

ExtremeControl Guest and IoT Manager Configuration

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About this Document

This chapter provides basic background information that sets the support information of the document into its perception.

Purpose

Guest and IoT Manager provides a simple and personalized web user interface through which an operational team can quickly and securely manage visitor network access.

It is intended for system administrators who will be installing, managing, and configuring the Guest and IoT Manager application.

Conventions

This section discusses the conventions used in this guide.

Text Conventions

The following tables list text conventions that can be used throughout this document.

Table 1. Notice Icons

Icon	Alerts you to
• Important:	Key information that does not carry with it the risk of personal injury, death, system failure, service interruption, loss of data, damage to equipment, or electrostatic discharge.
Note:	Important features or instructions.
◆ Tip:	Helpful tips and notices for using the product.
▲ Warning:	A potential hazard exists that, if not avoided, can result in harm to hardware or equipment.
⚠ Caution:	Practices that are not safe or are potential hazards not covered by danger or warning messages.

Table 2. Text Conventions

Convention Description					
Angle brackets (< >)	Angle brackets (< >) indicate that you choose the text to enter based on the description inside the brackets. Do not type the brackets when you enter the command.				
	If the command syntax is cfm maintenance-domain maintenance-level <0-7>, you can enter cfm maintenance-domain maintenance-level 4.				
Bold text	Bold text indicates the GUI object name you must act upon.				
	Examples:				
	• Click OK .				
	On the Tools menu, choose Options.				
Italic Text	Italics emphasize a point or denote new terms at the place where they are defined in the text. Italics are also used when referring to publication titles that are not active links.				
Plain Courier Text	Plain Courier text indicates command names, options, and text that you must enter. Plain Courier text also indicates command syntax and system output, for example, prompts and system messages.				
	Examples:				
	• show ip route				
	• Error: Invalid command syntax [Failed][2018-09-12 13:37:03.303 -04:00]				
Separator (A greater than sign (>) shows separation in menu paths.				
>)	For example, in the Navigation tree, expand the Configuration > Edit folders.				

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- A description of the failure
- A description of any action(s) already taken to resolve the problem
- A description of your network environment (such as layout, cable type, other relevant environmental information)
- Network load at the time of trouble (if known)
- The device history (for example, if you have returned the device before, or if this is a recurring problem)
- Any related RMA (Return Material Authorization) numbers

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New in this Document

The following sections detail what is new in this document.

Ability to Create Helpdesk Provisioners

A Helpdesk Provisioner provides a Provisioner user with the ability to view and edit all the Guest user and Device records of the Onboarding Templates to which they are assigned. Helpdesk Provisioners can add records of assigned Onboarding Templates; edit, delete and extend user expiration; and perform resend password, resend details, renew password, and print operations on accessible records.

In order to support this feature, the **Show** and **Onboarding Template** drop-down lists are available in the **Guest Users** and **Devices** tabs in the Provisioners application, allowing you to filter content based on the Provisioner or Onboarding template. The **Provisioned by** field is no longer available.

Onboarding Template based on Vouchers

The Voucher Type Onboarding Template allows creation of many Guest User accounts in Guest and IoT Manager by specifying the number of Vouchers to be generated with a random username and password.

For more information, see <u>Configuring the Common Details</u>, and <u>Creating Guest</u> User Account using Vouchers.

Onboarding Template based on CSV load of Devices

The CSV Type Onboarding Template allows uploading a CSV file to onboard many devices in a single go. The name of the device and MAC address are needed to be input from the file and the rest of the fields as specified during the creation process is like the existing process of adding a device to the Guest and IoT Manager.

For more information, see <u>Configuring the Common Details</u>, <u>Configuring the Guest User Account Details</u>, and <u>Configuring Guest User and Device</u>
Provisioning Using CSV.

Onboarding Template based on CSV load of Users

The CSV Type Onboarding Template allows creation of many Guest User accounts in Guest and IoT Manager by uploading a CSV file. The fields to be entered by the CSV file are first name, last name email and mobile number.

For more information, see <u>Configuring the Common Details</u>, <u>Configuring the Guest User Account Details</u>, and <u>Configuring Guest User and Device</u>
<u>Provisioning Using CSV</u>.

Zero Touch Guest Access Feature

The Zero-Touch feature is introduced in this release. The Guest Users can now create their own Guest User Acount using Self-Provisioning Services.

For more information see, <u>Automated Login of the Guest User using the Login URL</u>.

Added New Sections in Troubleshooting

For more information see the following:

- Problem: Unable to Renew Password
- Problem: Guest User account is not created post sending SMS
- Problem: Login URL redirects to Captive Portal
- Problem: "Server Error. Please contact Administrator" Error message on clicking Login URL
- Problem: FQDN not being used in URLs
- Problem: Unable to Customize Provisioner Login page
- Problem: "Login failed. Invalid credentials/Account Expired" message on clicking

Login URL

• Problem: Outlook Add-in throws Security Exception post enabling FQDN

Added New Command in the Command Line Interface

Added new command interface hostname. For more information see, <u>interface</u> hostname.

Guest and IoT Manager Overview

Welcome to the ExtremeControl Guest and IoT Manager Web Application! The Guest and IoT Manager (GIM) is an application that integrates with ExtremeControl. The purpose is to provide non-IT personnel with the ability to provision Guest Users and / or Devices within the constrains defined by the Administrator. Guest and IoT Manager communicates with the ExtremeControl Engine(s) for provisioning of Guest Users and Devices that may access the network through standard process of authentication and authorization by ExtremeControl.

Guest and IoT Manager allows the Administrator to perform the following:

- Create and customize Onboarding Templates for Guest Users and Devices.
- Create Internal Provisioners.
- Assign one or more Onboarding Templates to Internal or External Provisioners Provisioners (Provisioners on AD / LDAP)
- Enable and customize Guest and IoT Manager REST APIs for integration with third party applications.
- Enable and customize Guest and IoT Manager Outlook Plug-in.

Furthermore, Guest and IoT Manager allows the Provisioners to use the Onboarding Template(s) and provision Guest User and / or Devices based on their customized constrains. Provisioners may be:

- External Provisioners: They can be Employees or Students that reside on an AD or LDAP server.
- Internal Provisioners: These are created by the Administrator and are Business Partners, Vendors, Suppliers, Contractors, Front Desk Personal, Security Guards and so on.

The Guest and IoT Manager Administrator and the Provisioner have different splash login pages. When the Provisioner logs in;

- In case of external Provisioner, authentication happens by the Extreme Control engine against AD / LDAP.
- While in case of an Internal Provisioner it is against the Local Repository.

Once the Provisioner logs in, then the Provisioner has access to the Onboarding Templates that the Administrator has provided and is able to provision Guest User and / or Devices.

The Guest and IoT Manager Overview chapter provides information on the following:

- Guest and IoT Manager Application Framework
- User Roles and Access Controls
- Launching Guest and IoT Manager
- Using the Online Help System

Guest and IoT Manager Application Framework

The ExtremeCloud IQ - Site Engine portfolio system for provisioning and managing guest network access consists of the following components:

- Guest and IoT Manager Administrator Application for managing provisioners and for performing bulk updates of Guests and Devices.
- Guest and IoT Manager Provisioner Application for managing Guests and Devices.
- Access Control Engine that authenticates and authorizes users who desire to connect to your network.
- Extreme Management Center Application to create the authorization policies that determine which users can connect to specific parts of your network.
- (Optionally) ExtremeCloud IQ Site Engine Captive Portal: The web-based authentication helps users connect their "Bring Your Own Device" (BYOD) devices to enterprise network even though if it is not equipped with 802.1X authentication software.

User Roles and Access Controls

Roles are an important concept in the Guest and IoT Manager application. Roles determine what users can view or perform, including what they can monitor and

the types of changes they can make. Parts of the UI features are not available to users whose role does not authorize access to those features. The Guest and IoT Manager application facilitates the following user roles.

The three roles defined with different access control in the system are:

- Guest and IoT Manager Administrator Role
- Provisioner Role
- Guest Users Role

Guest and IoT Manager Administrator Role

The Guest and IoT Manager Application has single Administrator account. The Administrator of this account can set / modify access rights such as Username, Password, delete Guest User accounts, Device records and can also perform the following actions.

- Create the Onboarding Template.
- Configure application settings.
- Create and manage the Provisioner accounts. Each account has its own Username and Password.
- Connect the application to the ExtremeCloud IQ Site Engine appliance.
 The Administrator must ensure that the connection is stable for the Provisioners to use it.
- Manage Guest User accounts and Device records to remove the expired user accounts.

Provisioner Role

The Provisioner uses the Guest and IoT Manager application to manage Guest Users and Devices that they have created.

Each provisioner account is stored either in the Local Password Repository (LPR) internal store or in Lightweight Directory Access Protocol (LDAP).

Important:

Guest Users and Devices onboarded by the Provisioner can only be managed from Guest and IoT Manager.

Guest Users Role

A Guest User is a visitor or other temporary user to whom you grant specific limited rights to use the network. A Provisioner uses the Guest and IoT Manager Application to create any number of Guest User accounts. Guest User accounts are stored in Local Password Repository (LPR).

The created Guest User account contains the following attributes:

- Account Details: Includes Username and Password for the temporary account.
- Personal Data: Includes first name, last name, email address, and mobile number of the User.
- Access Duration: Specifies the account activation time for network access usage and the duration.
- Auto Expiry Deletion: Removes the Guest Users automatically after the specified duration.
- Notification Settings: Sends an Email or SMS notification stating that the Guest account has been created. The notification contains the Guest User's Name and Password and is usually sent directly to the Guest.

Launching Guest and IoT Manager

The **Access Control Engine** settings must be configured prior launching the Guest and IoT Manager application for the first time. For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Guest and IoT Manager consists of two applications:

- Administrator Application: The Application that the Administrator uses to configure Guest and IoT Manager to create Provisioner(s) and Self-Service accounts.
- Provisioner Application: The Application that Provisioners use to create Guest Users and Devices.

Administrator Home Screen

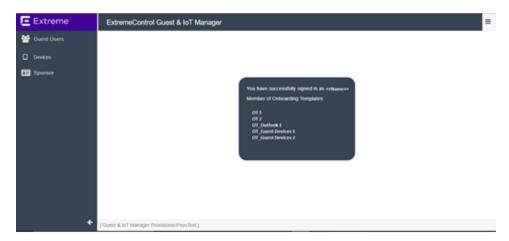


When Administrator logs into Guest and IoT Manager Web UI, the **Last Successful Login**, date, time, and the number of **Failed Login Attempts** between two successful logins of the Administrator account are displayed on the footer of the page.

Note:

You can also change the password after your first login. For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Provisioner Home Screen



The Onboarding Template associated with the logged in Provisioner is displayed in the Home screen.

Running the Administrator Application

Use this procedure to launch the Administrator Application.

Procedure

1. Open your web browser and enter the URL of the Administrator Application.

```
http://<Guest Manager machine>/GIM/admin/
```

OR

https://<Guest Manager machine>/GIM/admin/

- 2. In the Login screen, enter the Administrator login credentials.
- 3. Click Login.
 - a. If the login attempt succeeds, the Application displays the successful message: You have successfully signed in as <UserName>.
 - b. If your login attempt fails, the Application displays an alert message.
- 4. (Optional) Click **Download GIM Outlook Add-In** to configure an outlook add-in to a Windows or MAC machine.



The Administrator web session disconnects, if it is inactive for a period of time as specified in the inactive time-out settings. You need to login again to use the Application. For more information about how to configure the administrator account, see the *ExtremeControl Guest and IoT Manager Configuration* document.

5. Click **close[x]** to accept and close the cookie policy information displayed at the end of the login screen. Click the hyperlink to view the organization Privacy and Cookies Policy as specified in the Administrator **Preference** settings.

Running the Provisioner Application

Use this procedure to launch the Provisioner Application.

Procedure

1. Open your web browser and enter the URL of the Provisioner Application.

http://<Guest Manager machine>/GIM/provisioner/

OR

https://<Guest Manager machine>/GIM/provisioner/

2. In the Login screen, enter the Provisioner login credentials.

Provisioner can be LPR user or LDAP user.

Note: If you do not have a Provisioner account, contact Guest and IoT Manager Administrator.

- 3. Click Login.
 - 1. If the login attempt succeeds, the Application displays the successful message: You have successfully signed in as <UserName>.
 - 2. If your login attempt fails, the Application displays an alert message.
- 4. (Optional) Click **Download GIM Outlook Add-In** to configure an outlook add-in to a Windows or MAC machine.

For more information on the GIM Outlook Add-In, see the *ExtremeControl Guest and IoT Manager Configuration* document.

The Provisioner Application session disconnects, if it is inactive for a period of time as specified in the inactive time-out settings.

The Guest and IoT Manager Administrator sets the time-out threshold limit. You need to login again to use the Application.

Note:

For more information about setting the inactivity timeouts, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Provisioner login associated with REST API Onboarding Template and Outlook Add-in Onboarding Template cannot create new Guest User or Device. Only view option is available.

5. Click **close[x]** to accept and close the cookie policy information displayed at the end of the login screen. Click the hyperlink to view the organization Privacy and Cookies Policy as specified in the Administrator settings.

Using the Online Help System

The Guest and IoT Manager documentation is available as online help within the Application.



The menu icon at the top right corner of the screen provides links to additional information about your application.

Accessing Help

There are several ways to access the online help system:

- Select the **?** Help icon in the top right corner of your browser.
- Press F1 or Fn + F1 on the keyboard to open the Help to the context-

sensitive topic associated with the screen or dialog box you are using in the Application.

Help Features

The help is context-sensitive and as such, the topic displayed in the right panel changes as you navigate. To prevent the help topic from changing when you change screens in the Application, click the Pause icon at the top of the help screen. Click Resume icon to resume the help.

To open the help in a separate tab, click the **?** Launch Help icon. The left panel contains the Table of Contents. Items with a > indicate that clicking the TOC item opens another menu of options.

The Help toolbar also contains buttons to search all topics. Use the **Search** tab to search for a word or phrase in the help. In the **Search for** box type the word or combination of words you want to find, and click **Search**. The topics that contain the word or words you entered is displayed. Click the topic to be displayed in the topic pane.

Searching Within Topics

To search for specific instances of a term in only the currently accessed help topic, type **Ctrl** + **F** to open your browser's search box. Use this to search for the term or phrase in the currently accessed help topic.

Installing Guest and IoT Manager

This chapter describes how to install Guest and IoT Manager Application. You can install Guest and IoT Manager as a virtual appliance on a VMware ESXi 5.5, 6.0 or 6.5 server.

System Requirements

To install and configure Guest and IoT Manager Application, you need:

- A running Access Control Engine, reachable on the network from where you run Guest and IoT Manager.
- A system that meets the <u>requirements</u> listed in the Release Notes.
- An OVA file, if you are deploying the Guest and IoT Manager in ESXi.
- An installation of the ExtremeCloud IQ Site Engine application on the system.

VMware ESXi Server Requirements

Hardware platforms supported by VMware's ESXi server versions 5.5, 6.0 or 6.5. For more information on list of supported hardware platforms for ESXi, see http://www.vmware.com/

See the Release Notes for information about release-specific Guest and IoT Manager VM minimum system requirements (memory, CPU, disk space, interfaces).

Installation on a VMware ESXi server is done using an OVA file that uses Ubuntu as base Operating System.



Marning: Guest and IoT Manager is provided as a Virtual Appliance. Do not install or configure any other software on the VM shipped.

- Extreme Networks does not support the installation of any VMware specific, UNIX specific, or any third-party vendor package or RPM on its VM, other than what Extreme Networks ships as a package, image, or OVA.
- Do not install or uninstall any software components unless Extreme Networks specifically provides the software and / or instructs you to do so. Do not modify the configuration or the properties of any software components of the VMs (including VMware Tools) unless Extreme Networks documentation and / or personnel specifically instructs you to do so. We do not support any deviation from these guidelines.
- Extreme Networks determines which VMware Tools to install and configure. When required, Extreme Networks provides these tools as part of the installation package. Extreme Networks provides these tools because VMware Tools configures the kernel and network settings and unless Extreme Networks tests and approves these tools, We cannot guarantee that the VM works after the tool is installed and configured.

Turn off automatic VMware Tools updates if you have enabled them. Refer to the following instructions to disable automatic updates.

Preventing Automatic VMware Tools Updates

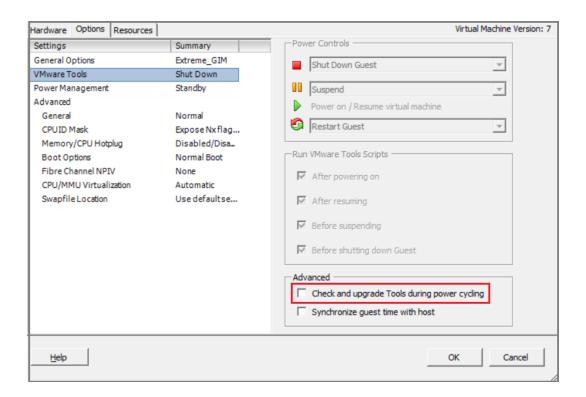
We strongly recommend you to prevent automatic VMware Tool updates and use only the tools that are delivered bundled with the installation package. Use this procedure to prevent automatic VMware Tools updates.

Use this procedure to prevent automatic VMware Tools updates.

Procedure

- 1. Use the vSphere client to log in to the ESXi Server.
- 2. Go to Getting Started > Edit Virtual Machine Settings > Options > VMware Tools > Advanced, and ensure that the Check and upgrade Tools during power cycling checkbox is not selected. This is the supported setting.
- 3. Click **OK**.

Example



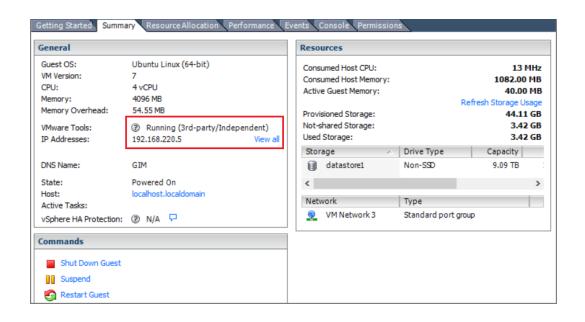
Checking the VMware Tools Status on an ESXi Server

The **Summary** tab of the VM describes the VMware Tools status. Use this procedure to check the VMware Tools status on an ESXi server versions 5.5, 6.0 or 6.5.

Procedure

- 1. Use the vSphere client to log in to the ESXi Server.
- 2. Go to the **Summary** tab.

After a fresh install, the VMware Tools status displays as "VMware Tools: Running (Current)".



🐼 Note:

VMware Tools may show as not installed. This is a known VMware issue where VMware Tools may not be detected correctly on certain hardware. However, this does not interfere with the functioning of the tools. It is a display issue only.

Network Configuration for Guest and IoT Manager — Based Authentication

Guest and IoT Manager has three network interfaces:

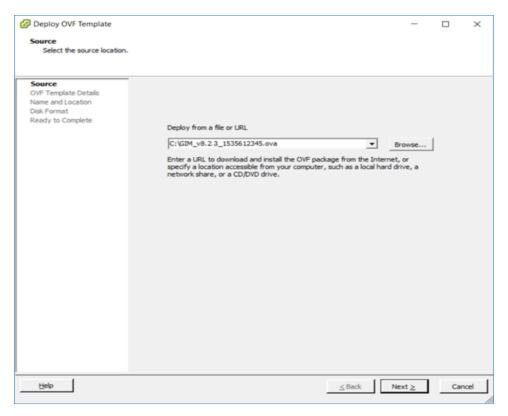
- Admin: The Admin interface provides connectivity to the Guest and IoT Manager Administrator and Provisioner web sessions. By default, this interface is also used for handling the connection with Access Control Engine.
- Service A: Depending on the network deployment, Access Control Engine can be in a separate network. You can use Service A exclusively for handling the connection with Access Control Engine (use interface and route commands).
- Service B: This is for future use.

Installing the Guest and IoT Manager Virtual Appliance

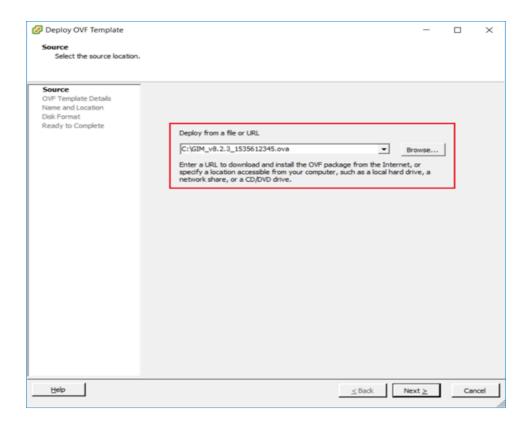
We strongly recommend that you use VMware vSphere Client to import the VM into your system. Start the VMware vSphere Client and log in to the ESXi server on which you want to install Guest and IoT Manager. Use the **Virtual Appliance Deploy OVF** option.

Procedure

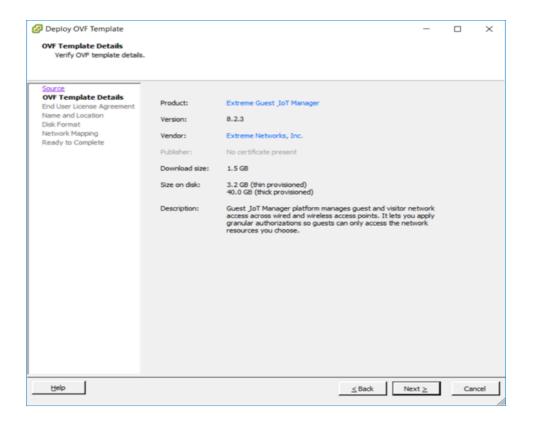
1. From the VSphere Client, select File > Deploy OVF Template.



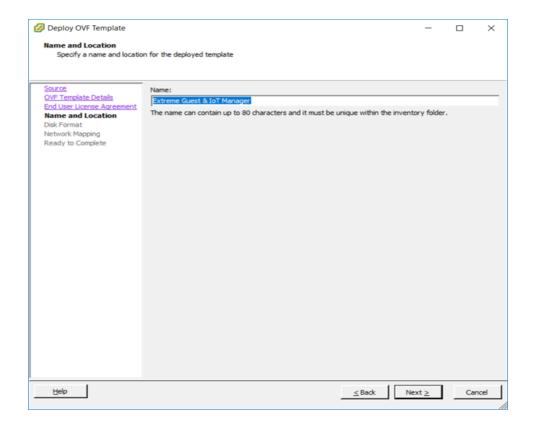
2. On the Source screen, select the location from which you want to import the Guest and IoT Manager virtual appliance and click **Next**.



3. On the OVF Template Details screen, review your settings. Click **Back** to make changes, or click **Next** to continue.

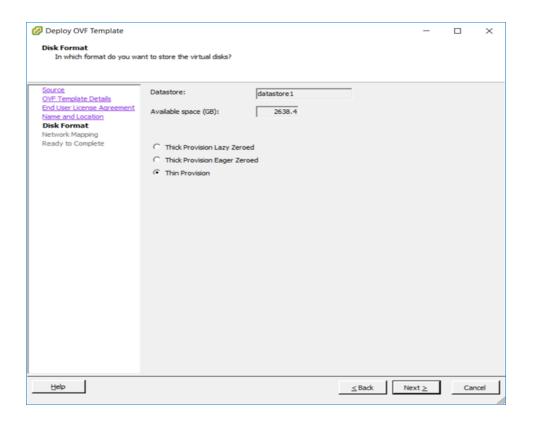


- 4. On the End User License Agreement screen, click **Accept** to accept the license and click **Next**.
- 5. On the Name and Location screen, enter a name for the virtual machine and click **Next**.



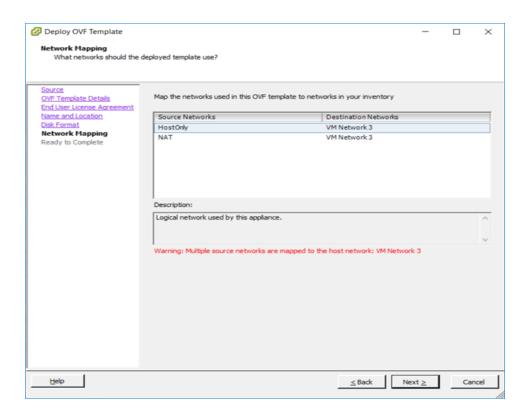
6. On the Disk Format screen, select a format in which to store the virtual machine's virtual disks and click **Next**.

We recommend to use Thin Provision mode.

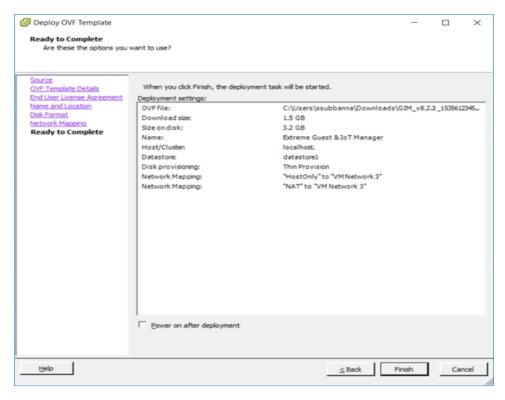


7. On the Network Mapping screen, associate the Guest and IoT Manager network interfaces to the correct VM network, based on your site configuration.

While Deploying	GIM Interfaces	ESXI Interface	Interface Inside Console
GIM-OVA in ESXI	Internal Mapping	after Deployment	II ISIDE COI ISOIE
		(Edit Settings)	
NAT	Admin	Network Adapter 1	ens33
Internal	Service B	Network Adapter 3	ens35
Host-Only	Service A	Network Adapter 2	ens34



8. On the Ready to Complete screen, review your settings. Use the **Back** button to make any changes or click **Finish** to start the import.



Configuring the Guest and IoT Manager Virtual Appliance

Use this procedure to configure the VM settings after you complete importing the VM to your system. This is the minimum configuration required to start Guest and IoT Manager Application.

Procedure

1. Power on the VM and launch the Guest and IoT Manager console. Enter the User Name and Password. The default User Name and Password is admin. The Guest and IoT Manager login screen is displayed.

```
Guest & IoT Manager 08.02.03
Node: GIM
Linux Server using Kernel 4.4.0-131-generic for x86_64
GIM login:
```

2. Enter the hostname only (no domain) fot the Guest and IoT Manager GIM admin interface.

```
[Default: GIM]: gimappliance
```

3. Enter the IP address for Guest and IoT Manager administrator interface.

```
[Default: 192.168.220.5]: 10.133.133.143
```

4. Enter the IP netmask for Guest and IoT Manager.

```
[Default: 24]:
```

5. Enter the gateway address.

```
[Default: 10.133.133.1]:
```

6. Enter the Primary DNS address.

```
[Default: 192.168.220.5]: 134.141.162.20.
```

You will receive the status message as "Please wait while the configuration is set...".

Once completed, you will view the status as:

- "Generating new self-signed certificates for IP 10.133.133.143. Tomcat restart completed successfully.
- Restarting the web services to listen on the new IP Address.
- Please verify the route setting using the "route command".
- Changing the DNS Setting. Tomcat restart completed successfully.
- 7. Enter the Domain name for GIM machine.

```
[Default: localdomain]: extremenetworks.com
```

- 8. To continue setup of Guest and IoT Manager, open a browser to the following URL: https://<IP address of GIM>/GIM/admin/. Use admin as the username and password to login and continue the setup procedures as listed in the following sections.
- 9. Once the user has completed the procedures mentioned above, follow the steps from Guest and IoT Manager Configuration inExtremeCloud IQ Site Engine and Access Control in Extreme Control User Guide. For more information, see https://emc.extremenetworks.com/content/oneview/docs/network/docs/t_ht_gim_config.htm.

Ports Used In Guest and IoT Manager

This section contains information about used in Guest and IoT Manager.

Port Details

Use the data in the following table to use the ports for Guest and IoT Manager.

Port	Description
25	This port is used for SMTP/SMS.
53	This port is used for DNS resolution.
443	This port is used for Guest and IoT Manager web GUI access for the Administrator / Provisioners.
1812	This port is used for RADIUS.
1813	This port is used for RADIUS Accounting.

8444	This port is used as the default port for REST. However, this port
	can be changed by the Administrator.

Administering Guest and IoT Manager

This module is intended for Guest and IoT Manager Administrator and describes how to manage and troubleshoot the Application and its components.

If you are a Provisioner, you may skip this module and proceed to <u>Configuring</u> Onboarding Template.

Configuring the Administrator Account

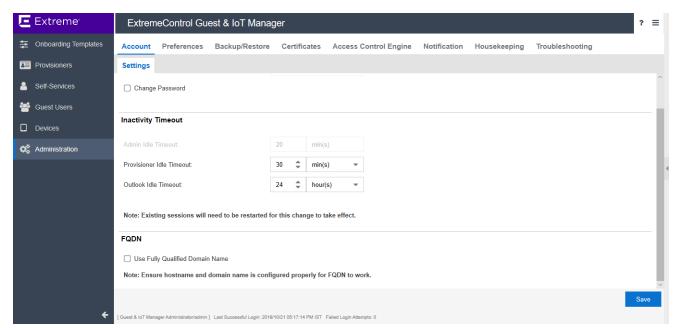
The **Account** tab in Administration menu allows you to modify the password and timeout values for Administration, Provisioner, and Outlook sessions.

Changing the Administrator Password

Use this procedure to change the password of the Guest and IoT Manager Administrator.

Procedure

1. In the navigation pane, click **Administration > Account** tab.



- 2. In the Administrator section, select **Change Password** to modify the existing password details.
- 3. Enter the details in Current Password, New Password and Confirm New Password fields. The timeout for administrator is from the ExtremeCloud IQ Site Engine but the rest are from the Guest and IoT Manager (GIM) application.
- 4. Click **Save** to submit the configuration.

Field Descriptions

Use the data in the following table to use the Administrator section.

Name	Description	
Username	By default, the Username field is disabled.	
Current Password	Specifies the current password that is used to login the Guest and IoT Manager Application.	
New Password and Confirm New Password	Configures a new password for the Administrator account. The Guest and IoT Manager encrypts the password. The new password must meet the following complexity checks:	
	Ensure that you use minimum of eight characters in the password.	
	Password must be a combination of Lowercase, Uppercase, One Number, and at least one Special character from the following:	
	! @ # \$ % ^ & * () - +	
	New password cannot match the three recently used passwords.	
	If the password does not meet the complexity criteria, the system displays an error message.	
	Note: We recommend that you change the Administrator password after you have completed the initial setup of Guest and IoT Manager Application.	

Setting Inactivity Timeouts

Use this procedure to modify the timeout values for Administration, Provisioner and Outlook sessions.

Procedure

- 1. In the navigation pane, click **Administration > Account** tab.
- 2. In the Inactivity Timeout section, modify the duration and select the duration units from the **Idle Timeout** and **Outlook Idle Timeout** drop-down list.
- 3. Click **Save** to save the configuration.

Field Descriptions

Use the data in the following table to use the **Inactivity Timeout** section.

Name	Description
Admin Idle Timeout	Displays the time-out configured in ExtremeCloud IQ - Site Engine. The timeout for administrator is from ExtremeCloud IQ - Site Engine but the rest are from the Guest and IoT Manager (GIM) application.
Provisioner Idle Timeout	Configures the idle time-out period. The time-out period disconnects the Provisioner Application after a period of inactivity that exceeds the applicable threshold. You must log in again to use the application with the new changes.
	The default time-out period is 30 minutes and the maximum period is 24 hrs.
Outlook Idle Timeout	Configures the idle time-out period for Outlook. The time-out period disconnects the Outlook Application after a period of inactivity that exceeds the applicable threshold. You must log in again to use the application with the new changes.
	The default time-out period and the maximum period is 24 hours.

Setting FQDN

Use this procedure to enable FQDN.

Procedure

- 1. In the navigation pane, click **Administration > Account** tab.
- 2. In the FQDN section, select the **Use Fully Qualified Domain Name** field to use FQDN instead of IP address for the Guest and IoT Manager (GIM) application

Note:Ensure hostname and domain name is configured properly for FQDN to work.

Click Save to save the configuration.

Field Descriptions

Use the data in the following table to use the FQDN section.

Name	Description
Use Fully Qualified Domain	Configures the Fully Qualified Domain Name to be used instead of IP address for the Guest and IoT Manager (GIM) application.
Name	Note: The hostname and domain name must be configured properly for FQDN to work.

Setting Preferences

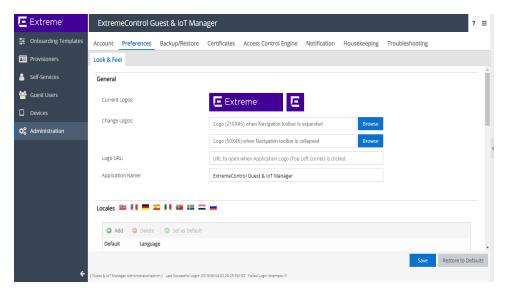
The **Preferences** tab in Administration menu allows you to customize the User Interface to fit your personal preferences like changing the application logo, name, language, file manager, terms of use and privacy policy information. You can use these settings to brand the application's look and feel as per the requirement.

Customizing General Preferences

Use this procedure to modify the logo and application name.

1. In the navigation pane, click **Administration** > **Preferences** tab.

By default, the Look and Feel screen is displayed along with the current logo used in the application.



- 2. In the General section, configure the Logo, URL and Name as following:
 - 1. Click **Browse** to navigate to the file you wish to upload in the **Change Logo** field, when the navigation toolbar is expanded / collapsed.
 - 2. Optional: Enter the specified URL address in the Logo URL field.
 - 3. Enter the application name that you want to change in the **Application Name** field.
- 3. Click **Save** to save the configuration or **Restore to Defaults** to cancel the changes and restore to default value.

Field Descriptions

Use the data in the following table to use the General section.

Name	Description
Current Logos	Displays the default or currently configured logo.

