



EMS MOBILE APP Configuration Guide

V44.1

Last Updated: January 16, 2018

Table of Contents

- EMS MOBILE APPConfiguration Guide 1
- Table of Contents 2
- EMS Mobile App Configuration Guide 7
- Introduction 9
 - System Requirements for EMS Mobile App 9
 - EMS Mobile or EMS Mobile Web App: What's the Difference? 11
 - EMS Mobile App = EMS Application for Mobile Devices11
 - Features of EMS Mobile App (Which are Not in EMS Web App) 11
 - EMS Mobile App = EMS Web App on a Mobile Browser 12
 - Features of EMS Web App (Which are Not in EMS Mobile App) 12
 - How Do I Install It?12

How Do I Use It?	13
Add Mobile Users	16
Deploy EMS Mobile App	30
Public Deployment: Public App Store	31
Private Deployment: Private App Store	36
Change EMS Mobile App Logo (Private Deployment Only)	38
IOS	38
Android	41
Configure and Re-Sign the EMS Mobile App (Private Deployment Only) ...	44
Use Unsigned Builds	45
Set Custom Configuration	45
IOS	46
Android	46

Re-Sign and Repackage for iOS	46
1. Install Fastlane.	46
2. Install Certificate and Provisioning Profile	47
Provisioning Profile	47
Certificate	47
3. Re-Sign	48
Re-Sign and Repackage for Android	51

Customize Your Mobile App Configuration Using config.json (Private Deployment Only)53

Find the config.json File	53
iOS	54
Android	54
Set the API URL	55

Configure Authentication	55
Supported Authentication Configurations	57
Open ID	57
Properties for the openID Section	58
SAML	59
Properties for the SAML Section	59
Examples	60
Custom URL only	60
Open ID with Discovery URL	61
Open ID Without Discovery URL	62
SAML With Default API SAML Endpoint	63
SAML with Specific API SAML Endpoint	64
Change Logging Location	64

Assign Templates to EMS Mobile Users	66
Restrict Users' Mobile App Versions	69
Determine EMS Mobile API and Version Compatibility	70
Change the Help Link Label and URL	74
Configure EMS Mobile QR Codes	76
How Do I Know When To Upgrade the Mobile App and API?	77
Determine EMS Mobile API and Mobile App Version Compatibility	77
Set EMS Mobile Parameters	81

EMS Mobile App Configuration Guide

EMS Mobile App, available on iOS and Android smartphones, is designed primarily for everyday users "on the go." It allows users to make simple reservations in unmanaged spaces (i.e., spaces without services and approvals), such as workspaces and open conference rooms.

This guide provides instruction on configuring the EMS Mobile App:

- » Introduction
- » Initial Configuration
 - » EMS Native Authentication
 - » LDAP Authentication
 - » NTLM Authentication
 - » Open ID Connect Authentication

- » SAML Authentication
- » Header Authentication

- » Enable Everyday User Booking Templates
- » Adding Mobile Users
- » How Mobile App Data Is Stored on Devices
- » Configuring EMS Mobile QR Codes
- » Setting EMS Mobile Parameters
- » How Do I Know When to Upgrade the Mobile App and API?

Introduction

EMS Mobile App enables easy booking and scheduling on-the-go for mobile devices by enabling you to manage space on mobile devices, such as tablets and smartphones. Simple touchscreen gestures on mobile devices allow you to scan QR codes for rooms and to cancel, end, or check in to meetings.

SYSTEM REQUIREMENTS FOR EMS MOBILE APP

The EMS Mobile App—which includes the EMS Platform Services—has specific requirements on top of the general EMS server and database requirements.

Note: You must upgrade to EMS v44.1 (released June 30, 2016) to have the EMS Mobile App. It is not available for earlier versions of EMS.

Supported Platforms

Android 4.4, 5.0, 6.0

iOS 9.x, 10.x, 11.x

Prerequisites

To host and install EMS Mobile App, you will need the following:

- » EMS database server, web server and Platform Services
(see Requirements)
- » Mobile phone(s)

EMS MOBILE OR EMS MOBILE WEB APP:

WHAT'S THE DIFFERENCE?

Although their names are similar and they share the same databases, these products have very different applications.

EMS MOBILE APP = EMS APPLICATION FOR MOBILE DEVICES

This is a separate software application EMS produces specifically to run on mobile devices such as smartphones.

FEATURES OF EMS MOBILE APP (WHICH ARE NOT IN EMS WEB APP)

- » Ultra-compact display designed for smartphones
- » Two factor authentication method
- » QR Code functionality

EMS MOBILE APP = EMS WEB APP ON A MOBILE BROWSER

This is the EMS Web App as it displays when running on a web browser on a mobile device, such as a tablet.

FEATURES OF EMS WEB APP (WHICH ARE NOT IN EMS MOBILE APP)

- » Browse Events
- » Browse People
- » Act As (delegation feature)
- » Edit Account Details
- » Edit Delegates
- » Edit Everyday User Process templates

