variable `$PASSWORD$` if you have checked **Save User Password in Settings > Preferences.** MobileIron Core then passes the user's password as the value to the device. WARNING: If you plan to use the

Key	Value: Enter/ Select one	Description
		`$PASSWORD$` variable, be sure to set **Save User Password** to Yes before any device users register. If a device user was registered before you set Save User Password, Email+ prompts the user to enter the password manually. NOTE: MobileIron recommends deleting the key if the password is not being saved on MobileIron Core. Default if key-value is not configured: Email+ requests device users to enter the password.
Keyboard extension		
MI_AC_IOS_ALLOW_CUSTOM_KEYBOARDS	• true • false	true: Email+ allows the use of keyboards extensions. false: Email+ does not allow the use of keyboards extensions. This key-value pair is case sensitive. Default if key-value is not configured: false.
Enable Show Pictures		
show_pictures_default (Core only)	• true • false	true: Enables the **Show Pictures** option. Device users automatically see images when opening an email. false: Disables the **Show Pictures** option. Device users must tap **Show Pictures** to view images when opening an email. Device users can override the value you configure by toggling the **Show Pictures** option on or off. NOTE: When changing the value

Key	Value: Enter/ Select one	Description
		of this key, Email+ does not change the **Show Pictures** option until after completing a full synchronization. A full synchronization occurs only when you change certain fundamental key-value pairs, like `email_address`, or when the device user uninstalls and reinstalls Email+ for iOS. Default if key-value is not configured: false.
Photo library		
allow_photo_library_ access	• true • false	• true: Users can attach photos and video files from their personal photo library on the device. • false: Disables access to the personal photo library, including video files, from Email+. Device users cannot attach photos or videos from their personal photo library. However, users can take new photos or videos directly from the email they are composing in Email+ and attach to the email. This feature allows administrators to clearly separate work-related and personal content on device. Default if key-value is not configured: true.
Calendar customization		
calendar_default_ reminder	• -1 • 0 • 5 • 10 • 15 • 30 • 60 • 120 • 1440	Specifies the default calendar alert: • -1: No alert • 0: At the time of event • 5: 5 minutes before the event • 10: 10 minutes before the event • 15: 15 minutes before the event • 30: 30 minutes before the event • 60: 1 hour before the event • 120: 2 hours before the event

Key	Value: Enter/ Select one	Description
	• 2880	• 1440: 1 day before the event • 2880: 2 days before the event Device users can edit the alert as desired after creating the event. Default if key-value is not configured: -1.
calendar_default_mode_tablet	• day • week • month • list	Sets the default Calendar view on an iPad. Device users can change the view in the Calendar's **Settings**. The device user's choice overrides the default set by the administrator. Default if key-value is not configured: week.
calendar_default_mode_phone	• day • month • list	Sets the default Calendar view on an iPhone. Device users can change the view in the Calendar's **Settings**. The device user's choice overrides the default set by the administrator. Default if key-value is not configured: day.
calendar_reset_view_threshold	*A number*	Sets the inactivity threshold after which the calendar view is reset to the default view. The inactivity threshold is measured in seconds. If the device screen is auto-locked or the app is in background for more than the configured time, the default view is loaded when users launch Calendar. Default if key-value is not configured: 120 seconds.
Notes customization		
allow_notes_title	• true • false	true: Email+ users are presented with a separate title field to add a title to a note. false: A separate title field for a notes is

Key	Value: Enter/ Select one	Description
		not available, instead, the first line of the note is used as a title. Default if key-value is not configured: false.
Default network timeout		
default_network_ timeout	*A positive integer*	Sets the app's default timeout for all ActiveSync network requests. The value is measured in seconds. Example: 30. In this example, for ActiveSync network requests, Email+ will timeout after 30 seconds. Default if key-value is not configured: 90 seconds
App feedback		
feedback_email_ address (Core only)	*An email address*	Device user app feedback and log messages are sent to the email address. Default if key-value is not configured: App feedback is not available to Email+ users.
Email watermark		
email_watermark	Any alphanumeric string	Adds watermark in an email for mail view and mail compose screens supported. The text for the watermark is unique to a customer.
email_watermark_ parameters	• textColor, • textSize, • horizontalSpacing, • verticalSpacing Where: textColor is #AARRGGBB and textSize, horizontalSpacing, and verticalSpacing are integer values.	Sets the watermark parameters such as text color, size, horizontal and vertical spacing.
Troubleshooting		
allow_logging (Core only)	• true • false	true: Email+ logs data to the device console, and allows the log file to be attached to a feedback email. Entering true is useful for problem diagnosis.

Key	Value: Enter/ Select one	Description
		Default if key-value is not configured: false.
allow_show_ configuration	• true • false	true: Enables the display of configuration information while setting up Email+ on an iOS device. Set this value to true for test devices first, then disable the key value pair when it is time to roll out Email+ for iOS to device users. Default if key-value is not configured: false.
exit_on_configuration_ error	• true • false	• true: Email+ simply shuts down without any notification if there is an error in the Email+ configuration that is pushed to the device. • false: If Email+ encounters an error in the configuration, device users are provided with the option to email the Email+ logs. The Email+ logs are helpful in debugging configuration errors. NOTE: Not all configuration errors are considered critical. Example: A missing S/MIME signing or encryption certificate is not considered a critical error. Default if key-value is not configured: true
enable_calendar_dump	• true • false	• true: Enables calendar dump to Email+ feedback logs for troubleshooting. Calendar data is encrypted. • false: Disables calendar dump to Email+ feedback logs. Default if key-value is not configured: false
Miscellaneous		
disabled_features	• move_button • local_cache_all • attach_files	• move_button: Disables the **Move** button in the **Move to** screen in Email+. Emails are moved without

Key	Value: Enter/ Select one	Description
	• openin_compose • document_viewer	confirmation when users tap on a folder • local_cache_all: Disables all local caching. • attach_files: Disables the **Attach Files** option in Email+. • openin_compose: Disables opening of files into Email+ from other apps. • document_viewer: Disables opening of attachments in Email+. Instead, users are provided the **Open In ...** option to choose an app in which to view the attachment. However, some attachments, such as text, .eml, audio, and certificate files are opened in Email+. Configure the value if you are also using the Watermark capability in Docs@Work. If you want watermarks to be shown on all documents, configure the value to disable the document viewer in Email+ and use Docs@Work exclusively.
enabled_features	• gmail_smart_folders • wkwebview_mail_viewer • richtext_email_support • rms_support • fit_to_width	• Enables smart folders, **All mails**, **Spam**, and **Starred,** for Gmail accounts. • WkWebView based framework for viewing emails. This option is enabled by default. • Enables the ability to format text using Bold, Italic, and Underline options.This option is enable by default. • Enables fetching, displaying and composing of the protected messages. If rms_support is enabled with configured server, list of fetched templates is displayed in Settings/Troubleshooting/Available Permissions. Due to ActiveSync protocol limitations, maximum of 20 templates are displayed in Email+.

Key	Value: Enter/ Select one	Description
		• Enables scaling down the size of an email to fit the width of the screen, but will not reduce it to less than 25% of its original size.
always_fetch_mime	• true • false	Use this option to set the default value for Email+ setting of **Always Fetch MIME**. Enable this option only when applications fail to launch when you click the links in the email body. Default if key-value is not configured: false
allow_callkit	• true • false	Use this option to disable CallKit functionality, which is restricted in China by Apple. Customers are advised to set allow_callkit to false for all their users in China. True - CallKit functionality enabled False - CallKit functionality disabled Default if key-value is not configured: true
disable_analytics	• true • false	Use this option to disable crash analytics. Default if key-value is not configured: false
filepass_key_identifier	A unique, sufficiently complex alphanumeric string.	This key allows admin to enable sharing documents securely between MobileIron Docs@Work and Microsoft IntuneMAM protected Office365 apps through FilePass. The value for this key-value pair needs to be same for the all the supported MobileIron Apps (Docs@Work, Email+, and FilePass) participating in File Sharing with Microsoft Office 365 apps.
migrate_from_email_ exchange_host	The value is the previous email_ exchange_host key that was set up on MobileIron Core.	This key allows the admin to configure MobileIron Core to MobileIron Cloud migration for the email exchange host. NOTE: Post-migration of a device, the Email+ app needs to be

Key	Value: Enter/ Select one	Description
		re-synced to continue receiving and sending email messages. The content in local folders, such as Draft and Outbox, will be removed and no longer available. The Inbox folder should be refreshed for the email list to display.
Microsoft Office 365 authority and resource URL		
modern_auth_ authority_url	https://login.microsoftonline.com/common	This KVP is added to specify Microsoft Office 365 authority url.
modern_auth_ resource_url	https://outlook.office365.com	This KVP is added to specify Microsoft Office 365 resource url.
Phishing reporting		
report_phishing_ address	email address	Enabling 'Report Phishing' option on View screen in the "More" menu. Phishing email will be sent to email address set in value.

S/MIME support in Email+ for iOS

Email+ for iOS includes support for Secure/Multipurpose Internet Mail Extensions (S/MIME). This functionality provides the following features:

- The device user sending the email can digitally sign the email.
  On the receiving side, Email+ for iOS validates the sender's identity and determines whether the email has been tampered with.
- The device user sending the email can encrypt the email.
  On the receiving side, Email+ for iOS decrypts the email.
- Email+ for iOS automatically encrypts emails when replying to or forwarding an encrypted email thread.

Using S/MIME requires a user certificate on the device running Email+ for iOS. You can import encryption certificates in one of two ways:

- Pushing S/MIME certificates from MobileIron Core
  OR
- Importing S/MIME certificates to the device through email

Before you set up S/MIME for Email+ for iOS

Before you set up S/MIME do the following:

- Make users' public encryption keys accessible to all users.
  To send an encrypted email, a user needs the recipient's public key. If you provide users' public keys in the Active Directory, Email+ for iOS uses global address lookup to retrieve a public key as needed.
  Another way for one user to have the public key of another user is to receive an email from a user with one certificate for both signing and encryption. When receiving a signed email where the signing certificate and encryption certificate are the same, Email+ for iOS now has the sender's public key. The recipient can now send an encrypted email to the sender of the signed email.
- Make sure users' encryption certificates are the same on all devices.
  Users need their private keys and certificates to read encrypted emails. A user's encryption key and certificate must be the same on all the user's email apps that use S/MIME, including desktop email apps.
- When an encryption key/certificate is renewed, the existing email on a device cannot be decrypted unless the original key certificate is available. Keep a backup copy of the encryption key and certificate or consider using a third-party escrow service.
- To restore an encryption key and certificate from backup, users can send themselves the key/certificate as an email attachment, as described in Importing S/MIME certificates to the device through email on page 46.

Pushing S/MIME certificates from MobileIron Core

Pushing S/MIME certificates from MobileIron Core is a two-step process:

1. Enabling per-message S/MIME for iOS
2. Configuring key-value pairs

Enabling per-message S/MIME for iOS

See the "Enabling per-message S/MIME for iOS" section in the MobileIron Device Management Guide for iOS device to set up the encryption and signing certificates for S/MIME.

Configuring key-value pairs

The key-value pairs define the encryption and signing certificates to be used in Email+. The value for each key is the certificate enrollment setting you created. You enter the key-value pairs in the AppConnect app configuration you created for Email+ for iOS.

Procedure

1. In the MobileIron Core Admin Portal, go to **Policy & Configs > Configurations**.
2. Select the app configuration you created in Creating an AppConnect app configuration for Email+ on page 14.
3. Click **Edit**.
4. Add the following key-value pairs in the **App-specific Configurations** section:
   - `email_encryption_certificate`: This key specifies the certificate to use for encrypting S/MIME emails. Select the SCEP setting you want to use from the dropdown list.
   - `email_signing_certificate`: This key specifies the certificate to use for signing S/MIME emails. Select the SCEP setting you want to use from the dropdown list.