Change Logos	Navigates to the file you prefer to upload when navigation toolbar is expanded or collapsed. **Note:* The height and width of the expanded logo must be 210 * 45 pixels and collapsed logo must be 50 * 45 pixels.	
Logo URL	Configures the URL to the Logo button. You can access the specified link in a new window when you click on the Logo.	
Application Name	Customize the name of the Guest and IoT Manager application.	

Setting the Locales

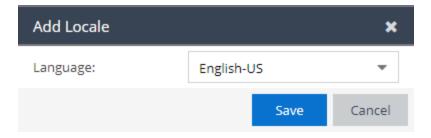
Use this procedure to change the language preference of the Application.

Note: This setting applies to only Provisioner, Self-Service and Outlook Add In Provisioner. The Provisioner has to login again to view the modified changes.

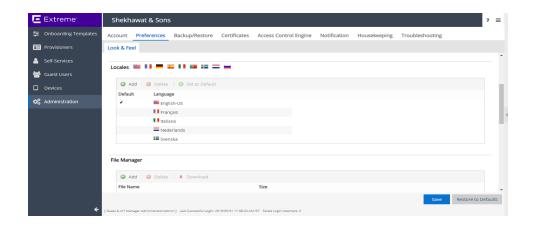
Procedure

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the Locales section, click Add.

The Add Locale screen is displayed.



3. In the Add Locale screen, select the required language preference from the **Language** field drop-down list and click **Save**. The selected language preference is added to the list.



- 4. Select the required language and click **Set as Default**. The selected language is displayed as default language during Provisioner login.
- 5. (Optional) Select the required language(s) and click **Delete** to clear the added language.
 - The default language cannot be removed. Use **Ctrl / Shift** to select multiple records to delete.
- 6. Click **Save** to save the configuration or **Restore to Defaults** to cancel the changes and restore to default value.

Field Descriptions

Use the data in the following table to use the **Locales** section.

Name

Language

Displays the preferred language in which you want the application to be displayed for the Provisioner. Currently, the **Guest and IoT Manager** application is available in the following languages: English, French, German, Spanish, Italian, Portuguese, Swedish, Dutch, and Russian.

Administrator can select a maximum of five languages including default language and also select any one of the five languages as default. Custom Attributes in Onboarding Template can be configured using these languages.

The configured languages are available for the Guest and IoT Manager Provisioner, Self-Service Provisioner, and Outlook Add In.

 Provisioners / Outlook Add-In Page: The login page loads with the default language selected. On clicking a desired language, the page reloads with the selected language.

Note: The Provisioner has the option to select language only in the login page. The selected language in the login page is used throughout the Provisioner's session.

Provisioner's language preference is stored in the browser as a persistent cookie and used for subsequent sessions. Provisioner can change this by selecting any other language to overwrite the cookie.

• Self-Provisioning Page: The languages are displayed in both Guest User and Device Registration page. On clicking a desired language, the page reloads with the selected language.

Configuring the File Manager

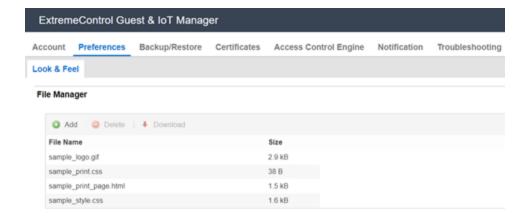
Use this procedure to upload a file and customize the printer friendly page.

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the File Manager section, click Add.

The Add File screen is displayed.



- 3. In the Add File screen, click **Browse** to navigate to the file you wish to upload.
- 4. Click **Upload**, to upload the files to the File Manager. The uploaded file can be used in Onboarding Template to customize the printer friendly page.



- 5. (Optional) Select the required file name from the displayed list and click **Download** to download the file.
- 6. (Optional) Select the required file(s) name from the displayed list and click **Delete** to delete existing uploaded file.

Use **Ctrl / Shift** to select multiple records to delete. You cannot delete the file,

- If the selected sample file is an HTML file and used in any of the Onboarding Template.
- If the selected file is a default file.

7. Click **Save** to save the configuration or **Restore to Defaults** to cancel the changes and restore to default value.

Field Descriptions

Use the data in the following table to use the File Manager section.

Name	
	Description
Add File	Uploads the files to customize the printer friendly page. By default, the application is pre-installed with the following four samples:
	• sample_print.css
	• sample_print_page.html
	• sample_style.css
	• sample_logo.gif
	1 Important
	Ensure that the total size of all the files is less than 10 MB, though there is no restriction on number of files in File Manager.

Guest User Attributes

Select the Guest User attributes that you want to display in the page by adding the following appropriate variables in the HTML file:

Attributes	Definition
\$username	Displays the Guest User Name.
\$password	Displays the Guest account password.
\$firstname	Displays the Guest first name.
\$lastname	Displays the Guest last name.
\$email	Displays the Guest email address.
\$mobilephone	Displays the Guest mobile phone number.

\$starttime	Displays the start time when the Guest account becomes usable.
\$endtime	Displays the end time of the Guest account.
\$termsofuse	Displays the terms of use text. For more information, see the Terms of Use field description in Configuring General Details .
\$usercustom1 to \$usercustom6	Displays additional information required during user creation.

🐼 Note:

You can retrieve the uploaded External Images / CSS files from the File Manager by using the URL in the following format and also entering the actual file name in place of the file name variable:

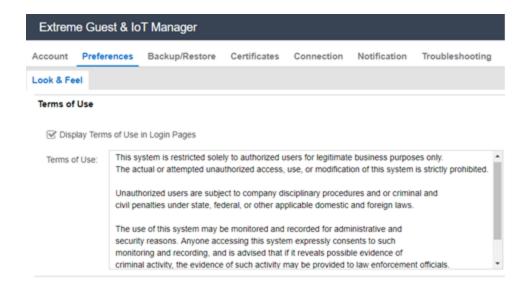
/GIM/uploads/<file_name>

Sample:

Configuring Terms of Use

Use this procedure to configure Terms of Use to be displayed on the login page.

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the Terms of Use section, select Display Terms of Use in Login Pages to display the terms of use information on the login page. By default, this is selected.

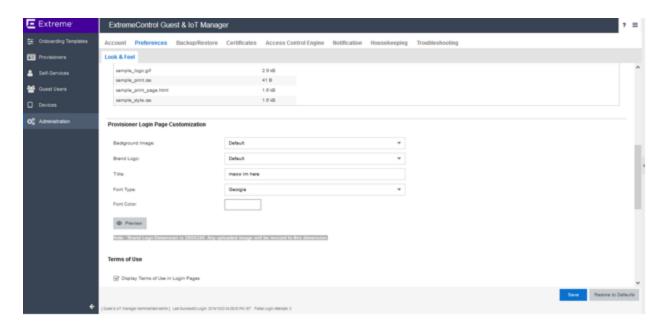


- 3. (Optional) Edit the default text given in the **Terms of Use** section as its a free form text box.
- 4. Click **Save** to save the configuration or **Restore to Defaults** to cancel the changes and restore to default value.

Customize Provisioner Login Page

Use this procedure to customize Provisioner Login page

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the Provisioner Login Page Customization, select **Background Image**, **Brand Logo**, **Title**, **Font Type**, and **Font Color**.
- 3. (Optional) Click **Preview** to Preview the changes made in the Provisioner Login Page.
- 4. Click Save to save the changes.

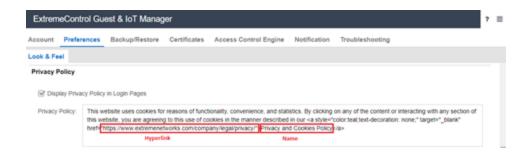


Name	Description
Brand Logo	Configures the Brand Logo. The Brand Logo Dimension is 380X245. Any uploaded image will be resized to this dimension.
Title	Configures the title of Provisioner Login Page.
Font Type	Configures the font type of all the text in Provisioner Login page.
Font Color	Configures the font color of all the text in Provisioner Login page.
Preview	Previews the changes made in the Provisioner Login Page
Background Image	Configures the Background Image of Provisioner Login Page.

Configuring Privacy Policy

Use this procedure to configure Privacy Policy to be displayed on the login page.

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the **Privacy Policy** field enter the required privacy policy information.
- 3. (Optional) Edit the default text given in the **Privacy Policy** field as it is a free form text box. Maximum length for the text allowed is 550 characters.
 - Note: You can change the privacy policy hyper link inside the "href" tag, if required. You can also change the name specified for the hyperlink on need basis.

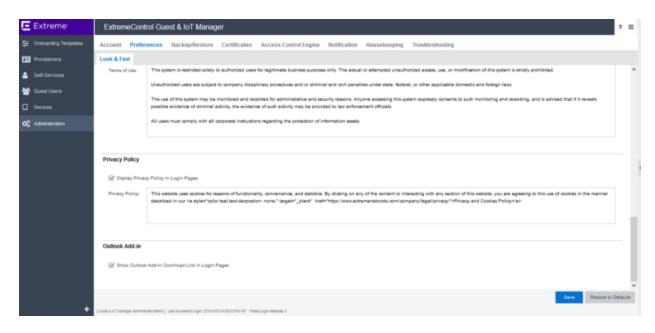


4. Click **Save** to save the configuration or **Restore to Defaults** to cancel the changes and restore to default value.

Outlook Add-In

Use this procedure to configure the Outlook Add-In Download Link to be displayed on the login page.

- 1. In the navigation pane, click **Administration** > **Preferences** tab.
- 2. In the Provisioner Login Page Customization, select **Show Outlook Add-In Download Link to configure the Outlook Add-In Download Link Pages** that is to be displayed on the login page.
- 3. Click **Save** to save the changes.



Name	Description
Outlook Add-lin Download Link in Login Page	Displays the Outlook Add-In Download Link in Login Page when the Outlook Add-In Download Link in Login Page field is selected.

Backup and Restore Configurations

The **Backup / Restore** tab in the Administration menu allows you to backup and restore Guest and IoT Manager configurations. This capability enables you to port the configurations between multiple Guest and IoT Manager deployments.

The configurations you can backup and restore include:

- Access Control Engine configurations
- RADIUS configurations
- Root certificates
- HTTPD Web server configuration (HTTP, HTTPD Certificates, SSL, and so

on)

• Configuration such as SMTP, SMS Gateway, SMS Provider and files that are present in the File Manager.

Note:

Guest Users, Devices, Provisioners, Self-Service Provisioner, and Onboarding Templates configurations are stored on the ExtremeCloud IQ - Site Engine database for corresponding Guest and IoT Manager domain and are not part of the Guest and IoT Manager backup / restore operations.

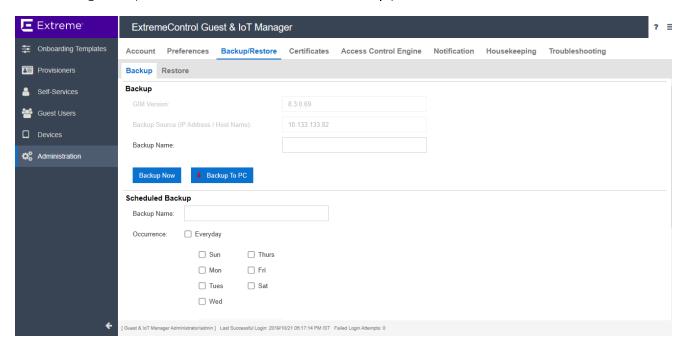
You can only store a maximum of 25 backup configurations per Guest and IoT Manager domain.

Storing Backup Configuration

Use this procedure to backup the configurations.

Procedure

1. In the navigation pane, click **Administration** > **Backup / Restore** tab.



- 2. In the Backup section, enter the name of the file in the Backup Name field.
- 3. Perform one of the following:
- Click Backup Now to save the local configurations to ExtremeCloud IQ -Site Engine.
- Click **Backup to PC** to save the Backup the Guest and IoT Manager (GIM) application Configurations to the Local Personal Computer.

Field Descriptions

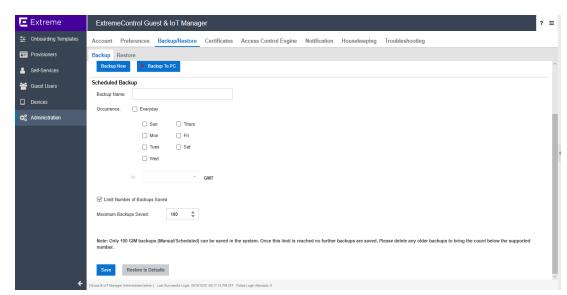
Use the data in the following table to use the Backup screen.

Name	Description
GIM Version	Displays the Guest and IoT Manager Application version number.
IP Address / Host Name	Displays the IP address / Host name of the Guest and IoT Manager Application for readability.
Backup Name	Configures the name of the backup file. When you specify the name for the backup file, it will be saved with the same unique name and will be displayed in the Restore screen.

Scheduling Backup

Use this procedure for scheduling the backup configurations to do the following:

- Provide a name for the scheduled backup.
- Schedule the occurrence for the backup.
- Schedule a time for the backup.
- (Optional) Limit the number of backups to be saved.



1. In the navigation pane, click **Administration** > **Backup / Restore** tab.

- 2. Within the Scheduled Backup section, in the **Backup Name** field, enter the name of the Backup.
- 3. In the **Occurrence** field, select the occurrence for the scheduled backup as required.
- 4. In the At field, select the time for the scheduled backup.
- 5. (Optional) Click Limit Number of Backups Saved and select the number of backups to be saved from the Maximum Backups Saved drop down list.
 - Note:

The Maximum Backups Saved is configured as 100 by default. If the number of saved backups saved exceeds that value, Guest and IoT Manager automatically deletes the oldest backups.

6. Click Save.

- Once the scheduled backup occurs on a day and time, the backup configurations are then visible in the Restore Panel. Where, the Backup name specified by the user is displayed with the date and time at which it is scheduled. For example: BackupName YYYYMMDD HHMMSS.
- The required backups can be restored by selecting a backup from the restore panel.

Field Descriptions

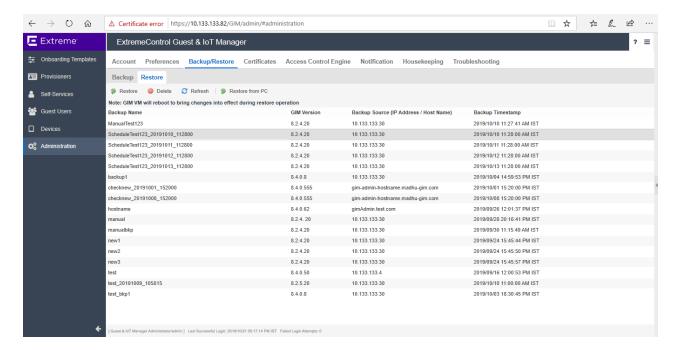
Use the data in the following table to use the Backup screen.

Name	Description
GIM Version	Displays the Guest and IoT Manager Application version number.
IP Address / Host Name	Displays the IP address / Host name of the Guest and IoT Manager Application for readability.
Backup Name	Configures the name of the backup file. When you specify the name for the backup file, it will be saved with the same unique name and will be displayed in the Restore screen.
Occurrence	Configures the scheduled backup for a day.
At	Configures the scheduled backup at a time in the day. This field is enabled after you select the day for the scheduled backup in the Occurrence field.
Limit Number of Backups Saved	Configures a limit for the number of backups Guest and IoT Manager saves.
Maximum Backups Saved:	Configures the maximum number of backups Guest and IoT Manager saves. This field is enabled when the Limit Number of Backups Saved field is selected.
Restore to Default	Cancels the configuration and resets back to the default settings.

Restoring Configuration

Use this procedure to restore the configurations.

- 1. In the navigation pane, click **Administration** > **Backup / Restore** tab.
- 2. Click **Restore**. The Restore screen displays all the available backup configurations in the Restore screen along with **Application Version**, **IP Address / Host Name** and **Backup Timestamp** details.



- 3. Do one of the following:
 - Select the required backup entry and click **Restore**.
 - Click on **Restore** from PC and upload the desired Backup file.

The Restore confirmation message is displayed requesting whether to restore the network configuration.

- 4. In the **Restore** screen, do the following:
 - 1. Click **Yes**, to include network configuration while restoring the backup configuration.

Network configuration includes:

- Interface IP addresses and subnet masks.
- · Static routes.

- DNS IP addresses and domain.
- 2. Click **No**, to restore the configuration without network configuration..
 - Note:

The Guest and IoT Manager Application automatically reboots the Virtual Appliance.

- 5. (Optional) Select the required backup(s) and click **Delete** to clear the added backup file. You will be asked to confirm the deletion.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

6. (Optional) Click **Refresh** to display the most recent changes.

Managing HTTPD Certificates

The Certificates tab in the Administration menu allows you to add, bind, or delete a certificate or key.

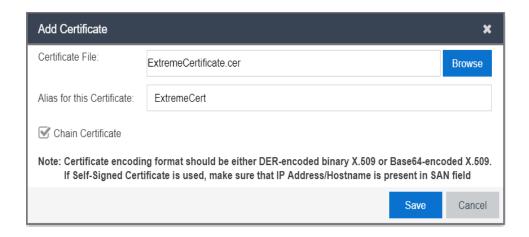
Adding a Certificate

Use this procedure to add a new certificate.

Procedure

- 1. In the navigation pane, click **Administration** > **Certificates** tab.
 - The Certificates screen is displayed.
- 2. In the Certificates screen, click Add > Add Certificate to add a new certificate.

The Add Certificate screen is displayed.



- 3. In the **Certificate File** field, click **Browse** to select the certificate from the local folder and click **Open** to upload.
- 4. In the **Alias for this Certification** field, enter the alias name to assign another name for the selected new certificate.
- 5. Select Chain Certificate checkbox to upload a chain certificate.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The added certificate and chain certificate details are displayed in the certificates table.

7. (Optional) Select the required certificate(s) and click **Delete** to remove certificates.



Active and default certificates cannot be deleted.

Use Ctrl / Shift to select multiple records to delete.

Field Descriptions

Use the data in the following table to use the Add Certificate screen.

Name	Description
------	-------------

Certificate File	Configures a new certificate for the application. This must be one of the following:
	DER encoded binary X.509 file containing the certificate.
	Base64 encoded file containing the certificate.
Alias for this certificate	Configures a unique string to identify the key entry of the certificate.
Chain Certificates	Uploads a chain certificate. A chain certificate is a sequence of certificates, where each certificate in the chain is signed by the subsequent certificate. The purpose of a certificate chain is to establish a chain of trust from a peer certificate to a trusted CA certificate.

Adding a Key

Use this procedure to add a new private key.

- In the navigation pane, click Administration > Certificates tab.
 The Certificates screen is displayed.
- 2. In the Certificates screen, click **Add > Add Key** to a new private key.

 The Add Private Key screen is displayed.



- 3. In the **Private Key File** field, click **Browse** to select the private key from the local folder and click **Open** to upload.
- 4. In the Passpharse field, enter the passphase for the selected private key.
- 5. In the Alias for this Key field, enter the alias name to assign another name for the selected new key.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The added private key details are displayed in the certificates table.

7. (Optional) Select the required private key(s) and click Delete, to remove keys.



Active and default private keys cannot be deleted.

Use Ctrl / Shift to select multiple records to delete.

Field Descriptions

Use the data in the following table to use the Add Private Key screen.

Name	Description
Private Key File	Configures a new private key for the certificate to encrypt messages intended for a particular recipient. These messages can be deciphered only by using the defined private key.
Passpharse	Configures the passphrase that needs to be used to decrypt the file containing the private key. If the private key is not encrypted, leave this field blank.
Alias for this Key	Configures a unique string to identify the key entry of the certificate which you intend to use.

Binding a Certificate

Use this procedure to bind a Key and a certificate to the HTTPD server.

Before you begin

Ensure that you have a added a certificate to the application and the same is listed in the **Administration** > **Certificates** table.

Procedure

1. In the navigation pane, click **Administration** > **Certificates** tab.

The added certificates, chain certificates, and private key are displayed along with the name and type details.

- 2. Select the required certificate you want to bind in the **Name** column.
- 3. Click **Bind** and select **Bind Certificate** from the drop-down list.

The Bind Certificate and Key screen is displayed.



Note:

Bind Certificate option in the drop-down list is disabled, if you select a incorrect certificate.

- 4. In the **Private Key** field, select the required key from the drop-down list.
- 5. (Optional) In the **Passpharse** field, enter the passphase for the selected private key.
- 6. Click Save to save the configuration or click Cancel to cancel the changes.

Field Descriptions

Use the data in the following table to use the **Bind Certificate** screen.

Name	Description
	Specifies a new private key for the certificate to encrypt messages intended for a particular recipient. These messages can be decoded only by using the defined private key.

Passpharse	Configures the passphrase that needs to be used to encrypt the file containing the private key. If the private key is not encrypted, leave this field blank. Note:
	Ensure that you provide the valid passphrase, so that the bind does not fail and result in HTTPD restart failure.

Binding a Chain

Use this procedure to bind a Certificate Chain to HTTPD server.

Before you begin

Ensure that you have a added a chain certificate to the application and the same is listed in the Administration > Certificates table.

Procedure

- 1. In the navigation pane, click **Administration** > **Certificates** tab.
 - The added certificates, chain certificates, and private key are displayed along with the name and type details.
- 2. Select the required chain certificate you want to bind in the **Name** column.
- 3. Click Bind and select Bind Chain from the drop-down list.

The Bind Chain screen is displayed.



🐯 Note:

If a chain certificate is not selected, the **Bind Chain** option in the drop-down list is disabled.

- 4. In the **Certificate** field, select the required certificate from the drop-down list.
- 5. In the **Private Key** field, select the required private key from the drop-down list.
- 6. (Optional) In the **Passpharse** field, enter the required passpharse for the selected certificate and private key.
- 7. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Field Descriptions

Use the data in the following table to use the **Bind Chain** screen.

Name	Description
Certificates	Specifies the available certificates for selection.
Private Key File	Specifies a new private key for the certificate to encrypt messages intended for a particular recipient. These messages can be decoded only by using the defined private key.
Passpharse	Configures the passphrase that needs to be used to encrypt the file containing the private key. If the private key is not encrypted, leave this field blank. Note: Ensure that you provide the valid passphrase, so that the bind does not fail and result in HTTPD restart failure.

Managing Access Control Engine

The Access Control Engine tab in the Administrator menu supports the Guest and IoT Manager Application to configure Access Control Engine.

Important:

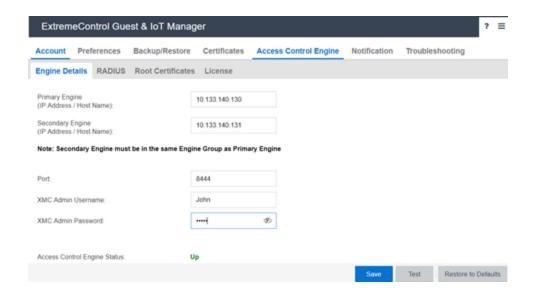
Guest and IoT Manager does not automatically connect to the Access Control Engine upon start-up. You need to configure the Access Control Engine providing the necessary details. And also, Guest and IoT Manager need not be connected to allow Guest Users to use their accounts.

Configuring Engine Details

Use this procedure to configure Guest and IoT Manager to Access Control Engine.

Procedure

In the navigation pane, click Administration > Access Control Engine tab.
 The Engine Details screen is displayed.



- 2. In the **Primary Engine** field, enter the IP address or host name of **Access Control Engine**.
- 3. (Optional) In the **Secondary Engine** field, enter the IP address or host name of any other **Access Control Engine** which is part of the same Engine Group as the Primary Engine.
- 4. In the **Port** field, enter the port number used for communicating with the Access Control Engine.
- 5. Enter the ExtremeCloud IQ Site Engine Admin Username and ExtremeCloud IQ Site Engine Admin Password of the ExtremeCloud IQ Site Engine administrative user having appropriate Guest and IoT Manager read / write access capability.

6. Click **Save** to store the valid configuration in Guest and IoT Manager Application.

Note:

The Guest and IoT Manager uses this configuration to establish connection with the **Access Control Engine**.

In the absence of these settings, Guest and IoT Manager is no longer connected to Provisioner and Self-Service Provisioning Application.

7. (Optional) Click **Test** to verify the **Access Control Engine** configuration.

The successful / failure test configuration message is displayed.

8. (Optional) Click Restore to Defaults to reset the configuration to default.

Field Descriptions

Use the data in the following table to use the Engine Details screen.

Name	Description
Primary Engine	Configures the Primary Control Engine IP address / host name of the Access Control Engine.
Secondary Engine	(Optional) Configures Secondary Control Engine IP address / host name for the Access Control Engine .
	When the primary appliance goes down the application switches to secondary appliances and vice verse with a maximum down time of 10 seconds.
Port	Configures the Access Control Engine port number to identify a specific process to which the connections needs to be forwarded when it arrives at a server. By default, the proxy value 8444 is displayed.

IQ - Site Engine - S	Specifies the Username and Password of the the ExtremeCloud IQ Site Engine administrative user which has Guest and IoT Manager Application read / write access.
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Configuring RADIUS Settings

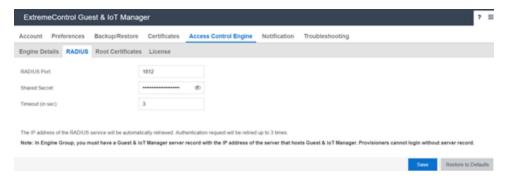
Use this procedure to specify the RADIUS settings in Guest and IoT Manager Application.

For more information on RADUIS settings, see <u>Guest and IoT Manager</u> <u>Configuration Document</u> in ExtremeCloud IQ - Site Engine.

Procedure

- 1. In the navigation pane, click Administration > Access Control Engine tab.
- 2. Click RADIUS.

The RADIUS screen is displayed.



- 3. In the RADIUS Port field, enter the port number for authentication request.
- 4. In the **Shared Secret** field, enter the pre shared key to establish the connection.
- 5. In the **Timeout** field, enter the period in seconds.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

 In Engine Group, you must have a Guest and IoT Manager Server record

with the IP address of the Server that hosts Guest and IoT Manager. Provisioners cannot login without Server record.

Field Descriptions

Use the data in the following table to use the RADIUS screen.

Name	Description
RADIUS Port	Configures the RADIUS port number where the Access Control Engine is running for centralized Authentication, Authorization, and Accounting (AAA) network access management. The default number is 1812.
	Access Control Engine uses RADIUS to authenticate Provisioners.
Shared Secret	Configures the proof of identity for authentication. The Shared Secret can be randomly selected bytes. The default shared secret is : ETS_TAG_SHARED_SECRET
Timeout (in sec)	Configures the maximum length of time in seconds to wait (for the real-time), so that Guest and IoT Manager Application retires the RADUIS login.
	If no Response, the application displays an error message. The default is 3 seconds.

Adding Root Certificate

Use this procedure to add a new Root Certificate.

Procedure

- 1. In the navigation pane, click **Administration** > **Access Control Engine** tab.
- 2. Click Root Certificates > Add, to add a new certificate.

The Add Root Certificate screen is displayed.



- 3. In the **Certificate File** field, click **Browse** to select the certificate from the local folder and click **Open** to upload.
- 4. In the Alias for this Certification field, enter the alias name to assign another name for the selected new certificate.
- 5. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The added Root Certificate details are displayed in the Root Certificates table and **Update Trust Mode** is enabled.

6. Click Trust Mode.

There are two options under the **Update Trust Mode**:

- 1. Select **All server certificates are accepted**. By default, this option is selected where all the server certificates are accepted. However, the Trust Mode gets highlighted in **RED**.
- 2. Select **Any untrusted server certificate is rejected** so that the certificate from the server is validated against the root certificates available in Guest and IoT Manager. The untrusted certificates are rejected if the identity is not verified. We recommend this as the safest option to be selected.
- Click Save to save the configuration or click Cancel to cancel the changes.
- 7. (Optional) Select the required Root Certificate(s) and click **Delete** to remove the certificates.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

Field Descriptions

Use the data in the following table to use the Add Root Certificate screen.

Name	Description
Certificate File	Adds a new Root Certificate for the application. The certificate file must contain PEM-encoded certificate.
	Make sure that the certificate does not have a password associated with it. The certificate encoding format must be any one of the following format.
	⊗ Note:
	 DER encoded binary X.509 file containing the certificate.
	 Base64 encoded file containing both the certificate and the private key.
Alias for this certificate	Configures a short unique string to identify the key entry of the Root Certificate in the keystore.
	You can use any name; Access Control Engine uses this Alias name as a key to identify the certificate in the keystore. All the installed certificate resides in the Guest and IoT Manager keystore.
	Important:
	Do not confuse the Guest and IoT Manager keystore with the browser keystore and the certificates that secure HTTPS browser sessions.

Viewing License Status

When you deploy Guest and IoT Manager for the first time, ensure that a valid Guest and IoT Manager license is added and enforced in ExtremeCloud IQ - Site Engine so that **Access Control Engine** details can be configured in Guest and IoT Manager. For more information, see <u>Configuring Engine Details</u>.

If the license is expired:

- License status is displayed as Not Installed / Expired.
- Provisioner users are logged out including Outlook Provisioner and all the

configured self-services become non-operational.

Valid new license needs to be added again to function.

Different License Status

Scenario	License Status
When engine details not configured	Not Available
Invalid Credentials	Not Available
Not compatible	Not Available
Not Reachable	Not Available
Not Trusted	Not Available
Reachable and valid license present	Valid
Reachable and there is no valid license present	Not Installed / Expired

For more information on Server License, see <u>Diagnostics</u> in ExtremeCloud IQ - Site Engine.

😵 Note:

When the connection fails from Guest and IoT Manager to **Access Control Engine**, the system waits for a minute and if the connection does not restore, all the configured self-services become non-operational.

When the connection restores, all the services are reactivated automatically.

Setting Notification Parameters

The **Notification** tab in the Administrator menu specifies the Email and SMS configuration that are used to notify the Guest Users created by the Provisioners. The usual way to provide the credentials (User Name and Password) is through email. Alternatively, the Administrator can send the credentials in an email to the front desk personnel who can pass them to the Guest as a hard copy.

For more information, see **Enabling E-mail Notification**.

The Administrator can also configure the application to send the credentials via an SMS text message to the mobile phone. The configured carrier Gateway / Provider communicate with the Guest and IoT Manager on how to send the messages.

For more information, see Adding SMS Gateway and Adding SMS Provider.

Important:

You can use a public mail server such as Gmail or Yahoo as the Simple Mail Transfer Protocol (SMTP) server. However, there are some limitations with these web-based SMTP servers.

Emails sent using Web-based SMTP servers are likely to be marked as spam by mail clients including Outlook. Guest Users need to be made aware of this so that they do not overlook the mail.

Yahoo SMTP comes with a strict limit of 500 outbound emails per day (and each message can be sent up to 100 recipients), to prevent spammers from using it for their unsolicited messages.

Gmail SMTP comes with severe sending limits to prevent spammers from using its outgoing server to blast out garbage emails. The boundary is 100 recipients a time and 500 messages per day. If you cross this restriction, Google blocks your account.

Google blocks sign-in attempts from unknown sources. To avoid this issue, you need to allow access to apps to get authenticated. You can find this option in your Google Account Security Setting. Select **Allow less secure apps** as **ON** to use these non-Google apps and devices despite the risks. For more information, see Let less secure apps access your account.

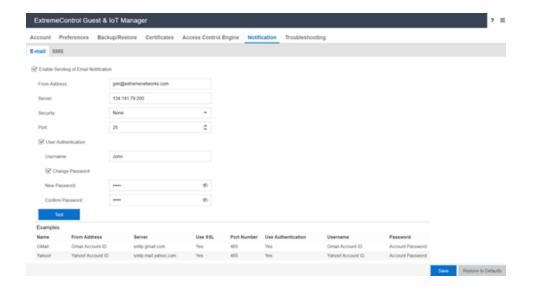
Enabling E-mail Notification

Use this procedure to configure SMTP email settings.

Procedure

1. In the navigation pane, click **Administration > Notification** tab.

By default, the **E-mail** screen is displayed.



- 2. In the **E-mail** screen, select the **Enable Sending of Email Notification** checkbox to configure SMTP.
- 3. In the **From Address** field, enter the email address that needs to be displayed in the **From** line of the messages that application sends.
- 4. In the **Server** field, enter the fully-qualified domain name or the IP address.
- 5. In the **Security** field. select **None**, **SSL/TLS** or **STARTTLS** options from the drop-down list.

By default, None option is selected to process email with Non-SSL connections.

If you select **STARTTLS** option, enter the port number to send the encrypted email.

If you select SSL/TLS option, the SSL Certificate field is enabled. You can perform the following:

- Select System option from the SSL Certificate field drop-down list, to use the known Root Certificates that are shipped along with Guest and IoT Manager Application.
- Select Custom option from the SSL Certificate field drop-down list to import the SMTP server certificate specified in Administration > Connection > Certificate tab. When you successfully import the certificate, this certificate is used to establish trust with the SMTP server.
- 6. In the **Port** field, enter the SMTP port number.

7. (Optional) Select **User Authentication** checkbox, if your SMTP server requires authentication.

The User Name and Change Password fields are enabled.

- 1. Enter the login credentials of SMTP server user in the **Username** field.
- 2. Select **Change Password** checkbox, to modify the password details.
- 8. (Optional) Click **Test** to verify that the application can reach the server using the specified email address before saving the configuration.

The Test SMTP Configuration screen is displayed.

- 1. Enter the sample email address in the **Test Destination Email** field.
- 2. Click **Send Test Email** to send the email or click **Cancel** to cancel the operation.
 - Note:

Ensure that you set up an appropriate email notification template. For more information, see <u>Configuring the Account Notification</u> Templates.

9. Click **Save** to save the configuration or **Clear** to clear the configuration.

For more information, sample email domains are listed as examples in the **E-mail** screen beneath frame. For example, Yahoo, Gmail, and so on.

Field Descriptions

Use the data in the following table to use the E-mail screen.