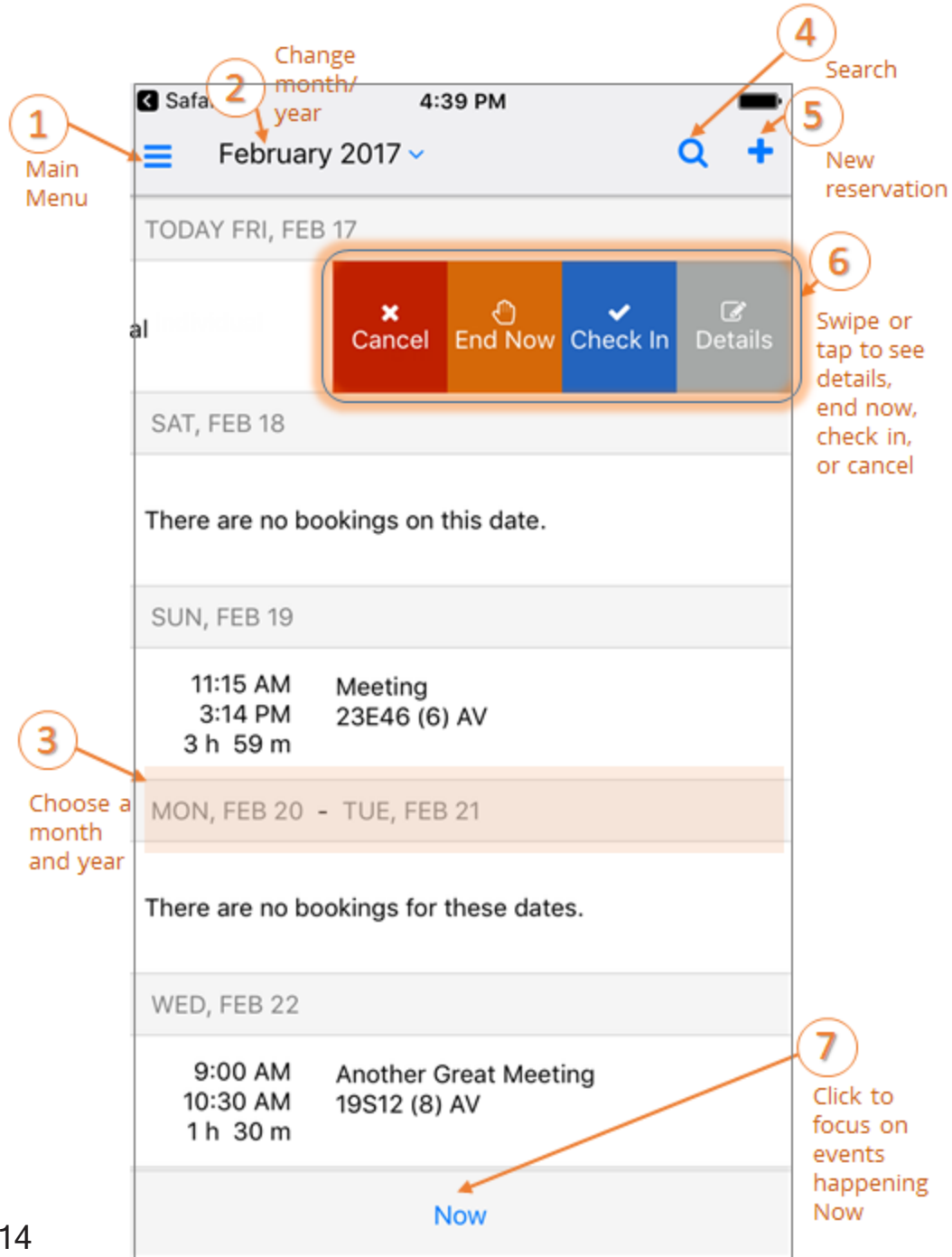
HOW DO I INSTALL IT?

If your organization has EMS Web Users licensing, no additional license for EMS Mobile App is required. Your administrator will need to:

1. Download the installation files from the [EMS Support Portal](#).
2. Install EMS Platform Services and connect to your organization's web server.
3. Set up user authentication.
4. Once these components are in place, users at your organization can add EMS Mobile App to their mobile devices (as a private or public deployment) and enter your server URL and (optional) credentials to authenticate.

HOW DO I USE IT?

Once you've [logged in](#), you can follow the tips below to interact with your calendar and see your events. Your calendar shows only current and upcoming events.



Tip: Get up to speed fast using our video tutorials:

EMS Mobile App Video Tutorials

- » Booking a Desk or Meeting
- » Booking a Meeting By Scanning a QR Code

Add Mobile Users

EMS Mobile App users are added as "Everyday Users" in EMS Desktop Client. Follow the steps below to create this type of user.

Note: This section guides you in configuring one Everyday User at a time. Once you have configured these users, you may need to assign them to security templates and one or more process templates.

- » To assign users to Everyday User process templates, see [Assign Templates to Everyday Users](#).
- » To assign multiple templates to multiple users in a single step, see [Assign Security Templates to Multiple Everyday Users](#).

Tip: You configure EMS Desktop Client user accounts in a different area (under the **System Administration > Security** menu). For instructions, see [Configure EMS Desktop Client Users](#).

Additionally, if your organization uses EMS Human Resources Toolkit to manage Everyday User accounts, see [EMS Human Resources Toolkit](#) .

Lastly, a set of Account Management parameters control account management behavior. To view these parameters, see [EMS Web App Parameters](#).

Concept: EMS classifies users into two categories—Guests or Visitors and Everyday Users

"Guests" or "Visitors" (unauthenticated or anonymous users) can browse events, see details about your organization's space, and/or submit requests.

These users can register themselves through EMS Web App and create a user account. To enable this, you need to set certain account management parameters (see EMS Web App System Parameters) and

select the Credit\Edit an Account role for the unauthenticated user (see the Roles tab definition in Configuring a security template).

"Guests" or "Visitors" (authenticated users) may also submit and manage reservations if you enable them.

You can configure these users through the EMS Desktop Client or the optional Integrated Authentication module.

See Also: [Configuring Additional Information for a Group](#) and [Configuring Contacts](#). Before you configure a user, check that the user has not already been created.

Concept: see Everyday User process templates control access and behavior in EMS Software's see Everyday User Applications. If you are upgrading from an older release of EMS, you may recognize Everyday Users as "Web Users" and "Everyday User Process Templates" as "Web Process Templates."

1. On the EMS Desktop Client menu bar, click **Configuration > Everyday User Applications > Everyday Users**. The Everyday Users window opens. The number of configured users for EMS Web App shows in the upper left corner. The number of users for which your organization is licensed shows in the top center.

The screenshot shows the 'Everyday Users' window. At the top, it displays 'Users In Use: 22' and 'User License Limit: 9999999'. Below this are search filters: 'Employee Type' (all), 'Search By' (User Name), 'Status' (all), 'City' (empty), 'Process Template' (all), and 'Find' (empty). There are 'Display' and 'Count' buttons. A table with columns 'Employee', 'City', 'Email Address', 'Status', 'Security Template', and 'Process Template' is shown. On the right, there are buttons for 'New', 'Edit', 'Delete', 'Print', 'Export', 'More...', and 'Close'.

2. Check that the user you wish to configure does not already exist. Enter the user name or email address in the **Find** field.

Tip: This search string is not case-sensitive, but your entries must be in the correct order. For example, if searching by Email Address, a search string of bob returns bobworth@emssoftware.com but not dbobbett@emssoftware.com.

You can narrow your search results by:

- » Group Type
- » City
- » Status
- » Process Template

Then **Click Display**. Search results show in the lower pane of the window. If your user does not already exist in EMS, proceed to the next step.

Note: If the EMS system parameter **Users linked to Groups via External Reference** is set to **Yes**, then you will also see a Group column and a City column.