NOTE: Use of expired or revoked certificates for signing and encryption not supported. Also, the expired certificates are not displayed in the signing or encryption selection lists.

Pushing S/MIME certificates from MobileIron Cloud

To enable S/MIME encryption, set up the certificates you will use for S/MIME in MobileIron Cloud. You will reference the certificates in the Email+ configuration to distribute the certificates to devices. Certificates are sent to the devices to which the configuration is distributed. Email+ imports the certificates into the keychain and selects the certificates as the encryption and signing certificates, respectively. Device users can then use the certificates in Email+ for iOS.

Procedure

1. Set up certificates.
   Create a **Certificate** or **Identity Certificate** setting from **Configurations > +Add.**
   Before creating an **Identity Certificate**, you must have also added a certificate authority in **Admin > Certificate Authority**. See MobileIron Cloud Help for information about setting up certificates in MobileIron Cloud.
2. Configure the S/MIME key-value pairs in the Email+ configuration.
   The key-value pairs define the encryption and signing certificates to be used in Email+ for iOS. The value for each key is the certificate setting you created in Step 1.

Related topics

See the key-value pairs f configuring on page 24, for the S/MIME key-value pairs for the encryption and signing certificates.

Importing S/MIME certificates to the device through email

Device users can import the signing and encryption certificates to their device from email.

Procedure

1. Device users email themselves the certificate they use for S/MIME as an attachment.
   The certificate must be sent as a PFX file.
2. Open the email using Email+ for iOS on the device
3. Tap to open the attachment.
   Email+ for iOS prompts the user for the certificate password.
4. Enter the certificate password.
   Email+ for iOS imports the certificate into its keychain.
5. Enable S/MIME signing and encryption in the mail settings in Email+ for iOS.
   a. In Email+ for iOS, tap **Settings > Mail**.
   b. Tap **Security**.
   c. Tap **Sign**. The user's signing certificate is automatically selected.
      Users may optionally tap **Always Sign** to always sign emails with their certificate, and **Sign As Clear Text**.
   d. Tap **Encrypt**. The user's signing certificate is automatically selected.

Users may optionally tap **Always Encrypt** to encrypt every email they send through Email+ for iOS.

Background email checks and user notifications

Email+ relies on iOS background execution to check for new email and to notify users. In the following cases Email+ may not be able to check for new email:

- To conserve battery power, iOS limits when third-party apps can run in the background. When Email+ is sent to the background, iOS occasionally allows Email+ to check for new email.
- iOS may terminate Email+ to reclaim memory for other apps. iOS may later decide to launch Email+ for iOS in the background to check email.

When Email+ is in the background and attempts to check email, as an AppConnect app that encrypts its content, Email+ must retrieve its encryption key from the UEM client. This requires an app flip to the UEM client, which cannot happen in the background. As a result, Email+ cannot retrieve the encryption key and therefore cannot verify working hours for notifications or check for new email.

To allow Email+ access to the encryption key even when it is in background, configure the `allow_device_keychain` key-value pair to allow Email+ to store the key in the device keychain. This allows Email+ to check for new email even when iOS launches it in the background.

NOTE: The `allow_device_keychain` key-value pair should only be used with a strong device passcode so as to secure the decryption key.

How Email+ for iOS checks for new emails

The following describes how Email+ for iOS checks for new emails.

TABLE 4. CHECKING FOR NEW EMAILS

When the ...	Email+ for iOS...	iOS...
user launches Email+	checks for new email and notifies the user of new email	allows Email+ for iOS to run as usual
app is in the background	occasionally checks for new email and notifies the user, depending on iOS background refresh	might do a periodic background refresh

Note The Following:

- iOS may sometimes terminate an app to preserve battery power or memory. If iOS terminates and then attempts to relaunch Email+ for iOS while the device is locked, then the decryption key is not accessible for reasons of security, and iOS cannot relaunch Email+ for iOS.
- iOS learns user habits and adjusts its background refresh parameters accordingly. As device users work with Email+ for iOS more frequently, iOS similarly launches Email+ for iOS in the background more frequently.

Configuring Web@Work for iOS to open mailto links in Email+ for iOS

Administrators can configure Web@Work for iOS to open mailto links in Email+ for iOS using key-value pairs. When device users click a mailto link in Web@Work for iOS, Email+ is automatically used.This feature allows administrators to maintain good security across the organization by ensuring that users go from a secure browser to a secure email application when clicking a mailto link.

Procedure

1. Select the Web@Work configuration in your UEM and click **Edit**.
   - In the MobileIron Core Admin Portal, go to **Policies & Configs > Configurations**.
   - In MobileIron Cloud, go to **Apps**.
2. For custom configurations, click **Add** to add a key-value pair.
3. Add the key `mailto_prefix`, and assign any of the following values:

Value	Value options	Description
email+app://<*Email+ for iOS app*>	email+app://email email+app://calendar email+app://contacts	Used for launching one of the apps within Email+ for iOS, such as the email app itself, calendar, or contacts.
email+launcher://<*browser URL scheme*>	email+launcher://mibrowser?url=mailto:	Sets Email+ as the default app to open mailto links.

4. Save the configuration.

Allow copy from Email+ for iOS to other AppConnect apps only

You can configure data loss prevention policies (DLPs) for Email+ for iOS, which involves specifying whether the device user can copy content from Email+ for iOS to any other app. You can specify whether the device user can copy content from Email+ for iOS only to other AppConnect apps, rather than all other apps. This allows device users to share content without also allowing the content to flow to non-AppConnect apps.

Review your AppConnect for iOS DLP settings for copy/paste for Email+ for iOS. Ask these questions depending on your current setting:

TABLE 5. REVIEW APPCONNECT COPY/PASTE SETTINGS FOR EMAIL+ FOR IOS

Current setting	Ask yourself
Copy/Paste To is not allowed for Email+ for iOS.	• Would your security needs still be met if you allowed copying only to other AppConnect apps, but not to all other apps? • Does Email+ for iOS have content that a device user would want to copy to another AppConnect app? If you answered yes to these questions, change the **Copy/Paste To** setting for Email+ for iOS to allow copying only to other AppConnect apps.
Copy/Paste To is allowed for Email+ for iOS to all other apps.	• Would your security needs be better met by limiting copying only to other AppConnect apps, instead of all other apps? • Would the user feel limited if copying is allowed only to other AppConnect apps? If so, is the more limited user experience, but tighter content security the right trade-off for your needs? If you answered yes to these questions, change the **Copy/Paste To** setting for Email+ for iOS to allow copying only to other AppConnect apps.

Data loss prevention policies for Email+ for iOS are configured on the MobileIron Core Admin Portal in one of the following places:

- the AppConnect container policy for Email+ for iOS
  See Configuring the AppConnect container policy on page 13
- the AppConnect global policy if you allow apps to be authorized without an AppConnect container policy and have no AppConnect container policy for Email+ for iOS.
  See Configuring the AppConnect global policy on page 12

What Email+ for iOS users see for copy/paste

When you limit copying from Email+ for iOS to only other AppConnect apps, the device user is able to copy from Email+ for iOS, but can paste only into the same app or other AppConnect apps. If the device user tries to paste into a non-AppConnect app, the content is not available.

The device user can also see the **Copy/Paste To** data loss protection policy setting in Mobile@Work at **Settings > Secure Apps > Email+**.

Email and calendar classification capabilities (Deprecated)

Classification capabilities provides the ability to manage protective markings to emails and calendar events. Email+ shows appropriate user interface fields to the user when viewing messages, replying to messages, or composing new messages, or creating new calendar events.

The messages that are sent through Email+, adds the markings to the subject line, header, and optionally on the top and the bottom of message body. Email+ supports two levels of markings:

- Classification - To identify the overall sensitivity of the message
- Distribution Limiting Markers - To limit the distribution

The different Classification and Distribution Limiting Markers (DLM) values are configured via key-value pairs as described in the following table;

TABLE 6. KEY-VALUE PAIRS TO CONFIGURE CLASSIFICATION AND DLM VALUES

Key-value pair	Description
email_classification_list	Enables the email classification feature. If present, it specifies the list of classification values to be used and all the supported permutations. The values are separated by a ";". For example: SEC=UNOFFICIAL;SEC=UNCLASSIFIED;DLM=For-Official-Use Only; DLM=Sensitive;DLM=Sensitive:LegalDLM=Sensitive:Personal;SEC=PROTECTED;SEC=PROTECTED,DLM=Sensitive;SEC=PROTECTED,DLM=Sensitive:Legal;
email_classification_version	Prefix the string to the x-header to represent the version of the standard supported. Default is "VER=2012.3,NS=gov.au". For example: X-Protective-Marking: VER=2012.3, NS=gov.au, SEC=UNCLASSIFIED, ORIGIN=neville.jones@ato.example.org
email_classification_default	Allows an administrator to specify the default classification value for all the new emails composed in Email+. If this value is not specified, then the user has to explicitly classify a message. The following value defaults to unofficial with no DLM SEC=UNOFFICIAL
email_classification_body	Enables whether the classification values are added to the message body (top and bottom) for emails that are sent (new emails as well as replies to existing emails). It is the Boolean value, if it is set to **True** then the message body is enclosed in Header and Footer.

TABLE 6. KEY-VALUE PAIRS TO CONFIGURE CLASSIFICATION AND DLM VALUES (CONT.)

Key-value pair	Description
	True/False. Default is True.
email_classification_lock_dlm	Enables the administrator to not allow any changes to the DLM value once it has been set in the original message. True/False. Default is False.
email_classification_required_string	A string value that is shown in the alert to the user asking the user to enter classification. Default is "Required".
email_classification_alert_string	A string value that is shown in the alert to the user asking the user to enter classification. Default is "Classification is required"
email_classification_security_label	A string value that is shown in the message compose user interface as label in the text field where the SEC value is selected.
email_classification_dlm_label	A string value that is shown in the message compose user interface as label in the text field where the DLM value is selected.

NOTE: With Email+ 3.14.0 and above the **Email and calendar classification capabilities** will be replaced with **Classification markers**. When you configure **email_security_classification_json** the older version of classification will be ignored.

Classification markers

Email classification markers allows secure sharing of Mail and Calendar events with internal and external audience. Configure Email classification marker using the **email_security_classification_json** key-value pair. To

verify if classification is enabled on the Email+ app, go to **Settings > Troubleshooting > Email classification markers**.

The admin can configure and customize classification rules as required. When you compose a new mail using the Email+ app, select the **Classification** field to apply classification markers. The device users can set text value, color, alignment, and header or footer labels. You can assign colors to differentiate between field values for easy identification. When a mail with classification is saved as a draft or is stuck in the outbox. The classifications are also saved along with the mail message, you can edit the drafts mail to add or remove classification markers.