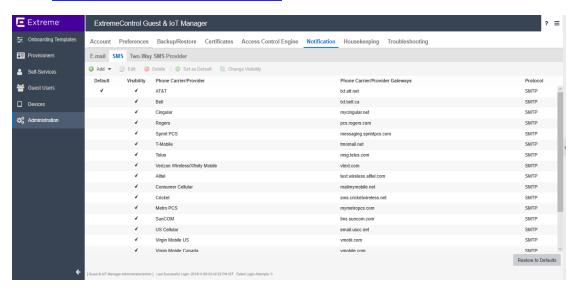
Name	Description
Enable Sending of Email Notification	Configures the Application to send Guest Users, Provisioners, and / or others an email notification, when Guest User accounts are created and / or updated.

From Address	Configures email address that needs to be displayed in the From line of the messages. For example, user provisioning notifications contains a From Address such as guestreception@extremenetworks.com. This address appears in all types of emails that Guest and IoT Manager Application sends.	
Server	Configures the domain name or the IP address assigned to the mail server that transmits email notifications from the application.	
	The SMTP server name can be an email address.	
	You can enter a public mail server such as Gmail or Yahoo as the SMTP server.	
Security	Specifies SSL/TLS and STARTTLS options.	
SSL Certificate	Specifies System and Custom options.	
	 System: Uses the shipped Root Certificate to establish trust with the SMTP server. If the application fails to establish trust, the email functionality does not work. Custom: Fetches the custom SMTP server certificates that are binded in the Application. For more information, see Binding a Certificate. Upon successful import this certificate is used to establish trust with SMTP server. 	
Port	Configures the SMTP port number to be used by the application for the SSL connection.	
Username	Specifies the login name of the SMTP server user.	
New Password and Confirm Password	Configures a new password for the account.	
Test Destination Email	Verifies the SMTP settings by sending the sample email.	
Restore to Default	Cancels the configuration and resets back to the default settings.	

Configuring SMS Gateway / Provider

The Administrator can perform the following procedures to send the login credentials to Guest Users.

- AddingSMSGateway
- AddingSMSProvider
- ModifyingSMSGateway/Providers
- Restore to Default SMS Gateways



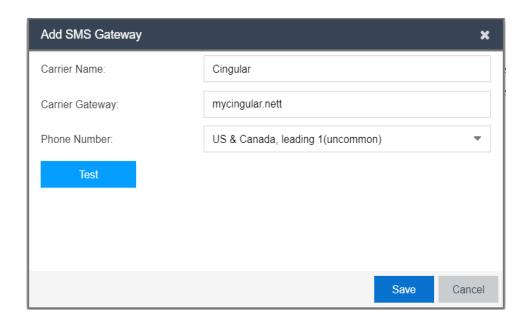
Adding SMS Gateway

Use this procedure to configure carrier gateways settings to send SMS messages to mobile service providers.

Procedure

- 1. In the navigation pane, click **Administration** > **Notification** > **SMS** tab.
- 2. Click Add and select Add SMS Gateway option from the drop-down list.

The Add SMS Gateway screen is displayed.



- 3. In the Carrier Name field, enter the name of the carrier.
- 4. In the Carrier Gateway field, enter the carrier gateway address.
- 5. In the **Phone Number** field, select the required calling options from the drop-down list.
- 6. Click **Test** to test the added gateway service configuration.

The Test Gateway Configuration screen is displayed.

- 1. Enter the phone number in the **Test Destination Mobile Number** field.
- 2. Click **Send Test SMS** to send the SMS or click **Close** to close the screen.
- Note:

Ensure that you set up an appropriate email notification template. For more information, see Configuring the Account Notification Templates.

- 7. Click **Save** to save the configuration or click **Cancel** to cancel the changes.
 - The added carrier gateways details are displayed in the SMS Gateway screen along with **Phone Carrier** and **Gateway** details.
- 8. (Optional) Select the required added carrier gateway and click **Set as default** option in the **SMS Gateway** screen.
 - If you configure a default gateway, the default gateway is used to send

SMS text messages to each mobile service provider.

Note:

The first SMS gateway is always a default gateway. You can select the required gateway and Set as default, if required.

- 9. (Optional) Select the required added carrier and click **Edit** to modify the SMS gateway. For more information, see Modifying SMS Gateway/Providers.
- 10. (Optional) Select the required added carrier gateway(s) and click **Delete** option in the **SMS Gateway** screen to clear the added carrier service. You will be asked to confirm the deletion.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

Field Descriptions

Use the data in the following table to use the Add SMS Gateway screen.

Name	Description
Carrier Name	Configures the carrier service provider name. It is mandatory to configure a gateway for each mobile phone provider to whom the application sends the Guest User login details.
Carrier Gateway	Configures the carrier gateway address to send SMS text messages.
Phone Number	Specifies the phone number format of the selected country. If you select specify length option from the drop-down list, the Digits (single number or range. For example, 10 — 15) field is enabled.
Digits (single number or range. For example, 10 — 15)	Configures the number range for the phone number input field.
Test Destination Mobile Number	Verifies the SMS configuration by sending a sample SMS to the specified mobile number.

Adding SMS Provider

Use this procedure to configure Clickatell gateways settings to send bulk SMS messages to mobile service providers.

Before you begin

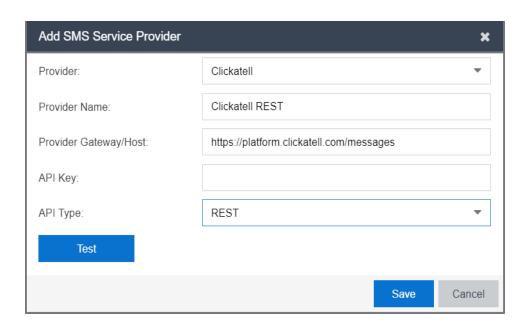
Ensure that you have completed Clickatell registration and have activated your account ID. The account activation email received includes User ID and Email address information.



If Do not Disturb (DND) service is enabled in your mobile network, you will not be able to receive any SMS notification.

Procedure

- 1. In the navigation pane, click **Administration** > **Notification** > **SMS** tab.
- Click Add and select Add SMS Provider option from the drop-down list.
 The Add SMS Provider screen is displayed.



3. In **Provider** field, select the name of the provider.

Currently, Clickatell is the only available service provider.

- 4. In the **Provider Name** field, enter the name of the provider.
- 5. In the **Provider Gateway / Host** field, check the available URL details.

The value displayed in this field is based on the option selected in the API Type field.

- 6. In the API Key field, enter the key details obtained from Clickatell.
- 7. In the API Type field, select the type from the drop-down list.

By default, REST option is selected.

8. Click **Test**, to test the added gateway services configuration.

The Test Gateway Configuration screen is displayed.

- 9. In the Add SMS Provider screen, do the following:
 - 1. Enter the phone number in the **Test Destination Mobile Number** field.
 - 2. Click **Send Test SMS** to send the SMS or click **Close** to close the screen.
- 10. Click Save to save the configuration or click Cancel to cancel the changes.

The added provider gateways details are displayed in the SMS Gateway screen along with Phone Provider, Provider Gateway and Protocol (REST/HTTP) details.

- 11. Select the required added provider gateway and click **Set as default** option in the SMS Gateway screen. On Guest User summary screen, the complete address as specified in the SMS provider configuration is now displayed with the essential part of the name.
- 12. (Optional) Select the required added carrier and click **Edit** to modify the SMS provider. For more information, see Modifying SMS Gateway/Providers.
- 13. (Optional) Select the required added provider gateway(s) and click **Delete** option in the **SMS Gateway** screen to clear the added provider service. You will be asked to confirm the deletion.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

Field Descriptions

Use the data in the following table to use the Add SMS Provider screen.

Name	Description
Provider	Specifies the list of Providers.
	Currently, Clickatell is the only available service provider.
Provider Name	Configures the Provider name.
Provider Gateway	Specifies the URL information.
/ Host	The default value for Provider Gateway / Host field is provided for both REST and HTTP API types.
API Key	Configures the API key.
	You need to copy the API key from Clickatell account.
	(https://portal.clickatell.com/#/login)
API Type	Specifies the API type available for the selected service provider.
	The options available are:
	• REST
	• HTTP

Modifying SMS Gateways / Providers

Use this procedure to modify SMS Gateways / Providers.

Procedure

- 1. In the navigation pane, click **Administration > Notification** tab.
- 2. Click **SMS** tab. The added carrier / provider gateway details are displayed in the SMS screen along with **Phone Carrier**, **Gateway** and **Protocol** (HTTP / REST) details.
- 3. Select the required phone carrier / provider from the list.
- 4. Click **Edit** to view the carrier details.
 - Note:

You can also view by double-clicking the required phone carrier / provider from the list.

- 5. In the **Edit SMS Gateway** screen, modify the fields required. The fields are displayed based on the selected phone carrier / provider type.
- 6. (Optional) The **Change Visibility** option can be used to hide SMS Gateways/Providers from the Provisioner application and the Self Registration page of Guest Users. This option can be used to either enable or disable the visibility of the selected **SMS gateway/provider**. The change visibility button is disabled when the default gateway is selected.
- 7. Click Save, to save the configuration or click Cancel to cancel the changes.

Restore to Default SMS Gateways

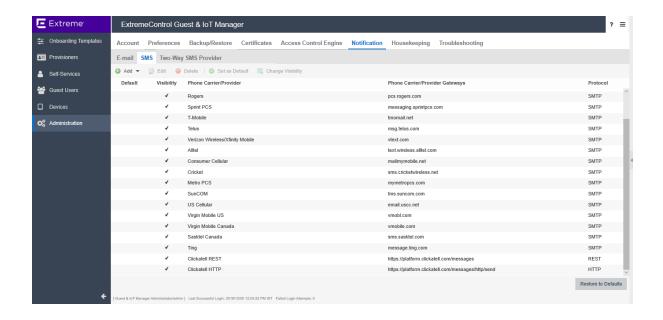
Use this procedure to modify SMS Gateways / Providers.

Procedure

- 1. In the navigation pane, click **Administration > Notification** tab.
- 2. Click **SMS** tab. The added carrier / provider gateway details are displayed in the SMS screen along with **Phone Carrier**, **Gateway** and **Protocol** (HTTP / REST) details.
- 3. Click **Restore to Default** to restore the default SMS Gateways.
 - 3 Note:

When **Restore to Default** is selected the newly added/deleted Gateways are removed and the Defalut SMS Gateways are displayed.

- 4. In the Restore windows pop-up, Do one of the following:
- Select **Yes** to restore the default SMS configurations.
- Select No to avoid restoring the default SMS configurations.

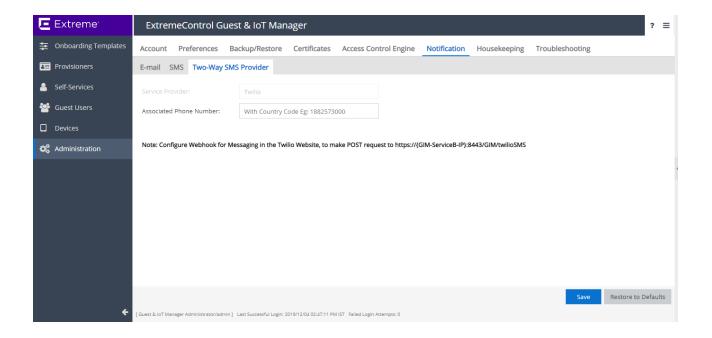


Two-Way SMS Provider

Use this procedure to configure the Two-Way SMS Provider.

Procedure

1. In the navigation pane, click **Administration > Notification** tab.



- 2. Select the Two-Way SMS Provider tab and enter the field details as required.
- 3. Click Save to Save the changes.

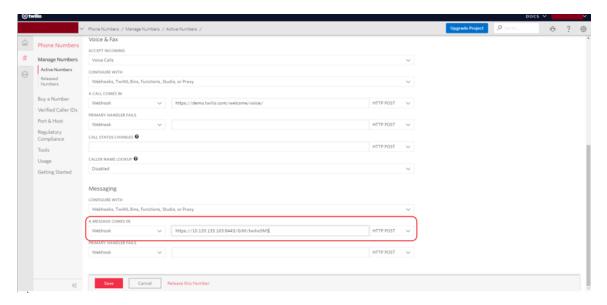
Field Descriptions

Use the data in the following table to use the Backup screen.

Name	Description
Service Provider	Service Provider Displays the name of the service provider.
Associated Phone Number	Enter the Associated Phone Number with the country code.
Save	Saves the configuration.
Restore to Defaults	Cancels the configuration and resets back to the default settings.

Note:

Configure Webhook for Messaging in the Twilio Website, to make POST request to https://{GIM-ServiceB-IP}:8443/GIM/twilioSMS.



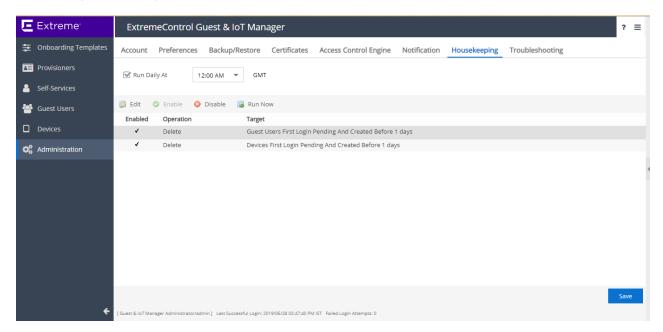
Housekeeping

The Housekeeping section for Guest and IoT Manager will help clear out the

records of Guest Users and Devices which have their first login pending.

Housekeeping tab under the administration section allows you to specify Housekeeping tasks that are set to show the details of the housekeeping tasks that are run on Guest and IoT Manager. The administrator can configure the time when the housekeeping tasks must be performed.

When the tasks are not needed, they can be disabled. The results are displayed in the logs to verify completion of process status.



Scheduling Housekeeping Tasks

Use this procedure to schedule housekeeping tasks.

Procedure

- 1. In the navigation pane, click **Administration** > **Housekeeping** tab.
- 2. In the Run Daily At field, select the time of occurrence.
- 3. Select the task for the targeted housekeeping task cleanup and do one of the following:
 - Click **Enable** to enable the selected housekeeping task.
 - Click **Disable** to disable the selected housekeeping task.

4. To delete Guest Users with First login pending, click the **Edit** button. In the Edit window pop-up enter the number of days to schedule the housekeeping task for the targeted task. The maximum value is 365 days.

Note:

For Devices/Guest Users with First login pending to be deleted before 'x' days, the scheduled tasks considers the period of 24 hours as 1 day. Therefore, for 'x' days the period will be 'x' * 24 hours before running the task.

For Example:

If the current date is 24th of a month and time is 12:00 PM then, a task scheduled to delete Guest Users with First login pending and created before 2 days will delete all Guest Users with First Login pending and created before 12 PM on the 22nd of that month.

Housekeeping tasks can be performed for the following:

- Guest Users
- Devices
- Guest Users and Devices
- 5. (Optional) To delete Guest Users with First login pending from a day before, click the **Run Now** button.

By clicking the **Run Now** button a the period of 24 hours is considered as 1 day and hence 'x' days would be 'x' * 24 hours prior to running of the task now.

- 6. Do one of the following:
- Click **Save** to save the configuration.
- Click Cancel to cancel the changes.

Field Descriptions

Use the data in the following table to use the Housekeeping tab.

Name	Description	
------	-------------	--

Run Daily At	Specifies the time of day for the scheduled housekeeping task to be completed.
Enable / Disable	Enables or disables the scheduled housekeeping occurrence for the guest user, device or both.
Edit	The time in days for an enabled guest user, device, or both.
Run Now	Enables the administrator to run the selected housekeeping task(s).
Save	Saves the configuration.
Cancel	Cancels the configuration.

Troubleshooting

The Troubleshooting tab in the Administrator menu allows the Administrator to view the logs of Guest and IoT Manager application. The default name of the log file is: GIM Version log IP Date Time.log.

For more information, see Viewing the Log Files.

For any debugging issues in the Guest and IoT Manager Application, Administrator can generate a show support file that Extreme support staff can use to diagnose the problem.

For more information, see **Generating a Show Support File**.

Swagger tool allows connections directly to REST APIs through an interactive, HTML-based user interface. Where, requests can be made directly from the UI and the options can be explored by the user of the interface.

For more information, see <u>REST API</u>.

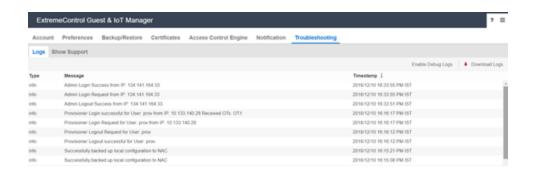
Viewing the Log Files

Use this procedure to view the log files.

Procedure

1. In the navigation pane, click **Administration** > **Troubleshooting** tab.

By default, the Logs screen is displayed along with Types (Info, Error) Message and Timestamp details.



- 2. Click **Enable Debug Logs** to view the logs of type **debug**. By default, the debug logs are disabled.
- 3. (Optional) Click **Download Logs** to store and view the logs from the local drive.
 - Note:

The log file size is 10 MB. If the size exceeds more than 10 MB, then roll over of log file occurs.

- 4. Click the Page Numbers arrow at the bottom of the screen to page through the files.
- 5. Click the **Refresh** icon to reload the page being viewed with most recent generated logs.

Generating a Show Support File

Use this procedure to generate a show support file for debugging the issues.

Procedure

- 1. In the navigation pane, click **Administration** > **Troubleshooting** tab.
- 2. Click Show Support tab.

The Show Support screen is displayed.

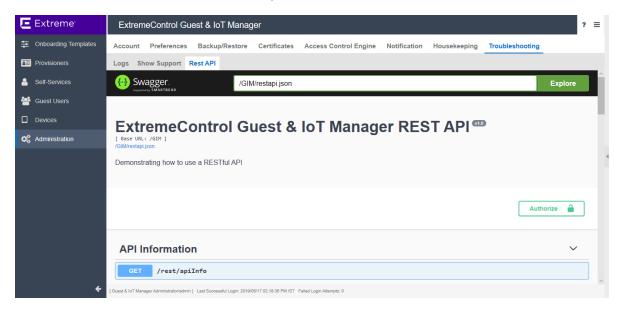


- 3. In the Show Support screen, click **Generate Show Support** to download the zip file.
- 4. Save the Guest and IoT Manager show support zip file to an appropriate location and contact Extreme Networks technical support. For more information, see Troubleshooting and FAQs.

REST API

Swagger tool allows connections directly to REST APIs through an interactive, HTML-based user interface. Where, requests can be made directly from the UI and the options can be explored by the user of the interface.

To enable the administrator to explore the REST API directly from the application, the Swagger tool is integrated within the admin application under Administration > Troubleshooting > REST API.



For non-authentication based API, the API Information can be executed without any authorization. The response contains the API Information details.

For any REST API that requires authentication, you must provide the Provisioner credentials by clicking the Authorize Button. Post Authorization one can execute any APIs that require authentication.

For all the APIs the api-version header is pre-populated with v1.0 as the default value that helps the admin to determine how to use it. Similarly, the Device and Guest User JSONs are shown as default body wherever applicable.

You can check for the sample JSON under Models. Each API can be tested to see the response. For a ready reference, the possible response codes and the brief response message is also displayed.

For more information about REST API see, the <u>Guest & IoT Manager REST APIs</u> document.

Configuring Onboarding Template

This module is intended for Guest and IoT Manager Administrator to create and manage Onboarding templates to be associated with Provisioner accounts.

The Guest and IoT Manager Administrator configures the Onboarding Template which specifies how Users / Devices can be onboarded by the Provisioner.

Administrator can also configure Custom Attributes and Access Groups.

If you are a Provisioner, you may skip this section, see the *ExtremeControl Guest* and *IoT Manager Configuration* document.

Creating an Onboarding Template

The **Onboarding Templates** tab in the Onboarding Templates menu is a collection of settings that establishes the administrative rights and account settings of the Provisioners that associate with it.

Use this procedure to create an Onboarding Template for each set of Provisioners that require a unique set of rules for creating Guest Users account / Device records. Every Provisioner must belong to at least one Onboarding Template.

Before you begin

Login to the **Guest and IoT Manager** application and ensure that it is connected with the **Access Control Engine**. For more information, see <u>Configuring Engine</u> Details.

Procedure

- 1. In the navigation pane, click **Onboarding Templates > Add**.
- 2. In the Common tab, configure the name and common details for the Onboarding Template. For more information, see <u>Configuring the Common Details</u>.
- 3. In the **Guest Users** tab, configure the Guest User Account Details For more information, see Configuring the Guest User Account Details, Configuring Guest User Provisioning Using Outlook Add-in, Configuring Guest User Provisioning Using CSV, and Configuring Zero Touch Guest User Provisioning.
- 4. In the **Sponsor** tab, configure Sponsor approval, if Self-Service Guest Users must be approved by a Sponsor before they are granted access. For more information, see <u>Configuring Sponsor Approval</u>.
- 5. In the **Devices** tab, configure User Device details for this Onboarding Template. For more information, see Configuring the Devices Record Details.
 - Important:
 - If Sponsor Approval is configured, Provisioners belonging to this Onboarding Template cannot manage Devices.
- 6. In the **Device Type Groups** tab, configure the Device Type(s) and Group(s) for the particular Onboarding Template. For more information, see <u>Configuring Device Type Groups</u>.
- 7. In the Notification tab, configure the notification templates used for sending account details to Guest User / Sponsor. For more information, see <u>Configuring the Account Notification Templates</u>.
- 8. In the **Advanced** tab, configure the advanced details for this Onboarding Template if required. For more information, see Configuring Advanced Details.
- 9. Check your entries and click **Save** to save the configuration.
 - Guest and IoT Manager creates the Onboarding Template.
 - Note:

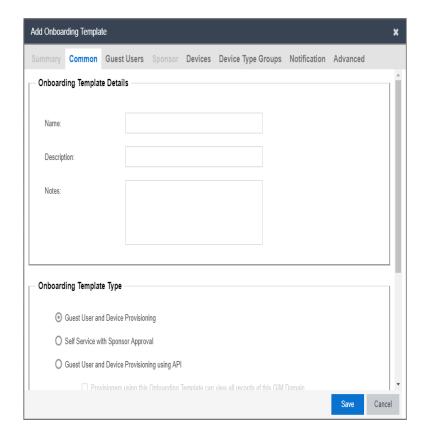
For more information on modifying, copying and deleting Onboarding Templates, see <u>Managing Onboarding Templates</u>.

Configuring the Common Details

Use this procedure to configure common details for Onboarding Template.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Common** tab. The Common screen is displayed.



- 2. In the **Onboarding Template Details** section, enter the name of the template, description, and any template related notes.
- 3. In the **Onboarding Template Type** section, select an option as required. **Note:**

If Provisioners are associated with REST API or Outlook Onboarding Templates then they will not be able to create new Guest Uses and Devices. Only view option is visible.

- 4. Select Provisioners belonging to this Onboarding Template can view and edit each other's records checkbox to manage Guest User / Device accounts of all the Provisioners belonging to this Onboarding Template.
- 5. In the **Temporary Accounts Validity** section, enter the maximum account validity that can be granted to a Guest / Devices in minutes, hours, or days.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Field Descriptions

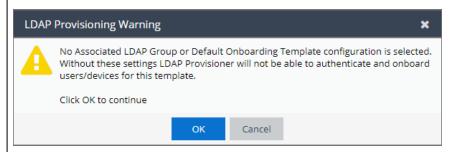
Use the data in the following table to use the Common tab.

Name	Description
Onboarding Template Details	Configures the details of the Onboarding Template.
	Onboarding Template Name: Configures the template name. The template name can be configured using alphanumeric / special characters and space between words. Only these special characters are allowed: # =()![]
	Description: Configures a short description of the Onboarding Template. The description is limited to 60 characters.
	Notes: Configures any notes specific to the template. Only 250 characters are allowed.

Onboarding Template Type

Specifies the type of Onboarding Template.

Note: If no Associated LDAP Group or Default
Onboarding Template configuration is selected, the
system displays a pop-up message. 'No Associated
LDAP Group or Default Onboarding Template
configuration is selected. Without these settings LDAP
Provisioner will not be able to authenticate and onboard
users/devices for this template'.



- Guest User and Device Provisioning: Creates an Onboarding Template that has Guest User and Device Provisioning rights. By default, this option is enabled. The tabs enabled are:
 - Guest User
 - Devices
 - Device Type Group
 - Notification
 - Advanced
- Self Service with Sponsor Approval: Creates an Onboarding Template with Guest User Self-Provisioning rights with additional sponsor approval requirements. The tabs enabled are:
 - Guest User
 - Sponsor
 - Notification
 - Advanced

- Guest User and Device Provisioning using API: Creates an Onboarding Template with Guest User and Device provisioning rights for thrid party APIs. The tabs enabled are:
 - Guest User
 - Devices
 - Device Type Group
 - Notification
 - Advanced
 - Note:

When you select Guest User and Device
Provisioning Using API, a new checkbox
Provisioners belonging to this Onboarding
Template can view all records of this GIM
Domain is displayed that allows the Provisioners
belonging to this template to view all Guest User
/ Device data in the Guest and IoT Manager
domain irrespective of the template they belong
to.

- Guest User Provisioning using Outlook Add-in: Enables Provisioners to login from the MS Outlook Add-in and to provision users in the meeting invite. The tabs enabled are:
 - Guest User
 - Notification
 - Advanced
- Guest User Provisioning using Vouchers: Enables Provisioners to create Guest Users in bulk using Vouchers. The tabs enabled are:
 - Guest Users
 - Advanced

	Guest User and Device Provisioning using CSV: Enables Provisioners to create Guest Users and Devices in bulk *.csv files. The tabs enabled are:
	Guest Users
	• Devices
	Device Type Group
	Advanced
	 Zero Touch Guest Provisioning: Enables Guest Users to create their own accounts using Self Service Provisioning Service with the help of a QR Code. The tabs enabled are:
	Guest Users
	Notification
	Advanced
Provisioners belonging to this Onboarding Template can view and edit each other's records	Configures the Provisioners in this template to manage all the Guest Users / Device accounts provisioned using this Onboarding Template. If you want to limit each Provisioner to view only the guest accounts that they have created, do not select this option.
Temporary Accounts Validity	Configures the maximum account validity the Provisioners can grant to a Guest. The access is denied if the account is expired.
	minutes: Indicates the minutes units for accounts validity.
	hours: Indicates the hours units for accounts validity.
	days: Indicates the days units for accounts validity.

Configuring the Guest User Account Details

Use this procedure to configure the Guest User account details for the

Onboarding Template.

Before you begin

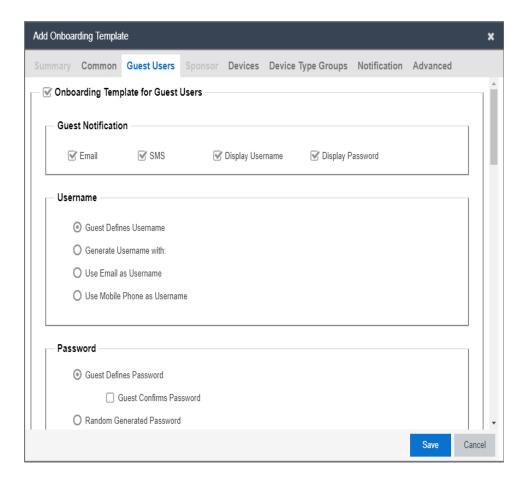
In the Common tab, select Guest User and Device Provisioning or Self Service with Sponsor Approval or Guest User and Device Provisioning using API option to configure the Guest User account details.

Note:

- If you select **Guest User Provisioning using Outlook Add-in** option, skip this section and see <u>Configuring Guest User Provisioning Using Outlook Add-in</u>.
- If you select **Guest User Provisioning using Vouchers** option, skip this section and see <u>Configuring Guest User Provisioning Using Vouchers.</u>
- If you select Configuring Guest User and Device Provisioning Using CSV option, skip this section and see <u>Configuring Guest User and Device Provisioning Using CSV</u>.
- If you select **Configuring Zero Touch Guest User Provisioning** option, skip this section and see Configuring Zero Touch Guest User Provisioning.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Guest Users** tab. The Guest Users screen is displayed.



- 2. In the **Guest Users** screen, select the **Onboarding Template for Guest Users** checkbox to configure the Guest User account details. By default it is selected.
- 3. In the **Guest Notification** section, select the required checkboxes.
- 4. In the **Username** section, select an option as required.
- 5. In the **Password** section, select an option as required.
- 6. In the **Password Complexity Check** section, set the password complexity selecting the required alphanumeric checkbox.
- 7. (Optional) Select **Guest User Account Limit** checkbox to restrict the number of guest accounts created within the specified duration in the **Limit the number of Guest Accounts that can be created for a given Email / Mobile Phone number within** field.
- 8. (Optional) Select **Customize Printer Friendly Page** to enable printable Guest User information page. You must select appropriate file from **Select Uploaded HTML file** drop-down list. For more information, see <u>Configuring the File Manager</u>.

- 9. In the **Access Groups** section, select the Single and Multiple Memberships Access Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 10. In the Accessible to Provisioner section, configure the **General** and **Custom Attributes** as required.
- 11. Click Save to save the configuration or click Cancel to cancel the changes.

Use the data in the following table to use the Guest User tab.

Name	Description
Guest Notification	Configures the mode of communication to notify guests about their new account details.
	Email: Notifies Guest Users their new account details by Email.
	SMS: Notifies Guest Users their new account details by SMS.
	Display Username: Notifies Guest Users with Username in the message that is displayed when a guest user account is successfully created through Self-Service or Provisioner Application.
	Display Password: Notifies Guest Users with password in the message that is displayed when a Guest User account is successfully created through Self-Service or Provisioner Application.

Username

Specifies the different available options of Username that the Administrator can enable.

- Guest Defines Username: Allows the Provisioner / User to specify Username during Provisioner Guest creation or Self Service Provisioning Services.
- Generate Username With: Specifies the format of the Guest Username.
 - Random Generated Username: Random generated Username is a combination of Uppercase letters, Lowercase letters and Numbers. By default, all are enabled. Enter the length as a single value / range (within 3 40). Depending on the checkbox(es) selected (lower case, upper case and number), a random Username within the specified length is generated.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "albacd", "2abbcd" and so on.

Note:

Provisioner Application and Self-Service Application Create User Screen displays the randomly generated Username in the Username text box.

• FirstnameLastname: Combination of Firstname and Lastname of the Guest User with an optional suffix / prefix. By default, No Prefix Suffix option is selected.

For example, if first name is "Tom" and the last name is "Jones," **Guest and IoT Manager** default the Username to "TomJones".

 firstintiallastname: Combination of the initial of the Firstname and Lastname of the user with an optional suffix / prefix. By default, No Prefix Suffix option is selected.

For example, if firstname is "John" and the lastname is "Smith", Guest and IoT Manager default his Username to "jsmith".

Note:

Administrator can restrict the Guest User and Provisioner from editing the auto-generated Username. Deselect the **Username field editable** checkbox to disable editing. By default, it is enabled.

- Use Email as Username: Specifies to use the Email address as Username.
- Use Cell Phone Number as Username: Specifies to use cell phone number as Username.

Password

Specifies the different available options of password that the Administrator can enable.

• Guest Defines Password: Allows the Provisioner / User to specify Password during Provisioner Guest creation or Self Service Provisioning Services.

3 Note:

On checking Guest Confirms Password, Provisioner/Self Provisioning Service User must confirm the password while creating the Guest User account.

• Random Generated Password: Generates random password with the specified password complexity.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the **Username / Password** must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

- Use Username as Password: Allows the Guest User to login with only a Username.
- Static Password: Allows you to set the password as a fixed string so that a single password can be used for multiple accounts.

Password Complexity Check	Configures the parameters to enforce when guests change their account passwords. Different levels of password complexity is required to select passwords that contain different combinations of characters, lowercase letters, uppercase letters, digits and symbols.
	If multiple combinations are selected, the different levels of password complexity is selected appropriately.
	characters: Configures the number of characters in the password.
	lower case: Indicates the password must have lower case only.
	upper case: Indicates the password must have upper case only.
	number: Indicates the password must have number only.
	 special characters: Indicates the password must have special characters only. Special characters are: ! @ # \$ % ^ & * () - +
Guest User Account Limit	Limits the number of Guest User accounts that can be created for a given Email / Mobile Phone within the specified time period. For example, if the limit is set to 2 for a time period of 1 hour, then the user can only create 2 distinct users having the same Email / Mobile Phone in the 1 hour time frame.
Customize Printer Friendly Page	Enables or disables printable Guest User information page. Uploads the required file from Select Uploaded HTML file dropdown list. Note: Provisioner can print the Guest User details in the specified HTML file.
	For more information on customizing and uploading a file using File Manager, see Configuring the File Manager.

Access Groups

Configures the Access Groups for this Onboarding Template. Select the required checkbox(s) from the available options. If there are no groups available, click the links to select the required User Groups. For more information, see Configuring Access Groups.

- User Groups Single Membership: Configures Single Membership User Groups for the Onboarding Template.
- User Groups Multiple Memberships: Configures Multiple Memberships User Groups for the Onboarding Template.

Accessible to Provisioner

Configures the Guest User settings accessible to Provisioner using this Onboarding Template.

The options selected in this section are available to the Provisioner. Each section allows you to customize the required fields to be **Optional / Mandatory**.

• General: Configures the general Guest User settings.

Access Groups: Configures the selected Access Groups.

- Email: Configures the Email address of the Guest User.
- Mobile Phone: Configures the contact number of the Guest User.
- Account State: Enables/disables the administrator to select whether the Provisioner can view the option to change the Guest User Account State.

If you select **Account Enabled**, then the Guest User Account is enabled by default and default value for **Guest User Enabled** field in the Provisioner application - Guest User Add window is set to true.

If you select **Account Disabled**, then the Guest User account is disabled by default and the default value for **Guest User Enabled** field in the Provisioner application - Guest User Add window is set to false.

 SMS Gateway List: Enables the SMS Gateway list to be accessible to Provisioner / Self-Service Guest User registration. If disabled, SMS messages are sent using the Administrator selected default SMS gateway for each service provider.