3. Create a new user. Click the **New** button. A dialog box opens.

Note: If the user has confirmed membership (by responding to an email containing an activation link), the **Validated** checkbox highlighted below will be selected. If the user had to answer questions when requesting an account, you can view the user's responses on the **User Defined Fields** tab.

Everyday User

Everyday User | Process Templates | Employees | Delegates | User Defined Fields | Audit

Name:

Password:

Email Address:

Phone 1 / Phone 2:

Notes:

External Reference:


Network ID:

Email Opt Out: ☐

Status:

Security Template:

Time Zone:

Validated: ☒ 

ABC Spelling OK Cancel

Concept: When you configure a user, you can also specify one or more delegates for the user. A delegate is a user who can create and view reservations on behalf of another user.

4. Enter information for the new user. User name and email address are required; password is only required if not using the optional Integrated Authentication module. All other information is optional and can be added later as needed.

FIELD	DESCRIPTION
Name	The name of the user. (Maximum of 30 characters, including spaces).
Password	The password that the user must enter to log in to EMS Web App. If using the optional

FIELD	DESCRIPTION
	Integrated Authentication module, Password can be left blank since the network password is used instead.
Email Address	Enter the full email address for the user as the user must enter this address to log in to EMS Web App.
Phone 1 /Phone 2	Optional fields.
Notes	Optional field. Read-only.
External Refer-	Optional field. Links the user to

FIELD	DESCRIPTION
ence	an outside program such as EMS Human Resources Toolkit if needed.
Network ID	The user's network ID.
Email Opt Out	Optional field. Select this option if you do not want the user to receive automatic emails (such as reservation summary emails) from EMS Web App. The user can still receive manually sent emails.
Status	Required field. Select the status for the user:

FIELD	DESCRIPTION
	<ul style="list-style-type: none"> » Active—The user can log in to EMS Web App, EMS Mobile App, and EMS for Outlook. » Pending—The user cannot log in to EMS Web App, EMS Mobile App, and EMS for Outlook and is informed that he/she must check back at a later time. » Inactive—The user cannot log in to EMS Web App, EMS Mobile App, and EMS for Outlook and is instructed to contact the EMS administrator.
Security Template	Required field. This determines

FIELD	DESCRIPTION
	the user's access to the system (i.e., the menu items the user can see and the event information that the user can view).

Time Zone Optional field. The time zone in which the user is located. Beginning in version 44.1, it is strongly recommended that users are assigned to a time zone for an optimal experience on all Everyday User Applications.

FIELD	DESCRIPTION
Validated	When checked, users who created their own accounts have confirmed membership (by responding to a email containing an activation link). When unchecked, the user will not be able to use EMS Web App.

5. Assign process templates to the new user. Open the **Process Templates** tab. The process templates you assign here will appear as menu items to the user in EMS Web App, EMS Mobile App, and EMS for Outlook.
6. Specify Groups on whose behalf the user can create and manage reservations. Open the **Groups** tab. To filter the list of active groups displayed, use the **Find** and **Type** fields and then click **Display**. Select one or more Groups (use CTRL-click for multiple groups), and then click **Move (>)** to move the selected groups to the **Selected** list.

7. Specify Delegates the user can impersonate. Open the **Delegates** tab; to see all available users, click **Display**. To narrow the search results, use the **Search** by dropdown list to search by User Name or Email Address. Select one or more delegates (using CTRL-click for multiple delegates), and then click **Move (>)** to move the selected users to the **Selected** list.

Tip: Click **Spelling** to spell-check any information that you manually entered for the user.

8. Click **OK**. The dialog box closes and returns you to the users window with the newly configured user automatically selected.

Deploy EMS Mobile App

There are two ways to deploy the EMS Mobile App for your users:

1. The standard public app store offered by Apple and Google. See [Public Deployment: Public App Store](#).
2. A private enterprise app store. (This approach can also be integrated with your company's Mobile Device Management system.) See [Private Deployment: Private App Store](#).

Warning: It is important to understand the compatibility between the EMS Mobile App and EMS Platform Services. The EMS Mobile App needs to be on the same version or higher as EMS Platform Services. For example, the EMS Mobile App Update 20 version will be compatible with EMS Platform Services Update 19 or older. However, compatibility issues will exist if you try to install EMS Platform Services Update 20 with an older version of the EMS Mobile App (Update 19 or older).

PUBLIC DEPLOYMENT: PUBLIC APP STORE

To deploy via the public app store, direct your users to go to the [Google Play](#) and [Apple](#) app stores on their mobile devices. They will be able to download the app by clicking on the link. However, they will have to manually input the EMS Mobile API URL. They will receive a prompt to do so the first time they open the EMS Mobile App.

If users need to change the API URL at a later date, they can:

1. Open the app, and then click **About** in the lower right corner.



4G
LTE



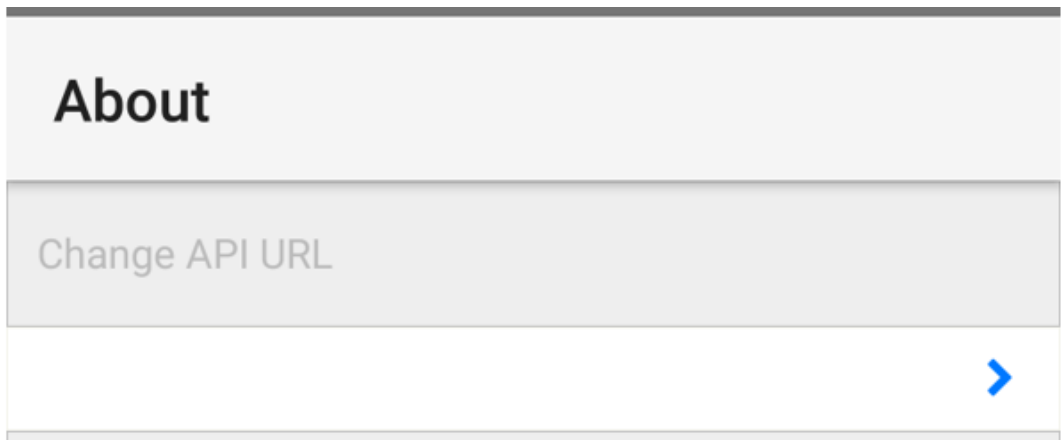
100%  2:27 PM



Sign In

SIGN IN

2. Click to change the API URL.



3. Enter the API URL you provide and connect.



EMS Server URL



CONNECT

While this approach may be easier for your IT staff, it has definite costs:

- » Users will have to input the EMS Mobile App API URL on their own.
- » EMS will frequently deploy mobile app updates to the app store. Most users will have this app set to automatically update, and will therefore receive updates even if you have not yet upgraded your EMS Mobile API.
- » While we aim to make the Mobile API backwards- and forwards- compatible within major updates, we may not do so all the time.
- » Deploying via the public app store therefore requires you to make major updates to the EMS Mobile API as soon as they are available.