The Email classification markers consists of JSON formatted data. The following table describes the generic classification and sample format:

Classification	Value	Sample format

Fields	Array of JSON objects of the classification field configurations.
	• **name**: The name is a combination of alphabets and numbers. The first letter of the name should be in uppercase.
	• **title**: The text that is displayed to a user in classification picker. It consists of letters, numbers, and spaces. The default value is equal to **name** value. (Optional)
	• **description**: The text displayed in the Classification Picker, to provide users with more information about the Field. The default value is an empty string. (Optional)
	• **required**: When set to "true" a user is required to select a value for this field Boolean. The default value is set to false. (Optional)
	• **onReply**: Possible values:
	- **UPGRADE_ONLY** - allows to upgrade this classification field on email reply.
	- **LOCK** - prevents from changing this classification field on email reply. (Optional)
	- **ANY** - allows any change to this classification field on email reply. The default value is set to "ANY". (Optional)
	• **allowCustomValue**: When "true" a user would be able to add a custom value manually in the picker. Possible
		<pre>"fields":[
		{
		"name":"SEC",
		"type":"text",
		"title":"Security Classification",
		"description":"",
		"onReply":"UPGRADE_ONLY"
		},
		{
		"name":"ACCESS",
		"title":"Information Management Marker",
		"parent":"SEC",
		"required":false,
		"onReply":"LOCK"
		},
		{
		"name":"CAVEAT",
		"title":"Caveat",
		"required":false,
		"allowCustomValue":true
		}
		]</pre>

Classification	Value	Sample format
	only when "onReply" is "ANY". Boolean. The default value is set to false. (Optional) • **selectionsMaxNumber**:When enabled, you can select multiple field values. The default value is set to 1.	

Values	Array of JSON objects of the classification fields values.
	• **$Fields.name$**: Array on the classification values for the appropriate field. The same field name can be declared multiple times for the unique "parentRange"
	- **value**: A value to be used for the specific classification marking. Must not contain semi-colons or be comprised of only spaces. Must be declared in the priority order, from the least secure to the most. (Required)
	- **title**: The text that is displayed as a classification value in the picker. The default value is equal to "value". (Optional)
	- **description**: The text that is displayed as a description to the specific classification value. The default value is an empty string. (Optional)
	• **defaultValue**: Classification selected by default on a message compose start. Object of the field-value pairs. The default is an empty field.
	• **conditionality**: Defines the dependencies between different fields. One field may be dependent just to a single another one.
	- **target**: defines a parent field and its values in "field":["value_1", ...,"value_n"] format.
	- **dependent**: defines a child field with a list of values that a user would be shown when any of the "target" fields is selected.
		"values":[
		{
		"SEC":[
		{
		"value":"UNOFFICIAL",
		"title":"Unofficial",
		"description":"Non work-related email"
		},
		{
		"value":"OFFICIAL",
		"title":"Official",
		"description":" Work-related emails that do not carry a security classification"
		},
		{
		"value":"OFFICIAL:Sensitive",
		"title":"Official:Sensitive",
		"description":"Sensitive but not security classified information"
		},
		{
		"value":"PROTECTED",
		"title":"Protected"
		},
		{
		"value":"SECRET",
		"title":"Secret"
		},
		{
		"value":"TOP-SECRET",
		"title":"Top secret"
		},
		],
		
		},
		{
		"ACCESS":[{"value":"Personal-Privacy"},
		{"value":"Legal-Privilege"}, {"value":"Legislative-Secrecy"}]
		},
		{
		"CAVEAT":[{"value":"SH:CABINET", title:"Cabinet"},
		{"value":"REL:AU", title:"Australia"}],
		}
		],
		"defaultValue":{"SEC":"OFFICIAL",
		"ACCESS":"Personal-Privacy" },
		"conditionality":[
		{
		"targetField":"SEC",
		"dependentField":"ACCESS",
		"dependencies":[{"targetValues":

Classification	Value	Sample format

		["OFFICIAL","OFFICIAL:Sensitive","PROTECTED","SECRET","TOP-SECRET"],
		"dependentValues":["Personal-Privacy","Legal-Privilege","Legislative-Secrecy"]}]
		},
		{
		"targetField":"SEC",
		"dependentField":"CAVEAT",
		"dependencies":[{"targetValues":
		["PROTECTED","SECRET","TOP-SECRET"],"dependentValues":["SH:CABINET","$custom$"]
		}
		]
		},
		]
		}

SendOptions	JSON object that defines the actions that would be applied to a message while sending and to a new event after creation.
	• **xHeader**: Object to define the X-Header key and value to be sent with each email.Optional.
	• **subjectSuffix**: Text to be appended to a classified message subject.
	• **bodyHeader** and **bodyFooter**: Formatted text to be appended to the start or the end of a message before an email sending. Optional.
	- **text**: text in Special formatting. **"\\n"** is resolved as a new line within the text.
	Required.
	- **color**: defines text color in #RRGGBB. Optional, default "#000000".
	- **alignment**: defines text alignment with "LEFT"|"CENTER"|"RIGHT" values. Optional, default "LEFT".
	- **style** - defines text style in HTML style format. When defined, "color" and "alignment" properties would be ignored.
	- **conditions**: allows to modify "bodyHeader" or "bodyFooter" values ("text", "color", "alignment") depending on "when" condition.
	- **when**: includes a field name and values. On an email sending with any of these classification values, a
		"sendOptions": {
		"subjectSuffix" : "[(SEC=$SEC.value$){, }(ACCESS=$ACCESS.value$){, }(CAVEAT=$CAVEAT.value$){, }(CAVEAT=$CAVEAT.value_1$){, }(CAVEAT=$CAVEAT.value_2$)]",
		"bodyHeader":{
		"text":"($CAVEAT.title$: $CAVEAT.value$){, }($CAVEAT.value_1$){, }($CAVEAT.value_2$)",
		"color":"#000000",
		"alignment":"CENTER",
		"conditions":[{"when":{"SEC":["PROTECTED"]},"result":{"color":"#FF0000"}}]
		},
		"bodyFooter":{
		"text":"($CAVEAT.title$: $CAVEAT.value$){, }($CAVEAT.value_1$){, }($CAVEAT.value_2$)",
		"color":"#000000",
		"alignment":"CENTER",
		"conditions":[{"when":{"SEC":["PROTECTED"]},"result":{"color":"#FF0000"}}]
		},
		"allowNotClassified":true
		}

Classification	Value	Sample format
	property from "result" would override the original "bodyHeader"/"bodyFooter" properties. • **allowNotClassified**: Boolean value that identifies if Email can be sent without classification selected. Boolean. Optional. Default value "false".	

ReceiveMarking	Defines a list of patterns to parse classification from a received message. The order in which the patterns are applied is defined in "priorities".
	• **xHeaderPatterns**: Rules to parse classification value from the X-Header.The X-Header key is searched by "headerName" values with left-to-right priority. (Optional)
	• **subjectSuffixPatterns**: Rules to parse classification value from an email subject.
	- **boundaries** define the range of characters in the subject to check for the classification. The "rules" are applied to the text starting from the first inclusion of "start" text and the last of "end". Whole subject is checked when not defined. (Optional)
	• **priorities**: Defines which patterns to fetch classification value. The default value is set to "priorities". ["xHeaderPatterns","subjectSuffixPatterns"]. (Optional)
		<pre>"receiveMarking": {
		"priorities":
		["xHeaderPatterns","subjectSuffixPatterns"],
		"xHeaderPatterns":{ "headerName" : ["X-Protective-Marking", "X-Classification"],
		"rules":["SEC=SEC", "sec=SEC", "SEC:SEC",
		"sec:SEC",
		"ACCESS=$ACCESS$", "access=$ACCESS$",
		"ACCESS:$ACCESS$", "access:$ACCESS$",
		"CAVEAT=$CAVEAT$", "caveat=$CAVEAT$",
		"caveat:$CAVEAT$", "caveat:$CAVEAT$"],
		"separatorRegex":"[^a-zA-Z\d\-_\s]"
		},
		"subjectSuffixPatterns":{
		"rules":["SEC=SEC", "sec=SEC", "SEC:SEC",
		"sec:SEC",
		"ACCESS=$ACCESS$", "access=$ACCESS$",
		"ACCESS:$ACCESS$", "access:$ACCESS$",
		"CAVEAT=$CAVEAT$", "caveat=$CAVEAT$",
		"caveat:$CAVEAT$", "caveat:$CAVEAT$"],
		"boundaries":{"start":"[", "end":"]"},
		"separatorRegex":"[^a-zA-Z\\d\\-_\\s:]"
		}
		},</pre>

Version	**version** value should be defined to differ between JSON schemas. (Required)	classification version: 2.0.0

For more information on JSON samples, see the Email+ 3.14.0 sample files for classifications KB article.

Crash reporting capabilities

Crashlytics is an enterprise grade service owned by Google and the Crashlytics SDK is embedded in MobileIron apps. Email+ implements the Crashlytics SDK. This enhancement helps MobileIron to proactively address issues experienced by end-users.

Crashlytics related features:

- When an application crashes, the details of the crash are collected and uploaded to Crashlytics servers.
- The collected data includes OS version, RAM size, disk space, and so on, in addition to crash specific data.
- PII data is not uploaded to Crashlytics.
- Each device uses a unique random ID when uploading its crash reports to Crashlytics. This ID is also written to various application specific log files (such as Email+) and allows the MobileIron engineering team to co-relate crash reports with specific customer provided log files.
- All data is maintained in the MobileIron Crashlytics account managed by the MobileIron engineering team.
- Disable Crashlytics through the existing key-value pair **disable_analytics** for iOS Email+.

Allow logging on Email+

Email+ logs data to the device console, and allows the log file to be attached to a feedback email.

For MobileIron Core, **allow_logging** key-value pair is used to configure logging.

For MobileIron Cloud, select the “allow Logging” check box in Email+ configuration to configure logging.

NOTE: The **allow_logging** KVP does not work on an AppConnect configuration.

Real-time push notifications

These sections provide information on how to configure real-time push notifications. With real-time push notifications, notifications appear on the device as soon as a new email arrives on the Exchange server.

Push notifications at specified intervals

You can also set up push notifications at specified intervals (interval-based) as opposed to real-time push notifications. With interval-based push notifications the notification interval is configurable by the administrator. For information on how to configure interval-based push notifications for MobileIron Core deployments, see MobileIron Cloud Notification Service for Email+ for iOS at https://community.mobileiron.com/docs/DOC-4443.

About real-time push notifications for Email+ for iOS

Email+ can be set up to receive real-time push notifications. Real-time notifications require additional setup with the MobileIron cloud notification service (CNS).

The MobileIron cloud notification service (CNS) is a cloud-based service hosted on Amazon Web Services (AWS) that provides real-time push notifications for Email+ for iOS users by using Microsoft's Exchange Web Services (EWS), Amazon's SNS service, and Apple Push Notification Service (APNs).

- Need for a notification service
- How the notification service works

Need for a notification service

As a third-party app, Email+ for iOS is not permitted by iOS to execute for an unlimited period of time when the app is in the background. Only apps developed by Apple, such as the native mail app, are able to execute for an unlimited period of time in the background. Therefore, even though both native mail and Email+ use the ActiveSync protocol, only the native mail app can get real-time notifications.

The MobileIron cloud-based notification service (CNS) addresses this limitation by using the Apple APNS push notification service to notify users about new emails even when Email+ is running in the background on iOS devices. New emails also include calendar invites.

About the cloud notification service for Email+ for iOS

Cloud-based notification service enables Email+ for iOS to check new emails at regular intervals. The cloud server sends a periodic APNs message to devices with Email+ for iOS installed. The periodic APNs message triggers iOS to launch Email+ for iOS in the background, allowing Email+ to download new email from the mail server and notify device users accordingly. Administrators can optionally set the interval at which Email+ app checks for new email.

The notification service is configured on MobileIron Core using key-value pairs added to the AppConnect app configuration for Email+ for iOS.

Configuring the cloud notification service for Email+ for iOS involves the following main steps:

- Provide an email address to Mobileiron for registration with the cloud notification service.

NOTE: No push notifications will be sent to this email address.

- Configure your organization ID and token (received from MobileIron) in MobileIron Core.