Important:

If a Guest User's mobile phone service provider does not support the selected default gateway, the SMS messages are not sent.

 Delete on Expire: Specifies if the account must be deleted when account validity duration expires.

If you select **Delete on Expire** checkbox, Provisioner will be able to view this field during Guest User creation. Provisioner can select this to override the specified conditions (**Delete on Expire** / **Do Not Delete On Expire**) and remove the accounts upon expiry.

If you do not select **Delete on Expire** checkbox, Provisioner will not be able to view this field during Guest User account creation. If you select **Delete on Expire** option, the Guest Account is removed on expiry. If you select **Do Not Delete On Expire** option, the account needs to be removed manually.

 Account Activation: Specifies the type of account activation to be accessible to Provisioner.

If you select **Time Based**, Provisioner can configure start time and duration (upto to a maximum set limit) during guest account creation.

If you select **First Login**, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.

Note:

First Login option enabled Guest User account will not expire until the user actually logs in. Once the user logs in, the account expires as per the specified duration.

 Account Expiration: Enables or disables the account expiration to be accessible to the Provisioner.

If you select Max Expiration Time, Provisioner can configure the account validity duration up to the maximum value specified in the Onboarding Template > Common > Temporary Accounts Validity field.

If you select **Permanent**, a permanent Guest User account is created. This account does not have account activation preference and will not be deleted on expiry.

- Firstname & Lastname: Allows the Provisioner to configure first name and last name of the Guest User.
- Access Groups: Configures the selected Access Groups.
- Resend Details: Enables or disables the Resend functionality on the Self-Service Registration Screen.
 This option is not applicable to REST API Onboarding Template.

If you select **Resend All Details**, the Resend All Details functionality is available on Self Service Registration Screen.

If you select **Resend Password Only**, the Resend Password Only functionality is available on Self Service Registration Screen.

• Custom Attributes: Configures the custom attributes for Guest User. For more information, see

Configuring Custom Attributes.		Configuring Custom Attributes.	
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Perform any one of the following:

- If Sponsor approval is required for the Self-Service Guest Users in this Onboarding Template, go to <u>Configuring Sponsor Approval</u>.
- If this Onboarding Template manages devices, go to <u>Configuring the</u> Devices Record Details.
- Otherwise go to Configuring the Account Notification Templates.

Configuring Sponsor Approval

Use this procedure to configure Sponsor approval if Self-Service Guest Users must be approved by a Sponsor before they are granted access.

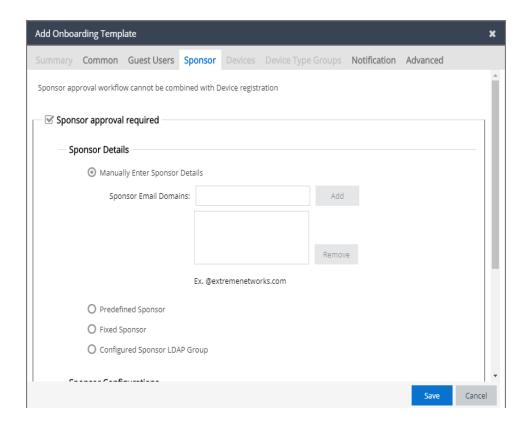
Before you begin

In the **Common** tab, select **Self Service with Sponsor Approval** to enable Sponsor tab.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Sponsor** tab.

The Sponsor screen is displayed.



- 2. In the Sponsor screen, select **Sponsor approval required** to configure the Sponsor approval details.
- 3. In the **Sponsor Details** section, select the required options.
- 4. In the **Sponsor Configuration** section, select the required checkboxes.
- 5. In the **Sponsor Authentication** section, select the **Authentication Before Approval** checkbox to login to the Provisioner account and approve or deny the request.
- 6. Click Save to save the configuration or click Cancel to cancel the changes.

Name	Description
Sponsor approval required	Configures the Sponsor approval settings accessible in this Onboarding Template.

Sponsor Details

Configures any one of the Sponsor details

 Manually Enter Sponsor Details: Configures the Sponsor Email Domains. You can add email domain name (2-32 character length).

If the entered domain name is less than 2 characters or more than 32 characters, the **Add** button is disabled.

For example, the domain name must be in the following the format:

<name>@healthbenifits.co.in

<name>@companyname.org

<name>@extremenetworks.travelersinsurance.c
om

If you have added the Sponsor Email Domains, it forces the Guest User to have a Sponsor in particular email domain.

 Predefined Sponsor: Configures the Sponsor email address. Add the Sponsor email address in the Predefined Sponsor Email field.

In the Sponsor Email Field, do one of the following:

- Select Guest Selects from Predefined Sponsor list to select Sponsor email address from the predefined list.
- Select Guest must specify Sponsor Email to match to specify the Sponsor email address that matches one of the email address from the predefined list.
- Fixed Sponsor: Configures the optional First Name, Last Name fields. The Email field is mandatory to be configured. These details are not visible to the Guest User.
- Configured Sponsor LDAP Group: Configures the Sponsor LDAP Group. This group contains all the sponsors that the user must select for approval.



If you are using the GIM Sponsor Retrieval Advanced Configuration in Extreme Management Center, the check box for GIM Sponsor LDAP Group Filter controls additional Sponsor look-up based on this LDAP Group.

For example,

Ex. CN=Gim,CN=Users,DC=SponGroup,DC=com

All the Sponsors are cached locally in Guest and IoT Manager and the frequency of the refresh depends on the Sync Duration.

• For example, if duration is specified as 1 hour, the cache refreshes every hour.

Sponsor Configuration

Configures sponsor additional details.

- Admin/Sponsor Email (Always Notified): Configures the email that will always be notified for all the sponsor related mail notification.
- Sponsor Response Timeout: Configures the time limit for Sponsor approval. If you select this, the Default action on timeout field is displayed. You can Approve / Deny the request post specified timeout. For example, (0 - 480 min; 0 = Immediate Default Action).
- Send Initial Notification to Guest: Enables or disables email and SMS notification sent to Guest Users as part of the Self-Service registration flow.
- Send Sponsor Response Notification to Guest: Enables or disables email and SMS notification sent to Guest Users as part of the Self-Service registration flow when Sponsor approves or denies the access request.

Sponsor Authenticatio n	Select if the Provisioner needs to login to the application prior approving or denying the Sponsor request. By default, this is enabled.
	Authentication Before Approval: Select to send an email to the Provisioner to login to the account and approve or deny the request. If it is unchecked, the Provisioner will receive an email with a link to approve or deny the request.

Configuring the Device Record Details

Use this procedure to configure the Device record details for the Onboarding Template.

Before you begin

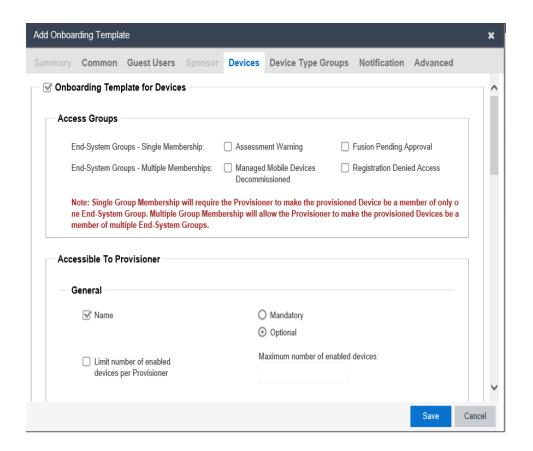
In the Common tab, select Guest User and Device Provisioning or Guest User and Device Provisioning using API option to enable Devices tab.

If you select Provisioners belonging to this Onboarding Template can view each other's records checkbox, the Provisioner using this Onboarding Template can view all the records of this particular Onboarding Template.

Note: If you select Guest User and Device Provisioning using CSV option, skip this section. For more information, see Configuring Guest User and Device Provisioning Using CSV.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Devices tab**.. The Devices screen is displayed.



- 2. In the **Devices** screen, select **Onboarding Template for Devices** to configure the Device record details. By default, it is selected.
- 3. In the **Access Groups** section, select the Single and Multiple End-System Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 4. In the Accessible to Provisioner section, configure the General, Custom Attributes, Device Attributes and Account Validity Period options as required.
- 5. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Use the data in the following table to use Devices tab.

Name	Description
------	-------------

Access Groups

Configures the Access Groups for this Onboarding Template. Select the required checkbox(es) from the available options. If there are no groups available, click the links to select the required End-System Groups. For more information, see Configuring Access Groups.

The options available are:

- End-System Groups Single Membership: Configures single End-System Groups for the Onboarding Template.
- End-System Groups Multiple Memberships: Configures multiple End System Groups for the Onboarding Template.

Accessible To Provisioner

Configures the Devices record settings accessible to Provisioners in this Onboarding Template.

The options selected in this section are available to the Provisioner. Each section allows you to customize the required fields as **Optional / Mandatory**.

- General: Configures the general Devices record settings.
 - Name: Configures the Device name.
 - Device State: Enables/Disables the administrator to select whether the Provisioner can view the option to change the Device State.

If you select **Device Enabled**, then the Device Record is enabled by default and default value for **Record Enabled** field in the Provisioner application - Device Add window is set to true.

If you select **Device Disabled**, then the Device Record is disabled by default and the default value for **Record Enabled** field in the Provisioner application - Device Add window is set to false.

- Limit number of enabled devices per Provisioner:

 Select this to restrict the maximum number of
 enabled Devices allowed for a Provisioner and enter
 the value in Maximum number of enabled devices
 field. When the limit exceeds, though Provisioner
 can create the Devices but disabled Devices cannot
 be authenticated.
- Display Admin's Comments: Select this checkbox to enable Administrator's additional information to be displayed on the Provisioner's Create Device screen and enter the information in Comments field.
- Source: Configures the default source value. If you select Auto populate with GIM-[Onboarding Template] option, the default value populated will be Guest and IoT Manager Onboarding Template name. If you select Static option, user defined

custom Device source value can be provided.

- Custom Attributes: Configures the custom attributes for Device record settings. For more information, see Configuring Custom Attributes.
- Device Attributes: Configures the device attributes for Device record settings.
 - Asset Type: Configures the Device Asset Type for Permanent / Temporary.
 - Device Type Groups: Configures the Device Type Groups.
 - **Device Type**: Configures the Device Type of the selected Device Type Group.
 - Access Groups: Configures the selected Access Groups.
- Account Validity Period: Configures the account validity period for Device record settings. By default, it is enabled.
 - **Delete on Expire:** Specifies if the Device must be deleted when account validity duration expires.
 - Account Activation: Specifies the type of account activation to be accessible to Provisioner. If you select Time Based, Provisioner can configure start time and duration (up to a maximum set limit) during guest account creation. If you select First Login, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.
 - Account Expiration: Enables or disables the account expiration to Max Expiration Time to be accessible to Provisioner.

Configuring Device Type Groups

Use this procedure to allow the Administrator to select a certain set of Device

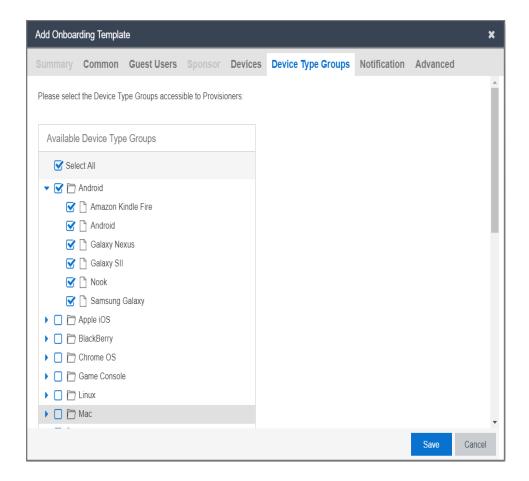
Type Groups to be made available to the Provisioner while creating Devices.

Before you begin

In the Common tab, select Guest User and Device Provisioning or Guest User and Device Provisioning using API option to enable Device Type Groups tab.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Device Type Groups** tab. The Device Type Groups screen is displayed:



- 2. Click **Select All** to enable all the Device Type Groups. By default, it is enabled.
- 3. In the Available Device Type Groups tree list, select the Device Type Groups that are

required.

4. Click **Save** to save the configuration or click **Cancel** to cancel the changes.



Configuring Device Type Groups limits the groups accessible to Provisioner while creating Devices.

Field Description

Use the data in the following table to use Device Type Groups tab.

Name	Description
Select All	Selects all the Device Type Groups accessible to Provisioners.
Available Device Type Groups	Specifies the available Device Type Groups accessible to Provisioner. By default, all are selected. You can select the required Device Type Groups.



The configured Device Type Groups apply to Self-Service, Provisioner, REST API while creating Devices.

Configuring the Account Notification Templates

Guest and IoT Manager allows you to edit the information sent in account notifications to new users. When a Guest User account is created or updated, notification is sent through an email, an SMS message, or both. You can use SMS and Email templates to edit the account notification details.

Use the **Notification > General** tab to send messages to the Guest User when a Provisioner saves the Guest User account or an account is created through Self-Services. You can modify the message if Sponsor Approval is required. For more information, see <u>Configuring General Details</u>.

Use the **Notification > Sponsor Email** tab to notify the Sponsor for appropriate action. For more information, see <u>Configuring Sponsor Email</u>.

Use the **Notification > Sponsor Action** tab to send messages to the Guest User when the Sponsor approves or denies the user account access request. For more information, see Configuring Sponsor Action.

3 Note:

Ensure that you have set up your Email and / or SMS gateways. For more information, see <u>Setting Notification Parameters</u>.

Configuring General Details

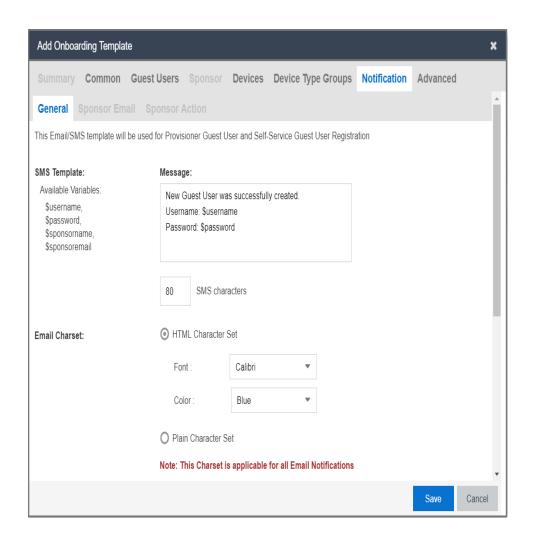
Use this procedure to configure the account notification sent to Guest Users.

Note:

When using SMS Template and Email Template, if Sponsor approval is required, change the default message and variables to indicate that the request is pending for Sponsor approval.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Notification > General** tab. The General screen is displayed.



- 2. In the SMS Template > Message field, enter the text message. You can use the available displayed variables.
- 3. In the **Email Charset** section, select an option as required.
- 4. In the **Email Template > Subject** field, enter the subject of email sent to the Guest User and enter the message in the Message field.
- 5. If you select Guest User Provisioning using Outlook Add-in or Zero Touch Guest User Provisioning, then an option to Select Interface is displayed to select the interface for the \$loginUrl variable.
- 6. In the Terms of Use and / or Additional information to be included as part of guest account confirmation page field, enter the required information.
- 7. Click Save to save the configuration or click Cancel to cancel the changes.

Use the data in the following table to use the General tab.

Name	Description
SMS Template	Specifies the SMS template that is used to send an SMS to the Guest User when a Provisioner and Self-Service creates or updates the account.
	The available options are:
	 Message: Configures the message using displayed available variables such as \$username, \$password, \$sponsorname, and \$sponsoremail if required.
	If you select Zero Touch Guest User Provisioning option, the available variables are \$username , \$password\$username , \$loginUrl .
	Note: If Sponsor approval is required, update the message with relevant variable.
	SMS characters: Displays the length of your message in characters. The SMS message is limited to 160 characters.
	Note: This section is disabled for Outlook Add-in Onboarding Template.

Email Charset

Specifies the type of character set for the contents of the Guest User email template.

The options available are:

- HTML Character Set: Configures the email template to support HTML content. You can select the Font and Color from the available list. By default, it is enabled.
- Plain Character Set: Configures the email template to contain only plain characters.

Note:

- This Character Set is applicable for all Email Notifications.
- This section is disabled for Zero Touch Onboarding Template.

Email Template

Specifies the email template that is used to send an email to the Guest User when a Provisioner and Self-Service creates or updates the account.

The option available are:

- Subject: Configures the subject of the email to be sent to the Guest User.
- Message: Configures the message using displayed available variables such as \$username, \$password, \$firstname, \$lastname, \$email, \$starttime. \$endtime, \$sponsorname, \$sponsoremail, \$terms, and \$userCustom1-6 if required.

If you select Guest User Provisioning using Outlook Add-in, the available variables are \$username. \$password, \$email, \$starttime, \$endtime. \$terms, \$loginUrl, \$ssid

For example, the variable \$userCustom1-6 reflects the additional information entered by the Provisioner while creating Guest User accounts and the variable **\$terms** is included to add the "Terms of Use" confidential information in the email template.



🛂 Note:

This section is disabled for Zero Touch Onboarding Template.

Select Interface

Configures the required interface through which the Guest User can access the network. The options available are:

- Admin
- Service A

By default, Service A is selected.

For example, If Service A interface is selected, the login link that the Guest User receives uses Service A interface IP address/FQDN. This action affects the \$loginUrl variable.

Terms of Use and/or Additional information to be included as part of guest account confirmation page

Configures a message to be displayed on the Guest account confirmation screen when an account is created. The Provisioner can print this confirmation and hand it to the Guest user. By default, text entered is appended as part of email confirmation sent to the user.



🐯 Note:

This section is disabled for Zero Touch Onboarding Template.

Configuring Sponsor Email

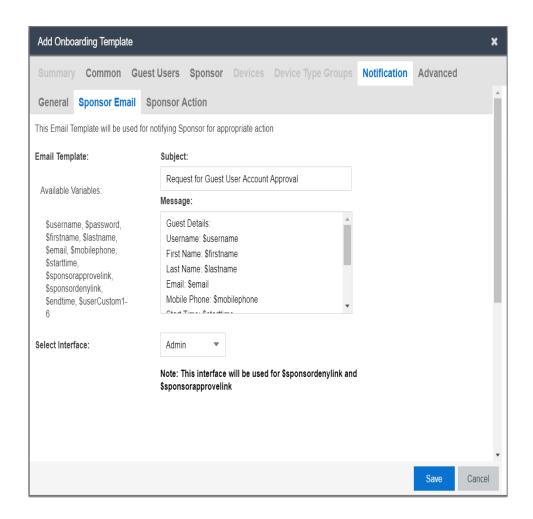
Use this procedure to configure notification email sent to the Sponsor to approve or deny the request for a Guest User account.

Before you begin

In the Common tab, select Self Service with Sponsor Approval option to enable the Sponsor Email tab.

Procedure

1. In the navigation pane, click Onboarding Templates > Add > Notification > Sponsor Email tab. The Sponsor Email screen is displayed.



- In the Email Template > Subject field, enter the subject of the Sponsor request email
 and in the Message field, enter the message to be sent to the sponsor to approve or
 deny the access request for a Guest User account. You can use the available
 displayed variables.
- 3. In the **Select Interface** field, select the required interface from the drop-down list. By default, **Admin** is selected.
- 4. Click **Save** to submit the information or click **Cancel** to cancel the changes.

Use the data in the following table to use the Sponsor Email tab.

Name	Description
------	-------------

Fmail **Template**

Specifies the email template that is used to notify the Sponsor for appropriate action.

The options available are:

- Subject: Configures the subject of the email to be sent to the Sponsor.
- Message: Configures the message using displayed available variables such as \$username, \$password, \$firstname, \$lastname, \$email, \$starttime, \$sponsoractionlink, \$endtime, and **\$userCustom1-6** if required.

🛂 Note:

If you have selected Authentication Before Approval field in Sponsor tab, \$sponsoractionlink variable is available. If you have unchecked, the \$sponsorapprovelink and \$sponsordenylink

Select Interface

Configures the required interface to allow a Sponsor to have access to a certain network to approve or deny received requests.

The options available are:

- Admin
- Service A

By default, Service A is selected.

variables are available.

For example, If Service A interface is selected, the email link that Sponsor receives uses Service A interface IP address/ FQDN. This action affects the \$sponsorapprovelink and \$sponsordenylink variable.



🛂 Note:

This field is available only if you have selected Authentication Before Approval field in Sponsor tab. For more information, see Configuring Sponsor Approval.

Configuring Sponsor Action

Use this procedure to configure Guest User account notification when the Sponsor approves or denies the user account access request.

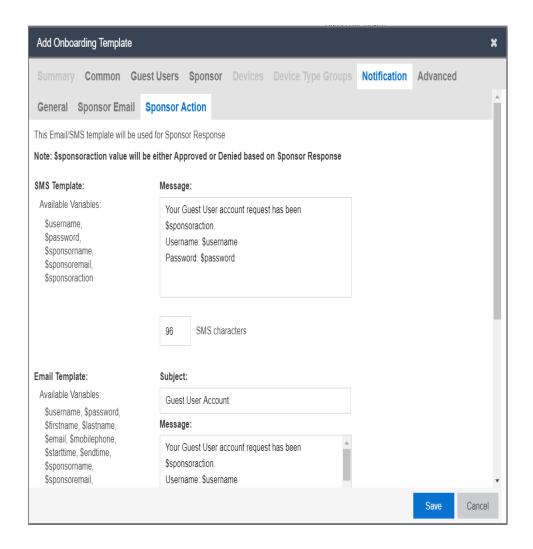
Before you begin

In the **Common** tab, select **Self Service with Sponsor Approval** option to enable the **Sponsor Action** tab.

Procedure

 In the navigation pane, click Onboarding Templates > Add > Notification > Sponsor Action tab.

The Sponsor Action screen is displayed



- 2. In the SMS Template > Message field, enter the text message. You can use the available displayed variables.
- 3. In the Email Template > Subject field, enter the subject of the Sponsor request email and in the Message field, enter the message to be sent to the sponsor to approve or deny the access request for a Guest User account. You can use the available displayed variables.
- 4. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Use the data in the following table to use the Sponsor Action tab.

Name

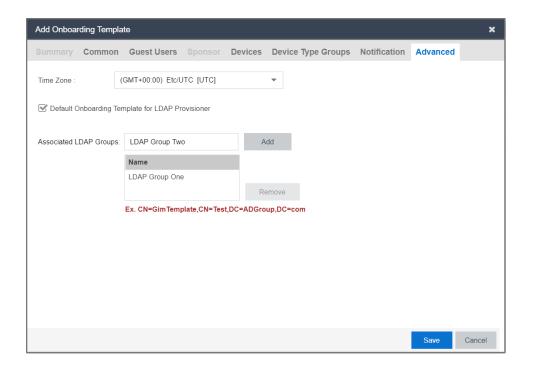
SMS Specifies the email template that is used to send an Template email to the Guest User when a Sponsor approves or denies the Guest User account. The option available are: Message: Configures the message using displayed available variables such as \$username, \$password, \$sponsorname, \$sponsoremail, and \$sponsoraction if reauried. • SMS characters: Displays the length of your message in characters. The SMS message is limited to 160 characters. Email Specifies the email template that is used to send an Template email to the Guest User when a Sponsor approves or denies the Guest User account. The options available are: • Subject: Configures the subject of the email to be sent to the Guest User. • Message: Configures the message using displayed available variables such as \$username, \$password, \$firstname, \$lastname, \$email, \$starttime, \$endtime, \$sponsorname, \$sponsoremail, \$sponsoraction, and \$sponsortext if required.

Configuring Advanced Details

Use this procedure to configure advanced details for the Onboarding Template.

Procedure

In the navigation pane, click Onboarding Template > Add > Advanced tab.
 The Advanced screen is displayed.



- 2. In the **Time Zone** drop-down list, select the required zone.
- 3. Select **Default Onboarding Template for LDAP Provisioner** to send the Onboarding Template as default for Provisioners who are not associated with any Onboarding Template(s).
- 4. In the **Associated LDAP Groups** section, **Add** or **Remove** the required LDAP Groups to be associated with the Onboarding Template(s).
- 5. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Use the data in the following table to use the **Advanced** tab.

Name	Description
Time Zone	Configures the time zone.

Default Onboarding Template for LDAP Provisioner	Enables or disables the default Onboarding Template for LDAP Provisioner. By default, it is enabled. Note: If you log in as a Provisioner: Case Scenario: The group that you are part of is not associated with any Onboarding Template. Result: The Onboarding Template(s) marked as default is / are sent to you.
Associated LDAP Groups	Configures the LDAP group(s) associated with the Onboarding Template. Note: If the logged in Provisioner is a part of any of the specified group(s), then the created Onboarding Template must be sent to the Provisioner. You can define the same group for multiple Onboarding Templates. For example, Ex CN=GimTemplate,CN=Test,DC=ADGroup,DC=com

Configuring Guest User Provisioning Using Outlook Add-in

Use this procedure to configure Guest User record details for using Outlook Add-in.

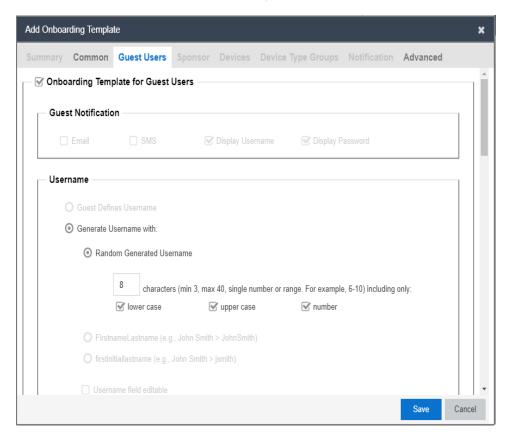
Before you begin

In the Common tab, select Guest User Provisioning using Outlook Add-in option to configure Guest User account details.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Guest Users** tab.

The Guest Users screen is displayed.



- 2. In the **Guest Users** screen, select the **Onboarding Template for Guest Users** checkbox to configure the Guest User account details. By default, it is enabled.
- 3. In the **Username** section, by default **Generate Username With** option is enabled while other options are disabled.
- 4. In the Password section, select an option as required.
- 5. In the **Password Complexity Check** section, set the password complexity by selecting the required alphanumeric checkbox.
- 6. In the **Access Groups** section, select the Single and Multiple Memberships Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 7. In the **User Email Domains** section, enter the preferred domain names to be excluded from the user creation and click **Add**.

- 8. In the Accessible to Provisioner section, configure the General and Custom Attributes as required.
- 9. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Use the data in the following table to use the Guest User tab.

Name	Description
Guest Notification	Email notification is checked and this field is disabled for Outlook Add-in Onboarding Template.
Username	Specifies the different available options of Username that the Administrator can enable. Only Generate Username With field is enabled.
	Generate Username With: Specifies the format of the Guest User Name.
	• Random Generated Username: Random generated Username is a combination of Uppercase letters, Lowercase letters and Numbers. By default, all are enabled. Enter the length as a single value / range (within 3 - 40). Depending on the checkbox(es) selected (lower case, upper case and number), a random Username within the specified length is generated.
	For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

Password

Specifies the different available options of password that the Administrator can enable.

- Guest Defines Password: This option is disabled for Outlook Add-in Onboarding Template.
- Random Generated Password: Generates random password with the specified password complexity.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

- Use Username as Password: Allows the Guest User to login with only a Username. The Access Portal login screen must be modified to accept a Username without a password.
- Static Password: Allows you to set the password as a fixed string so that a single password can be used for multiple accounts.

Password Complexity Check	Configures the parameters to enforce when guests change their account passwords. Different levels of password complexity is required to select passwords that contain different combinations of characters, lowercase letters, uppercase letters, digits and symbols. If multiple combinations are selected, the different levels of password complexity is selected appropriately. • characters: Configures the number of characters in the password. • lower case: Indicates the password must have lower case only. • upper case: Indicates the password must have upper case only.
	 number: Indicates the password must have number only. special characters: Indicates the password must have special characters only. Special characters are: ! @ # \$ % ^ & * () - +.
Guest User Account Limit	This field is disabled for Outlook Add-in Onboarding Template.
Customize Printer Friendly Page	This field is disabled for Outlook Add-in Onboarding Template.
Access Groups	Configures the Access Groups for this Onboarding Template. Select the required checkbox(s) from the available options. If there are no groups available, click the links to select the required User Groups. For more information, see Configuring Access Groups. • User Groups - Single Membership: Configures Single Membership User Groups for the Onboarding
	 Template. User Groups - Multiple Memberships: Configures Multiple Memberships User Groups for the Onboarding Template.

User Email Domains	Configures the domains that need to be excluded during Guest User creation.
	For example, if the specified domain is "@extremenetworks.com"; Guest User accounts with email "name@extremenetworks.com" is not created.

Accessible to Provisioner

Configures the Guest User settings accessible to Provisioner using this Onboarding Template.

The options selected in this section are available to the Provisioner.

- General: Configures the general Guest User settings.
 - Email: Configures the Email address of the Guest User. This option is checked and disabled for Outlook Add-in Onboarding Template.
 - Mobile Phone: This option is disabled for Outlook Add- in Onboarding Template.
 - **SSID**: Specifies if the Provisioner can configure the SSID details.
 - SMS Gateway List: This option is disabled for Outlook Add-in Onboarding Template.
 - Delete on Expire: Specifies if the account has to be deleted when account validity duration expires.

If you select **Delete on Expire**checkbox, Provisioner will be able to view this field during Guest User creation. Provisioner can select this to override the specified conditions **Delete on Expire / Do Not Delete On Expire** and remove the accounts upon expiry.

If you do not select **Delete on Expire** checkbox, Provisioner will not be able to view this field during Guest User account creation.

If you select **Delete on Expire** option, the Guest Account is removed on expiry. If you select **Do Not Delete On Expire** option, the account needs to be removed manually.

 Account Activation: Specifies the type of account activation to be accessible to Provisioner.

If you select **Time Based**, Provisioner can configure start time and duration (upto to a maximum set limit) during guest account creation.

If you select **First Login**, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.

For Outlook Add-in Onboarding Template,

Time based is selected and the field is disabled.

 Account Expiration: Enables or disables the account expiration to be accessible to Provisioner.

If you select Max Expiration Time, Provisioner can configure the account validity duration up to the maximum value specified in the Onboarding Template > Common > Temporary Accounts Validity field.

If you select **Permanent**, a permanent Guest User account is created. This account does not have account activation preference and will not be deleted on expiry.

For Outlook Add-in Onboarding Template, **Max Expiration Time** is checked and the field is disabled.

- Firstname & Lastname: This option is disabled for Outlook Add-in Onboarding Template.
- Access Groups: Configures the selected Access Groups.
- Resend Details: This option is not applicable for Outlook Add-in Onboarding Template.
- Custom Attributes: This option is disabled for Outlook Add-in Onboarding Template.

Configuring Guest User Provisioning Using Vouchers

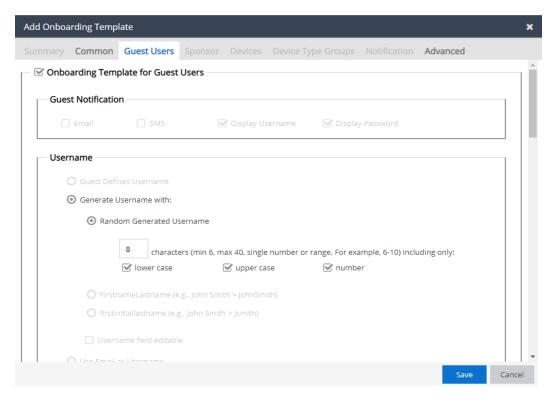
Use this procedure to configure Guest User record details for using Vouchers.

Before you begin

In the **Common** tab, select **Guest UserProvisioning using Vouchers** option to configure Guest User account details.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Guest Users** tab. The Guest Users screen is displayed.



- 2. In the **Username** section, by default **Generate Username With** along with **Random Generated Username** option is enabled while other options are disabled.
- 3. In the **Password** section, select an option as required.
- 4. In the **Password Complexity Check** section, set the password complexity by selecting the required alphanumeric checkbox.
- 5. In the Voucher Template section, you can select the printable templates

available to the Provisioner. The options are:

- Select Avery 5371 Business Card Template to print in Avery 5371 format.
- Select **Default** to print in grid format.
- 6. In the Access Groups section, select the Single and Multiple Memberships Groups as required. For more information, see Configuring Access Groups.
- 7. In the Accessible to Provisioner section, configure the General section as required.
- 8. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Field Descriptions

Use the data in the following table to use the Guest User tab.

Name	Description
	Display Username and Display Password are checked and this field is disabled for Voucher type Onboarding Template.

Username

Specifies the different available options of Username that the Administrator can enable. Only **Generate Username With** field is enabled.

- Generate Username With: Specifies the format of the Guest User Name.
 - Random Generated Username: Random generated Username is a combination of Uppercase letters, Lowercase letters and Numbers. By default, all are enabled. Enter the length as a single value / range (within 3 40). Depending on the checkbox(es) selected (lower case, upper case and number), a random Username within the specified length is generated.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "alBacd", "2aBBCD" and so on.

Password

Specifies the different available options of password that the Administrator can enable.

• Guest Defines Password: This option is disabled for Voucher Type Onboarding Template.

Guest Confirms Password: This option is disabled for Voucher Type Onboarding Template.

• Random Generated Password: Generates random password with the specified password complexity.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

- Use Username as Password : Allows the Guest User to login with only a Username. The Access Portal login screen must be modified to accept a Username without a password.
- Static Password: Allows you to set the password as a fixed string so that a single password can be used for multiple accounts.

Password Complexity Check	Configures the parameters to enforce when guests change their account passwords. Different levels of password complexity is required to select passwords that contain different combinations of characters, lowercase letters, uppercase letters, digits and symbols.
	If multiple combinations are selected, the different levels of password complexity is selected appropriately.
	characters: Configures the number of characters in the password.
	lower case: Indicates the password must have lower case only.
	upper case: Indicates the password must have upper case only.
	number: Indicates the password must have number only.
	 special characters: Indicates the password must have special characters only. Special characters are: ! @ # \$ % ^ & * () - +
Guest User Account Limit	This field is disabled for Voucher Type Onboarding Template.
Customize Printer Friendly Page	This field is disabled for Voucher Type Onboarding Template.