PRIVATE DEPLOYMENT: PRIVATE APP STORE

To deploy via a private enterprise app store, first download the unsigned apk/ipa files from your EMS software portal. You then have to resign the app and deploy it via your MDM system. [This site](#) offers some guidance on how to sign an unsigned ipa file (i.e. for iOS), while [this site](#) does the same for Android apk files. Deploying via a private app store allows you to [Restrict Users' Mobile App Versions](#) your users have.

As an example, here are the key steps to resign and deploy the unsigned EMS Mobile App ipa file (following instructions provided [here](#)):

1. Download unsigned builds: .ipa and .apk files
 - Optional: [Customize Your Mobile App Configuration Using config.json \(Private Deployment Only\)](#), change logo
2. [Configure and Re-Sign the EMS Mobile App \(Private Deployment Only\)](#)
 - [Change EMS Mobile App Logo \(Private Deployment Only\)](#)
(if using MDM)

Change EMS Mobile App Logo (Private Deployment Only)

For customers re-signing the application, we provide unsigned builds.

1. Store your unsigned EMS Mobile App in a new or empty directory.
2. Change the extension of the app to .zip. (e.g., iPhone.App-44.1.xxx-unsigned.ipa -> iPhone.App-44.1.xxx-unsigned.zip.)
3. Un-compress/expand the new zip file.
4. To set a custom logo, replace the following logo files:

IOS

1. Rezip all of the extracted files from earlier.
2. Give the new zip file an ipa extension.
3. Using a Mac computer, install fastlane.
» `sudo gem install fastlane`

4. Do the rest of this on the Mac.
5. Login to <https://developer.apple.com> and switch to team "Your Team Name."
6. Download your teams Distribution provisioning profile.
7. Double click it to install it. This file should exist on your system:
 - » `~/Library/MobileDevice/Provisioning Profiles/<a guid for your provisioning profile>.mobileprovision`
8. Get your team's existing .p12 file with the cert and private key combined, and then import that into Keychain (by double-clicking it) and then entering the password.
 - » When the cert is installed successfully you should see iPhone Distribution: <Your Team Name> in your Keychain, with a private key.
9. Assuming you have:
 - » fastlane installed on your Mac
 - » the cert & private key installed in Keychain
 - » the provisioning profile mentioned above in: `~/Library....-mobileprovision`

10. Resign your target ipa with this command:

```
fastlane run resign \
```

```
ipa:path/to/your/file.ipa \
```

```
signing_identity:"iPhone Distribution: <Your Team Name>" \
```

```
provisioning_profile:$HOME/Library/MobileDevice/Provisioning Profiles/<your profile GUID>.mobileprovision \
```

```
display_name:EMS-Resigned
```

11. If you want a bash script that will do this, you can copy this into a file (e.g., `resign_enterprise.sh`):

```
#!/bin/bash
```

```
IPA=relative/path/to/file.ipa
```


IDENTITY="iPhone Distribution: <Your Team Name>"

PROFILE=\$HOME/Library/MobileDevice/Provisioning Profiles/<your profile GUID>.mobileprovision

DISPLAY_NAME=EMS-Resigned

fastlane run resign ipa:"\$IPA" signing_identity:"\$IDENTITY" provisioning_profile:"\$PROFILE" display_name:\$DISPLAY_NAME

ANDROID

1. Rezip all the extracted files from earlier.

- » Note that assets, res, and AndroidManifest.xml are top-level files in an .apk, so be careful to zip the right things up.
- » This CLI command will zip all the files in the current directory into a new zip file in the parent directory:

zip -qr ../ems-custom-44.1.xxx.zip ./*

2. Give the new zip file an apk extension (e.g., myapp.zip -> myapp.apk).
3. Sign the new apk file.

This is the script we use to sign our app, adjust for your needs:

```
#!/bin/bash
```

```
APK_TO_SIGN=$1
```

```
APK_OUTPUT=$2
```

```
EMS_APK_KEYSTORE_PATH=path/to/your/app.keystore
```

```
jarsigner -verbose \
```

```
-sigalg $EMS_APK_SIG_ALG \
```

```
-digestalg $EMS_APK_DIGEST_ALG \
```

```
-storepass $EMS_APK_KEYSTORE_PASS \
```

```
-keystore $EMS_APK_KEYSTORE_PATH \  
$APK_TO_SIGN $EMS_APK_ALIAS_NAME
```

```
zipalign 4 $APK_TO_SIGN $APK_OUTPUT
```

Note: We recommend that you use an image with a 3:1 aspect ratio in order to ensure that the image will be properly rendered by the application.

Configure and Re-Sign the EMS Mobile App (Private Deployment Only)

This topic provides information on the following:

- » [Use Unsigned Builds](#)
- » [Set Custom Configuration](#)
 - » [IOS](#)
 - » [Android](#)
- » [Re-Sign and Repackage for iOS](#)
 - » [1. Install Fastlane.](#)
 - » [2. Install Certificate and Provisioning Profile](#)
 - » [3. Re-Sign](#)
- » [Re-Sign and Repackage for Android](#)

USE UNSIGNED BUILDS

For customers re-signing the application, we provide unsigned builds.

1. Store your unsigned EMS Mobile App in a new or empty directory.
2. Change the extension of the app to .zip. (e.g., iPhone.App-44.1.xxx-unsigned.ipa -> iPhone.App-44.1.xxx-unsigned.zip.)
3. Un-compress/expand the new zip file.

SET CUSTOM CONFIGURATION

1. Refer to [Customize Your Mobile App Configuration Using config.json \(Private Deployment Only\)](#) for details on building a configuration file for EMS Mobile.
2. Replace the config.json file with your custom configuration (located as follows):

IOS

» config.json (top-level file)

ANDROID

» assets/config.json

RE-SIGN AND REPACKAGE FOR IOS

Follow the steps below to re-sign and repackage for iOS.

1. INSTALL FASTLANE.

Using `sudo gem`, install fastlane on an administrative Apple computer.

2. INSTALL CERTIFICATE AND PROVISIONING PROFILE

If your Apple computer is already configured with these items, these steps may not be necessary.