Before you begin

Configure, distribute, and install Email+ for iOS on all iOS devices.

Configuring cloud notification service for Email+

You must provide MobileIron with the name of your organization and an email address to which the cloud notification service is to be registered. MobileIron will register your organization with the service, and provide an organization ID and token (for security purposes) to be configured on MobileIron Core. The ID and token will allow Email+ for iOS to use the service.

To configure the cloud notification service for Email+ for iOS:

1. Navigate to the MobileIron Customer Support Portal at http://help.mobileiron.com.
2. Enter your log in credentials.
3. Click the **Software** link at the top of the page.
4. On the Software page, click the **Cloud Notification Service (CNS) for iOS Email+** link.
5. To register for the service, click **Register Cloud Notification Service for iOS Email+**.

NOTE: Make sure popup windows are enabled in your browser.

6. On the registration page, enter the following information in the space provided:

- Email: The email address to which the cloud notification service is to be registered.
- Organization: The name of your organization.

NOTE: Make sure the email address you provide to MobileIron is an externally facing group address (not the email address of an individual), such as admin@example.com.

7. Click **Register**.
   The registration page shows the email address and organization you entered, as well as an authorization token for the cloud server.

NOTE: After MobileIron has registered your details, you will receive an email with the following information:

Item	Description
Name	The name of your organization as provided to MobileIron. For example, Acme Corp.
Email	The email address you provided to MobileIron, for example admin@example.com.
ID	An ID for your organization generated by MobileIron. For example: 000000b0-e000-00eb-a0ba-000000ba000c
Token	A randomly generated string from MobileIron, representing an authorization token for the cloud server.

8. Copy the token and paste it into a text editor.
9. In the MobileIron Core Admin Portal, go to **Policy & Configs > Configurations**.
10. Select the AppConnect app configuration you created for Email+.
11. Click **Edit**.
12. Add the following key-value pairs:

Key	Decription
notification_ server_host	Enter the URL of the notification server: • cns-na1.mobileiron.com/PROD (interval-based push notifications) • cns.mobileiron.com/PROD (real-time notifications) The name of your organization as provided to MobileIron. For example, Acme Corp.
allow_ device_ keychain	Enter a value of true to enable Email+ for iOS to fetch email in the background.
notification_ server_ organization_ id	Enter your organization's ID as provided to you by MobileIron. Use this KVP for interval-based push notifications.
notification_ server_ authorization	Copy and paste the token you received after you registered for the cloud notification service. Use this KVP for interval-based push notifications.
notification_ interval	Optional. Enter the desired notification interval in seconds. The recommended interval is range is 5 minutes (300 seconds) to15 minutes (900 seconds). Use this KVP for interval-based push notifications.

13. Click Save.
14. The updated AppConnect app configuration for Email+ for iOS will be sent to devices at the next sync interval.

How the notification service works

Email+ uses Microsoft's Exchange Web Services (EWS) protocol to subscribe with Exchange to receive push notifications. As a result of the EWS subscription, Exchange sends a brief message to the MobileIron cloud-based notification service (CNS) when a new message is received.The MobileIron cloud notification service is hosted on Amazon Web Services (AWS) and uses Amazon's SNS service in conjunction with Apple's APNs service to send notifications to iOS devices. The APNs message triggers iOS to launch Email+ for iOS in the background, allowing Email+ to notify device users of new emails.

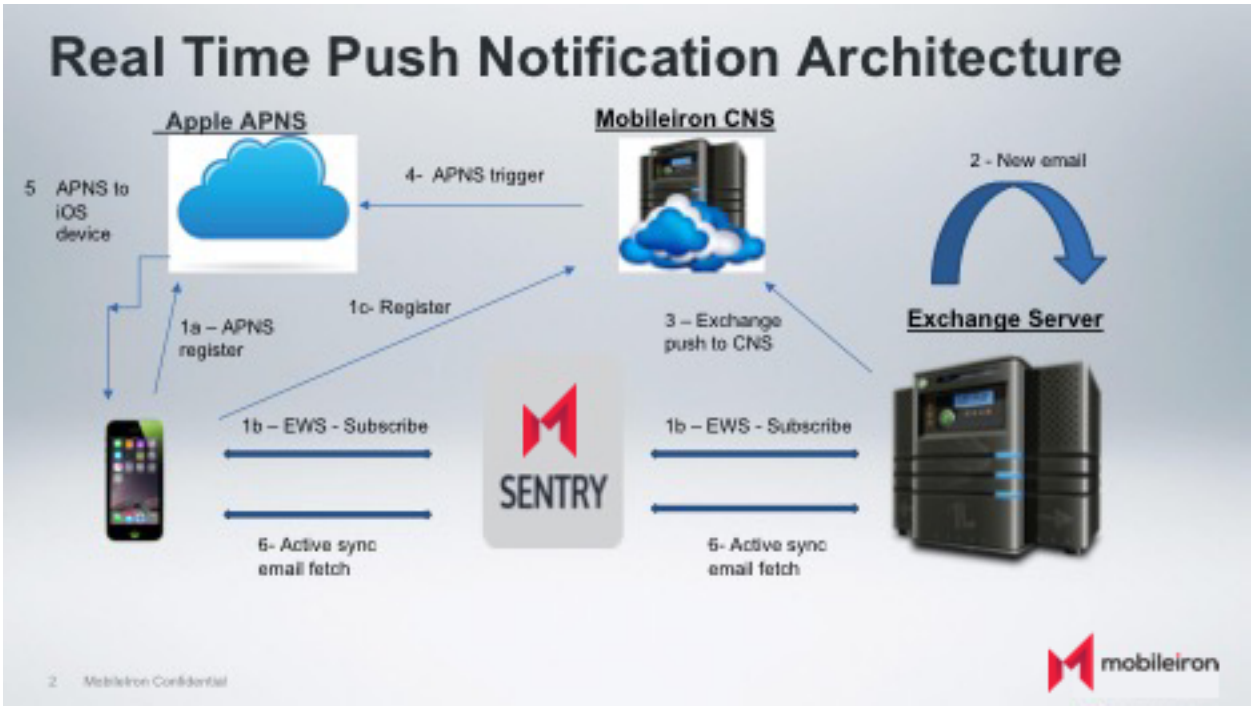
No sensitive user data or email content is transferred from Exchange to CNS. No corporate data or user identity information is stored on CNS, thus making the notification service safe and secure. Only the following information is sent from EWS to CNS:

- The unique EWS subscription ID of the user.
- Watermark to avoid duplicate notifications.
- The folder ID of the sub folder from which the new email originated.

CNS does not make any requests to the Exchange server.

The notification service is configured via the MobileIron unified endpoint management (UEM) platform using key-value pairs added to the AppConnect app configuration for Email+ for iOS.

FIGURE 4. REAL TIME PUSH NOTIFICATION ARCHITECTURE



1. Subscription workflow:
   a. Device registers with Apple APNs.

b. Devices registers with the EWS service on Exchange.

2. A new email arrives on the Exchange server.
3. Exchange notifies MobileIron CNS.
4. MobileIron CNS triggers APNs.
5. APNs notifies the iOS device.
6. Notification workflow on Email+:

NOTE: This feature requires users to be subscribed to CNS v2 for Real Time Notifications.

a. iOS displays a notification to the user indicating that there are new messages.

b. iOS wakes up Email+ in the background.

c. Email+ wakes up and fetches the email messages from the Exchange server via ActiveSync. Note that the email headers are fetched, and the body snippet is used for list view. The entire email body is not fetched.

d. Email+ replaces the previous notification with details of the new messages.

Standalone Sentry setup for real-time push notifications

The following sections provide the authentication to the Exchange and EWS service and the supported Standalone Sentry setup.

- Exchange, real-time push notifications, and Standalone Sentry setup
- EWS service and Standalone Sentry setup

Exchange, real-time push notifications, and Standalone Sentry setup

The following table shows the Standalone Sentry setup based on the required authentication and whether you are deploying real-time push notifications.

TABLE 7. SUPPORTED STANDALONE SENTRY SETUP

What is the authentication to Exchange?	Do you want real-time push notification?	Supported Standalone Sentry setup
Basic, NTLM	No	Enable ActiveSync on Standalone Sentry.
Basic	Yes	Enable ActiveSync and AppTunnel on Standalone Sentry. • Set up an AppTunnel service to tunnel Exchange Web Services (EWS). Device user experience: • Device users are prompted for user name and password for authentication to EWS.
Basic	Yes	Enable AppTunnel on Standalone Sentry.: • Set up an AppTunnel service for to tunnel Exchange Web Services (EWS) and Exchange ActiveSync (EAS) traffic. Device user experience: • Device users are prompted for user name and password for authentication to EWS and Exchange ActiveSync (EAS).

TABLE 7. SUPPORTED STANDALONE SENTRY SETUP (CONT.)

What is the authentication to Exchange?	Do you want real-time push notification?	Supported Standalone Sentry setup
Basic	Yes	Set up per app VPN with MobileIron Tunnel.: NOTE: Email+ must be an MDM managed app so that it can use MobileIron Tunnel. Device user experience: • Device users are prompted for user name and password.
Certificate	No	Enable ActiveSync on Standalone Sentry.
Certificate, NTLM, Modern Auth	Yes	Setup per app VPN with MobileIron Tunnel. NOTE: • Email+ must be an MDM managed app so that it can use MobileIron Tunnel. • If you are using certificates for authentication: - the certificate chain (root and intermediate) must be trusted by the Exchange server. - The certificate can be issued per user by a third-party CA or ADCS on Exchange. - The certificate is configured as a key-value pair in the Email+ configuration in the UEM. • For modern auth, Standalone Sentry setup is supported. The **PKCS-12** and **X.509** certificates should be configured on MobileIron Core. Modern auth uses ADFS that is exposed to the internet. The AppTunnel Sentry rules should be set to <ANY> **for adfs.company.com** on ports 443 and 49443. Device user experience: • Device users are not prompted for authentication.

EWS service and Standalone Sentry setup

The following table provides the supported authentication methods to the EWS service.

TABLE 8. SUPPORTED AUTHENTICATION TO THE EWS SERVICE

Setup	Basic Auth	Certificate Auth	NTLM Auth	Modern Auth
ActiveSync + AppTunnel	Yes Uses AppTunnel for EWS	No	No	No
AppTunnel only	Yes Uses AppTunnel for EWS and EAS.	No	No	No
MobileIron Tunnel	Yes	Yes	Yes	Yes
No Sentry	Yes	Yes	Yes	Yes

Deployment use cases for real-time push notifications

This document addresses the following use cases:

- Email+ uses AppTunnel to tunnel EWS traffic to the Exchange server. This setup only supports basic authentication to the EWS service.
- Email+ uses MobileIron Tunnel to tunnel all traffic to the Exchange server. This setup supports basic, NTLM, modern auth, and identity certificates to authenticate to the EWS service.

NOTE: If your existing Email+ deployment uses a Standalone Sentry for ActiveSync and your Exchange Web Service (EWS) is set up to use certificates, you have to disable ActiveSync on Standalone Sentry and set up MobileIron Tunnel.

Before you configure real-time push notifications

Before you configure real-time push notifications;

- Configure, distribute, and install Email+ for iOS.
  Real time notification is supported for Email+ 2.4 for iOS through the most recently released version as supported by MobileIron.
  For information about installing Email+ for iOS, see Configuring Email+ for iOS on page 10.
- For information about the EWS push notification service see Microsoft's documentation at https://msdn.microsoft.com/en-us/library/office/dn458791%28v=exchg.150%29.aspx
- Open port 443, for outbound only HTTPS requests, on your firewall to allow Exchange to send notifications to MobileIron CNS. The URL for the CNS server is https://cns.mobileiron.com/PROD. Alternately, you can enter the following IP addresses:
  - 13.56.49.23
  - 34.253.2.239

NOTE: MobileIron strongly recommends entering the URL for the notification server, as the IP addresses for the server might change.