Voucher Template

This field displays the templates accessible to the provisioner. They are as follows:

Default: To print in the default grid view

Avery 5371 Business Card Template: To print in the Avery 5371 Business Card format view. The configurations are as follows:

- Title: Configures the Title of the Business card:
 - **Text:** Configures the Text for the Title. A Maximum of 35 characters can be used in the Text of the Title.
 - Font: Configures the font family for the Title.
 - Color: Configures the color of font of the Title.
 - Size: Configures the Font Size of the Title in Pixels.

Content: Configures the Content of the Business card.

- Text: Configures the Text for the Content. A Maximum of 145 characters can be used in the Text of the Content. The available Variables are \$username, \$password, \$ssid, \$QRCode
- Font: Configures the Font family for the Content.
- Color: Configures the color of font of the Content.
- Size: Configures the Font Size of the Content.

Select Network Interface: Configures the Network Interface used for the URL embedded in \$QRCode. The available interfaces are the Admin interface or Service A interface.

Preview: Displays the print version of Voucher Template.

Access Groups

Configures the Access Groups for Voucher Type Onboarding Template. Select the required checkbox(s) from the available options. If there are no groups available, click the links to select the required User Groups. For more information, see Configuring Access Groups.

- User Groups Single Membership: Configures Single Membership User Groups for the Onboarding Template.
- User Groups Multiple Memberships: Configures Multiple Memberships User Groups for the Onboarding Template.

Accessible to Provisioner

Configures the Guest User settings accessible to Provisioner using this Onboarding Template.

The options selected in this section are available to the Provisioner.

- General: Configures the general Guest User settings.
 - Email: Configures the Email address of the Guest User. This option is disabled for Voucher Type Onboarding Template.
 - Mobile Phone: This option is disabled for Voucher Type Onboarding Template.
 - **SSID**: Specifies if the Provisioner can configure the SSID details.
 - Account State: Enables Enables/disables the administrator to select whether the Provisioner can view the option to Enables/disables the administrator to select whether the Provisioner can view the option to change the Guest User Account State.

If you select **Account Enabled**, then the Guest User Account is enabled by default and default value for **Guest User Enabled** field in the Provisioner application - Guest User Add window is set to true.

If you select **Account Disabled**, then the Guest User Account is disabled by default and the default value for **Guest User Enable** field in the Provisioner application - Guest User Add window is set to false.

- SMS Gateway List: This option is disabled for Voucher Type Onboarding Template.
- Delete on Expire: Specifies if the account has to be deleted when account validity duration expires.

If you select **Delete on Expire** checkbox, Provisioner will be able to view this field during Guest User creation. Provisioner can select this to override the specified conditions **Delete on Expire / Do Not Delete On Expire** and remove the accounts upon expiry.

If you do not select **Delete on Expire** checkbox, Provisioner will not be able to view this field during Guest User account creation.

If you select **Delete on Expire** option, the Guest Account is removed on expiry. If you select **Do Not Delete On Expire** option, the account needs to be removed manually.

 Account Activation: Specifies the type of account activation to be accessible to Provisioner.

If you select **Time Based:**, Provisioner can configure start time and duration (upto to a maximum set limit) during guest account creation

If you select **First Login:**, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.

Note:

First Login option enabled Guest User account will not expire until the user actually logs in. Once the user logs in, the account expires as per the specified duration.

 Account Expiration: Enables or disables the account expiration to be accessible to Provisioner.

If you select **Max Expiration Time**, Provisioner can configure the account validity duration up to the maximum value specified in the

Onboarding Template > Common > Temporary Accounts Validity field.

If you select **Permanent**, a permanent Guest User account is created. This account does not have account activation preference and will not be deleted on expiry. For Voucher Type Onboarding Template, **Max Expiration Time** is selected and the field is disabled.

- Firstname & Lastname: This option is disabled for Voucher Type Onboarding Template.
- Access Groups: Configures the selected Access Groups.
- Resend Details: This option is not applicable to Voucher Type Onboarding Template.
- Custom Attributes: This option is disabled for Voucher Type Onboarding Template.

Configuring Guest User and Device Provisioning Using CSV

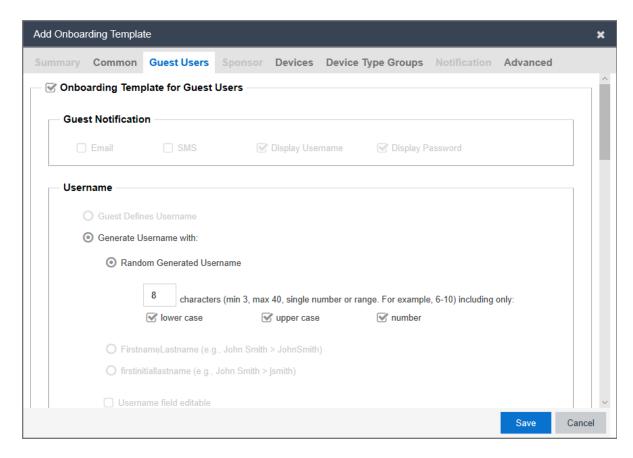
Use this procedure to configure Guest User record details for using CSV and Device Record details for using CSV.

Before you begin

In the Common tab, select Guest User and Device Provisioning using CSV option to configure Guest User account and Device Record details.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Guest Users** tab. The Guest Users screen is displayed.



- 2. In the **Username** section, by default **Generate Username With** along with **Random Generated Username** option is enabled while other options are disabled.
- 3. In the **Password** section, select an option as required.
- 4. In the **Password Complexity Check** section, set the password complexity by selecting the required alphanumeric checkbox.
- 5. In the **Access Groups** section, select the Single and Multiple Memberships Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 6. In the Accessible to Provisioner section, configure the General section as required.
- 7. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Field Descriptions

Use the data in the following table to use the Guest User tab.

Name	Description
------	-------------

Guest Notification	Display Username and Display Password are checked and this field is disabled for CSV type Onboarding Template.
Username	Specifies the different available options of Username that the Administrator can enable. Only Generate Username With field is enabled.
	Generate Username With: Specifies the format of the Guest User Name.
	• Random Generated Username: Random generated Username is a combination of Uppercase letters, Lowercase letters and Numbers. By default, all are enabled. Enter the length as a single value / range (within 3 - 40). Depending on the checkbox(es) selected (lower case, upper case and number), a random Username within the specified length is generated.
	For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

Password

Specifies the different available options of password that the Administrator can enable.

 Guest Defines Password: This option is disabled for CSV Type Onboarding Template.

Guest Confirms Password: This option is disabled for CSV Type Onboarding Template.

 Random Generated Password: Generates random password with the specified password complexity.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

- Use Username as Password : Allows the Guest User to login with only a Username. The Access Portal login screen must be modified to accept a Username without a password.
- Static Password: Allows you to set the password as a fixed string so that a single password can be used for multiple accounts.

Password Complexity Check	Configures the parameters to enforce when guests change their account passwords. Different levels of password complexity is required to select passwords that contain different combinations of characters, lowercase letters, uppercase letters, digits and symbols.
	If multiple combinations are selected, the different levels of password complexity is selected appropriately.
	characters: Configures the number of characters in the password.
	lower case: Indicates the password must have lower case only.
	upper case: Indicates the password must have upper case only.
	number: Indicates the password must have number only.
	 special characters: Indicates the password must have special characters only. Special characters are: ! @ # \$ % ^ & * () - +
Guest User Account Limit	This field is disabled for CSV Type Onboarding Template.
Customize Printer Friendly Page	This field is disabled for CSV Type Onboarding Template.

Access Groups

Configures the Access Groups for CSV Type Onboarding Template. Select the required checkbox(s) from the available options. If there are no groups available, click the links to select the required User Groups. For more information, see Configuring Access Groups.

- User Groups Single Membership: Configures Single Membership User Groups for the Onboarding Template.
- User Groups Multiple Memberships: Configures Multiple Memberships User Groups for the Onboarding Template.

Accessible to Provisioner

Configures the Guest User settings accessible to Provisioner using this Onboarding Template.

The options selected in this section are available to the Provisioner.

- General: Configures the general Guest User settings.
 - Email: Configures the Email address of the Guest User. This option is disabled for CSV Type Onboarding Template.
 - Mobile Phone: This option is disabled for CSV Type Onboarding Template.
 - Account State: Enables Enables/Disables the administrator to select whether the Provisioner can view the option to Enables/Disables the administrator to select whether the Provisioner can view the option to change the Guest User Account State.

If you select **Account Enabled**, then the Guest User Account is enabled by default and default value for **Guest User Enable** field in the Provisioner application - Guest User Add window is set to true.

If you select **Account Disabled**, then the Guest User account is disabled by default and the default value for **Guest User Enable** field in the Provisioner application - Guest User Add window is set to false.

- SMS Gateway List: This option is disabled for CSV Type Onboarding Template.
- Delete on Expire: Specifies if the account has to be deleted when account validity duration expires.

If you select **Delete on Expire** checkbox, Provisioner will be able to view this field during Guest User creation. Provisioner can select this to override the specified conditions **Delete on Expire / Do Not Delete On Expire** and remove the accounts upon expiry.

If you do not select **Delete on Expire** checkbox, Provisioner will not be able to view this field during Guest User account creation.

If you select **Delete on Expire** option, the Guest Account is removed on expiry. If you select **Do Not Delete On Expire** option, the account needs to be removed manually.

 Account Activation: Specifies the type of account activation to be accessible to Provisioner.

If you select **Time Based:**, Provisioner can configure start time and duration (upto to a maximum set limit) during guest account creation

If you select **First Login:**, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.

Note:

First Login option enabled Guest User account will not expire until the user actually logs in. Once the user logs in, the account expires as per the specified duration.

 Account Expiration: Enables or disables the account expiration to be accessible to Provisioner.

If you select Max Expiration Time, Provisioner can configure the account validity duration up to the maximum value specified in the Onboarding Template > Common > Temporary Accounts Validity field.

If you select **Permanent**, a permanent Guest

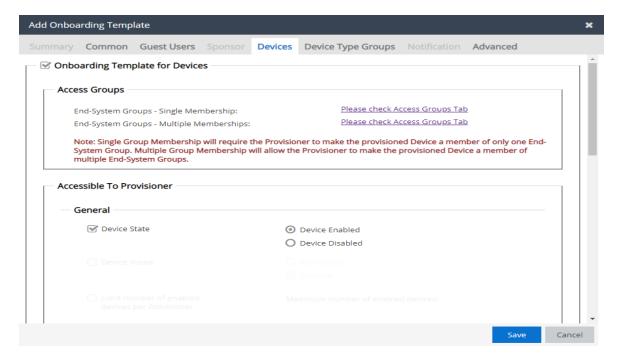
User account is created. This account does not have account activation preference and will not be deleted on expiry. For CSV Type Onboarding Template, **Max Expiration Time** is selected and the field is disabled.

- Firstname & Lastname: This option is disabled for CSV Type Onboarding Template.
- Access Groups: Configures the selected Access Groups.
- Resend Details: This option is not applicable to CSV Type Onboarding Template.
- Custom Attributes: This option is disabled for CSV Type Onboarding Template.

Configuring Device Record Details

Procedure

 In the navigation pane, click In the navigation pane, click Onboarding Templates > Add > Devices tab. The Devices screen is displayed.



- 2. In the Devices screen, select **Onboarding Template for Devices** to configure the Device record details. By default, it is selected.
- 3. In the Access Groups section, select the Single and Multiple End-System Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 4. In the Accessible to Provisioner section, configure the General, Custom Attributes, Device Attributes, and Account Validity Period options as required.
- 5. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Field Descriptions

Use the data in the following table to use Devices tab.

Name	Description
Access Groups	Configures the Access Groups for this Onboarding Template. Select the required checkbox(es) from the available options. If there are no groups available, click the links to select the required End-System Groups. For more information, see Configuring Access Groups.
	 The options available are: End-System Groups - Single Membership:

Accessible To Provisioner

Configures the Devices record settings accessible to Provisioners in this Onboarding Template.

The options selected in this section are available to the Provisioner. Each section allows you to customize the required fields as **Optional / Mandatory**.

- **General:** Configures the general Devices record settings.
 - Name: Configures the Device name.
 - Device State: Enables/Disables the administrator to select whether the Provisioner can view the option to change the Device State.

If you select **Device Enabled**, then the Device Record is enabled by default and default value for **Record Enabled** field in the Provisioner application - Device Add window is set to true.

If you select **Device Disabled**, then the Device Record is disabled by default and the default value for **Record Enabled** field in the Provisioner application - Device Add window is set to false.

- Limit number of enabled devices per Provisioner: This option is disabled for CSV type Onboarding Template.
- Display Admin's Comments: This option is disabled for CSV type Onboarding Template.
- Source: Configures the default source.

If you select **Auto populate with GIM-**[Onboarding Template] option, the default value populated will be **Guest and IoT**Manager Onboarding Template name.

If you select Static option, user defined

custom Device source can be provided.

- Custom Attributes: Configures the custom attributes for Device record settings. For more information, see Configuring Custom Attributes.
- Device Attributes: Configures the device attributes for Device record settings.
 - Asset Type: Configures the Device Asset Type for Permanent / Temporary.
 - **Device Type Groups:** Configures the Device Type Groups. By default, Device Type Groups is checked and Mandatory option is selected.
 - Device Type: Configures the Device Type of the selected Device Type Group. By default, Device Type is checked and Mandatory option is selected.
 - Access Groups: Configures the selected Access Groups.
- Account Validity Period: Configures the account validity period for Device record settings. By default, it is enabled.
 - Delete on Expire: Specifies if the Device has to be deleted when account validity duration expires.

If you select **Delete on Expire** checkbox, Provisioner will be able to view this field during Device Record Creation. Provisioner can select this to override the specified conditions **Delete on Expire / Do Not Delete On Expire** and remove the devices upon expiry.

If you do not select **Delete on Expire** checkbox, Provisioner will not be able to view this field during Device Record creation.

If you select **Delete on Expire** option, the Device is removed on expiry. If you select **Do Not Delete On Expire** option, the device needs to be removed manually.

 Account Activation: Specifies the type of account activation to be accessible to Provisioner.

If you select **Time Based**, Provisioner can configure start time and duration (up to a maximum set limit) during guest account creation.

If you select **First Login**, Provisioner can configure guest account duration that is valid from the moment the Guest User first logs in.

 Account Expiration: Enables or disables the account expiration to Max Expiration Time to be accessible to Provisioner.

Configuring Zero Touch Guest User Provisioning

Use this procedure to configure Guest User Account Details for using Zero Touch Guest User Provisioning.

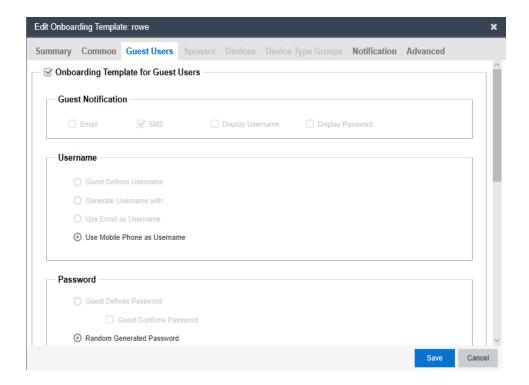
Before you begin

In the Common tab, select Zero Touch Guest User Provisioning.

Procedure

1. In the navigation pane, click **Onboarding Templates > Add > Guest Users** tab.

The Guest Users screen is displayed.



- 2. In the **Guest Users** screen, select the **Onboarding Template for Guest Users** checkbox to configure the Guest User account details. By default, it is enabled.
- 3. In the **Username** section, by default **Generate Username With** option is enabled while other options are disabled.
- 4. In the Password section, select an option as required.
- 5. In the **Password Complexity Check** section, set the password complexity by selecting the required alphanumeric checkbox.
- 6. In the **Access Groups** section, select the Single and Multiple Memberships Groups as required. For more information, see <u>Configuring Access Groups</u>.
- 7. In the Accessible to Provisioner section, configure the General and Custom Attributes as required.
- 8. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Name	Description
Guest Notification	SMS notification is checked and this field is disabled for Zero Touch Guest User Provisioning Template.

Username

Specifies the different available options of Username that the Administrator can enable. Only **Generate Username**With field is enabled.

- Generate Username With: Specifies the format of the Guest User Name. this field is disabled for Zero Touch Guest User Provisioning Template. Guest Defines User Name: Specifies the Guest User name this field is disabled for Zero Touch Guest User Provisioning.
 - Guest Defines User Name: Specifies the Guest User name this field is disabled for Zero Touch Guest User Provisioning.
 - Generate Username With: Specifies the format of the Guest User Name this field is disabled for Zero Touch Guest User Provisioning.
 - Use Email as Username: Specifies to use the Email address as Username this field is disabled for Zero Touch Guest User Provisioning.
 - Use Mobile Phone as Username: Specifies to use the Mobile Phone number as Username.

Password

Specifies the different available options of password that the Administrator can enable.

- Guest Defines Password: This option is disabled for this field is disabled for Zero Touch Guest User Provisioning Template.
- Random Generated Password: Generates random password with the specified password complexity.

For example, the length specified is 6 characters, and you have selected "lower case", "upper case", and "number"; the Username / Password must contain at least one lowercase, one uppercase, and one number. Valid Usernames are: "a1Bacd", "2aBBCD" and so on.

- Use Username as Password: Allows the Guest User to login with only a Username. The Access Portal login screen must be modified to accept a Username without a password.
- Static Password: Allows you to set the password as a fixed string so that a single password can be used for multiple accounts.

Password Complexity Check	Configures the parameters to enforce when guests change their account passwords. Different levels of password complexity is required to select passwords that contain different combinations of characters, lowercase letters, uppercase letters, digits and symbols. If multiple combinations are selected, the different levels of password complexity is selected appropriately. • characters: Configures the number of characters in the password. • lower case: Indicates the password must have lower case only. • upper case: Indicates the password must have upper case only. • number: Indicates the password must have number only. • special characters: Indicates the password must have special characters only. Special characters are: • # \$ % ^ & * () - +.
Guest User Account Limit	This field is disabled for this field is disabled for Zero Touch Guest User Provisioning Template.
Access Groups	Configures the Access Groups for this Onboarding Template. Select the required checkbox(s) from the available options. If there are no groups available, click the links to select the required User Groups. For more information, see Configuring Access Groups. • User Groups - Single Membership: Configures Single Membership User Groups for the Onboarding Template. • User Groups - Multiple Memberships: Configures Multiple Memberships User Groups for the
Accessible to Provisioner	Onboarding Template. This section is disabled for Zero Touch Onboarding Template.

Managing Onboarding Templates

Onboarding Template is a collection of settings that establishes the administrative rights and account settings of the Provisioners that associate with it.

Use this procedure to manage an Onboarding Template.

Procedure

- 1. In the navigation pane, Click Onboarding Templates.
- 2. Click the required Onboarding Template to manage.
- 3. Click **Add** to create a new Onboarding Template. For more information, see <u>Creating</u> an Onboarding Template.
- 4. Click **Edit** to modify and view the existing Onboarding Template. For more information, see <u>Modifying and Viewing an Onboarding Template</u>.
- 5. Click **Copy** to create a copy of the existing Onboarding Template. For more information, see Copying an Onboarding Template.
- Click **Delete** to delete the selected Onboarding Templates, Onboarding Template
 Members, and Expired Guest Accounts. For more information, see <u>Deleting</u>
 <u>Onboarding Templates and Guest Accounts</u>.
 - Tip:

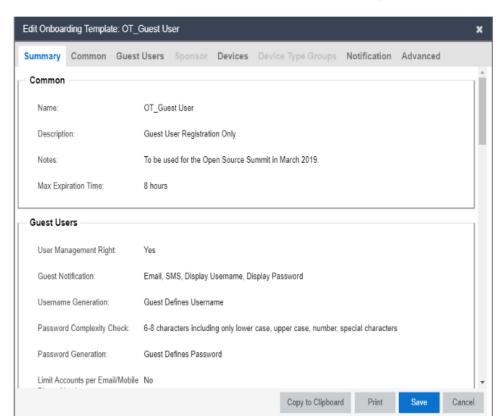
Use Ctrl / Shift to select multiple records to delete.

Modifying and Viewing an Onboarding Template

Use this procedure to edit and view an existing Onboarding Template.

Procedure

- 1. In the navigation pane, Click Onboarding Templates.
- 2. Select the required Onboarding Template from the list.
- 3. Click **Edit > Summary** tab to view an Onboarding Template summary.
 - Note:



You can also view by double-clicking the required Onboarding Template from the list. The Edit screen is displayed.

- 4. In the Edit Onboarding Template screen, modify the changes in the required tabs.
- 5. Click Copy to Clipboard to copy the Onboarding Template summary to clipboard.
- 6. Click **Print** to print the Onboarding Template.
- 7. Click **Save** to save the configuration or **Cancel** to cancel the changes.

Copying an Onboarding Template

Use this procedure to create a copy of an existing Onboarding Template.



The **Copy** option in the Onboarding Template only creates a new Onboarding Template. The Provisioner(s) or Guest User(s) or Device(s) associated with the source Onboarding Template are not added to the copied Onboarding Template.

Procedure

- 1. In the navigation pane, click **Onboarding Templates**.
- 2. Click the required Onboarding Template from the list.
- 3. Click Copy.
- 4. In the **Onboarding Template Name** field, enter the name, description and notes for the new Onboarding Template.
- 5. Modify the required changes in all the tabs for the new Onboarding Template.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Deleting Onboarding Templates and Guest Accounts

Use this procedure to delete Onboarding Template(s), Onboarding Template Member(s) and Expired Guest User(s).

Procedure

- 1. In the navigation pane, click **Onboarding Templates**.
- 2. Select the required Onboarding Template(s).
- 3. In the **Delete** drop-down list, click an option as required.
- 4. Click **Yes** or **No** in the confirmation message to delete the selected Onboarding Template(s), Onboarding Template Member(s), and Expired Guest User(s).

Field Descriptions

Use data in the following table to use **Delete** option.

Name	Description
Delete Onboarding Template(s)	Deletes the selected Onboarding Template(s). Note You cannot delete an Onboarding Template, if it is associated with the Guest User(s) or Device(s) or Provisioner(s). Use Delete Onboarding Template Member(s) Option to proceed in such scenarios. In case of failure, appropriate error message is displayed.

Delete Onboarding Template Member(s)	Deletes all the Internal Provisioner(s) or Self Service Provisioner (s), or Guest User(s), or Device(s) of the selected Onboarding Template. If you select this option, the Guest and IoT Manager displays a screen that allows you to select the type of records to delete.
	If this option is selected, you need to select the required selection in the Delete Member screen.
Delete Expired Guest User(s)	Deletes all the expired Guest User accounts of the selected Onboarding Template(s).

Configuring Custom Attributes

The **Custom Attributes** tab in Onboarding Templates menu allows the Administrator to specify human readable labels for **Custom Field** (1-6). You can set custom labels differently for Guest User and Device in their respective tabs.

The Administrator configures custom labels, whereas the Provisioner and Self-Service guest configures values for these custom labels.

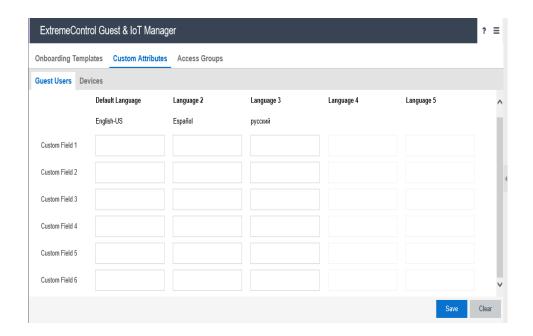
For more information, see <u>Configuring Guest User Custom Attributes</u> and <u>Configuring Device Custom Attributes</u>.

Configuring Guest User Custom Attributes

Use this procedure to configure Guest User Custom Attributes.

Procedure

1. In the navigation pane, click **Onboarding Templates > Custom Attributes > Guest User** tab. The Guest User screen is displayed.



The languages displayed are based on the locales configured in Preferences tab. For more information, see

the **Setting the Locales** section in <u>Setting the Locales</u>.

- 2. In the Custom Field, enter one or more labels as required in the (1-6) fields.
- 3. Click **Save** to save the configuration or click **Clear** to clear the configuration.

You cannot clear the default and other languages available in this screen.

Field Descriptions

Use the data in the following table to use Guest User tab.

Name	Description
------	-------------

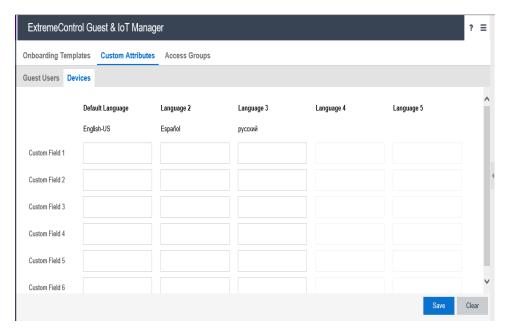
Custom Field Specifies the labels for the custom fields to be displayed during Guest User Registration. For example, If Administrator specifies Country Code as the label for Custom Field 1 for the language English-US and the Provisioner or Self Service Guest User selects English-Us as the language to be displayed. Then depending on the Onboarding Template settings, the country code needs to be specified during Guest User registration. For more information, see Registering a New Guest User.

Configuring Device Custom Attributes

Use this procedure to configure Device Custom Attributes.

Procedure

1. In the navigation pane, click **Onboarding Templates > Custom Attributes > Device** tab. The Devices screen is displayed.



The languages displayed are based on the locales configured in **Preferences** tab. For more information, see the **Setting the Locales** section in Setting Preferences.

- 2. In the Custom Field field, enter one or more labels as required in the (1-6) fields.
- 3. Click **Save** to save the configuration or click **Clear** to clear the configuration.
 - Note:

You cannot clear the default and other languages available in this screen.

Field Descriptions

Use the data in the following table to use **Device** tab.

Name	Description
Custom Field	Specifies the labels for the custom fields to be displayed during Guest User Registration.
	For example,
	If the Administrator specifies Location as the label for the Custom Field 1 for the language English-US and the Provisioner or Self Service Guest User selects English-Us as the language to be displayed. Then depending on the Onboarding Template settings, the location needs to be specified during Guest User registration. For more information, see Registering a New Guest User.

Configuring Access Groups

The Access Groups tab in Onboarding Templates menu allows the Administrator to map the Access Groups as Single and Multiple Memberships that are available to the Provisioner during Guest User Registration as per the Onboarding Template settings.

There are two types of Access Groups. The Netsight Administrator needs to create "User Groups - Single Membership" and "User Groups - Multiple Memberships" types of accounts in the server prior Provisioner provides network access to the users at your facility. These groups are customized for your site;

the Administrator structure the fields that needs to be available during Guest User creation.

- User Groups Single Membership: Configures the specific network to which the Guest User has access. The Provisioner may select only one Single Membership as the user must be assigned to one segment of the network. For example, you can select south east regional sales department VLAN as the Single Membership for the people belonging to the sales department of the south east region.
- User Groups Multiple Memberships: Configures wired, wireless or secured wireless and typically the location of a switch or access point.

You can set Access Groups differently for Guest User and Device in their respective tabs. The User Groups configured in ExtremeCloud IQ - Site Engine are available to the Guest and IoT Manager Administrator to map as Single and Multiple Memberships. For more information on configuring User Groups, see User Groups in ExtremeCloud IQ - Site Engine.

The End System Groups configured on ExtremeCloud IQ - Site Engine are available to Guest and IoT Manager Administrator to map as Single and Multiple Memberships. For more information on configuring End System Groups, see End-System Groups in ExtremeCloud IQ - Site Engine.



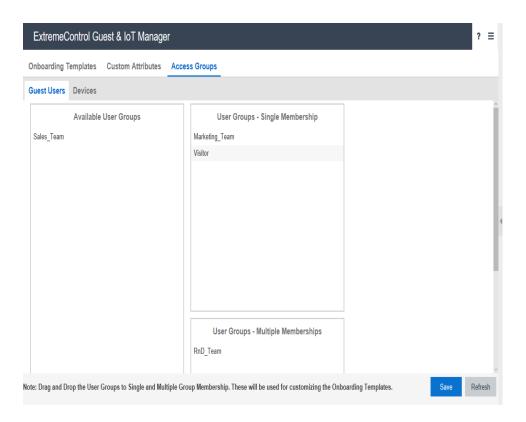
The **Access Groups** settings are optional. If you do not map the Access Groups as Single and Multiple Memberships, then a link to the Access Groups tab is displayed while creating an Onboarding Template.

Configuring Guest User Access Groups

Use this procedure to configure Guest User access groups.

Procedure

1. In the navigation pane, Click Onboarding Templates > Access Groups > Guest Users tab. The Guest Users screen is displayed.



2. In the **Available User Groups** section, drag and drop the required **User Groups** to **Single** and **Multiple Group Memberships**. This can be used for customizing the Onboarding Templates.

You can also perform the same action in reverse order.

3. Click **Save** to save the configuration.

Field Descriptions

Use the data in the following table to use Guest Users tab.

Name	Description
Available User Groups	Specifies the list of User Groups available for mapping with Single or Multiple Memberships.
User Groups - Single Membership	Specifies the list of User Groups that provide specific network access to the Guest User.

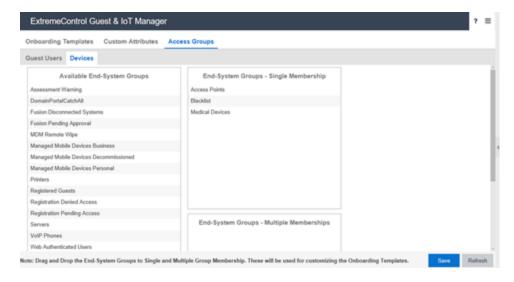
User Groups	Specifies the User Groups that provide general network
- Multiple	access to the Guest User.
Memberships	

Configuring Device Access Groups

Use this procedure to configure Device access groups.

Procedure

1. In the navigation pane, Click **Onboarding Templates > Access Groups > Device** tab. The Devices screen is displayed.



- In the Available End-System Groups section, drag and drop the required End-System Groups to End-System Groups - Single Memberships or End-System Groups - Multiple Memberships.
- 3. Click **Save** to save the configuration.

Field Descriptions

Use the data in the following table to use **Device** tab.

Name	Description
------	-------------

Available End-System Access Groups	Specifies the list of End-System Groups available for mapping as Single and Multiple Groups.
End-System Groups - Single Memberships	Specifies the list of End-System Groups that provide specific network access to the Guest User.
End-System Groups - Multiple Memberships	Specifies the End-System Access Groups that provide general network access to the Guest User.

Configuring Provisioners

This module is intended for Guest and IoT Manager Administrator to perform operations on Provisioner accounts that are stored in the **Access Control Engine** local password repository. A Provisioner is a member of the organization whose account is stored either in the **Access Control Engine** or in LDAP. These internally stored Provisioners are referred as **Internal Provisioners**.

If the Administrator desires to create Guest User accounts to test policies, it is essential to have a Provisioner account. Administrator can only set up rules to place the Guest Users in the appropriate Onboarding Template and not modify the Guest Users. For more information, see Configuring Advanced Details.

Prerequisite for Provisioner Function

The Administrator must ensure that the following criterion is met before the Provisioners start functioning.

- Provisioner Accounts: Each provisioner must have a Provisioner Account stored in Access Control Engine or mapped via Access Control Engine to your LDAP store.
- Access to the Provisioner Application: Each provisioner must be able to connect to the Provisioner Application via the web browser.
- Connection to an Access Control Engine: The Guest and IoT Manager Application must have connectivity to the Access Control Engine in order to save and retrieve guest data.
- Configurations: The Access Control Engine must have the Single
 Membership Access Group and Multiple Memberships Access Groups that
 form the set of assignable access constraints for Guest Users.
- Notification Settings: The Guest and IoT Manager Application must have configuration to send Email and SMS notifications to the Guest Users. For more information, see <u>Enabling E-mail Notification</u> and <u>Configuring SMS</u> <u>Gateway / Provider</u>.

Note:

Ensure that you have created an Onboarding Template to which the new Internal Provisioner belongs. For more information, see <u>Creating an Onboarding Template</u>.

It is necessary to train the Provisioners to use the Guest and IoT Manager Provisioner Application. For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Internal Provisioner Operations

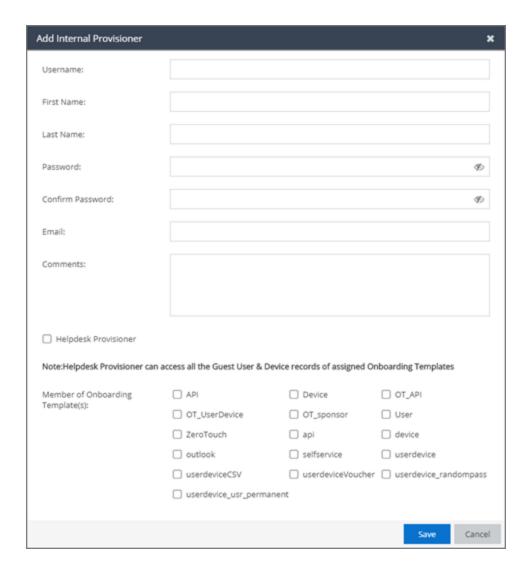
The Internal Provisioners tab in Provisioners menu allows you to create and manage Internal Provisioners. You can also view and reassign the Internal Provisioner to one or more Onboarding Template(s). For more information, see Prerequisite for Provisioner Function.

Creating an Internal Provisioner

Use this procedure to create an Internal Provisioner account in the local password repository.

Procedure

- 1. In the navigation pane, click **Provisioner > Internal Provisioners** tab.
- 2. In the Internal Provisioners screen, click **Add** to add the internal provisioners. The Add Internal Provisioner screen is displayed.