PROVISIONING PROFILE

1. Login to <https://developer.apple.com>
2. Download your Distribution provisioning profile
3. Double click it to install it. This file should exist on your system:
 - » `~/Library/MobileDevice/Provisioning Profiles/<profile-guid>.-mobileprovision`

CERTIFICATE

See Apple's [documentation](#) for installing and managing certificates and signing identities. When the certificate is installed successfully, you should see iPhone Distribution: Your Company, Inc in your Keychain, with a private key.

3. RE-SIGN

Assuming you have:

- » Fastlane installed on your Apple computer
- » the cert and private key installed in Keychain
- » the provisioning profile mentioned above in ~/Library/.../<profile-guid>.-mobileprovision

...then you should be ready to re-sign the application. Before you proceed, change the following in the command below:

- » Replace path/to/your/file.ipa with the real path to the ipa file
- » Replace iPhone Distribution: Your Company, Inc with the appropriate signing identity on your machine
- » Replace <profile-guid> with the actual GUID or name of the provisioning profile you intend to use
- » Replace **EMS-Resigned** with the display name you wish to use, or remove the parameter if you do not wish to rename the application

Note: Running these commands will **overwrite** the ipa file you designate. Make a copy first if necessary.

```
fastlane run resign \  
  ipa:path/to/your/file.ipa \  
  signing_identity:"iPhone Distribution: Your Company, Inc" \  
  provisioning_pro-  
file:$HOME/Library/MobileDevice/Provisioning Pro-  
files/<profile-guid>.mobileprovision \  
  display_name:EMS-Resigned
```

(All on one line for copy/paste:)

```
fastlane run resign ipa:path/to/your/file.ipa signing_iden-  
tity:"iPhone Distribution: Your Company, Inc" provisioning_pro-  
file:$HOME/Library/MobileDevice/Provisioning  
Profiles/<profile-guid>.mobileprovision display_name:EMS-
```

Resigned

If you want a bash script that will do this, you can copy this into a file (e.g., `resign_enterprise.sh`):

```
#!/bin/bash
```

```
IPA=relative/path/to/file.ipa
```

```
IDENTITY="iPhone Distribution: Your Company, Inc"
```

```
PROFILE=$HOME/Library/MobileDevice/Provisioning\ Profiles/<profile-guid>.mobileprovision
```

```
DISPLAY_NAME=EMS-Resigned
```

```
fastlane run resign ipa:"$IPA" signing_identity:"$IDENTITY"  
provisioning_profile:"$PROFILE" display_name:$DISPLAY_  
NAME
```

RE-SIGN AND REPACKAGE FOR ANDROID

- » Re-zip all the extracted files from earlier
 - » Note that assets, res, and AndroidManifest.xml are top-level files in an .apk, so be careful to zip the right files
 - » This CLI command will zip all the files in the current directory into a new zip file in the parent directory:
 - » `zip -qr ../ems-custom-44.1.xxx.zip ./*`
- » Give the new zip file an .apk extension
 - » e.g., `myapp.zip -> myapp.apk`
- » Sign the new .apk file, for example:

#!/bin/bash

APK_TO_SIGN=\$1

APK_OUTPUT=\$2

EMS_APK_KEYSTORE_PATH=path/to/your/app.keystore

```
jarsigner -verbose \  
-sigalg $EMS_APK_SIG_ALG \  
-digestalg $EMS_APK_DIGEST_ALG \  
-storepass $EMS_APK_KEYSTORE_PASS \  
-keystore $EMS_APK_KEYSTORE_PATH \  
$APK_TO_SIGN $EMS_APK_ALIAS_NAME
```

```
zipalign 4 $APK_TO_SIGN $APK_OUTPUT
```

Customize Your Mobile App Configuration Using config.json (Private Deployment Only)

EMS Mobile App ships with a config.json file that you can use to customize EMS Mobile App before re-signing and distributing in your app store or similar as follows:

- » [Set the API URL](#) so users do not have to type it in on their own.
- » [Configure Authentication](#).

FIND THE CONFIG.JSON FILE

After unzipping the respective app files, the paths to the file for each OS are:

IOS

» config.json (top-level file)

ANDROID

» assets/config.json

The file looks like the example below (subject to change, per development):

```
{
  "api_doc": [
    "Configure the API here"
  ],
  "api": {

    "url_doc": [
      "The API EMS Mobile App should connect to"
    ],
    "url": ""
  }
}
```

```
}  
  
}
```

SET THE API URL

1. Open the **config.json** file in a text editor.
2. In the API section, find the URL property.
3. Set the URL property to your desired value
(e.g., <https://yourcompany.com/ems-platform-api>).

CONFIGURE AUTHENTICATION

EMS Mobile App does not ship with an authentication configuration section by default, but you can add it as follows.

Note: If you are adding authentication configuration, **it is also necessary to [Set the API URL](#)**.

Below is an example (the ..._doc entries are omitted for brevity):

```
{
  "api": {
    "url": "https://yourcompany.com/ems-platform-api"
  },
  "authentication": {
    "activities": "openId",
    "openID": {
      "discoveryURL": "https://yourcompany.com/openid",
      "authorizationURL": "",
      "tokenURL": "",
      "clientID": "abcdefxabQijQcJstY4nImWYL5y12345",
      "redirectURL": "emssoftware://oauth-callback/x"
    }
  }
}
```


SUPPORTED AUTHENTICATION CONFIGURATIONS

OPEN ID

```
"authentication": {  
  "activities": "openId",  
  "openID": {  
    "discoveryURL": "https://yourcompany.com/openid",  
    "authorizationURL": "",  
    "tokenURL": "",  
    "clientId": "abcdefxabQijQcJstY4nImWYL5y12345",  
    "redirectURL": "emssoftware://oauth-callback/x"  
  }  
}
```

- » Set the **activities** to **openId**
- » Add an **openID** section next to **activities**

PROPERTIES FOR THE OPENID SECTION

» **discoveryURL**

- » if your IdP provides it, this is the URL for EMS Mobile App to automatically configure its Open ID settings
- » if you provide this, leave authorizationURL and tokenURL empty

» **authorizationURL**

- » this is the endpoint to send the initial Open ID authorization request

» **tokenURL**

- » this is the endpoint to request an Open ID access token

» **clientID**

- » the client ID for the EMS Mobile App as configured in the IdP

» **redirectURL**

- » leave this set to emssoftware://oauth-callback/x for EMS Mobile App
- » this is the URL the IdP will redirect to during the Open ID authentication flow