- Set up your Exchange environment. See the following:
  - For information about installing Email+ for iOS, see Configuring Email+ for iOS on page 10. on page 64.
  - Configuring additional Exchange setup for identity certificates on page 66.
- Ensure that Go Daddy is available in the Exchange trust store as a trusted certificate authority (CA). The MobileIron cloud notification service uses the Go Daddy CA.

Configuring EWS to send push notifications

These steps are applicable for both Exchange 2010 and 2013 servers.

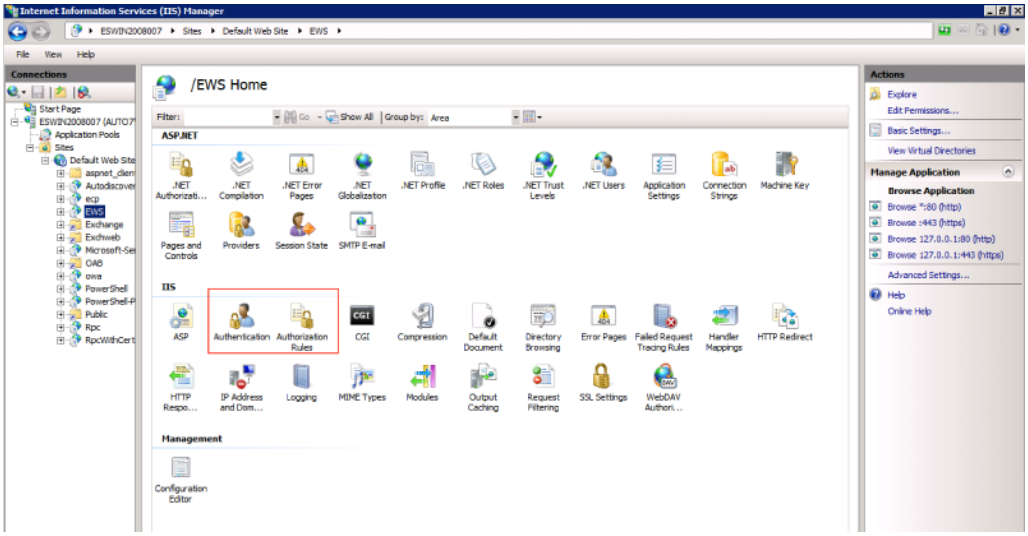
Before you begin

- You must have enabled EWS on the Exchange server.

Procedure

1. On the Exchange server, launch IIS Manager.
2. Go to **Server > Sites > Default Web Site > EWS**.

FIGURE 5. EWS HOME AUTHENTICATION AND AUTHORIZATION



3. Verify that the Authentication and Authorization Rules roles are added to IIS.
4. Open Authentication and Enable Basic Authentication.
5. Open Authorization Rules and add rule to Allow for All users if it was not added automatically.

Next steps

- If your setup uses MobileIron Tunnel and identity certificates to authenticate with EWS and ActiveSync, do the additional setup on the Exchange server described in Configuring additional Exchange setup for identity certificates on page 66.

- Once you have set up your Exchange environment, go to Overview of configuration on MobileIron Core on page 66.

Configuring additional Exchange setup for identity certificates

Perform these steps only if your setup uses MobileIron Tunnel and identity certificates for authentication to EWS and ActiveSync.

Procedure

1. On the Exchange server, launch IIS Manager.
2. Go to **Server > Sites > Default Web Site > EWS**.
3. Click on **SSL Settings**.
4. Check **Require SSL**.
5. For **Client certificate**, select **Accept**.
6. In the **EWS** directory, click on **Configuration Editor** and browse to the **clientCertificateMappingAuth** option. Set the value for the option to **True**.
7. In the **EWS** directory, click on **Authentication** and enable the **Windows Authentication** option. Disable all other authentication types.

Next steps

- Once you have set up your Exchange environment, go to Overview of configuration on MobileIron Core on page 66.

Overview of configuration on MobileIron Core

This section provides an overview of the steps required to set up Email+ for real-time push notifications on MobileIron Core. Depending on your authentication requirements, use one of the following setup to tunnel Exchange Web Services (EWS) traffic:

- Using MobileIron Tunnel to tunnel EWS traffic (Core)
  OR
- Using AppTunnel to tunnel EWS traffic (Core)

Using MobileIron Tunnel to tunnel EWS traffic (Core)

This section provides the main steps for configuring real-time notifications with Email+ for iOS on MobileIron Core if you are using MobileIron Tunnel to tunnel EWS traffic.

Before you begin

- Complete the setup described in Before you configure real-time push notifications on page 64.

Procedure

1. Set up MobileIron Tunnel.

NOTE: Email+ must be an MDM managed app so that it can use MobileIron Tunnel.

2. **If your EWS setup uses either NTLM, modern auth, or identity certificates** for authenticating to the EcWS service, create a SCEP certificate enrollment setting. Skip this step if your EWS setup uses basic authentication.
3. Update the Email+ AppConnect app configuration.

Related topics

- See MobileIron Tunnel for iOS Guide for Administrators to set up MobileIron Tunnel on MobileIron Core.
- Configuring SCEP settings.
- Updating the AppConnect app configuration for Email+

Using AppTunnel to tunnel EWS traffic (Core)

This section provides the main steps for configuring real-time notifications with Email+ for iOS on MobileIron Core if you are using AppTunnel to tunnel EWS traffic.

Before you begin

- Complete the setup described in Before you configure real-time push notifications on page 64.

Procedure

1. Add an **<ANY>** AppTunnel service in Standalone Sentry settings.
2. Update the Email+ AppConnect app configuration.

Related topics

- Configuring an AppTunnel service on page 68.
- Updating the AppConnect app configuration for Email+ on page 68.

Description of configurations in MobileIron Core

This section provides a more detailed description of the configuration steps referenced in Overview of configuration on MobileIron Core on page 66. The following configurations are described:

- Configuring SCEP settings
- Configuring an AppTunnel service
- Updating the AppConnect app configuration for Email+

Configuring SCEP settings

Create a SCEP setting if your Exchange server and the EWS service require certificate authentication. You will reference the name of SCEP setting in the AppConnect configuration for Email+ to generate the login certificate for Email+, so that the Exchange server and EWS trust the device.

Procedure

1. In the Admin Portal, go to **Policies & Configs > Configurations**.
2. Select **Add New > Certificate Enrollment > SCEP**.
3. In the **New SCEP Setting** window, configure the settings based on your SCEP requirements.
4. Click **Save** to save the SCEP setting.
5. Click **OK** to dismiss the prompt indicating the successful creation of your SCEP setting.
   You will reference this SCEP setting in the AppConnect app configuration for Email+ using the key email_login_certificate.

Related topics

- "Configuring SCEP" in the MobileIron Core Device Management Guide for iOS devices.

Configuring an AppTunnel service

You create an AppTunnel service in Standalone Sentry as part of an AppTunnel setup.

Before you begin

Ensure that you have a Standalone Sentry that is set up for AppTunnel and the necessary device authentication is also configured. See "Configuring Standalone Sentry for app tunneling" in the MobileIron Sentry Guide.

Procedure

1. In the MobileIron Core Admin Portal, go to **Services > Sentry**.
2. Edit the entry for the Standalone Sentry that supports AppTunnel.
3. In the **App Tunneling Configuration** section, under **Services**, click **+** to add a new service.
4. Use the following guidelines to configure an AppTunnel service:

Item	Description
Service Name	Select **<ANY>**. The Service Name is used in the AppConnect app configuration for Email+.
Server List	Select the Standalone Sentry
TLS Enabled	NA
Proxy/ATC	NA
Server SPN List	NA

5. Click **Save**.

Updating the AppConnect app configuration for Email+

Update the AppConnect app configuration for Email+ for iOS, so that Email+ on iOS devices is authorized to get real-time notifications from CNS.

Procedure

1. In the Core Admin Portal, go to **Policy & Configs > Configurations**.
2. Select the AppConnect app configuration you created for Email+.
3. Click **Edit**.
4. Add an AppTunnel rule that points to the Standalone Sentry on which you configured the AppTunnel service.
   a. For **URL Wildcard**, enter the Exchange server's IP address or FQDN.
5. For **Identity Certificate**, select the **Certificate Enrollment** setting you configured for Standalone Sentry. You would have created the **Certificate Enrollment** setting as part of the Standalone Sentry setup for identity certificate with **Pass through**.
6. Add the necessary key-value pairs.
7. Click **Save**.
8. Ensure that the configuration is applied to the labels that contain the devices to which you want to push the configuration. The updated AppConnect app configuration for Email+ for iOS will be sent to devices at the next sync interval.

Related topics

See Key-value pairs for real-time push notifications on page 72 for a list of key-value pairs.

Overview of configuration on MobileIron Cloud

This section provides an overview of the steps required to set up Email+ for real-time push notifications on MobileIron Cloud. Depending on your authentication requirements, use one of the following setup to tunnel Exchange Web Services (EWS) traffic:

- Using MobileIron Tunnel to tunnel EWS traffic (Cloud)
  OR
- Using AppTunnel to tunnel EWS traffic (Cloud)

Using MobileIron Tunnel to tunnel EWS traffic (Cloud)

This section provides the main steps for configuring real-time notifications with Email+ for iOS on MobileIron Cloud if you are using MobileIron Tunnel to tunnel EWS traffic.

Before you begin

- Complete the setup described in Before you configure real-time push notifications on page 64.

Procedure

1. Set up MobileIron Tunnel.
   See MobileIron Tunnel for iOS Guide for Administrators to set up MobileIron Tunnel on MobileIron Cloud.

NOTE: Email+ must be an MDM managed app so that it can use MobileIron Tunnel.

2. **If your EWS setup uses either NTLM, modern auth or identity certificates** for authenticating to the EWS service, create a SCEP certificate enrollment setting. Skip this step if your EWS setup uses basic authentication.

See Configuring Identity certificate setting on page 71.
3. Update the Email+ app configuration.
See Updating the app configuration for Email+ on page 72.

Using AppTunnel to tunnel EWS traffic (Cloud)

This section provides the main steps for configuring real-time notifications with Email+ for iOS on MobileIron Cloud if you are using AppTunnel to tunnel EWS traffic.

Before you begin

- Complete the setup described in Before you configure real-time push notifications on page 64.

Procedure

1. Add a custom HTTP service to the Standalone Sentry profile.
See Configuring a custom HTTP service on page 70.
2. Update the Email+ app configuration.
See Updating the app configuration for Email+ on page 72.

Description of configurations in MobileIron Cloud

This section provides a more detailed description of the configuration steps referenced in Overview of configuration on MobileIron Cloud on page 69. The following configurations are described:

- Configuring a custom HTTP service
- Configuring Identity certificate setting
- Updating the app configuration for Email+

Configuring a custom HTTP service

You create an AppTunnel service in Standalone Sentry as part of the AppTunnel setup.

Before you begin

Ensure that you have a Standalone Sentry that is set up for AppTunnel and the necessary device authentication is also configured. See “Configuring Standalone Sentry for app tunneling” in the MobileIron Sentry Guide for MobileIron Cloud.