- 3. Configure the Provisioner login credentials details in the respective fields as required.
- 4. Select the **Helpdesk Provisioner** checkbox to provide the Provisioner user with the ability to view and edit all the Guest user and Device records of the Onboarding Templates to which they are assigned. Helpdesk Provisioners can add records of assigned Onboarding Templates; edit, delete and extend user expiration; and perform resend password, resend details, renew password, and print operations on accessible records.
- 5. In the **Member of Onboarding Templates(s)** section, select the Onboarding Templates that need to be associated with the Provisioners.
- 6. Click Save to save the configuration or click Cancel to cancel the changes.
 - The added Internal Provisioners details are displayed in Internal Provisioners

screen along with all the specified information.

- The URL to access the Provisioner application is https://<Guest Manager & IOT Manager IP/Host Name>/GIM/provisioner/
- Provisioner URL can be also access through IP address or host name. For example: https://<Guest Manager & IOT Manager IP / Host Name>.
- 7. (Optional)Select the required Provisioner account and click **Edit**, to modify a provisioner account. For more information, see <u>Modifying Internal Provisioner Account</u>.
- 8. (Optional) Click Show Filter to narrow the search parameters and quickly find all similar Provisioner accounts. For more information, see Filtering Internal Provisioner Account.
- 9. (Optional) Select the required Internal Provisioner(s) and click **Delete**, to remove the created Internal Provisioner(s).
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

When you delete a Provisioner(s), the application retains all Guest Users and Device Accounts that were provisoned by the deleted Provisioner.

Field Descriptions

Use data in the following table to use Add Provisioner screen.

Name	Description
Username, First Name, and Last Name	Configures the username, first name, and last name of the Provisioner account details. The length of the name can be 30 characters or less. Note: These fields should only contain letters, number, hyphen, and underscore.

Password and Confirm Password	Configures the password of the Provisioner. Since Guest and IoT Manager encrypts the password, ensure that you make a note of the password for future reference. Note: These fields should only contain alphanumeric and special characters. Only these special characters are allowed: ! @ # \$ % ^ & * () +
Email	Configures the email address of the Provisioner.
Comments	Configures the additional information.
Member of Onboarding Template(s)	Configures the Onboarding Template that needs to be associated with the Provisioner. Select the required Onboarding Template and ensure that Provisioner must be part of atleast one Onboarding Template.

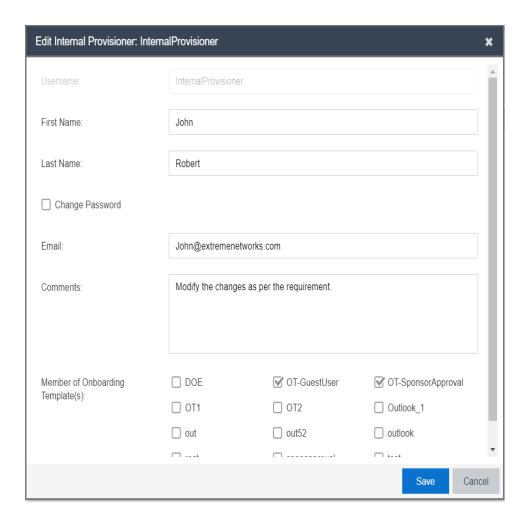
Modifying Internal Provisioner Account

Use this procedure to modify a Internal Provisioner account.

Procedure

- 1. In the navigation pane, click **Provisioner > Internal Provisioner** tab.
 - The Internal Provisioners screen is displayed with the list of provisioners currently authorized to set up Guest access.
- 2. In the **Internal Provisioners** screen, select the Provisioner account that you wish to modify.
- 3. Click Edit, to view the Provisioner account details.

The Edit Internal Provisioner screen is displayed.



Note:

You can also view by double-clicking the required Provisioner account from the list. By default, the **Username** field is disabled.

- 4. In the Edit Internal Provisioner screen, modify the fields required.
- 5. (Optional) Select **Change Password** to modify the Internal Provisioner's password. You must specify **New Password** and **Confirm New Password**.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The modified internal provisioners details are displayed in the **Internal Provisioners** screen.

Field Descriptions

Use data in the following table to use Edit Provisioner screen.

Name	Description
First Nameand Last Name	Modify the First Name, and Last Name of the Provisioner account details. The length of the name can be 30 characters or less. Note: These fields should only contain letters, number, hyphen, and underscore.
Change Password	Select this to modify the current password details. If selected, you must also specify New Password and Confirm New Password. Change Password is optional.
New Password and Confirm New Password	Configures a new password for the Provisioner account. Since Guest and IoT Manager encrypts the password, ensure that you make a note of the password for future reference. Note: These fields should only contain alphanumeric and special characters. Only these special characters are allowed:! @ # \$ % ^ & * () +
Email	Modify the email address of the Provisioner, if required.
Comments	Modify the additional information, if required.
Member of Onboarding Template(s)	Reassign the Internal Provisioner to one or more Onboarding Template, if required.

Filtering Internal Provisioners

Use this procedure to filter Internal Provisioner account.

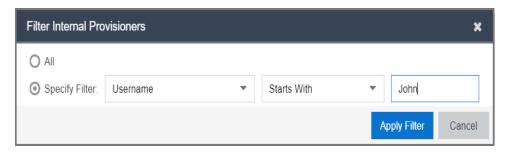
Procedure

1. In the navigation pane, click **Provisioner > Internal Provisioner** tab.

The Internal Provisioners screen is displayed with the list of provisioners currently authorized to set up Guest access.

2. In the Internal Provisioners screen, click Show Filter to narrow the search parameters and quickly find all similar provisioners.

The Filter Internal Provisioner screen is displayed.



- 3. In the Filter Internal Provisioner screen, do the following:
 - 1. Select All, and click Apply Filter to view all the Internal Provisioners.
 - 2. Select **Specify Filter** to include the additional fields to narrow the quick search and click **Apply Filter**.
 - 3. Click Cancel to cancel the changes.

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Field Descriptions

Use data in the following table to use Filter Internal Provisioner screen.

Name	Description
All	Displays the list of all the Internal Provisioner account data.

Specify Filter

Simplifies the search parameters to quickly find the selected search criterion that includes specified parameters.

Additionally you can also enter the operator conditions to match the selected search criteria to obtain precise search results of each Provisioner.

The search conditions are:

- Username
- First Name
- Last Name
- Email

The search conditions operators are:

- Starts with
- Ends with
- Contains
- Equals
- Not Equals

Configuring Self-Services

This module is intended for Guest and IoT Manager Administrator to create Self-Service Provisioner. A Self-Provisioned Guest User and Devices that appears as a Guest User account and Devices is managed similar to other Guest User account and Devices. For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Configuring Self-Service Provisioners

The **Self-Service Provisioners** tab in Self-Services menu allows you to select the Service Type and Onboarding Template to create Self-Service URLs and also creates a dedicated Provisioner account for each Self-Service. The dedicated Provisioner owns the Guest User and Devices created through the Self-Service. You can direct arriving Guests to these Self-Service URLs to use the self-registering feature.

Generally, an arriving Guest uses a kiosk computers / BYOD devices to fill out the Self-Provisioning information. When their account is created, this service sends the login credentials to the user through email, SMS message, or to a front desk personal who can print it as hard copy.

Note:

Ensure that you have configured email and / or SMS gateway details to send account access details. For more information, see Enabling E-mail
Notification and Configuring SMS Gateway / Provider.

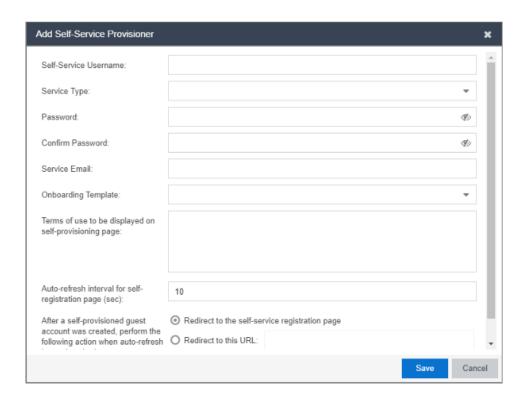
Creating Self-Service Provisioners

Use this procedure to create a Self-Service Provisioners.

Procedure

- 1. In the navigation pane, click **Self-Services** > **Self-Service Provisioners** tab.
- 2. In the Self-Service Provisioners screen, click Add to add a Self-Service Provisioner.

The Add Self-Service Provisioner screen is displayed.



- 3. In the Self-Service Username field, enter the name of the Provisioner account.
- 4. In the Service Type field, select the required service type from the drop-down list.

If you select **Device** option as **Service Type**, the **User account with** provisioning rights must be successfully authenticated to create a device account and **Confirmation Template** fields are enabled.

- Select User account with provisioning rights must be successfully authenticated to create a device account, to allow the successfully authenticated Provisioners to create a Device account.
- Use the **Confirmation Template** field, to specify how the confirmation messages needs to be displayed.

If you select **Zero Touch Guest Access** option as **Service Type**, the **QR Code Validity (in mins)** and **Redirect to this URL post successful authentication on clicking login URL** fields are enabled.

• Use the QR Code Validity (in mins) field, to configure the validity of the QR code.

- Use the Redirect to this URL post successful authentication on clicking login URL fields to specify the URL to which the Guest User must be redirected after a successful authentication when the Guest User clicks the login URL.
- 5. In the **Password**, **Confirm Password** and **Service Email** fields, configure the Provisioner login credentials.
- 6. In the **Onboarding Template** field, select the required Onboarding Template from the drop-down list to set the access restrictions.
- 7. In the **Terms of use to be displayed on self-provisioning page** field, enter the terms of use to be displayed on the Self-Provisioning page.
- 8. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The created Self-Service Provisioner is displayed in the **Self-Service Provisioners** screen with all the added details.

- 9. (Optional) Select the required Self-Service Provisioner and click **Edit** to modify a Self-Service Provisioners. For more information, see <u>Modifying Self-Service</u> Provisioners.
- 10. (Optional) Select the required Self-Service Provisioner(s) and click **Delete** to delete the Self-Service and its Provisioner account.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

When you delete a Self-Service Provisioner(s), the application retains all Guest Users and Device Accounts that were provisioned by the deleted Self-Service Provisioner.

Field Descriptions

Use data in the following table to use Add Self-Service Provisioner screen.

Name [Description
--------	-------------

Self-Service Username	Configures the name of the Provisioner account that manages the Self-Service and also used in URL of the Self-Service. The length of the name can be 30 characters or less. Note: These fields should only contain letters, number, hyphen, and underscore.
Service Type	Configures basic properties of Self-Provisoning Service. The Registration Page does not exist until you specify the options. The options are: • Guest User: If you select Guest User option as
	Service Type and the Onboarding Template of the type as Guest User, the users can create their account directly. If the Onboarding Template is of type Sponsor, then Sponsor Approval is required. For more information, see Configuring Sponsor Approval.
	Devices: If you select Device option as Service Type, then you must select Onboarding Template of the type a Devices only.
	Zero Touch Guest Access: If you select Zero Touch Guest Access option as Service Type, then you must select Onboarding Template of the type a Zero Touch Guest Access only.
Password and Confirm Password	Configures the password of the Provisioner. Since Guest and IoT Manager encrypts the password, ensure that you make a note of the password for future reference. Note:
	These fields should only contain alphanumeric and special characters. Only these special characters are allowed: ! @ # \$ % ^ & * () +
Service Email	Configures the email address of the Provisioner.

Onboarding Template	Associates this Onboarding Template to the Self-Service Provisioner.
User account with provisioning rights must be successfully authenticated to create a device account	Select to provision a Device only after successful authentication of the Provisioner. This field is enabled, if the selected Service Type is Device only.
Confirmation Template	Specifies the confirmation message format and also contains the variables to display the Username and MAC address as part of the confirmation message. You can also specify variables to display the start time and end time of the Device account in the confirmation message.
	This field is enabled, if the selected Service Type is Device only.
	Note: If you have not provided any information in this field, then the default template will be used.
Terms of use to be displayed on self-provisioning page	Displays terms and condition information in the Self-Service Provisioning page.
Auto-refresh interval for self-registration page (sec)	Configures the time value for the refresh interval of the Self-Service Provisioning page. Default value is 10 seconds.
After a self- provisioned guest account is created, perform the following action when auto-	Specifies the actions that needs to be performed after the Guest account creation. The options are: • Redirect to the self-service registration page • Redirect to the specified URL
refresh interval expired	Don't do anything

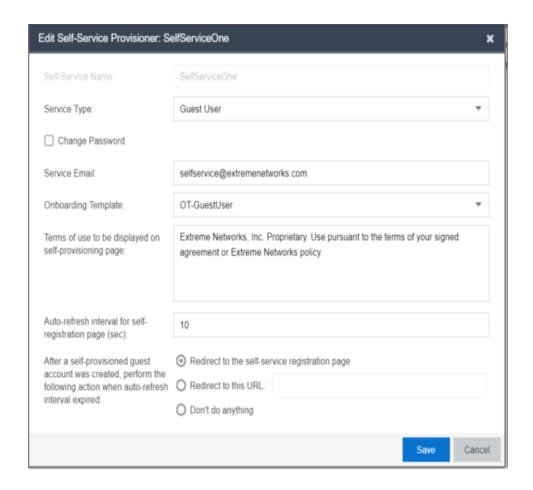
QR Code Validity (in mins)	Enter the time value in minutes to ensure the QR code is valid for that period.
	The maximum time limit that a valid QR code can be set is 1440 minutes.
	This field is applicable only for Zero Touch Guest Access.
Redirect to this URL post successful authentication on clicking login URL.	Enter the URL to which the Guest User must be redirected after a successful authentication when the Guest User clicks the login URL. This field is applicable only for Zero Touch Guest Access.

Modifying Self-Service Provisioners

Use this procedure to modify a Self-Service Provisioners.

Procedure

- 1. In the navigation pane, click **Self-Services** > **Self-Service Provisioners** tab.
 - The Self-Service Provisioners screen is displayed with list of Self-Service Provisioners and their accounts.
- 2. In the **Self-Service Provisioners** screen, select the Self-Service Provisioners account that you wish to modify.
- 3. Click **Edit**, to view the Provisioner account details. The Edit Self-Service Provisioner screen is displayed.



🕴 Note:

You can also edit by double-clicking the required Self-Service Provisioner account from the list. By default, the **Self-Service Username** field is disabled.

- 4. In the Edit Self-Service Provisioner screen, modify the fields required.
- 5. (Optional) Select **Change Password** to modify the Self-Service Provisioner's password. You must specify New Password and Confirm New Password.
- 6. Click Save to save the configuration or click Cancel to cancel the changes.

The modified Provisioners details are displayed in the **Self-Service Provisioners** screen.

Field Descriptions

Use data in the following table to use Edit Self-Service Provisioner screen.

Name	Description
Service Type	Modify the Service Type.
	The Options are:
	Guest User
	• Device
	Zero Touch Guest Access
	Device option enables User account with provisioning rights must be successfully authenticated to create a device account and Confirmation Template field.
	Zero Touch Guest Access option enables the QR Code Validity (in mins) and Redirect to this URL post successful authentication on clicking login URL. fields.
Change Password	Select this to modify the current password details. If selected, you must also specify New Password and Confirm New Password. Change Password is optional.
New Password and Confirm New Password	Modify the password and reconfirm. Since Guest and IoT Manager encrypts the password, ensure that you make a note of the password for future reference. Note: These fields should only contain alphanumeric and special characters. Only these special characters are allowed: ! @ #
	\$ % ^ & * () +
Service Email	Modify the email address of the Provisioner, if required.
Onboarding Template	Select the different Onboarding Template from the drop-down list to associate, if required.

User account with provisioning rights must be successfully	Select to provision a Device only after successful authentication of the Provisioner.
authenticated to create a device account	This field is enabled, if the selected Service Type is Device only.
Confirmation Template	Modify the confirmation message, if required
	This field is enabled, if the selected Service Type is Device only.
	S Note:
	If you have not provided any information in this field, then the default template will be used.
Terms of use to be displayed on self-provisioning page	Modify the terms of use message, if required.
Auto-refresh interval for self registration page (sec)	Modify the auto refresh value, if required.
After a self-provisioned guest account is created, perform the following	Specifies the options that needs to be performed once the Self-Provisioners Guest account is created. The options are:
action when auto-refresh interval expired	Redirect to the self-service registration page
	Redirect to the specified URL
	Don't do anything
QR Code Validity (in mins)	Enter the time value in minutes to ensure the QR code is valid for that period.
	The maximum time limit that a valid QR code can be set is 1440 minutes.
	The Guest User is redirected to this URL post successful authentication on clicking login URL.
	This field is applicable only for Zero Touch Guest Access.

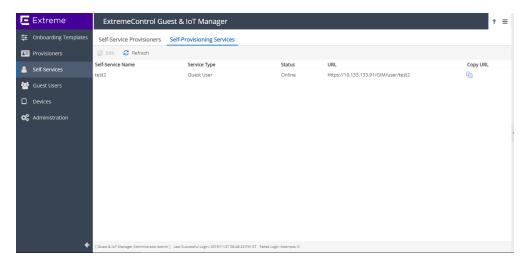
Redirect to this URL post successful authentication on clicking login URL.	Enter the URL to which the Guest User must be redirected after a successful authentication when the Guest User clicks the login URL.
	This field is applicable only for Zero Touch Guest Access.

Viewing Self-Provisioning Services

The **Self-Provisioning Services** tab in Self-Services menu allows you to view and identify Self-Provisioning Services that you have created. The created Self-Provisioning Services are displayed along with Self-Service Name, Service Type, Status, and the URL. The different URL represents the particular service type pages that has been generated for registering the Guest Users and Devices.

You can also copy these URLs to access the Self Service page. For more information on using Self-Provisioning page, see <u>Using Self-Provisioning</u> Services.

Self Provisioning Services



Managing Guest Users

This module is intended for Guest and IoT Manager Administrator to manage and carry out bulk Guest User operations. A Guest User account can be permanent, temporary, automatically expiring account with specific limited rights to use the network based on the associated Onboarding Template.

Accessing Guest Users

The **Guest Users** tab in the Guest Users menu allows you to view and manage all the users created by the Provisioner(s).

Using Guest User Features

Use this procedure to manage the Guest User Administrator features.

Procedure

1. In the navigation pane, click **Guest Users > Guest Users** tab.

The Guest Users screen is displayed along with the user details created by the Provisioner(s). By default, 25 users are displayed and you can extend up to 75 users.

You can also click the column headers to sort the list view by that column. Click the column header a second time to reverse the direction of the sort.

- 2. Select the required user and click View to view the selected user information.
- 3. (Optional) Select the required Guest User(s) and click **Extend Expiration** to extend the validity of Guest User(s) account. The validity is extended based on the duration specified during the creation.

The duration of each selected Guest User is calculated as:

DURATION = END_TIME - START_TIME

Then the account is modified to:

START_TIME = CURRENT_TIME

END TIME = START TIME + DURATION

Extend Expiration Example:

Consider two Guest Users, User 1 valid for a duration of one month and User 2 is valid for a duration of two months, both are expiring tomorrow and the current time is 02:00 P.M. When you select these two accounts and click **Extend Expiration** option, their expiry is extended as follows:

- User 1 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 1 month.
- 2. User 2 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 2 months.

3 Note:

The Provisioners can use **Extend Expiration** option to extend the duration of expiry for expired Guest User account(s) also.

Expiry of First Login Pending and Permanent Guest User accounts cannot be extended.

- 4. (Optional) Select the required Guest User Accounts(s) and click **Resend Password** to resend the password to Guest Users.
- 5. (Optional) To resend Details to Guest User(s), select the required Guest User Accounts(s) and click **Resend Details**.

When Guest User(s) are selected to resend the password, resend details, or both the application validates the following prior sending the password:

- Notification options has either SMS / Email or both enabled.
- Account is not locked / expired.
- 6. (Optional) To renew password to Guest Users(s), select required Guest User Accounts(s) and click **Renew Password** to generate new password and send the credentials to the Guest User(s)

When Guest User are selected to renew password, the application validates the following prior sending the renewed password:

- Notification options has either SMS / Email or both enabled.
- Account is not locked / expired.
- Account cannot be of CSV or Voucher Type.
- Account must belong to an Onboarding Template with Randomly generated Password for Guest Accounts.
- Guest User account must not be in First login pending state.
- 7. (Optional) To remove Guest User account(s), select the required user account(s) and select **Delete > Delete Selected** to remove only the Guest User accounts you selected, or **Delete > Delete All** to remove all Guest User accounts.
 - 😈 Tip:

Use Ctrl / Shift to select multiple records to delete.

- 8. (Optional) In the **Guest Users** screen, click **Show Filter** to specify the search parameters and quickly find all similar records. The filter is applied to all columns displayed in the list view. For more information, see <u>Searching Specific Guest Users</u>.
- 9. (Optional) Select the Guest User and click **Print**, to print the account summary.
 - 3 Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Searching Specific Guest Users

Use this procedure to retrieve specific Guest Users based on the search parameters.

Procedure

1. In the navigation pane, click **Guest Users > Guest Users** tab.

The Guest Users screen is displayed along with the user details created by the Provisioner. By default, 25 users are displayed and you can extend up to 75 users.

2. In the **Guest User** screen, click Show Filter to specify the search parameters and quickly find all similar records.

The Filter Guest Users screen is displayed.

- 3. To retrieve specific Guest Users, do the following:
 - 1. For Guest Users added by the Provisioner:
 - 1. In the **Specify Filter** section, select **Provisioner** from the drop-down list.
 - 2. Enter the operation (Starts with, Equals, Not Equals, Contains, Ends With) and the name of the Provisioner.
 - 3. Click **Apply Filter**. A list of Guest Users provisioned by the selected Provisioner are displayed.
 - 2. For Guest Users that belong to an Onboarding Template:
 - In the Specify Filter section, select Onboarding Template and required template of the selected Onboarding Template from the drop-down list.
 - 2. Click **Apply Filter**. A list of guest users that belong to the selected Onboarding Templates are displayed.
 - 3. For Guest Users First Login Pending Accounts:
 - In the Specify Filter section, select First Login Pending and Created Before and the required search conditions operator from the drop-down list.
 - 2. Enter the date in YYYY/MM/DD format or click the calendar icon to select a date
 - 3. Enter the **Time** and select AM or PM from the drop-down list.
 - 4. Select the **Time Zone** from the drop-down list.
 - 5. Click **Apply Filter**. The list of all the first login pending accounts created before the specified date as entered are displayed.

- 4. For Guest Users based on Sponsor Response
 - 1. In the **Specify Filter** section, select **Sponsor Response** and the required search values from the drop-down list.
 - Approved
 - Denied
 - Pending
 - Auto-Approved
 - Auto-Denied
 - Not Applicable
 - 2. Click **Apply Filter**. The list of all the Guest Users that have the selected Sponsor Response are displayed.
- 5. For Guest Users activated in last X number hours:
 - 1. In the Specify Filter section, select **Guest Users Activated in the Last** from the drop-down list and enter number of hours in the Hours field. You can search up to a maximum of two years from the current time.
 - 2. Click **Apply Filter**. The list of all the Guest Users activated in last X number hours are displayed.
- 6. For expired Guest User account details:
 - 1. In the **Specify Filter** section, select **Expired Guest Users** from the drop-down list.
 - 2. Click **Apply Filter**. A list of guest users that belong to the selected Onboarding Templates are displayed.



When Guest User accounts are expired, the affected accounts cannot access the network. You can also use this procedure to delete all the expired Guest User accounts.

3. (Optional) Select the required expired Guest User(s) and

click **Delete** to remove the guest account.

Note:

Use Ctrl / Shift to select multiple records to delete.

- 7. Click Show Filter to specify the search parameters and quickly find all similar records. The filter is applied to all columns displayed in the list view. For more information, see Searching Specific Guest Users
- 8. (Optional) Select the Guest User and click **Print**, to print the account summary.

Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Managing Devices

This module is intended for Guest and IoT Manager Administrator to carry out bulk operations on the Device records. A Device record can be permanent, temporary, automatically expiring record with specific limited rights to use the network based on the associated Onboarding Template.

Accessing Devices

The **Devices** tab in the Devices menu allows you to view and manage all the Device actions created by the Provisioner(s).

Using Devices Features

Use this procedure to manage the Device Administrator features. The Administrator can also perform bulk operations of Devices.

Procedure

1. In the navigation pane, click **Devices > Devices** tab.

The Devices screen is displayed along with the Device details created by the Provisioner(s). By default, 25 Devices are displayed and you can extend up to 75 Devices.

You can also click the column headers to sort the list view by that column. Click the column header a second time to reverse the direction of the sort.

- 2. Select the required Device record and click **View** to view the Device record summary.
- 3. (Optional) Select the required Device record(s) and click **Extend Expiration** to extend the validity duration of the Device record(s). The validity is extended based on the duration specified during the creation.

The duration of expiry of each selected Devices is calculated as:

DURATION = END_TIME - START_TIME

Then the account is modified to:

START_TIME = CURRENT_TIME

END TIME = START TIME + DURATION

Extend Expiration Example:

Consider two Devices, Device 1 valid for a duration of one month and Device 2 is valid for a duration of two months, both are expiring tomorrow and the current time is 02:00 P.M. When you select these two Devices and click Extend Expiration option, their expiry is extended as follows:

- 1. Device 1 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 1 month.
- 2. Device 2 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 2 months.

Note:

The Provisioners can use **Extend Expiration** option to extend the duration of expiry for expired Device record(s) also.

Expiry of First Login Pending and Permanent Device record(s) cannot be extended.

- 4. (Optional) Select the required Device record(s) and select **Delete > Delete Selected** to remove Device records you selected or **Delete > Delete All** to remove all Device records.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

5. (Optional) In the **Devices** screen, click **Show Filter** to specify the search parameters and quickly find all similar records. The filter is applied to all columns displayed in the list view. For more information, see <u>Searching Specific Devices</u>.

Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Searching Specific Devices

Use this procedure to retrieve specific Device record summary based on the search parameters

Procedure

1. In the navigation pane, click **Devices > Devices** tab.

The Devices screen is displayed along with the Device details created by the Provisioner. By default, 25 Devices are displayed and you can extend up to 75 Devices.

2. In the **Devices** screen, click **Show Filter** to specify the search parameters and quickly find all similar records.

The Filter Devices screen is displayed:

- 3. To retrieve the specific Devices, do the following:
 - 1. For Devices added by the Provisioner:
 - 1. In the **Specify Filter** section, select **Provisioner** from the drop-down list.
 - 2. Enter the operation (Starts with, Equals, Not Equals, Contains, Ends With) and the name of the Provisioner.
 - 3. Click **Apply Filter**. A list of Devices provisioned by the selected Provisioner are displayed.
 - 2. For Devices that belong to an Onboarding Template:
 - 1. In the **Specify Filter** section, select **Onboarding Template** and required template of the selected Onboarding Template from the drop-down list.
 - 2. Click **Apply Filter**. A list of Devices that belong to the selected Onboarding Templates are displayed.
 - 3. Devices activated in last X number of hours:
 - 1. In the Specify Filter section, select Devices Activated in the Last and enter the number of hours in the Hours field. You can search up to a maximum of two years from the current time.

2. Click **Apply Filter**. The list all the selected Devices activated in last X number hours are displayed. Here, X represents the number of hours as entered in **Hours** field are displayed.

4. For pending Devices list:

- 1. In the **Specify Filter** section, select **First Login Pending and Created Before** and the required search conditions operator from the drop-down list.
- 2. Enter the date in YYYY/MM/DD format or click the calendar icon to select a date.
- 3. Enter the **Time** and select AM or PM from the drop-down list.
- 4. Select the **Time Zone** from the drop-down list.
- 5. Click **Apply Filter**. The list of all the first login pending Device records created before the specific date as entered are displayed.
- 5. For Device record expiring in limited hours:
 - 1. In the Specify Filter section, select Devices Expiring in the Next and enter the number of day in the Days field. You can search up to a maximum of two years from the current time.
 - 2. Click **Apply Filter**. The list of all the Device records expiring in next few days are displayed.
- 6. To retrieve the specific Devices, do the following:
 - 1. In the **Specify Filter** section, select **Expired Devices** from the drop-down list.
 - 2. Click **Apply Filter**. The list of all the expired Device records are displayed.
 - 3. (Optional) Select the required expired Device and click **Delete** to remove the Device record(s).

Note:

You can also use this procedure to delete all the expired Device records.

Configuring Guest and Devices

This module is intended for Guest and IoT Manager Provisioner to create and manage Guest User and Device account(s). Your Provisioner account is part of one or more Onboarding Templates that establish rights, such as the maximum lifetime of accounts you create, and which "Single Membership" and "Multiple Memberships" Access groups you can provide to those accounts.

A Guest User is a visitor, or other temporary user, to whom you grant specific, limited rights to use your network. As a Provisioner you can set the duration of access for the Guest User. The account can be valid for only a few minutes, hours, for a number of weeks, or permanent. The account expires automatically after a specified period of time. However, if the account expires, you can renew it, if needed.

When a Guest User is created, you can determine how and when the user can use your network. These are the groups that can be configured in **Access**Control Engine. You can do the following:

- Establish the set of allowed connection mechanisms a guest can use: 802.1X-secured wired connection, 802.1X-secured wireless connection, web-authenticated wireless connection, and so on.
- Determine the network ports or access points the user can connect. That is, you can specify the access points or conference room network jacks that allows the user to connect.
- Specify the segments of your network the user can reach once connected.
 For example, you can give a user only Internet access or you can give access to the corporate Intranet.

Configuring Guests

The **Guest Users** tab in Guest Users menu provides complete control over the user account creation process. Guest User features for managing guest accounts allows you:

- Create guest accounts
- View and manage guest accounts
- Handle the account activation time for network access usage and the duration.
- Remove the guest accounts automatically after expiration.

🐯 Note:

The assigned Onboarding Template needs to permit the Guest User management operations to the Provisioner.

Guest User Connections

When guests have their temporary Username and Password, they can connect in one of two ways:

- Standard Login: In most networks, the Guest User plugs in their Device into the wired network or connects to an open wireless access point. The networking client (known as the "supplicant") on the user's Device brings up a login dialog. The user can provide the login credentials for the configuration.
- Captive Portal: If the captive portal tool is used, the user plugs in their
 Device into the wired network or connects to an open wireless access point
 and launch web browser. The captive portal intercepts the user's web
 traffic and displays a login page in the browser. The user can provide the
 login credentials.

Creating Guest User Account

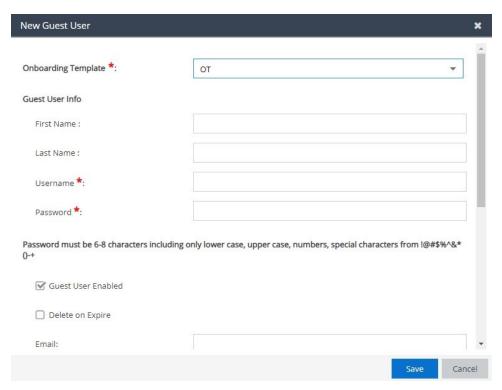
Use this procedure to create a Guest User account.

Procedure

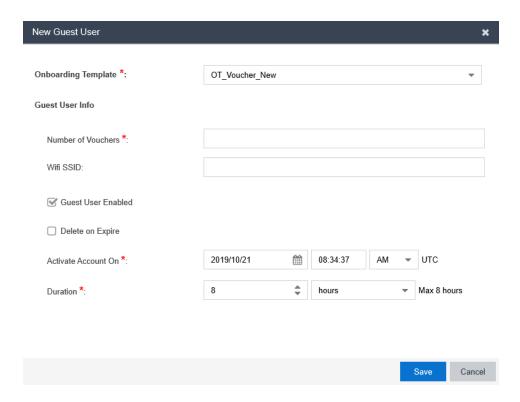
- 1. In the navigation pane, click **Guest Users > Guest Users** tab.
- 2. In the Guest User screen, click **Add** to create a new Guest User.

3. In the **Onboarding Template** field, select the required Onboarding Template the Guest User is to be associated with from the drop-down list...

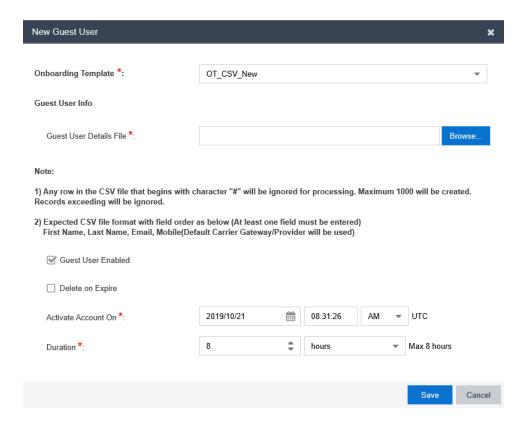
The Guest User screen is displayed for Guest and Device type Onboarding Template.



The Guest User screen is displayed for Voucher Type Onboarding Template.



The Guest User screen is displayed for CSV Type Onboarding Template.

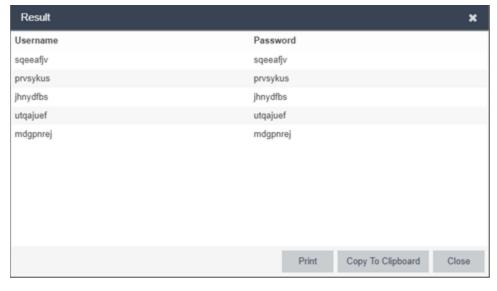


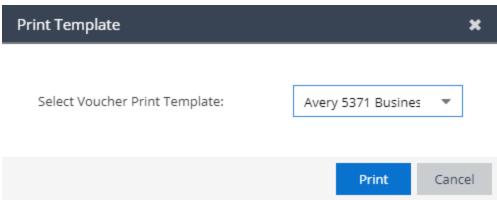
- 4. In the Guest User Info section, configure the account details as required.
- 5. In the **Send Notification** section, configure the notification conditions as required.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The Successful Guest Creation message is displayed along with Username and Password details if specified in the Onboarding Template.