SAML

```
"authentication": {  
  "activities": "saml",  
  "saml": {  
    "url": "https://yourcompany.com/ems-platform...ntication/saml`  
  }  
}
```

- » Set the **activities** to **saml**
- » Add a **saml** section next to **activities**

PROPERTIES FOR THE SAML SECTION

- » URL
 - » this property is optional
 - » you can manually specify the initial request URL for SAML authentication
 - » this URL will be opened in a webview in EMS Mobile App

- » if you do not specify this property, EMS Mobile App will assume the default SAML endpoint for the REST API
 - » This is one reason you must specify the URL in the api section for custom authentication configuration (e.g., if you set the custom API URL to `https://ems.example.com/api`, then EMS Mobile App will use `https://ems.example.com/api/api/v1/authentication/saml` as its initial SAML url)

EXAMPLES

CUSTOM URL ONLY

```
{  
  "api": {  
    "url": "https://yourcompany.com/ems-platform-api"  
  }  
}
```

OPEN ID WITH DISCOVERY URL

```
{  
  "api": {  
    "url": "https://yourcompany.com/ems-platform-api"  
  },  
  "authentication": {  
    "activities": "openId",  
    "openID": {  
      "discoveryURL": "https://yourcompany.com/openid/discovery",  
      "authorizationURL": "",  
      "tokenURL": "",  
      "clientID": "abcdefxabQijQcJstY4nImWYL5y12345",  
      "redirectURL": "emssoftware://oauth-callback/x"  
    }  
  }  
}
```

OPEN ID WITHOUT DISCOVERY URL

```
{
  "api": {
    "url": "https://yourcompany.com/ems-platform-api"
  },
  "authentication": {
    "activities": "openId",
    "openID": {
      "discoveryURL": "",
      "authorizationURL": "https://yourcompany.com/openid/authorize",
      "tokenURL": "https://yourcompany.com/openid/token",
      "clientID": "abcdefxabQijQcJstY4nImWYL5y12345",
      "redirectURL": "emssoftware://oauth-callback/x"
    }
  }
}
```

SAML WITH DEFAULT API SAML ENDPOINT

```
{  
  "api": {  
    "url": "https://yourcompany.com/ems-platform-api"  
  },  
  "authentication": {  
    "activities": "saml"  
  }  
}
```

SAML WITH SPECIFIC API SAML ENDPOINT

```
{  
  "api": {  
    "url": "https://yourcompany.com/ems-platform-api"  
  },  
  "authentication": {  
    "activities": "saml",  
    "saml": {  
      "url": "https://ems.example.com/saml"  
    }  
  }  
}
```

CHANGE LOGGING LOCATION

1. Modify the logFilePath attribute:

```
"logFilePath": ".\\LogFiles\\api.log"
```


Assign Templates to EMS Mobile Users

EMS V44.1 allows you to select which process templates (e.g "web process templates") will be enabled on your users' mobile devices. From the Admin page for templates in the EMS Desktop Client, you will see an **Enable for Mobile** checkbox on the first tab of the template dialog box:

Process Template	Booking Rules	Defaults	Rooms	Catego
Description:	Workspace			
Mode:	Self Serve			
Menu Text:	Workspace			
Available To New Users:	<input checked="" type="checkbox"/>			
Reserve Status:	Confirmed			
Request Status:	Confirmed			
Conflict Status:	Conflict			
Cancel Status:	No Show			
Rule Violation Status:				
Default Setup Type:	(none)			
Menu Sequence:	0			
Video Conference:	<input type="checkbox"/>			
— Everyday User Application Settings —				
Enable for Web App:	<input checked="" type="checkbox"/>			
Enable for Mobile:	<input checked="" type="checkbox"/>			

Note: EMS Mobile App is designed to make and edit simple reservations for users "on the go." At this time it cannot handle service requests, video conference bookings or complex workflows. Please consider this when you decide which templates should be enabled for the EMS Mobile App. Additionally, you can only change the name and icon of the mobile app through private [deployment via MDM](#). Please refer to your MDM guide for instructions on how to change the name and icon of the mobile app.

Restrict Users' Mobile App Versions

Starting with the August 2016 release, EMS will ensure that EMS Mobile App is both forwards- and backwards- compatible, so that the mobile app will still function even if users update it on their devices. Alternatively, if you update your API but users do not update their app, functionality remains intact.

You may wish to force users to keep their installations up to date. For example, you may want them to upgrade their EMS Mobile App after you upgrade the API, or you may want to prevent them from updating their EMS Mobile App until you upgrade the API. To enforce these restrictions, follow the steps below.

1. Log in to the API admin page (previously configured [here](#)).
2. Click on **Admin** tab, and set the minimum and maximum app versions:

The screenshot shows the 'Admin' interface with two tabs: 'AUTHENTICATION' and 'APP VERSIONS'. The 'APP VERSIONS' tab is active. It contains two input fields: 'Minimum App Version' with the value '44.1.230' and 'Maximum App Version' with the value '44.1.999'. A blue 'Submit' button is located at the bottom left of the form.

DETERMINE EMS MOBILE API AND VERSION COMPATIBILITY

Use the matrix below to determine how you want to enforce user updates.

EMS RELEASE #	MOBILE APP VERSION SHIPPED	MOBILE API VERSION	MOBILE APP MINIMUM VERSION	MOBILE APP MAXIMUM VERSION
V44.1	44.1.241	44.1.129	44.1.238	44.1.241
V44.1 Update 1	44.1.288	44.1.146	44.1.288	44.1.288
V44.1 Update 2	44.1.319	44.1.158	44.1.288	44.1.319
V44.1 Update 3	44.1.410	44.1.172.0	44.1.288	44.1.410