Procedure

1. In MobileIron Cloud, go to **Admin > Sentry**.
2. Edit the entry for the Standalone Sentry profile that supports AppTunnel.
3. In **Services,** click **Custom HTTP** to add a new service.
4. Use the following guidelines to configure the service:

Item	Description
Service Name	Enter a name to identify the service. The Service Name is used in the Email+ app configuration.
Server Authentication	Select **Pass through (Basic Authentication)**.
All destinations (forward proxy)	Selected by default.

5. Click **Save**.

Related topics

See “Configuring Standalone Sentry for app tunneling” in the MobileIron Sentry Guide for MobileIron Cloud for more information on creating an AppTunnel service.

Configuring Identity certificate setting

You need to create the SCEP setting if your Exchange server and the EWS service require certificate authentication. You will reference the name of SCEP setting in the AppConnect configuration for Email+ to generate the login certificate for Email+, so that the Exchange server and EWS trust the device.

Before you begin

Create a certificate authority in **Admin > Certificate Authority**.

Procedure

1. In MobileIron Cloud, go to **Configurations**.
2. Click **Add > Identity Certificate**.
3. Fill in the following fields for the certificate configuration:
   - Name: Enter brief text that identifies this certificate setting.
   - Description: Enter additional text that clarifies the purpose of this SCEP setting.
   - Certificate Distribution: Select Dynamically Generated.
   - Source: Select the Certificate Authority you created in Admin > Certificate Authority.
   - Subject: CN=${EMAIL}
   - Key size: 2048
4. Test the configuration, and click Next.
5. Click **Done** to save the configuration.
   You will reference the certificate configuration in the app configuration for Email+ using the key email_login_certificate.

Updating the app configuration for Email+

Update the app configuration for Email+ for iOS with key-value pairs, so that Email+ on iOS devices is authorized to get real-time notifications from CNS.

Procedure

1. In MobileIron Cloud, go to **Apps > App Catalog**.
2. In the App Catalog, click on MobileIron Email+.
3. Click **App Configurations**.
4. In **App Configurations Summary**, click on **AppTunnel** to add an AppTunnel rule.
   a. Enter a name for the configuration.
   b. Select the Sentry profile in which you configured the custom HTTP service.
   c. Select the custom HTTP service you created for real-time push notifications in the Sentry configuration.
   d. For **URL Wildcard**, enter the Exchange server's IP address or FQDN.
   e. Select the distribution for this configuration.
   f. Click **Save**.
5. In **App Configurations Summary**, click on **Email+ Configuration** to add the necessary key-value pairs in **AppConnect Custom Configuration**.
6. Select the app distribution.
7. Click **Update**.

Related topics

See Key-value pairs for real-time push notifications on page 72 for a list of key-value pairs.

Keys for real-time and interval-based push notifications (Core and Cloud)

Key-value pairs for real-time push notifications

The following keys are applicable to configuring real-time push notifications:

- notification_server_host
  For real-time push notifications enter the following value: cns.mobileiron.com/PROD.
- allow_realtime_notifications
- email_ews_host
- eas_min_allowed_auth_mode
- ews_min_allowed_auth_mode
- notification_resubscription_interval
- allow_device_keychain
- subscription_valid_until

- sentry_server_host

The following table describes the key-value pairs applicable for real-time push notifications.

TABLE 9. KEY-VALUE PAIRS FOR REAL-TIME PUSH NOTIFICATIONS

Key	Value: Enter/Select one	Description
allow_realtime_notifications	true	Enables real-time push notifications.
notification_server_host	*The URL of the notification server*	The URL for the notification server for real-time push notifications is cns.mobileiron.com/PROD. Alternately, you can enter the following IP addresses: 13.56.49.23 34.253.2.239 NOTE: MobileIron strongly recommends entering the URL for the notification server, as the IP addresses for the server might change.
email_ews_host	*Exchange server address* for the EWS host	Explicitly sets the EWS host address for real-time push notifications, as opposed to the value configured for email_exchange_host. Enter the IP address or DNS of the EWS host. The DNS name must be in the following format: case2010.xyz.com. Do not prepend https or full path name. For Office 365, enter `outlook.office365.com`. This key-value pair is required if your Standalone Sentry is the email host, i.e. the `email_exchange_host` key points to the Standalone Sentry FQDN.
eas_min_allowed_auth_mode	• basic • ntlm • cert_base • modern_ auth	Defines the authentication method to the Exchange ActiveSync service. • basic: Select if you are using Basic authentication (user name and password) • ntlm: Select if you are using NTLM authentication • cert_base: Select if you are using identity certificates for authentication • modern-auth: Select to enable modern auth for corresponding protocol If a key-value pair is not configured, the default authentication method is Basic. If you have configured ntlm or cert_base or modern_auth, and there are errors in your configuration, the authentication method

TABLE 9. KEY-VALUE PAIRS FOR REAL-TIME PUSH NOTIFICATIONS (CONT.)

Key	Value: Enter/Select one	Description
		defaults to basic.
ews_min_allowed_auth_mode	• basic • ntlm • cert_base • modern_ auth	Defines the authentication method to the Exchange EWS service. • basic: EWS uses basic authentication (User name and password) • ntlm: EWS uses NTLM authentication • cert_base: EWS uses identity certificates for authentication • modern_auth: user authentication on first application launch or when token cannot be refreshed or renewed If you have configured ntlm or cert_base or modern_ auth, and there are errors in your configuration, the authentication method defaults to basic. Default value if no key-value is configured is basic.
notification_resubscription_ interval	*A number*	Optional. Sets the interval when Email+ resubscribes to receive real-time push notifications. The resubscription interval is in minutes. If a key-value pair is not configured, the default resubscription interval is 60 minutes.
subscription_valid_until	The default value for "validUntil" is 1440 minutes	Sets the duration of the subscription.
sentry_server_host	host name address	Installs MobileIron Sentry, to support VIP notification. Once Sentry is installed, the "VIP Allowed After Work Hours" option is enabled.
Add the following key-value pairs if you are using an identity certificate for authentication		
email_exchange_username	$USERID$	The user ID for the ActiveSync server.
email_exchange_host	*<exchange_ real_address>*	The fully qualified domain name of the ActiveSync server.
email_trust_all_certificates	true	Email+ automatically accepts all certificates.
email_login_certificate	*<name of the identity certificate*	**Core:** Name of the SCEP setting in MobileIron Core. **Cloud:** Name of the Identity certificate configuration in

TABLE 9. KEY-VALUE PAIRS FOR REAL-TIME PUSH NOTIFICATIONS (CONT.)

Key	Value: Enter/Select one	Description
	configuration>	MobileIron Cloud
email_ssl_required	true	Secures communication using https to the server that you specified in `email_exchange_host`.
allow_logging	true	Email+ logs data to the device console, and allows the log file to be attached to a feedback email.
email_device_id	$DEVICE_UUID_NO_DASHES$	Identifies the device to the ActiveSync server.
email_address	$EMAIL$	Email address of the device user.
feedback_email_address	*An email address*	Device user app feedback and log messages are sent to the email address.
Add the following key-value pairs if your deployment includes Email+ versions 2.3.4 and less and the devices require interval-based push notifications: • notification_server_organization_id • notification_server_authorization For a description of the key-value pairs see Key-value pairs for push notifications (interval-based) on page 76. NOTE: Email+ versions 2.3.4 and less do not get real-time notifications.		

Key-value pairs for push notifications (interval-based)

The following keys are applicable to configuring push notifications:

- notification_server_host
  For push notifications enter the following value: cns-na1.mobileiron.com/PROD.
- notification_server_organization_id
- notification_server_authorization
- notification_interval
- allow_device_keychain

The following table describes the key-value pairs applicable for interval-based push notifications.

TABLE 10. KEY-VALUE PAIRS FOR PUSH NOTIFICATIONS (INTERVAL-BASED)

Key	Value: Enter/Select one	Description
notification_server_host	*The URL of the notification server*	The URL for the notification server for real-time push notifications is cns-na1.mobileiron.com/PROD.
notification_interval	*A number*	The desired notification interval in seconds. The recommended interval is 15 minutes, or 900 seconds. The minimum interval is 5 minutes, or 300 seconds. This key is ignored if real-time push notifications is configured. Default value if no key-value is configured: 900 seconds.
allow_device_keychain	true	Enables Email+ to fetch email in the background.
notification_server_ organization_id	*ID provided by MobileIron*	Organization ID provided by MobileIron.
notification_server_authorization	*Token provided by MobileIron*	Token for the cloud notification service.

Verifying that the cloud notification service is working

After configuring real-time push notification, verify that the service is working.

Procedure

1. Obtain a test iOS device with an email address you can access configured on it.
2. Ensure that Email+ for iOS is installed to the device.
3. In Email+, go to **Settings > Notifications** and verify that your device is subscribed with EWS.
   The following message appears in the **Mail Alerts** section:
   You are subscribed to real-time push notifications.
4. Place the Email+ app in the background without exiting the app.
5. From your desktop, send an email to yourself, using the email address configured on the test iOS device.
6. Watch for a new mail notification from Email+ for iOS on the test device.

Troubleshooting Email+ for iOS

The following describe some tools for troubleshooting Email+ for iOS:

Setting up logging for Email+ for iOS (Core)

You can troubleshoot user issues with Email+ for iOS by collecting logs and sending them to an email address you can access. You then ask the device user to reproduce the issue so that you can view logging data. You can also diagnose your configuration before rolling out Email+ for iOS to device users.

Procedure

1. In the MobileIron Core Admin Portal, go to **Policy & Configs > Configurations** and select the AppConnect configuration you created for Email+ for iOS.
2. Click **Edit**.
3. In the **App-specific Configurations** section, enter the key allow_logging with value as true.
   This allows Email+ for iOS to log data to the device console.
4. Enter the key feedback_email_address with value as a valid email address which you can access.
   Email+ for iOS sends the collected log data to the email address entered here.
5. If you are diagnosing a configuration, enter the key allow_show_configuration with value as true.
   When set to true, Email+ for iOS shows all configured key-value pairs for diagnostic purposes. Disable this setting after diagnosis is complete.
6. Click **Save**.
7. Force a check-in on the user's device to ensure the modified AppConnect app configuration for Email+ for iOS is sent to that device:
   a. Go to **Users & Devices > Devices**.
   b. Select the checkbox for the device.
   c. Click **Actions > Force Device Check-in**.
   The Force Device Check-In dialog appears.
   d. In the dialog, confirm the user and device information and enter a note.
   e. Click **Force Device Check-in**.
   The device user will now see a Feedback icon in Email+ for iOS.
8. Ask the device user to reproduce the problematic action and tap the **Feedback** button.
   Email+ for iOS log data will be collected and emailed to the address you provided.

Related topics

See Key-value pairs for customizing Email+ for iOS on page 23 for additional key-value pairs for troubleshooting.

Detailed logging for AppConnect apps for iOS (Core)

For more information about logging for AppConnect apps for iOS, see the section “Detailed logging for AppConnect apps for iOS” in the AppConnect and AppTunnel Guide.

Email+ crash recovery

Email+ has a built-in crash recovery mechanism that is triggered in the event that Email+ consistently crashes upon launch. If Email+ crashes three times consecutively within a short interval each time it is launched, the consecutive crashes are considered a catastrophic failure that is associated with some internal data. In this case, the app reconfigures and the reconfiguration wipes all cached data.

What users see

The user can manage notifications for the Email+ app.

Real-time push notifications

Real-time push notifications allow Email+ users to receive notifications about new emails as soon as the emails arrive in the **Inbox**. Previous versions of Email+ supported periodic notifications for new emails at an interval set by the IT department. The following sections address some questions you may have about real-time notifications:

- How will I receive Email+ notifications?
- How do I change the notification settings?
- Why do I see two notifications for each email?
- Why am I not receiving Email+ Notifications?
- How do I turn on/off notification details on the lock screen?