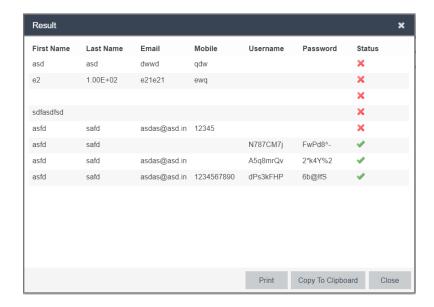
For Voucher Type Onboarding Template, the Successful Guest Creation message is displayed along with Usernames and Passwords. The Provisioner can copy these details to the clipboard in the supported browsers or print them.





Note:

For CSV Type Onboarding Template, the **Successful Guest Creation** message is displayed along with Username and Password details. The Provisioner can copy these details to the clipboard in the supported browsers or print them.



The added new user is displayed in the Guest User screen along with all the specified information and also sends Email / SMS notifications to the user.

- 7. (Optional) Click **Print** to print the result of the operation. This is applicable only to Voucher and CSV type Onboarding Template. For Voucher, the options are as follows:
 - Select **Default** to print in the default grid view.
 - Select the Avery 5371 Business card Template to print in Avery business card template view.
 - Note: The new window to Select Voucher Print Template appears only when both Default and Avery 5371 Business card Template options are selected in the Onboarding Template.
- 8. (Optional) Select the required Guest User(s) and click **Extend Expiration** to extend the validity of Guest User(s) account. The validity is extended based on the duration specified during the creation. For more information, see <u>Extending Expiry of Guest User Account.</u>
- 9. (Optional) To send the password to Guest Users, select the required user and click **Resend Password**.

The password is shared via email / SMS or both depending on the notification options of the Onboarding Template to which the user is associated with.

The following checks are performed prior the password is shared when one or more users are selected:

- Notification options has either SMS / Email or both enabled
- Account is not locked / expired
- 10. (Optional) To send the password and details to Guest Users, select the required user and click **Resend Details** to send the password and details to Guest Users.

The password is shared via email / SMS or both depending on the notification options of the Onboarding Template to which the user is associated with.

The following checks are performed prior the password is shared when one or more users are selected:

- Notification options has either SMS / Email or both enabled
- Account is not locked / expired
- 11. (Optional) Select the required Guest User and click **Edit** to modify Guest User accounts. For more information, see <u>Modifying Guest User Account</u>.
- 12. (Optional) Select the required Guest User(s) and click **Delete**, to remove accounts.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

- 13. Click Show Filter to specify the search parameters and quickly find all similar records. The filter is applied to all columns displayed in the list view. For more information, see Finding Guest User Account. (Optional)
- 14. (Optional) (Optional) Select the Guest User and click **Print**, to print the account summary.
 - Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Field Descriptions

Use data in the following table to use New Guest User screen. The fields are

enabled based on the associated Onboarding Template settings.

Name	Description
Onboarding Template	Specifies the list of Onboarding Templates that the Provisioner is a member of. The provisioner can add the Guest User to any one of the available Onboarding Templates.
	The Onboarding Templates imposes certain account guidelines (for example, prompt the Username, autogeneration of the password, maximum validity period, allowable access groups, and so on), depending on how the Administrator has configured the Guest User account details for the particular selected Onboarding Template. As a result, the fields and defaults of the screen changes when you select a Onboarding Template.
	Note: Onboarding Template limits the rights that can be granted to the user.
First Name and Last Name	Configures the first and last name of the Guest User. The length of the name can be 30 characters or less. Note: These fields should only contain letters, number, hyphen, and underscore.

Username	Generates Username for the created users first name. Ensure that the first name entered does not have any spaces. The length of the name can be 30 characters or less. Note: You can edit the Username and provide a unique name, if the Administrator has selected Generate Username with option while creating an Onboarding Template. User Name is auto-generated, if the Administrator has selected Random Generated Password option while creating an Onbarding Template. This field should only contain alphanumeric and special characters. Only these special characters are allowed: ! @ # \$ % ^ & * () +
	For more information about configuring the guest user account details, see the ExtremeControl Guest and IoT Manager Configuration document.
Password	Specifies the password for the Guest User login. The password must meet the specified complexity checks. If the Onboarding Template is configured to autogenerate password, this field does not appear while creating a new Guest User.
Confirm Password	Confirm the password by typing again. This field appears based on Onboarding Template setting.
Number of Vouchers	Enter the number of vouchers as required. The maximum number of vouchers is 1000. Only applicable to Voucher Type Onboarding Template.
WifiSSID	The Wifi SSID to join the device to the network. Only applicable to Voucher Type Onboarding Template.

Guest User Details File	Select Browse to select the *.csv file. The expected CSV file format must have at least one field entry. This is only applicable to CSV Type Onboarding Template. The default carrier Gateway/Provider is used for Mobile For Example: First Name, Last Name, Email, Mobile. Note: Any row in the CSV file that begins with character "#" will be ignored for processing.
	The maximum number of records that will be processed from the *.csv file is 5000. Records exceeding will be ignored
Delete on Expire	Deletes the Guest User from the Access Control Engine . Select this option to automatically remove expired guest account.
	If you do not select this option, you need to manually remove the guest account after it expires. The expired user accounts remains in the Access Control Engine .
	As a Provisioner you can renew or remove the expired accounts at any point of time. The account validity is indicated in RED color in the End Time column of Guest User screen attributes.
Email	Configures the email address of the Guest User.
	When this account is created, you can instruct Guest and IoT Manager Application to send a notification to specified or another address. For more information, see Send Notification row beneath.
Mobile	Configures the contact number of the Guest User. Guest and IoT Manager Application uses this number is to send account notification via SMS messaging.
Carrier / Provider	Specifies the list of phone carrier and provider service details.

Activate Account On	Configures the date and time at which the Guest User account is activated. The value in these fields defaults to the current date and time on the Guest and IoT Manager . You can also view the time zone that has been set to the current Onboarding Template.
	Date: Enter the start date for activating Guest User account. The date should be in YYYY/MM/DD format.
	Time: Enter the time in hours and minutes based on a 12-hour setting. The time should be in hh:mm:ss format.
	AM / PM: Select the time of the day.
Activate On First Login	Specifies that guest account will be valid only after the first login. Note:
	This field is available only if the Administrator has selected First Login option while creating an Onboarding Template and the Provisioner selects the same Onboarding Template during Guest User account creation from the Onboarding Template drop-down list.
	The Activate Account On option is replaced by Activate on First Login: Yes option.
Duration	Configures the duration validity of the guest account. The account validity period starts from the activation time and lasts for the specified duration.
	By default, the application sets the durations to the maximum time period specified in the Temporary Account Validity field during creation of Onboarding Template. Specify the period as an integer and set the units by selecting minutes, hours, and days.
Single Membership Access Group	Specifies one of the access group that has been configured in the Onboarding Template.

Multiple Memberships Access Group	Configures the access to the Guest User. You can select multiple options.
	For example, if the access has to be provided for a specific department, the Administrator defines which access group are available for you.
Custom Fields: 1 to 6	Specifies the label values configured for Guest Users.

Send Notification

Specifies the address / number that is required to share the account notification details. The application automatically sends the notification via Email or SMS to the Guest and / or others to provide the new guest account details.

A notification message has the format of Email / SMS template configured in the Onboarding Template of which the Guest User is a member.

For more information about configuring account notification templates, see the *ExtremeControl Guest and IoT Manager Configuration* document.

The options available are:

- Guest User Email: Sends an email to guest with account details. The variables specified in the guest's Onboarding Template > Email Template field are sent.
- Other Email: Sends the guest's account details to the address specified. The variables specified in the guest's Onboarding Template > Email Template field are sent.
- Password to Guest User Mobile Phone: Sends an SMS message to guest with account details. The variables specified in the guest's Onboarding Template > SMS Template fields are sent.

The options are available only if the **Guest and IoT Manager** Administrator has configured the Application to send messages.

For more information about enabling e-mail notifications and configuring the SMS gateway or provider, see the *ExtremeControl Guest and IoT Manager Configuration* document.

Note:

Different types of Guest User accounts created based on the validity are:

- Permanent
- Temporary Time Based
- Temporary First Login

Modifying Guest User Account

Use this procedure to modify Guest User accounts.

Procedure

1. In the navigation pane, click **Guest Users > Guest Users** tab.

The Guest User screen is displayed with list of Guest User accounts created by the Provisioner.

2. Select the required user account to be modified and click Edit.

You can also edit by double-clicking the required user account from the list.

The **Onboarding Template** field is editable only during creating an Guest User.

- 3. In the **Guest User Info** section, modify the fields required.
- 4. In the **Send Notification** section, select the required fields.
 - Note:

Guest User account(s) that was created using Voucher type Onboarding Template will not have this option.

5. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The modified Guest User details are displayed in the Guest User screen.

- 6. (Optional) To modify the validity of a Guest User account, do the following:
 - 1. Select the required user account and scroll left to view the **Start Time** and **End Time** Guest User attributes column. The **RED** text indicates an expired account.
 - 2. Double-click the user account to view the **Edit Guest User** screen.

- 3. Modify the duration period in **Duration** field or modify the **Activate Account On** field to change the validity period to desired time frame.
- 7. (Optional) To remove Guest User account(s), select the required user account(s) and select **Delete > Delete Selected** to remove only the Guest User accounts you selected, or **Delete > Delete All** to remove all Guest User accounts.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

For more information, see Creating Guest User Account Field Descriptions.

Finding Guest User Account

Use this procedure to find a Guest User account.

Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Procedure

- 1. In the navigation pane, click **Guest Users > Guest Users** tab.
 - The Guest User screen is displayed with the list of Guest Users created by the Provisioner.
- 2. Select the **Show** drop-down list to filter the users in the table to display only those users added by a specific Provisioner or the **Onboarding Template** drop-down list to filter the users in the table to display only those users added through a specific Onboarding Template.
- 3. In the Guest User screen, click Show Filter to specify the search parameters and quickly find all similar user records. The Guest User Search Filters screen is displayed.



- 4. To search the Guest Users:
 - Select All Guest Users to view all the Guest Users.
 - Select Specify Filter to define additional fields by which you can filter the list of Guest Users.
- 5. Click Apply Filter.

The corresponding records are displayed in the Guest User screen table.

In the **Guest User** screen, select the required Guest User and scroll towards left to view the permanent access user accounts. The **End Time** Guest User attributes column status is displayed as blank (-).

Extending Expiry of Guest User Account

Use this procedure to extend the duration of expiry of a Guest User account(s) at one go.

Procedure

1. In the navigation pane, click **Guest Users > Guest Users** tab.

The Guest User screen is displayed with the list of users provisioned.

2. Select the required Guest User(s) and click **Extend Expiration** to extend the validity of Guest User(s) account. The validity is extended based on the duration specified during the creation.

The duration each selected Guest User is calculated as:

DURATION = END_TIME - START_TIME

Then the account is modified to:

START TIME = CURRENT TIME

END_TIME = START_TIME + DURATION

Extend Expiration Example:

Consider two Guest Users, User 1 valid for a duration of one month and User 2 is valid for a duration of two months, both are expiring tomorrow and the current time is 02:00 P.M. When you select these two accounts and click **Extend Expiration** option, their expiry is extended as follows:

- User 1 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 1 month.
- 2. User 2 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 2 months.

Note:

The Provisioners can use **Extend Expiration** option to extend the duration of expiry for expired Guest User account(s) also.

Expiry of First Login Pending and Permanent Guest User accounts cannot be extended.

3. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

Configuring Devices

The **Devices** tab in Devices menu provides complete control over the Device records creation process. Device features allows you:

Devices feature allows you:

- Adding device records
- View and manage devices

Note:

The assigned Onboarding Template need to permit the Device management operations to the Provisioner.

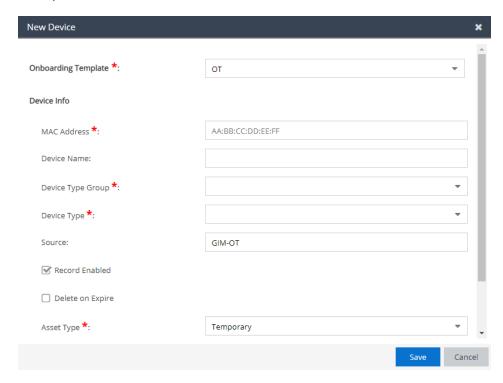
Adding a Device Record

Use this procedure to add a Device record.

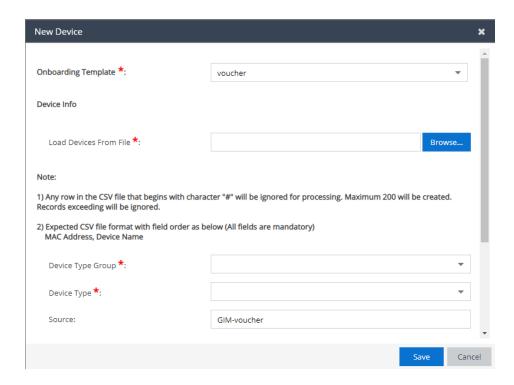
Procedure

- 1. In the navigation pane, click **Devices > Devices** tab.
 - The Devices screen is displayed.
- 2. In the **Devices** screen, click **Add** to create a new Device record. The New Device screen is displayed.
- 3. In the **Onboarding Template** field, select the required Onboarding Template the Guest User is to be associated with from the drop-down list..

The Guest User screen is displayed for Guest and Device type Onboarding Template.

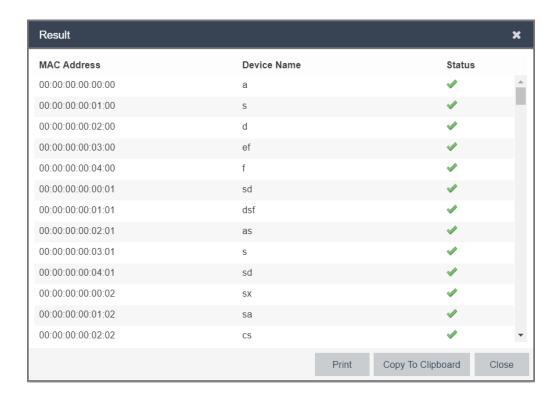


The Guest User screen is displayed for CSV Type Onboarding Template.



- 4. In the **Onboarding Template** field, select the required Onboarding Template the Device is to be associated with from the drop-down list.
- 5. In the **Device Info** section, configure the Device details as required.
- 6. Click **Save** to save the configuration or click **Cancel** to cancel the changes.

The added new Device record is displayed in the **Devices** screen along with all the specified information. For CSV creation Result dialog is displayed.



- 7. (Optional) Click **Print** to print the result of the operation in the the default grid view. This is applicable only to CSV type Onboarding Template.
- 8. (Optional) Select the required Device record(s) and click **Extend Expiration** to extend the validity duration of the Device record(s). The validity is extended based on the duration specified during the creation. For more information, see <u>Extending Expiry of a Device.</u>
- 9. (Optional) Select the required Device record(s) and click **Delete** to remove the Device record(s).
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

- 10. (Optional) Click Show Filter to specify the search parameters and quickly find all similar records. The filter is applied to all columns displayed in the list view. For more information, see Finding Device Records.
- 11. Solution Note:

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Field Descriptions

Use data in the following table to use **New Device** screen. The fields are enabled based on the associated Onboarding Template settings.

Name	Description
Onboarding Template	Specifies the list of Onboarding Template(s) that the Provisioner is a member of. The Provisioner can add the Device using any one of the available Onboarding Template(s).
Load Devices From File	Specifies the the path of the file containing the Devices records in CSV format to be uploaded. This applies only to CSV Type Onboarding Template. Specifications of the file contents are as follows:
	Any row beginning with # will not be processed.
	A maximum of 200 records will be created in a single operation, exceeding will not be processed.
	Post operation a dialog with the operation status is displayed over the created Device details.
MAC	Configures the MAC address of the Device.
Address	Format of MAC address: xx:xx:xx:xx:xx.
	For example: 10:00:01:02:21:10.
Device Name	Configures the name of the Device.
Source	Displays the source of the Device. By default, the information is available.
Device Type Groups	Specifies the list of Device type groups available for the selected Onboarding Template.

Device Type	Specifies the list of Device types available for the selected Device type group.
Records Enabled	Select to enable the record. If you do not select this option, the Device is disabled.
Delete on Expire	Deletes the Devices from the Access Control Engine . Select this option to automatically remove expired Device records.
	If you do not select this option, you need to manually remove the Device records after it expires. The expired Device records remains in the Access Control Engine .
	As a Provisioner you can renew or remove the expired records at any point of time.
Assest Type	Specifies the list of assets types to configure the record duration.
	The options available are:
	Permanent
	Temporary
	If the Asset Type is selected as Permanent , the Application creates a permanent record for the Device and the End Time column displays "—".
	If the Asset Type is selected as Temporary , the Application creates a temporary record for the Device and allows you to specify the record validity details in Activate Account On field.
Activate Account On	Configures the date and time at which the Device record is activated. The value in these fields defaults to the current date and time on the Guest and IoT Manager . You can also view the time zone that has been set to the current Onboarding Template.
	Date: Enter the start date for activating Device records . The date should be in YYYY/MM/DD format.
	Time: Enter the time in hours and minutes based on a 12-hour setting. The time should be in hh:mm:ss format.
	AM / PM: Select the time of the day.

Activate on First Login	Specifies that guest account will be valid only after the first login. Note: This field is available only if the Administrator has selected First Login option in Account Validity Period section while creating an Onboarding Template and the Provisioner selects the same Onboarding Template during Device record creation from the Onboarding Template drop-down list. The Activate Account On option is replaced by Activate on First Login: Yes option.
Duration	Configures the duration validity of the Device record. The record validity period starts from the activation time and lasts for the specified duration. By default, the application sets the durations to the maximum time period specified in the Temporary Account Validity field during creation of Onboarding Template. Specify the period as an integer and set the units by selecting minutes, hours, and days.
Single Membership Access Group	Specifies one of the access groups that has been configured in Onboarding Template.
Multiple Memberships Access Group	Configures the access to the Devices. You can select multiple options. For example, if the access has to be provided for a specific department, the Administrator defines which access group are available for you.
Custom fields: 1 to 6	Specifies the label values configured for Device records.

Modifying Device Record

Use this procedure to modify Device records.

Procedure

1. In the navigation pane, click **Devices > Devices** tab.

The Devices screen is displayed with list of Device records created by the Provisioner.

2. Select the required Device record to be modified and click Edit.

You can also edit by double-clicking the required Device record from the list.

The Onboarding Template field is editable only during creating an Device.

- 3. In the **Device Info** section, modify the fields required.
- 4. Click Save to save the configuration or click Cancel to cancel the changes.

The modified Device record details are displayed in the Devices screen.

- 5. (Optional) To modify the validity of a Device record, do the following:
 - 1. Select the required Device record and scroll left to view the **Start Time** and **End Time** Device attributes column. The **RED** text indicates expired record.
 - 2. Double-click the Device record to view the **Edit Device** screen.
 - 3. Modify the duration period in **Duration** field or modify the **Activate Account On** field to change the validity period to desired time frame.
- (Optional) Select the required Device record(s) and select Delete > Delete Selected
 to remove Device records you selected or Delete > Delete All to remove all Device
 records.
 - Tip:

Use Ctrl / Shift to select multiple records to delete.

For more information, see Adding a Device Record <u>Adding a Device</u> <u>Record</u>.

Finding Device Records

Use this procedure to find a Device record summary.

Procedure

1. In the navigation pane, click **Devices > Devices** tab.

The Devices screen is displayed with the list of Devices created by Provisioner.

- 2. Select the **Show** drop-down list to filter the devices in the table to display only those devices added by a specific Provisioner or the **Onboarding Template** drop-down list to filter the devices in the table to display only those devices added through a specific Onboarding Template.
- 3. In the Devices screen, click Show Filter to specify the search parameters and quickly find all similar Device records. The Filter Devices screen is displayed.



- 4. To search the devices:
 - Select **All Devices** to view all the Devices.
 - Select **Specify Filter** to define additional fields by which you can filter the list of devices.

The appropriate Device records are displayed in the Devices screen table.

5. Click Apply Filter.

Use the paging control at the bottom of the list to move forward or backward by one page, or to the first or last page of the list. You can control number of records to be displayed per page and also click an individual page number to navigate to the specific page. Click **Refresh** icon to refresh the view.

Field Descriptions

Use data in the following table to use Filter Devices screen.

Name	Description
All Devices	Displays the list of all the devices available. By default, this option is selected.

Specify Filter

Simplifies the search parameters to quickly find the selected search criterion that includes specified parameters. Additionally, you need to enter the operator conditions to match the selected search criteria to obtain precise search results of the selected Onboarding Template.

The search conditions are:

- MAC Address
- Name
- Type
- Source
- Start Time
- End Time
- **Devices Activated in the Last**: Fetches all the Device records activated in the last X number of hours.
- First Login Pending and Created Before: Fetches all the Device records that have been created before the X date entered and awaiting first login.
- Devices Expiring in the Next: Calculates and fetches the Devices according to:

CURRENT_TIME < END_TIME < CURRENT_TIME + X days

'X' is a variable here. So, if you want to filter all Devices expiring tomorrow, you can select this filter condition.

• Expired Devices: Fetches all the expired Device records.

The search conditions operators depends on the selected search conditions. For example, you can provide explicit operations such as Start With, Equal, Not Equal, Contains, Ends With and the name of the search value.

Some conditions have multiple condition operators. For

example, you can search for multiple values when using the equal (=) or not equal !=) operators.
the equal () of hot equal.) operators.

Extending Expiry of a Device

Use this procedure to extends the duration of expired Device(s) by "X" days at one go.

Procedure

- 1. In the navigation pane, click **Devices > Devices** tab. The Devices screen is displayed with the list of Devices provisioned
- 2. Select the required Device record(s) and click **Extend Expiration** to extend the validity duration of the Device record(s). The validity is extended based on the duration specified during the creation.

The duration of expiry of each selected Devices is calculated as:

```
DURATION = END_TIME - START_TIME
```

Then the account is modified to:

START_TIME = CURRENT_TIME

END_TIME = START_TIME + DURATION

Extend Expiration Example:

Consider two Devices, Device 1 valid for a duration of one month and Device 2 is valid for a duration of two months, both are expiring tomorrow and the current time is 02:00 P.M. When you select these two Devices and click **Extend Expiration** option, their expiry is extended as follows:

- 1. Device 1 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 1 month.
- 2. Device 2 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 2 months.

Note:

The Provisioners can use **Extend Expiration** option to extend the duration of expiry for expired Device(s) also.

Expiry of First Login Pending and Permanent Device accounts cannot be extended.

Managing Sponsor Actions

The **Sponsor** tab in Sponsor menu allows a Sponsor to manage guest accounts that require Sponsor's attention. A Sponsor can either be an internal Provisioner or a Provisioner belonging to a Sponsor LDAP.

Sponsor feature allows you:

- View all the sponsored Guest Users
- Manage Sponsor actions

The Sponsor tab will only be visible in the Provisioner Application on the left panel of the screen only if there are records to be viewed.

When there are no records to be displayed the left navigation will not have the Sponsor tab and once there are records added the tab will be seen on login.

If the Provisioner is already logged in, the Provisioner can refresh the page and the tab will be seen. Vice-versa is also applicable, once the records are deleted or not available the Sponsor tab will not be visible again on refresh or re-login whichever occurs first.

Viewing and Providing Guest Access

Use this procedure to view all sponsored Guest Users and allow actions such as approve, bulk approve, bulk deny / lock, bulk extend expiration, send email, and print the Guest Users.

Procedure

1. In the navigation pane, click **Sponsor > Sponsor** tab.

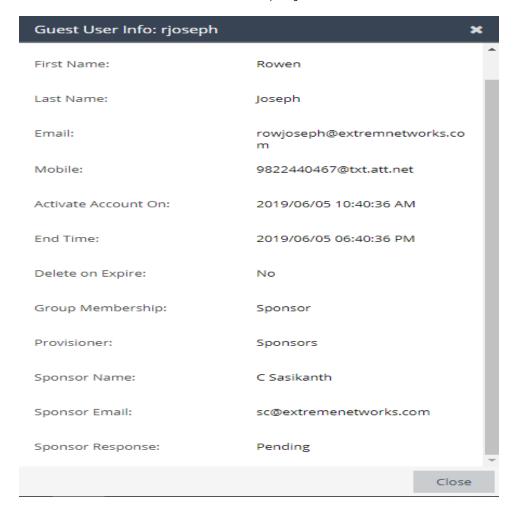
The Sponsor screen is displayed with all the list of guests for which the

Provisioner is a Sponsor.

You can also click the column headers to sort the list view by that column. Click the column header a second time to reverse the direction of the sort.

2. Select the required user and click View to view the selected user information.

The Guest User Info screen is displayed.



Note:

The view functionality is available only if the following conditions are met:

- If a valid Email ID is present for the Sponsor.
- LDAP Sponsor Username must be mentioned along with the complete domain. Though Guest and IoT Manager-LDAP authentication is not case sensitive, the Sponsor view functionality is case sensitive. For example, if the Provisioner Username in LDAP is <<name>> and the domain is test.local, then the Sponsor managing Guest Users view works only if the Provisioner logs in as <<name>>@test.local.
- 3. Select the required user accounts and click **Approve** to approve the access.

The Approve screen is displayed. You can include a message that needs to be sent as part of the approval email.

4. Select the required user accounts and click **Deny/Lock** to deny the access.

The Deny / Lock screen is displayed. You can include a message that needs to be sent as part of the denial email.

5. Select the required user accounts and click **Extend Expiration** to extend the duration of Guest User account.

The Extend Expiration screen is displayed and enables you to extend the validity of Guest User(s) account. The validity is extended based on the duration specified during the creation.

The duration of each selected Guest User is calculated as:

DURATION = END TIME - START TIME

Then the account is modified to:

START_TIME = CURRENT_TIME

END TIME = START TIME + DURATION

Extend Expiration Example:

Consider two Guest Users, User 1 valid for a duration of one month and User 2 is valid for a duration of two months, both are expiring tomorrow and the

current time is 02:00 P.M. When you select these two accounts and click **Extend Expiration** option, their expiry is extended as follows:

- User 1 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 1 month.
- 2. User 2 is extended as Start Time = 02:00 P.M. today and End Time = 02:00 P.M. today + 2 months.

Note:

Expiry of First Login Pending and Permanent Guest User accounts cannot be extended.

6. Select the required user and click **Send Email**.

The Email screen is displayed. You can include a message that needs to be sent as part the email.

- 7. Select the required user and click **Print** the information, if required.
- 8. (Optional) Click Show Filter to specify the search parameters and quickly find all similar records.

The filter is applied to all columns displayed in the list view. Additionally you can also enter the operator conditions to match the selected search criteria to obtain precise search results.

For more information about how to search specific guest users, see the ExtremeControl Guest and IoT Manager Configuration document.

Using Self-Provisioning Services

This chapter is intended for Guest Users to understand the Self-Provisioning Services functionality that offers guest the ability to create an account or register their devices.

The available service types are:

- <u>Guest User</u>: A Self-Provisioning Service that allows users to self-register to create their own accounts.
- <u>Devices</u>: A Self-Provisioning Service that allows users to register a Device.
- <u>Using Self-Service for Zero Touch Guest Access</u>: A Self-Provisioning Service that allows users to create a new Guest User account by just scanning a QR code and sending an SMS.

Registering a New Guest User

Use this procedure to create a new Guest User using the Self-Provisioning Services

Before you begin

Ensure that you have the URL that is available in the Self-Provisioning Services tab.

The URL's are different for each service type. For Guest User: https://<server_name>/GIM/user/<service_name>

Procedure

- 1. In the **Register New Guest User** screen, enter the Guest User details in the respective fields as required.
- 2. If the Onboarding Template type is Sponsor Approval, users has to enter the Sponsor details. The Sponsor details need to be entered depends on the associated Onboarding Template setting.
- 3. Click **Submit / Request Approval** to create the guest account.

If the Sponsor approval is not required, the Guest User account is created

and the credentials are shared with the user via email / SMS or displayed. If the associated Onboarding Template has settings that requires Sponsor approval, then the **Request Approval** option is displayed. The Sponsor must approve for the account to be activated.

- 4. (Optional) Click Clear, to clear the configuration.
- 5. (Optional) To resend the password to Guest User, in the **Username** field enter the username and click **Resend Password**.
- 6. (Optional) To resend the complete user details, in the **Username** field enter the username and click **Resend Details**.

The application validates the following prior to resending the Password or Resend Details.

- Notification options has either SMS/Email or both enabled
- Account is not locked/expired

Important:

We strongly recommend that Administrator must disable unnecessary features in the web browser that displays in the Self-Service Provisioning service. Disable all menus, tool bars, and the URL.

Guest and IoT Manager must be connected to the Access Control Engine all the times for the Self-Service Provisioning service to operate.

Sponsor Details

Use this procedure to add the sponsor details while registering Guest Users.

Procedure

- 1. In the **Register New Guest User > Sponsor** section, enter the Sponsor contact details in the respective fields as required.
- 2. Click Request Approval to create the Guest User.

For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.

3. (Optional) Click **Clear**, to clear the configuration.

- 4. (Optional) To resend the password to Guest Users, select the required user and click **Resend Password** to resend the Password.
- 5. (Optional) To resend the password and Details to Guest Users, select the required user and click **Resend Details** to resend the Password and Details to Guest Users.

When Guest Users are selected to resend the Password or User Details, the application validates the following prior to resending the Password or User Details.

- Notification options has either SMS / Email or both enabled.
- Account is not locked / expired.

Sponsor Details Field Descriptions

Use data in the following table to use **Sponsor** section in **Register New Guest User** screen.

Name	Description
First Name and Last Name	Specifies the first and last name of the Sponsor.
Email	Specifies the email ID and allows to select the domain from the drop-down list.
	You can either select the email ID from the drop-down list, or enter the corresponding name to search and select the appropriate Sponsor.
Mobile Phone	Specifies the Sponsor contact number that is required to send SMS notification.

Based on OT template settings, one of the following Sponsor Details options is available. They are listed below:

- Manually Enter Sponsor: In this scenario, enter you must enter the First Name and Last Name, Email, and Mobile Phone Details of the sponsor.
- Predefined Sponsor: In this scenario, the guest must select from the predefined sponsor list or specify the sponsor email match the list of sponsor emails specified by the administrator.

- **Fixed Sponsor:** In this scenario, the sponsor is defined by the administrator and user need not specify the Sponsor details.
- LDAP Sponsor: In this scenario, the sponsor is defined by the associated LDAP group. Where, the user can search and select from the list of the available sponsors.

Registering New Devices

Use this procedure to create a new Device using the Self-Provisioning Services.

Before you begin

Ensure that you have the URL that is available in the Self-Provisioning Services tab.

The URL's are different for each service type. For new Devices: https://<server_name>/GIM/device/<service_name>

Procedure

- 1. In the Register New Guest User screen, enter the Device details in the respective fields as required.
- 2. Click **Submit** to create the Device record.
- 3. (Optional) Click **Clear**, to clear the configuration.

Using Self-Service for Zero Touch Guest Access

Use this procedure to create a new Guest User using the Zero Touch Guest Access Self-Provisioning Services.

Before you begin

Ensure that you have the URL that is available in the Self-Provisioning Services tab.

The URL's are different for each service type. For Zero Touch Guest Access Selfservice: the URL is https://<server_ name>/GIM/qr-user/<service_name>

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Procedure

- 1. The Guest User Scans the QR code. An SMS will be triggered after the scan is complete and is sent to the service provider (Twilio).
 - Note: Ensure Two-way SMS configuration is done properly. For more information see, Two-Way SMS Provider.
- 2. The service provider sends the SMS to GIM and GIM creates a Guest User account.
- 3. **Guest and IoT Manager** then send an SMS through the same service provider back to the Guest User with the newly created account details for the new Guest User.



This QR Code will expire in...

23 hours 59 minutes 53 seconds

For more information see, <u>Automated Login of the Guest User using the Login URL</u>.

Guest and IoT Manager Add-In for Outlook

The **Guest and IoT Manager** Add-in provosions and provides guest access credentials to meeting invitees. You can download the add-in from both Administrator and Provisioner login page.

This section provides information on how to install Add-in for Outlook that works with Windows and Macintosh computers (Outlook 2016 for Windows and Mac) and also on how to provision guest access using the installed Add-in.

Installing Guest and IoT Manager Add-In

Use this procedure to install **Guest and IoT Manager** Add-In for Outlook 2016 for Windows and Mac that helps in automating tasks when you view or create meetings.

Before you begin

Internet Explorer must be installed and needs to be enabled in the **Turn Windows features on or off** screen for an Outlook Add-in to work.

Procedure

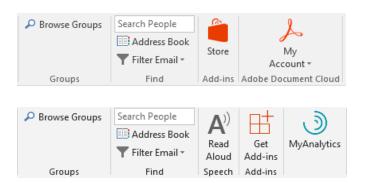
- 1. In the **Guest and IoT Manager** Administrator / Provisioner login page, click **Download GIM Outlook Add-in** to download the installer and store it in the local drive.
- 2. In the local folder, extract the files. You can see the following files in the folder:
 - GIM Certificate File: **Guest and IoT Manager** certificate is the HTTPD certificate bound to the HTTPD service.
 - GIM Manifest File
 - Readme File

Note:

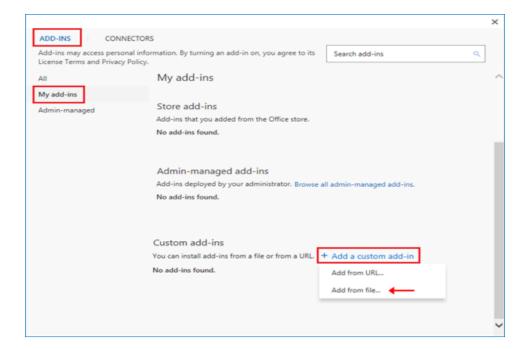
The GIM certificate file contains a certificate to certify the identity and Readme file contains the instructions to install.