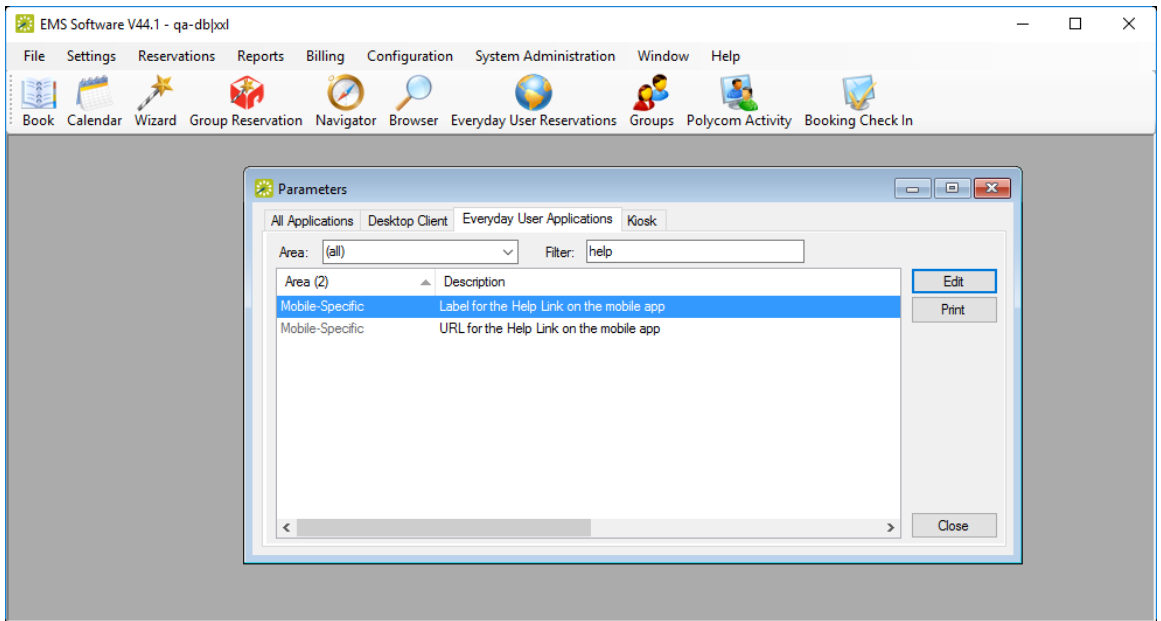
EMS RELEASE #	MOBILE APP VERSION SHIPPED	MOBILE API VERSION	MOBILE APP MINIMUM VERSION	MOBILE APP MAXIMUM VERSION
V44.1 Update 4	44.1.430	44.1.187.0	44.1.288	44.1.430
V44.1 Update 5	NA	NA	NA	NA
V44.1 Update 6	44.1.477	44.1.208.0	44.1.288	44.1.477
V44.1 Update 7	44.1.487	44.1.249.0	44.1.288	44.1.487

Concept: The Minimum App Version means that users running EMS Mobile App below the minimum will not be able to use EMS. Increasing this value essentially forces users on an older version to upgrade. Maximum App Version prevents users from using EMS Mobile App if they run a version above the max.

Change the Help Link Label and URL

To change the label for the Help link label, locate the [Set EMS Mobile Parameters](#), **Label for the Help Link on the mobile app**, and enter a new value.

To change the label for the Help link URL, locate the parameter, **URL for the Help Link on the mobile app**, and enter a new URL.



Configure EMS Mobile QR Codes

In order to associate rooms with QR Codes, System Administrators must run and print a [Room Card - QR Code report](#) (under Hoteling) in the EMS Desktop Client. This automatically generates the codes and associates them with the designated rooms.

How Do I Know When To Upgrade the Mobile App and API?

DETERMINE EMS MOBILE API AND MOBILE APP VERSION COMPATIBILITY

Use the matrix below to determine how you want to enforce user updates.

EMS RELEASE #	MOBILE APP VERSION SHIPPED	MOBILE API VERSION	MOBILE APP MINIMUM VERSION	MOBILE APP MAXIMUM VERSION
V44.1	44.1.241	44.1.129	44.1.238	44.1.241
V44.1	44.1.288	44.1.146	44.1.288	44.1.288

EMS RELEASE #	MOBILE APP VERSION SHIPPED	MOBILE API VERSION	MOBILE APP MINIMUM VERSION	MOBILE APP MAXIMUM VERSION
Update 1				
V44.1	44.1.319	44.1.158	44.1.288	44.1.319
Update 2				
V44.1	44.1.410	44.1.172.0	44.1.288	44.1.410
Update 3				
V44.1	44.1.430	44.1.187.0	44.1.288	44.1.430
Update 4				

EMS RELEASE #	MOBILE APP VERSION SHIPPED	MOBILE API VERSION	MOBILE APP MINIMUM VERSION	MOBILE APP MAXIMUM VERSION
V44.1 Update 5	NA	NA	NA	NA
V44.1 Update 6	44.1.477	44.1.208.0	44.1.288	44.1.477
V44.1 Update 7	44.1.487	44.1.249.0	44.1.288	44.1.487

Concept: The Minimum App Version means that users running EMS Mobile App below the minimum will not be able to use EMS.

Increasing this value essentially forces users on an older version to upgrade. Maximum App Version prevents users from using EMS Mobile App if they run a version above the max.

Set EMS Mobile Parameters

Configure your mobile application behavior using the parameters described below.

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
VEMS_ DefaultCancelReason	Default Cancel Reason	Desktop Cli- ent > System Admin- istration > Set- tings > Parameters > Everyday User Applications t-	Create/- Manage Reser- vations	Con- trols which Cancel Reason, if any, is applied to book-

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
		ab		ings that are can- celled by every- day users. The ability for a user to choose a

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
				Cancel Reason to be applied.
MOBILE_HelpLinkLa- bel	Label for the Help Link on the mobile app	Desktop Cli- ent > System Admin- istration > Set- tings > Parameters > Everyday User Applications t-	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
		ab		
MOBILE_ HelpLinkURL	URL for the Help Link on the mobile app	Desktop Cli- ent > System Admin- istration > Set- tings > Parameters > Everyday User Applications t- ab	Mobile- Specific	
Mobile_Require2FA	Requir-	Desktop Cli-	Mobile- Specific	Requir-

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	es 2- factor authen- tication for all mobile logins	ent > System Admin- istration > Set- tings > Parameters > Everyday User Applications t- ab		es Two- Factor Authen- tication for mobile authen- tication
Mobile_AuthHead- erVariable	Sets the header vari-	Desktop Cli- ent > System Admin- istration > Set-	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	able for the EMS Mobile API's Header Authen- tication Method	tings > Para- meters > Everyday User Applications t- ab		
MOBILE_2faE- mailSubject	The subject for the EMS	Desktop Cli- ent > System Admin- istration > Set-	Mobile- Specific	Subject of the email sent to

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	Mobile two- factor setup email	tings > Para- meters > Everyday User Applications t- ab		users noti- fying them to go to the EMS - Web App and scan their 2fa bar- code