How will I receive Email+ notifications?

Email+ notifications are displayed on your device as:

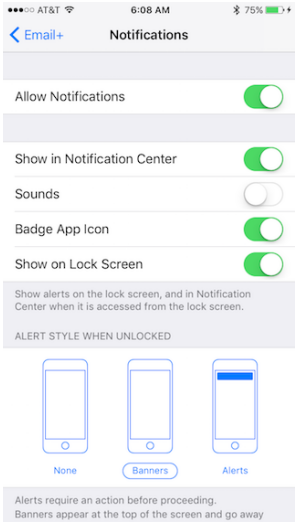
- A new email notification in the **Notification Center** on your device.
- Badging of the Email+ app icon on the Home Screen.

FIGURE 6. EMAIL+ APP ICON BADGING

How do I change the notification settings?

To change the notifications settings for Email+, in iOS device **Settings,** tap **Email+ > Notifications**.

FIGURE 7. EMAIL+ NOTIFICATIONS OPTIONS IN DEVICE SETTINGS



Why do I see two notifications for each email?

If real-time notifications are enabled, the Email+ app displays two notifications for each new email. The first notification is sent by Apple APNs and shows up immediately on the lock screen (depending on the Emai+ Notification settings in your device Settings). This notification has the text: “You have new messages”. The second, more detailed, notification is sent by the Email+ app if the app is running in the background. The Email+ app fetches the email summary for the new unread email, removes the original device notification, and replaces it with a new notification. The second notification shows either the unread email count or summary of the new emails, depending on your Email+ settings. To turn off detailed notifications, see How do I turn on/off notification details on the lock screen? on page 81.

Occasionally, the Email+ app is not able to sync new email in the background due to poor network connectivity or because the app is no longer running in the background. If this happens, you may continue to receive the first notification, which shows that you have new messages, but the second notification with the summary/unread email count will not display. To correct this, move to an area with better network connectivity and launch Email+.

Why am I not receiving Email+ Notifications?

There are a number of reasons why you may not be receiving notifications on your device:

- Notification options are disabled: Check the notifications options for Email+ in iOS device Settings to make sure that the options to “Allow Notifications”, “Show in Notification Center”, “Badge App Icon”, and “Show on Lock Screen” are enabled.
- Email+ app is force terminated: If you force killed Email+ by flicking it off the top of the screen, the app will stop receiving the second notification. Please launch Email+ to start receiving notifications again.
- Background App Refresh is disabled: If you have disabled Background App Refresh for Email+, in your iOS device Settings, you will see the first email notification showing that you have new messages but will not see the second notification showing the new email details/unread email count. You can manage your background app refresh settings in your iOS device Settings by going to General > Background App Refresh.

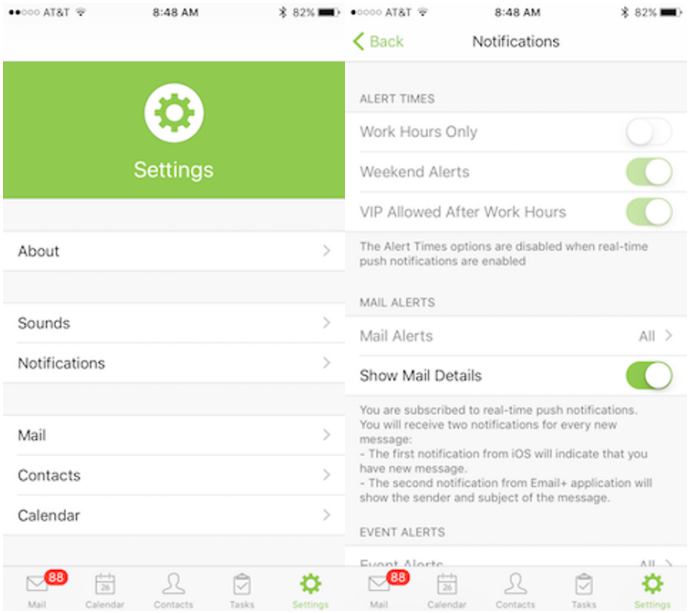
- Cellular Data option is disabled: If the Cellular Data option is disabled and the device is not connected to WiFi, the device will not receive new email notification for Email+. Enable the Cellular Data option in your iOS device Settings for Cellular > Cellular Data and for Email+ > Cellular Data, to get notifications when the device is not connected to WiFi.
- Device is in Low Power Mode: If your device goes into Low Power mode when the battery is running low, Background App Refresh gets disabled and the second notification will stop working. Charge your device, disable low power mode, and launch Email+ to get notifications to work again.
  iOS 9 introduced a new feature called Low Power Mode where the user can control whether a device can go into a battery conservation state to extend battery life. This is typically used when the device battery is running low and it is not possible to immediately recharge the device. In this state, iOS turns off background app refresh and also prevents apps from running in the background. When this happens, Email+ will show the first notification ("You have new messages"), but will not be able to fetch updated unread email summaries in the background. So the second notification will not be displayed. To recover from this, charge your device fully and disable low power mode. You may also need to launch Email+ to get notifications to work again.

How do I turn on/off notification details on the lock screen?

You can control whether detailed notifications are displayed on the lock screen by using the Email+ notification settings in the iOS device settings. In addition, you can control whether the summary of new unread emails is displayed in the lock screen, by using the **Show Mail Details** option in the **Notifications** screen in the **Settings** section of the Email+ app.

If the **Show Mail Details** option is enabled, an individual notification is displayed for each unread email. If the option is disabled, a single notification that shows the aggregate count of unread emails is displayed.

FIGURE 8. NOTIFICATIONS OPTIONS IN THE EMAIL+ SETTINGS



Rights Management System for iOS Overview

The Rights Management System (RMS) enables you to share encrypted mails to protect the content that is shared over email when using Microsoft Mail Exchange server.

When enabled the sender can control the distribution of the content shared over the mail. A rights managed email message is used to protect email content from inappropriate access, use, and distribution.

A rights policy template specifies whether a user can edit, forward, reply, reply all, print, extract (copy), export (remove protection), or programmatically access the content in the rights-managed email message. List of RMS permissions is displayed in **Email+ Settings/Troubleshooting/Available Permissions** and is selected in **New Mail Composer > lock button > Protect**. Due to ActiveSync protocol limitations, maximum of 20 RMS permissions are displayed in Email+.

Every protected mail has additional cell in mail viewer below subject cell, that contains information about license that is template name and description.

The admin can apply the following options to secure mail exchange as indicated by the **RightsManagementLicense** element included in the response. The RightsManagementLicense include:

- **ContentExpiryDate** - specifies the expiration date for the license (set to "9999-12-30T23:59:59.999Z" if the rights management license has no expiration date set).
- **ContentOwner** - specifies the email address of the content owner.
- **EditAllowed** - specifies if the content of the original email can be modified by the user when the user forwards, replies, or replies all to the email message.
- **ExportAllowed** - specifies if the IRM protection on the e-mail message can be removed by the user. The user can remove the IRM protection of the original message's content in the outgoing message when the user forwards, replies, or replies all to the original e-mail message;
- **ExtractAllowed** - specifies if the user can copy content out of the e-mail message (the content of the e-mail message can be cut, copied, or a screen capture can be taken of the content).
- **ForwardAllowed** - specifies if the user can forward the e-mail message.
- **ModifyRecipientsAllowed** – specifies if the user can modify the recipient list.
- **Owner** - value of **true** indicates that the authenticated user has owner rights on this message. This element is used for information presentation purposes only.
- **ProgrammaticAccessAllowed** - specifies if the contents of the e mail message can be accessed programmatically by third party applications.
- **ReplyAllAllowed** - specifies if the user can reply to all the recipients of the original e-mail message.
- **ReplyAllowed** - specifies if the user can reply to the e-mail message.
- **TemplateDescription** - This element is used for informational presentation purposes only.
- **TemplateID** - It contains a string that identifies the rights policy template.
- **TemplateName** - specifies the name of the rights policy template.

For more information on **To create a new Azure information protection template**, see Microsoft documentation

Setting permissions on an email

The permissions for email protection can be set on MobileIron Email+ iOS app.

Setting permissions on Email+ iOS app

Using the Email+ app to set email permissions.

Procedure

1. In the Email+ app, click on the compose mail icon.
2. Click on the **Lock** icon, select **Protect** option.
3. Select the permission you want to apply from the list of **Available Permissions** to the mail.
4. Click **Ok**.

Result: The selected permission is applied to the mail.

Searching mail in Email+ app

Device users can search for mails in the Email+ app in particular folder or complete mailbox. You can preview mail from the search results list. Email+ iOS app supports token based search, you can select suggested token or any other that is automatically generated based on user emails. Type in the name of a sender or other keyword in the search field. The following default search tokens are suggested by the application:

- Unread Messages
- Flagged Messages
- Messages from VIP
- Messages with Attachments
- Messages with Calendar Invites

Multiple tokens can be applied to a search.

The following procedure describes how to initiate search for an email in a folder:

Procedure

1. In the Email+ app, select a mailbox.
2. Pull down the screen, search bar is displayed.
3. Type in the name of a sender or other keyword to in the search field.
4. By default, search is executed for “All Folders”. The search results view displays two tab and the search is executed by default in the "All Folders" view. The user can switch to "Current Folder" if required.

Introduction to Email+ Notification Services

When a mail is received on an iOS mobile device, a notification appears if real-time notification is enabled. For each mail there are two notifications received:

- **Apple APNS notification**: Shows up immediately on the lock screen (depending on the Email+ Notification settings in your device Settings). This notification has the text: “You have new messages”.
- **Email+ notification**: The Email+app fetches the email summary for the new unread email, removes the original device notification, and replaces it with a new notification. The second notification shows either the unread email count or summary of the new emails, depending on your Email+ settings.

VoIP notifications for Email+ are not supported starting Email+ 3.13.0 and later, due to the changes in Apple Policy with regards to notifications. This impacts the **VIP notifications outside of work hours**, other notifications such as **Work hours notifications** and the **Weekend notifications** work as before.

MobileIron has developed Email+ Notification Services (ENS), as a recommended solution to fix this issue.

There are two different notification deliverable mechanism for real-time notification:

1. Cloud based service which only supports work hour notification, see About real-time push notifications for Email+ for iOS section.