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
MOBILE_Every- dayAppConfigJson	Authen- tication con- fig- uration for the EMS Mobile App	Desktop Cli- ent > System Admin- istration > Set- tings > Parameters > Everyday User Applications t- ab	Mobile- Specific	Stores the con- fig- uration the mobile app will use to authen- ticate against the api
MOBILE_MaxSup- portedAppVersion	Max-	Desktop Cli-	Mobile- Specific	Max-

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	imum	ent > System		imum
	EMS	Admin-		app ver-
	Mobile	istration > Set-		sion
	App	tings >		that the
	version	Parameters >		api will
	that the	Everyday		allow to
	API	User		con-
	should	Applications t-		nect
	allow to	ab		
	con-			
	nect			
MOBILE_MinSup- portedAppVersion	Min- imum	Desktop Cli- ent > System	Mobile- Specific	Min- imum

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	EMS Mobile App version that the API should allow to con- nect	Admin- istration > Set- tings > Parameters > Everyday User Applications t- ab		app ver- sion that the api will allow to con- nect
MOBILE_Num- berofDays	Inactiv- ity period	Desktop Cli- ent > System Admin-	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	in minute- s before auto logout from mobile app	istration - Set- tings - Para- meters - Everyday User Applic- ations tab		
MOBILE_ QueryStringKey	Key used to sign mobile	Desktop Cli- ent > System Admin- istration > Set-	Mobile- Specific	Key used to encrypt the

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	query strings in links to vir- tual	tings > Para- meters > Everyday User Applications t- ab		query strings when email- ing users links to the EMS - Web App
MOBILE_Ses- sionTokenSign- ingKey	Key use to	Desktop Cli- ent > System	Mobile- Specific	Key used to

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	for sign- ing EMS Mobile ses- sion tokens	Admin- istration > Set- tings > Parameters > Everyday User Applications t- ab		sign the tokens authen- ticated users receive once they create a valid ses- sion

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
VEMS_User_ RequirePhone	Requir- e Phone during accoun- t cre- ation	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Account Man- age- ment	
VEMS_User_Secur- ityStatus	Default Accou- nt	Desktop Cli- ent > System Admin-	Account Man- age- ment	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	Status for Newly- Create- d User	istration > Set- tings > Para- meters > Everyday User Applic- ations tab		
VEMS_ResBook_ ShowWhatInBar	Event Inform- ation to Display in Book- ing on Sched- ule	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User	Sched- ule View	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	View	Applications t- ab		
VEMS_Reser- vationBook_ StartTime	Start Time on Sched- ule View	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Sched- ule View	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
VEMS_Browse_ DropEventsInPast	Drop Events from Daily View After They Occur	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Browse Events	
VEMS_EmailAccount	Accou- nt to Use for Send-	Desktop Client > Sys- tem Admin-	Email - Settings	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	ing Email	istration > Set- tings > Para- meters > Everyday User Applications t- ab		
VEMS_EmailAc- countPassword	Pass- word of Email Accou- nt	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday	Email - Settings	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
--------------------------------	------------------	----------------------	------	-------

User
Applications t-
ab

VEMS_EmailSender	Name of Email Sender	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Email	
------------------	-------------------------------	----------------------------------------------------------------------------------------------------------------------------------	-------	--

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
VEMS_EmailSender- Address	Email Addres- s of Sender	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Email	
VEMS_EmailServer	Name or IP Addres- s of	Desktop Client > Sys- tem Admin-	Email - Settings	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	SMTP Server	istration > Set- tings > Para- meters > Everyday User Applications t- ab		
Vems_Reservations_ AutoEmailFormat	Format for Reque- st Sum- mary	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday	Email	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
--------------------------------	------------------	----------------------	------	-------

User
Applications t-
ab

VEMS_Reser- vations_ AutoSendSummary	Send Reque- st Sum- mary upon Submit	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Email	
--------------------------------------------	-----------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------	-------	--

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
VEMS_Reser- vations_ AutoSendSummaryOn	Send Con- firm- ation on Cancel	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Email	
VEMS_Reser- vations_DefaultSub- ject	Default Subject for Email	Desktop Client > Sys- tem Admin-	Email	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
		istration > Set- tings > Para- meters > Everyday User Applications t- ab		
LDAP_Authenticate	This determ- ines whethe- r to authen- ticate	Virtual EMS > LDAPCon- fig- uration.aspx > Security tab	LDAP	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
--------------------------------	------------------	----------------------	------	-------

with
LDAP.

MOBILE_Check- inProximityDistance	Mobile checki- n prox- imity dis- tance	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Mobile- Specific	
--------------------------------------	--------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------	---------------------	--

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
MOBILE_Check- inProx- imityUnitOfMeasureme	Mobile checki- n prox- imity unit of meas- ure- ment	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t- ab	Mobile- Specific	
MOBILE_ MinutesToRe- memberLogin	Inactiv- ity period	Desktop Client > Sys- tem Admin-	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	in minute- s before auto logout from mobile app	istration > Set- tings > Para- meters > Everyday User Applications t- ab		
MOBILE_Prox- imityDistance	Mobile build- ing prox- imity	Desktop Client > Sys- tem Admin- istration >	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	dis- tance	Settings > Parameters > Everyday User Applications t- ab		
MOBILE_Prox- imityUn- itOfMeasurement	Mobile build- ing prox- imity unit of meas- ure-	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	ment	Applications t- ab		
PAM_Tex- tAboveEditLink	The text to display above the edit link	PAM Web Service > PAMConfig- .aspx > Message tab	PAM	
PAM_WebSer- viceURL	Excha- nge Integ- ration Web	Desktop Client > Sys- tem Admin- istration > Settings >	Integ- ration to Microso- ft Exchan-	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	Service URL	Parameters > Everyday User Applications t- ab	ge	
URL for the EMS Mobile App in the app store	Setting this para- meter to blank preven- ts the	Desktop Client > Sys- tem Admin- istration > Settings > Parameters > Everyday User Applications t-	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	EMS Mobile App popup prompt from appear- ing.	ab		
URL for the EMS Mobile App in the play store	Setting this para- meter to	Desktop Client > Sys- tem Admin- istration > Settings >	Mobile- Specific	

KEYVALUE (TBLREGISTRY NAME)	DESCRI- PTION	CONFIGURED WHERE?	AREA	NOTES
	blank	Parameters >		
	preven-	Everyday		
	ts the	User		
	EMS	Applications t-		
	Mobile	ab		
	App			
	popup			
	prompt			
	from			
	appear-			
	ing.			