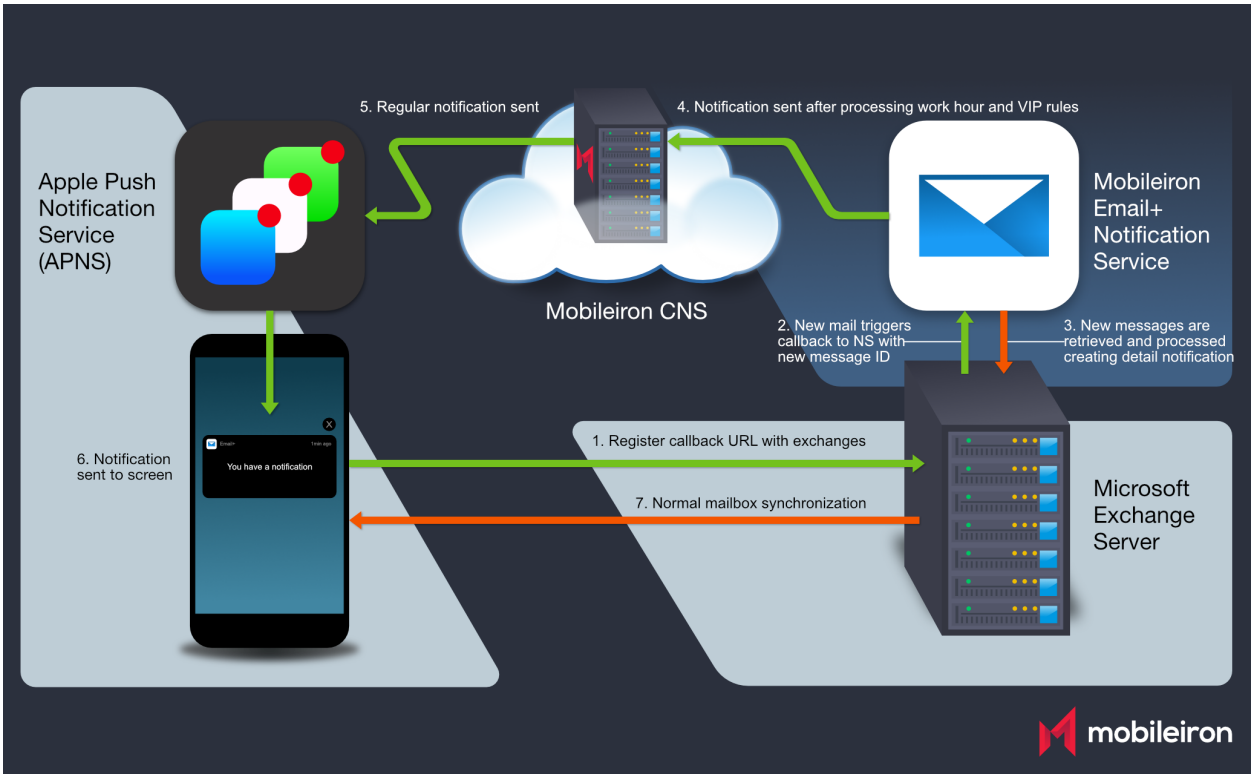
2. ENS based service which supports VIP email only notifications. The following sections describes about ENS and how to configure it on your device.

About Email+ Notification Services

Email+ Notification Service leverages a standalone server that is based on existing MobileIron Sentry and hosted inside the organizations firewall. This server is configurable on MobileIron UEM servers and leverages a service account on Microsoft Exchange to retrieve email metadata information (such as Sender, Subject, and Body Snippet) required to support VIP mails notifications outside of office hours and direct detail notifications.

The following diagram describes how the ENS solution works:

FIGURE 9. EMAIL+ NOTIFICATION SERVICES ARCHITECTURE



1. **Email+ App**: The Email+ app registers callback URL with Microsoft Exchange server to send out work hours, list of VIP contacts, key-value pairs settings, and VIP notifications outside work hours.
2. **Microsoft Exchange**: When a new mail is received in the folder that you are subscribed to, Microsoft Exchange sends a notification to Email+ Notification Proxy (ENP) which consists of Message Id and Folder Id for the new received mail.
3. **Email+ Notification Proxy**: ENP logs in to the exchange server using a service account and pulls the following information about the mail:
   a. Senders email address
   b. Subject line
   c. Snippet of the mail

   ENP applies and verifies the rules. Once the verifications is complete, it creates a payload and sends it to real-time push notification server on the cloud.
4. **Real-time push notifications**: The MobileIron CNS relays the information to Apple Push Notification service (APNs).
5. **Apple Push Notification service (APNs)**: Notifies the iOS device.
6. **Notification workflow on Email+**: This feature requires users to be subscribed to CNS for Real Time Notifications. iOS displays a notification to the user indicating that there are new messages.
7. **Mailbox active sync**: A notification is triggered to Email+, to open the correct mailbox a sync up is performed to co-relate the notification and the mail.

Enable Email+ settings on your device to receive notifications. In Email+ app, go to **Settings > Notifications** and enable **Work Hours Only** option first to enable **Weekend Alerts** or **VIP Allowed After Work Hours** option. The VIP related options are not be enabled if ENS is not configured, as there is no service account to check if the sender is a VIP contact (ensure that the contacts are marked as VIP).

When notification settings is changed, a note similar to the following is displayed:

Changes to alert times will come into effect after 'X' hours. The default interval is 1440 minutes.

NOTE: If you are using CNS only for real-time notifications. all the settings related to VIP are not visible on the Email+ app and cannot process notifications outside work hours other than delivering notifications over weekend.

The following section describes how to configure ENS.

Limitation: The ENS solution is not supported on Microsoft Exchange Office 365.

Before you begin

- Supported on MobileIron Core 10.7.0.0 or later, MobileIron Cloud R70 and later, and MobileIron Sentry 9.8.5.
- Ensure that you have configured a service account on Microsoft Exchange Server (Service account on exchange impersonates other mailboxes when accessing exchange over various supported protocols. For the purpose of Exchange Notification Proxy (ENP), Microsoft's Exchange Web Services (EWS) protocol is used to access mailbox messages.)
- Ensure that you have the JWT token of CNS production server. For more information, see *About real-time push notifications for Email+ for iOS* section.

NOTE: The term JWT token is also referred as **Authorization Token**, **Token**, and **notification_server_authorization** in MobileIron products.

- Standalone Sentry must be configured ActiveSync with a publicly trusted certificate.
- Ensure that the Exchange servers are configured with the service account. The servers must have identity certificate to authenticate the service account
- If Exchange server version support is earlier than TLS v1.2, then the supported protocols should be configured in Incoming protocols on MICS.

The following table describes the ENS port rules for firewall.

TABLE 11. ENS PORT NETWORK RULES

Requirement	**Destination**	Port	**Direction**
Standalone Sentry	CNS.mobileiron.com	TCP443	Outbound Initialized, Bi-direction Connection
Exchange Server	Standalone Sentry	TCP443	Outbound
Standalone Sentry	Exchange Server	TCP443	Inbound
Core Management IP	Standalone Sentry	TCP443, 9090	Bi-direction Connection
IT Admin PC IP	Standalone Sentry	TCP8443, 22	Inbound Initialized, Bi-direction Connection

Standalone Sentry	NTP Server	NTP	Outbound
Standalone Sentry	DNS Server	DNS	Outbound
Standalone Sentry	SMTP Server	SMTP	Outbound

Configuring service account

Service account on Microsoft Exchange impersonates other mailboxes when accessing exchange over various supported protocols. Following are the main steps for configuring service account.

- Setting up service accounts on Exchange server
- Configuring a service account on Exchange server

Setting up service accounts on Exchange server

For the purpose of Exchange Notification Proxy (ENP), Microsoft's Exchange Web Services (EWS) protocol is used to access mailbox messages.

For example service account is assigned to the following role:

```
ApplicationImpersonation
```

The EWS sends requests with the credentials of a single service account which includes an .XML key.

```
<soap:Header>
<t:RequestServerVersion Version="Exchange2013" />
<!-- The following causes the request to run as alfred@contoso.com -->
<t:ExchangeImpersonation>
<t:ConnectingSID>
<t:SmtpAddress>alfred@contoso.com</t:SmtpAddress>
</t:ConnectingSID>
</t:ExchangeImpersonation>
</soap:Header>
```

This allows a single account to access the mailbox of other accounts.

Configuring a service account on Microsoft Exchange Server

To configure service account on EWS follow these steps:

1. In the Microsoft Exchange Management console, open a browser and type in URL. For example: *https://<hostname>/ecp*
2. Log in as an Admin, go to **Mail > Options > Manage My Organization > Roles & Auditing> Mailboxes** and create a new Role group.
3. Add the **applicationImpersonation** role to the group.
4. Add members to the group.
5. Click **Save** to finish.

For more information on configuring service account on Microsoft Exchange server, see Microsoft documentation

Setting up Standalone Sentry as an Email+ Notification Service

You can set up a dedicated Standalone Sentry as an Email+ Notification Service. This capability allows you to configure multiple Exchange servers to provide notifications for VIP accounts in Email+. This feature requires MobileIron UEM servers, MobileIron Cloud Notification Service (CNS), Standalone Sentry, and Email+. Applicable to iOS only, the Email+ Notification Service cannot be combined with ActiveSync or AppTunnel. Email+ Notification Service requires Sentry 9.8.5 and Email+ 3.13.0 through the latest versions as supported by MobileIron. (Content Notification System is automatically upgraded by MobileIron). For more information, see: "*Standalone Sentry Email Notifications*" section in the MobileIron Sentry Guide.

Configuring Email+ using KVPs on MobileIron Core for Notification Services

After Standalone Sentry is set up, you must configure Email+ on MobileIron Core.

Procedure

1. In the MobileIron Core Admin Portal, go to **Policy & Configs > Configurations**.
2. Click **Add New > AppConnect > App Configuration** to create a new AppConnect configuration.
3. In the Name field, enter brief text that identifies this AppConnect app configuration. For example: Email+ for iOS.
4. In the Description field, enter additional text that clarifies the purpose of this AppConnect app configuration.
5. In the Application field, enter the bundle ID for the app:
   com.mobileiron.ios.emailplus
6. In the **App-specific Configurations** section enter the required key-value pairs.
   For more information on how to configure the key-value pair on Cloud Notification Service, see Real-time push notifications section.
7. Click **Save**.
8. Go to **Policies & Configs > Policies**, select an AppConnect policy and click **Edit**. Guidelines to edit AppConnect Global Policy:

Fields	Option
Name	Default AppConnect Global Policy
AppConnect	Select **Enabled** option.
Security Policies > Apps without an AppConnect container policy	Check the **Authorize** option.

9. Click **Save**.
10. Go to **Apps > App Catalog > Add + >In-house**.
11. Click **Browse** to **Upload Email+ Inhouse App**.

Registering your iOS device using MobileIron Core

You should register your iOS device with an LDAP user or local user:

1. In the MobileIron Core Admin Portal, go to **Device & Users > Users**.
2. Click on **Add** and select **Add Local User** or **LDAP User**.
3. Fill in the details in the **Add New User** window.
4. Click **Save**.
5. Register device with the Local or LDAP user.
   Result: Email+ is pushed to Device as a part of MDM configuration.

Configuring Email+ using KVPs on MobileIron Cloud for notification services

Set up a Standalone Sentry before configuring Email+ on MobileIron Cloud, see the Standalone Sentry Email+ Notification Services section in the *MobileIron Sentry Guide for Cloud*.

Procedure

1. In the MobileIron Cloud Admin Portal, go to **Apps > App Catalog > Email+**
2. Go to **App Configuration > Email+ Configuration**, click **+** to create a new Email+ configuration.
3. In the **Configuration Setup** section enter the following:
   a. In the **Name** field, enter the name of the configuration.
   b. In the **Description** field, enter additional text that clarifies the purpose of the configuration.
4. In the **Email+ Settings** section, enter the following:
   a. Email Address
   b. Exchange Host
   c. Exchange Username
5. In the **AppConnect Custom Configuration** section enter the required key-value pairs, to configure ENS.
6. Choose a distribution option for the configuration and click **Done**. The configuration is distributed to the subset of the devices to which the app is distributed.

NOTE: The **sentry_server_host** key-value pair should point to ENS Sentry hostname.

Registering your iOS device using MobileIron Cloud

To register your iOS device with Email+, see the Device Registration (iOS, macOS, and Android) section in the *MobileIron Cloud Administrator Guide.*

Procedure

1. In the MobileIron Cloud Admin Portal, go **Admin >User**.
2. Click on **+Add** to add a user, select the user type.
3. Click **Done**. New user is added.
4. In the MobileIron Go Client, log in with the user details. After registering on MI Go Client. The device is listed under the devices tab in MI Cloud.