Install the GIM certificate only if it is Self-Signed SSL certificate. For more information on certificate installation, refer Readme file.

3. Start the Outlook application and click **Store** or **Get Add-ins** in the **Home** menu.



The **ADD-INS** screen is displayed. In the ADD-INS screen, you can install the add-in either from the local drive or Administration can side-load this add-in to all the Provisioner(s).



- 4. To install the add-in from the local drive, do the following:
 - 1. In the ADD-INS screen, click My add-ins > + Add a custom add-in > Add from file.... to import the add-in manifest file.
 - 2. Select **Browse** and navigate to the location of the add-in manifest file that you want to install.
 - 3. Select the "gim-manifest.xml" add-in file and click **Open**.

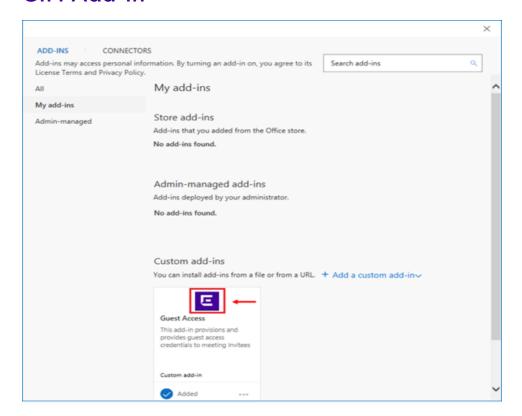
4. Click Install.

The added add-in is displayed in the **Custom add-ins** section of ADD-INS screen.

5. To side-load the add-in to the Provisioner(s) as an Administrator, use Exchange Administration Center (EAC).

Side-loading add-ins requires at minimum the **My Custom Apps** role for your Exchange Server. For more information, see <u>Install an Add-In for Outlook</u>.

GIM Add-In



Note:

The added add-in is activated only when the Provisioner(s) wants to raise a meeting request.

An example of added add-in:



Provisioning Guest Access

Use this procedure to provision Guest Users while scheduling the meeting.

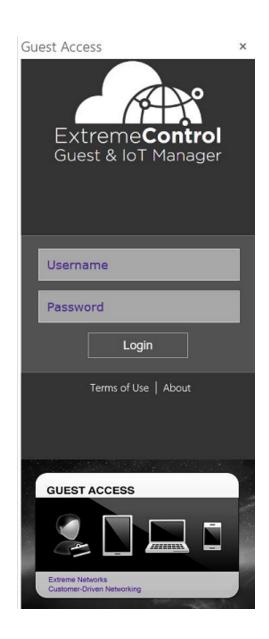
Procedure

- 1. Start the **Outlook** application.
- 2. In the **Meeting** mode, select **Guest Access** add-in. If you do not see the Guest Access add-in, then you need to install.



3. Click Guest Access.

The task pane displays the Guest and IoT Manager Provisioner login page.



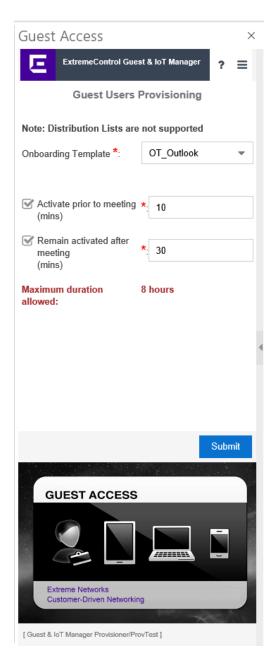
4. Login to the application using Provisioner credentials.

The **Guest User Provisioning** screen is displayed on successful authentication and if the Provisioner being part of atleast one Onboarding Template of type Outlook.

🐼 Note:

Ensure that the **Guest and IoT Manager** Application is connected to **Access Control Engine** to authenticate.

All the fields that are mandatory in the provisioner's application is highlighted with a red '*' that is added with the label field.



5. Select the required **Onboarding Template** to which the users in the meeting needs to be associated from the drop-down list.

6. Select the required Access Groups.

The Single and Multiple Memberships Access Groups are available based on the Onboarding Template configuration.

7. (Optional) Select the Activate prior to meeting (mins) or Remain activated after meeting (mins) and enter the minutes to add a buffer time between the scheduled guest access. The maximum buffer time is 30 minutes.

The Guest Users obtain the access duration equal to scheduled duration along with buffer / padding duration. Whereas, the outlook calendar shows only the scheduled meeting duration.

- 8. Set up the meeting as you typically do:
 - 1. In the **To** field, enter the email address of the Guest User(s), separated by semicolons.
 - 2. Select **Room...** to find a conference room if you need your Guest Users to be accommodated in one location.
 - 3. Select a Start Time and End Time; enter an agenda in the meeting area.
- 9. Click **Submit** in the **Guest User Provisioning** screen prior sending the meeting invite. Alternatively, you can also provision the Guest Users by reopening this meeting invite from the calendar. The email sent summary is displayed.
 - If the Guest User is present in the database, then the invite is updated with the scheduled start and end time.
 - If a new Email ID is added, then the Guest User is created and confirmation email is sent to the corresponding Guest User.
 - If any Email ID is removed, then the corresponding Guest Users will also be removed from the **Guest and IoT Manager** Application.

🐼 Note:

- If the Administrator has excluded a domain during Guest User Onboarding Template creation, then the Guest User account is not created for any emails available in that specific domain.
- Ensure that you always expand the distribution list.
- You need to click Submit in the add-in once again, if there are any changes in the recipient list or meeting duration.
- If the scheduled meeting duration along with added padding is greater than the maximum expiration time configured in the Onboarding Template, then the access duration will be reduced to maximum duration configured in the Onboarding Template.
- Recurring meetings are not supported. Access will be provided only for the first occurrence.



If you want to extend the access for the second occurrence, resubmit in the Guest and IoT Manager add-in when the first meeting is ended and so on.

10. (Optional) Click **Delete** in the Guest User **Provisioning** screen to remove all the Guest Users in the meeting. For example, if you need to cancel the guest access / meetings.

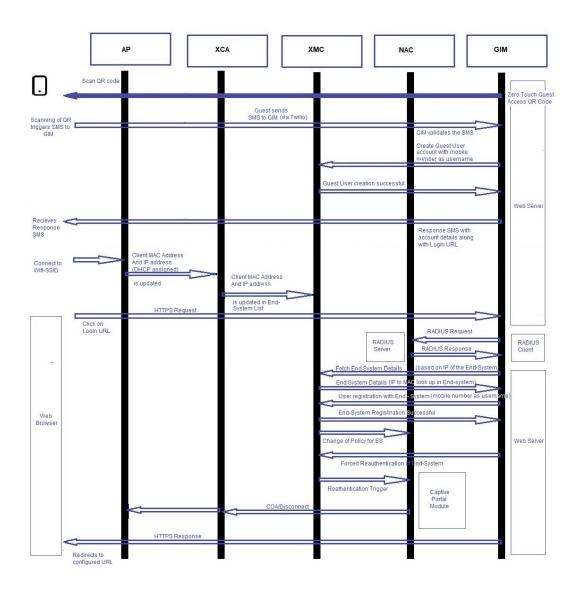
Note:

The application displays a warning message prior removing all the Guest Users.

The **Delete** option is available only if you have created the Guest Users for the current meeting schedule.

Automated Login of the Guest User using the Login URL

This procedure explains the Automated Login of the Guest User using the Login URL.



Procedure

- The User scans the QR code and the scanned QR code triggers a SMS to Guest and IoT Manager
- 2. **Guest and IoT Manager** application validates the SMS.
- 3. **Guest and IoT Manager** application then creates a Guest User account number with the Username.
- 4. The Response is then sent to Guest User with the account details along with the login URL.

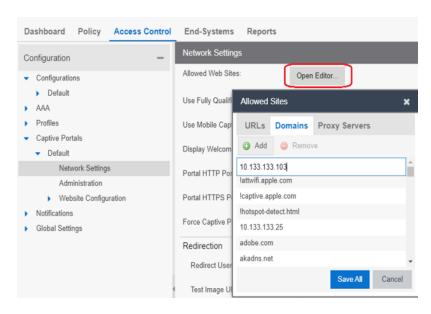
- 5. Once the Guest User connects to the Wifi-SSID, the Guest User gets the IP address from DHCP.
- 6. The client's Mac Address and IP address gets updated in the Extreme Cloud Application (XCA) and the details get auto populated in the ExtremeCloud IQ Site Engine's end system table.
 - Note:

Ensure all the wireless clients connected to XCA are getting listed in End-System table for this feature to work as expected.

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- 7. Guest User clicks on the Login URL and is redirected to the Guest and IoT Manager application.
 - Note:

GIM's IP/Hostname should be whitelisted in the NAC's captive portal setting and the HTTPS traffic to GIM should be allowed even when the device is in Unregistered Rule



- 8. On clicking the Login URL that contains the encrypted details of the Guest User the details are validated by RADIUS request to NAC.
- 9. After the successful authentication, the end system details are fetched from

- ExtremeCloud IQ Site Engine from the ExtremeCloud IQ Site Engine's end system data.
- 10. The Guest and IoT Manager application associates the Guest User with the corresponding end system and forces the reauthentication of the device that is enforced through XCA.
- 11. Finally, Guest and IoT Manager application redirects the Guest User to the URL configured in self-service.

Troubleshooting and FAQs

This chapter describes the basic concepts and general troubleshooting guidelines for problems that may occur when configuring and using the Guest and IoT Manager Application. The solutions to common questions helps you troubleshoot quires when you encounter errors.

Testing RADIUS Connection Settings

Use this procedure to test the RADIUS setup.

Procedure

- 1. Create a Provisioner. For more information, see Creating an Internal Provisioner.
- Open your web browser and enter the URL of the Provisioner Application.
 https://<Guest Manager machine>/GuestManager/provisioner/
- 3. In the **Login** screen, enter the Provisioner login credentials.
- 4. Click Login. If your login attempt fails, see Problem: Provisioner Cannot Login.

Restarting Guest and IoT Manager

Use this procedure to restart Guest and IoT Manager Application.

Procedure

- 1. Log in to the Guest and IoT Manager Virtual Appliance console.
- 2. Enter the **Username** and **Password**.
- 3. Enter tomcat restart, to restart the web server.
- 4. Launch the Guest and IoT Manager Virtual Appliance console.

Problem: Virtual Appliance Troubleshooting

Condition

Problem in Guest and IoT Manager Virtual Appliance.

Guest and IoT Manager URL is not Accessible

- 1. Log in to the Guest and IoT Manager Virtual Appliance as Administrator.
- 2. From the CLI, enter command tomcat restart.

Guest and IoT Manager HTTPS is not using the Custom Certificate

If the Guest and IoT Manager HTTPS connection is not using the associated certificate and key after you uploaded the custom certificate and associated it with tomcat, do the following:

- 1. Log in to Guest and IoT Manager Virtual Appliance as Administrator.
- 2. From the CLI, enter tomcat restart.

Guest and IoT Manager CLI

If you are not able to ping the Guest and IoT Manager Virtual Appliance after assigning the IP address and configure the route, enter reboot from the CLI.

Problem: Saving Access Control Engine Settings

Problem

Unable to save Access Control Engine details in Guest and IoT Manager.

- 1. Ensure that the DNS is configured correctly if hostname is used to connect.
- 2. Ensure ExtremeCloud IQ Site Engine / Access Control Engine version is compatible with the Guest and IoT Manager version.
- 3. Ensure that the ExtremeCloud IQ Site Engine administrative user has Guest and IoT Manager read and write permissions.
- 4. Ensure that the Access Control Engine is added in the required Engine Group in ExtremeCloud IQ Site Engine.

Problem: User Groups / End System Group Not Visible in Guest and IoT Manager

Problem

Any newly created User Groups / End System Groups created in ExtremeCloud IQ - Site Engine is not visible in the Access Group tab of the Onboarding Template module.

Solution

- 1. User Groups of type Username and End System Groups of type MAC are only visible in the Guest and IoT Manager.
- 2. Ensure that the Groups created in ExtremeCloud IQ Site Engine are of the appropriate type.

Problem: Provisioner Cannot Login

Problem

No login button found.

Solution

- 1. If Access Control Engine or ExtremeCloud IQ Site Engine is not reachable, ensure that Access Control Engine and ExtremeCloud IQ Site Engine are up and reachable.
- 2. If invalid ExtremeCloud IQ Site Engine credentials are entered, ensure that Guest and IoT Manager is configured with valid ExtremeCloud IQ Site Engine administrator credentials which has Guest and IoT Manager read and write access.
- 3. Ensure that the **Access Control Engine** is added in the required **Engine Group** in ExtremeCloud IQ Site Engine.
- 4. If no valid Guest and IoT Manager license installed, ensure that the valid Guest and IoT Manager license is installed in the **ExtremeCloud IQ Site Engine**.

Problem

Provisioner login fails with an error stating Server error please contact administrator.

Solution

- 1. If Access Control Engine or ExtremeCloud IQ Site Engine is not reachable, ensure that Access Control Engine and ExtremeCloud IQ Site Engine are up and reachable.
- 2. If Guest and IoT Manager is not configured in the Engine Group, ensure to add Guest and IoT Manager IP address and RADIUS shared secret in Engine details on ExtremeCloud IQ Site Engine.
- 3. If Guest and IoT Manager management IP address is changed but not updated the Guest and IoT Manager Server settings in the Engine Group, update the Guest and IoT Manager IP address in Engine details on ExtremeCloud IQ Site Engine.
- 4. If RADIUS shared secret mismatch, ensure that you have entered the same RADIUS shared secret on Guest and IoT Manager and in the Engine details on ExtremeCloud IQ Site Engine.
- 5. If Guest and IoT Manager is not licensed, install valid Guest and IoT Manager license on ExtremeCloud IQ Site Engine.
- 6. If the Provisioner is an LDAP Provisioner and is not associated with any Onboarding Template, ensure that an Onboarding Template is associated with that LDAP group or there is a default Onboarding Template present. For more information, see Configuring Onboarding Template.

Problem

Invalid credentials

- 1. If wrong credentials are entered, ensure a valid username and password is entered.
- 2. If Guest and IoT Manager domain LPR and **Access Control Engine** AAA LPR settings are not same, ensure that both are same.
- 3. If Internal Provisioner and AAA rule does not have local authentication selected in the AAA rule, ensure that the local authentication is selected with LPR same as GIM domain LPR

4. If LDAP Provisioner and AAA rule does not have LDAP authentication selected as the authentication type in the AAA configuration, ensure the LDAP authentication is selected and required LDAP details are provided.

Problem

If fall through is enabled in the AAA configuration and both Local Authentication and LDAP Authentication is enabled, then the fall through does not work as expected and the second rule is not evaluated.

Solution

Do not enable fall through option for Provisioner login.

Problem: Guest and IoT Manager Email / SMS Notification Failed

Problem

Unable to send Email / SMS notifications for Guest Users.

- 1. Make sure that the email notification is properly configured.
 - Log in to the Guest and IoT Manager Administrator User Interface. In the navigation pane, click **Administration > Notification > Email > Enable Sending of Email Notification**. Check the details and click **Save**.
- 2. Log in to the Guest and IoT Manager Virtual Appliance console as Administrator.
 - a. Enter command show dns to check if the dns is configured. If dns is not configured, configure dns. For more information, see dns.
 - b. Enter reboot.
- 3. Send a test email using **Test** option. For more information, see <u>Setting Notification Parameters</u>.
- 4. Ensure that the Guest User Email and / or Password to Guest User Mobile Phone options are selected in the Send Notification section of the New Guest User screen.

Problem: Unable to Access Guest and IoT Manager Application URL

Problem

When the admin interface IP address is updated manually through CLI command, Guest and IoT Manager URL is not reachable.

Solution

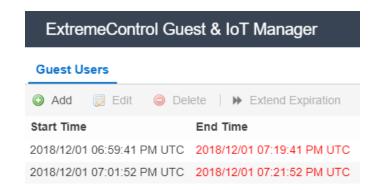
Verify the route settings and make appropriate change if needed. For more information, see route.

Problem: User and Device Troubleshooting

Problem

Newly created Guest Users / Devices from Guest and IoT Manager are not authenticated.

- 1. Ensure that the records are enabled.
 - For more information, see the *ExtremeControl Guest and IoT Manager Configuration* document.
- 2. Ensure that the Guest User / Device is not expired. You can identify the expired record in the End Time attributes column that is highlighted in RED.



3. Ensure that the start time is not in the future.

Problem

Expired Guest User / Device record is not available Guest and IoT Manager.

Solution

Ensure that the **Delete on Expiry** option is unchecked while creating the new Guest User / Device.

Problem: Sponsor List is Not Available

Problem

The Sponsor list is not available error is seen when logging to the self-service URL.

Solution

Ensure that the LDAP group which has the sponsors is correctly entered in the Onboarding Template setting.

Problem: Modification in Network Interface settings does not reflect post deployment

Problem

If Network Interface information is modified during the deployment, the changes will not get updated post deployment.

Solution

- 1. Delete the installed **OVA**.
- 2. Re-install the OVA with default Network Interface settings.

Retain the default Network interface settings on deployment of **OVA**. Any changes in the Network interface settings can be done post bring up.

Problem: Outlook Add-in Issues

Problem

Any changes to the meeting invite, either invitees or meeting time, is not reflecting in the Guest User records.

Solution

Ensure to click on submit after making the changes and before clicking **Send Update** in the meeting invite.

Problem

Outlook Add-in icon disappears from Outlook.

Solution

Restarting the Outlook application resolves this issue.

Problem: Service Unavailable in Browser

Problem

Post GIM reboot (manually from CLI) or post a config restore workflow, Service Unavailable message is observed in the browser while accessing GIM Application.

Solution

Restart tomcat service from the CLI. Enter command tomcat restart.

Problem: Time Zone Issues for Schedule Tasks

Problem

All the scheduled tasks for Backup / Housekeeping, have the time displayed either in GMT, or some other timezone. Therefore, calculating the local time is difficult.

Solution

- 1. Log into the GIM console and check the time zone using the **show time zone** command. By default, time zone setting for GIM is in GMT.
- 2. Change the time zone using the timezone command in the console.

Problem: Users/Devices are not getting cleaned up for Housekeeping Tasks

Problem

Housekeeping task is used to delete Guest Users/Devices that have their first login pending.

For Devices/Guest Users with First login pending to be deleted before 'x' days, the scheduled tasks considers the period of 24 hours as 1 day. Therefore, for 'x' days the period will be 'x' * 24 hours before running the task.

For example, a scheduled task that is configured as, **Delete all First Login Pending Guest User created before 1 day** but when the task is executed, the Guest Users that were created a day before and meet this criteria are not removed.

Solution

The time period used to identify the eligible Guest Users/Devices is calculated from the time the task is executed. Therefore, ensure that the identification of eligible Guest Users/Devices is calculated keeping in mind the time at which the task executes.

For example,

If the task is defined as **Delete all First Login Pending Guest Users created before 1 day**. Where, the task is executed at 10 AM on the 4th June. Then all the Guest Users created before 10 AM 3rd June are eligible for this clean up.

Similarly, if the Guest User was created on 11 AM on the 3rd June and may seem to fit the created before one day criteria, this Guest User is not eligible for clean up.

Problem: Unable to Access GIM UI

Problem

Unable to access the GIM UI after having disabled and then enabled the interface or after doing a restore operation or after reboot.

Solution

Some routes are deleted when the GIM interfaces are disabled or when GIM VM is rebooted.

Check if the added routes are deleted after having disabled the interface or after rebooting.

If there are some routes that are disabled, then add the routes manually and restart tomcat.

```
<interface <Port> ipaddr <ip address/netmask>
<route add <dest ip > gateway
```

Problem: LDAP Provisioner login fails

Problem

LDAP login fails with a **Server Error**. In the logs, an error **'Login successful but No Onboarding Templates recived form NAC'** is displayed, indicating that no Onboarding template was received from NAC.

Solution

This occurs when the LDAP Provisioner is not mapped to any Onboarding Template.

In the Onboarding Template(s) - Advanced section, check the following:

• If the Default Onboarding Template for LDAP Provisioner checkbox is selected

OR

- If the LDAP Group to which the Provisioner belongs is specified in one or more of the Onboarding Templates in the Associated LDAP Groups section. Then, you must specify the LDAP group and not the User search root as previously specified in 8.2.x.
- Only the Onboarding Templates that have the LDAP group mapped (to which the Provisioner belongs) or have the **Default Onboarding Template** checkbox marked as checked are sent back by NAC for LDAP Provisioners.

Problem: LDAP Sponsors are not populating in the Self-Service Page

Problem

The list of LDAP sponsors that was populating in GIM 8.2.x does not populate after migrating to GIM 8.3.0

Solution

The LDAP Sponsor configuration done in GIM 8.2.x does not work in GIM 8.3.0.

As, Guest and IoT Manager lists the Sponsor details with matching LDAP groups in 8.3.0, unlike matching User Search Root as in 8.2.x

Problem: Server Error during bulk creation

Problem

When Guest Users or Devices are being imported using CSV. This occurs only when a very large number such as 1000 records are attempted in continuous batches of 1000 (maximum limit for each upload is 1000).

Solution

This occurs due to the time required in enforcement of the created Guest Users / Devices between ExtremeCloud IQ - Site Engine and NAC.

The time taken to complete the enforcement is the reason for the Server Error displayed.

To overcome this wait for some time before attempting to create more records so that the enforcement can complete.

The error is more frequent if there are multiple GIM's associated with a NAC and all of them are bulk creating Guest User / Device records.

Problem: Unable to Renew Password

Problem

The Guest User Renew Password fails.

Solution

- The reason for the failure is stated on the result dialog of the operation.
- Only the Guest User accounts which have been created using an
 Onboarding Template which meets the following criteria can be renewed:
 - Password must be randomly generated.
 - Notification options At least one method must be enabled (Email/SMS).
 - Account must not be Expired.
 - Onboarding Template cannot be of the Type Voucher/ CSV.

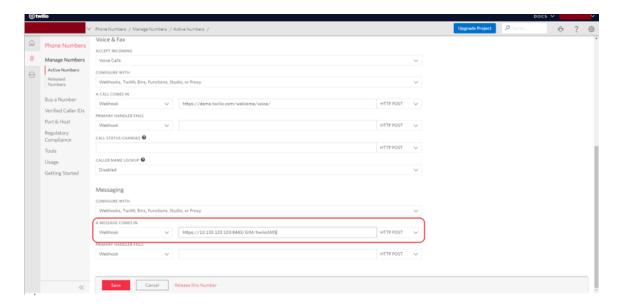
Problem: Guest User account is not created post sending SMS

Problem

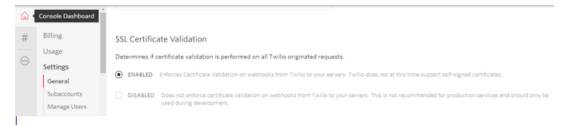
When Guest User scans the QR code and sends the SMS, No Guest User account is created for that request..

Solution

 Ensure GIM's REST API (with Service-B IP/FQDN) end point is configured in the Twilio's Configuration.



- Ensure reachability of Service-B out of corporate firewall.
- Strict-SSL configuration should turned OFF or ON in Twilio Configuration page as per the scenario.

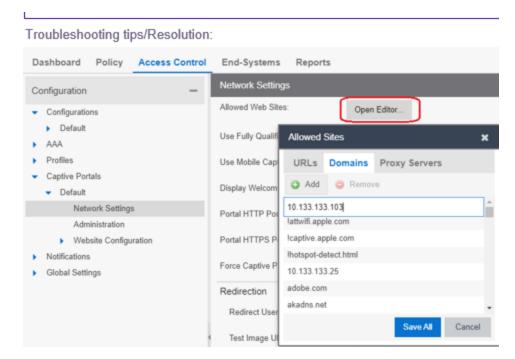


Problem: Login URL redirects to Captive Portal

Problem

On clicking Login URL, the URL gets redirected to NAC Captive Portal.

- Ensure that the HTTPS traffic to GIM IP is enabled for Unregistered Profile of End-System.
- GIM IP/FQDN should be added in the whitelisted domain in Captive Portal settings.
- Make sure that MAC Address and IP Address of the Client device are getting populated in End-System table of ExtremeCloud IQ - Site Engine



when it gets connected to AP

Problem: "Server Error. Please contact Administrator" Error message on clicking Login URL

Problem

Guest User Auto Login fails with error message "Server Error. Please contact Administrator."

- Ensure Connectivity of NAC and ExtremeCloud IQ Site Engine from GIM.
- Make sure that MAC Address and IP Address of the Client device are getting populated in End-System table of ExtremeCloud IQ - Site Engine when it gets connected to AP.

Problem: FQDN not being used in URLs

Problem

FQDN is not being used in URLs sent in Sponsor emails/ messages and UI checkbox is checked.

Solution

Ensure Hostname and Domain name is configured in the CLI. You can use the **show interface** CLI to check if hostname is configured on the interface.(FQDN is derived from the hostname + domain name).

Problem: Unable to Customize Provisioner Login page

Problem

The changes are not reflected in the Provisioner Login Page.

Solution

Select the required settings for the customization and make sure you save the changes (at the bottom of the screen). Merely selecting the values will not result

in the customization.

Problem: "Login failed. Invalid credentials/Account Expired" message on clicking Login URL

Problem

Guest User Auto Login fails with error message - "Login failed. Invalid credentials/Account Expired" and no network access.

Solution

- Ensure the Login URL is not corrupted.
- Ensure the Guest User account is not expired/disabled.
- If both the scenarios are satisfied and still not able to login, ensure that time of GIM,
 NAC, ExtremeCloud IQ Site Engine and XCA are in sync.

Problem: Outlook Add-in throws Security Exception post enabling FQDN

Problem

After enabling FQDN settings, Outlook Add-in throws Security Exception.

Solution

This problem occurs when Add-in Manifest was downloaded by accessing GIM using IP address and not Hostname.

In order to fix this issue, download the manifest again and re-install (Either individually or Admin can push to desired users through Microsoft Exchange Center).

Command Line Interface

This chapter describes the Command Line Interface (CLI) used in Guest and IoT Manager Application to operate the system and to perform specific tasks required by Administrator.

The Guest and IoT Manager CLI provides a limited set of administrative actions that you can perform on the Application. The CLI has a default timeout of 5 minutes.

The following section briefs the CLI commands available on Guest and IoT Manager.

certificate

Important:

HTTP, HTTPS, and FTP are the only supported protocols for the URL.

The URL must point to the file location directly and not through a proxy server.

Make sure that the imported certificate or key does not have an associated password.

Make sure that the FTP server is an anonymous FTP server (that is, no user name/password needed).

Syntax

```
certificate [reset, reset-all]
```

Example

```
GIM>certificate
certificate [reset, reset-all]
reset #reset will retain all custom certs / keys / chain and reset only to default
reset-all # reset all will remove all custom certs / keys / chain and reset to default
```

clear

The clear command clears the terminal screen.

Syntax

clear

Example

GIM>clear

dns

The **dns** command configures the DNS settings.

Syntax

```
dns server primary NNN.NNN.NNN.NNN
dns server secondary NNN.NNN.NNN.NNN
dns server <domain.com>
dns clear server all
dns clear server primary
dns clear server secondary
dns clear domain
```

```
GIM>dns
dns server primary NNN.NNN.NNN.NNN
dns server secondary NNN.NNN.NNN.NNN
dns domain <domain.com>
dns clear server all
dns clear server primary
dns clear server secondary
dns clear domain
GIM>
```

exit

The exit command closes the current active session and logout the console.

Syntax

exit

halt

The **halt** command ends running system and power off the Guest and IoT Manager virtual machine.

Syntax

halt

help

The **help** command displays the list of Guest and IoT Manager CLI commands.

Syntax

help

```
GIM>help
certificate
                   : Manage Certificates.
clear
                   : Clear the Terminal Screen
                   : Configure DNS setting.
dns
                   : Exit GuestManager cli
exit
halt
                   : Halt GuestManager Virtual Machine.
                   : Display list of GuestManger CLI
help
                   : commands.
                   : Configure interface settings.
interface
                   : Ping remote system.
ping
                   : Reboot GuestManager Virtual Machine.
eboot
reinit
                   : Reinitialize GuestManager VM to
                   : factory defaults.
                   : Configure route settings.
route
show certificates : Show Certificates.
                   : Show current dns settings.
show dns
show interface
                   : Show current interface settings.
show route
                   : Show current route settings.
sshd
                   : Enable/disable configure sshd service.
tomcat
                   : tomcat <start|stop|restart|status>
                   : user <user name> [enable|disable]
user
GIM>
```

interface

The **interface** command configures the interface settings.

Important:

You must enter an httpd restart command after you configure the interface settings.

Syntax

```
interface <port> <[enable|disable|stats]|[ipaddr
<A.B.C.D>/netmask in bits]>
```

port

is one of eth0, eth1, eth2, or Admin, ServiceA, ServiceB

```
GIM>interface admin ipaddr 10.133.133.143/24
Generating new self-signed certificates for IP 10.133.133.143
tomcat restart completed successfully
Restarted the web services to listen on the new IP Address.
Please verify the route setting using the "route command"
GIM>
```

interface hostname

The Interface CLI has been modified to accept hostname for Admin, ServiceA and ServiceB interfaces. It takes only the hostname as the input, not the complete FQDN. The FQDN is derived from the hostname and domain name.

Syntax

Interface <port> hostname <interface hostname>

Example

To assign a hostname to ServiceA interface you can, interface ServiceA hostname serviceahostname.

ping

The **ping** command pings a remote system to test the connection between ExtremeControl Guest and IoT Manager and another network device. After you

ping a device, the switch sends an Internet Control Message Protocol (ICMP) packet to the target device. If the device receives the packet, it sends a ping reply. After the switch receives the reply, a message is displayed that indicates traffic can reach the specified IP address. If the switch does not receive a reply, the message indicates the address is not responding.

Syntax

```
ping
```

```
ping [ttl <nnn> [ count <nnn> ]] <NNN.NNN.NNN.NNN >:<DNS Name
>
```

Example

```
GIM>ping 10.133.133.10
PING 10.133.133.10 (10.133.133.10) using timeout of 5 seconds.
200 bytes from 10.133.133.10 icmp_seq=0 ttl=5 time=0.620126724243 ms
200 bytes from 10.133.133.10 icmp_seq=1 ttl=5 time=0.509977340698 ms
200 bytes from 10.133.133.10 icmp_seq=2 ttl=5 time=0.501871109009 ms
200 bytes from 10.133.133.10 icmp_seq=3 ttl=5 time=0.499963760376 ms
GIM>
```

reboot

The **reboot** command restarts the Guest and IoT Manager virtual machine instance.

Syntax

reboot

reinit

The **reinit** command restores the Guest and IoT Manager virtual machine instance to the factory default and reset all configurations.

Syntax

reinit

route

The **route** command adds static routes to the system.

Syntax

route add|delete <subnet><[prefix|netmask] <gateway_ip>
[<interface>]

Example

```
GIM>route
route add|delete <subnet>><[prefix|netmask]> <gateway> [interface]
Adding a route:
route add 0.0.0.0/0 192.168.1.1 [<port>]
route add 192.168.10.0/24 192.168.1.1 [<port>]
route add 192.168.10.0 255.255.255.0 192.168.1.1 [<port>]
Deleting a route:
route delete 192.168.10.0/24 192.168.1.1
route delete 192.168.10.0/255.255.255.0 192.168.1.1
GIM>_
```

show certificates

The **show certificates** command shows information about the certificates and keys in the certificate/key database. The command displays the name of the certificate, if deleting the certificate is allowed (you cannot delete the factory / default certificate), and if the item in the database is key or a certificate. It also displays the certificate and key that the HTTPD server is currently configured to use.

Syntax

show certificates

```
GIM>show certificates

Name Delete Allowed Type
Default_Cert False certificate
Default_Chain False chain
Default_Key False key

httpd is using certificate: Default_Cert
httpd is using key : Default_Key
httpd is using chain : Default_Chain
GIM>_
```

show dns

The **show dns** command displays the current DNS settings, including the search domain, and the primary and secondary DNS server settings.

show dns

Example

```
GIM>show dns
Domain : None
Primary DNS Server : 134.141.162.20
Seconday DNS Server: None
GIM>
```

show interface

The **show interface** command displays interface information for a specific port or ports. If you do not provide a port, all of the ports in the operating system are shown. Separate the ports with white space or commas.

Syntax

```
show interface [port[,port]...]
```

port

is one of eth0, eth1, eth2, or Admin, ServiceA, ServiceB.

```
GIM>show interface admin
NIC Name: Admin
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 10
00
    link/ether 00:0c:29:95:c9:dd brd ff:ff:ff:ff
    inet 10.133.133.143/24 scope global ens33
    valid_lft forever preferred_lft forever
    inet6 fe80::20c:29ff:fe95:c9dd/64 scope link
    valid_lft forever preferred_lft forever
GIM>
```

show route

The **show route** command displays the operating system routing table in the same format as the RedHat Linux operating system at the Unix shell.

Syntax

show route

Example

```
IM>show route
ernel IP routing table
 stination
                 Gateway
                                                   Flags Metric Ref
                                                                         Use Iface
efault
                 10.133.133.1
                                                         0
10.42.0.0
                                                         0
                                                   UG
                                                         0
                                                         0
                                                         0
                                                   U
0.133.133.0
172.17.0.0
GIM>
```

show timezone

The **show tomzone** command displays the current timezone of the Guest and IoT Manager Virtual Machine.

Syntax

show timezone

Example

```
GIM>show timezone
US/Eastern
```

sshd

The **sshd** command lets you enable or disable sshd service.

Syntax

sshd <enable|disable>

Important

In this Release, only sshd enable and sshd disable are supported. The optional interface and port parameters are supported in a future release.

Example

```
GIM>sshd
sshd <enable|disable> [<interface> <port>]
Note: <port> must be between 1 and 65535 inclusive.
sshd enable admin 22
sshd disable [<interface>]
    where interface is one of the following:
    Admin, ServiceA, ServiceB
    ens33, ens34, ens35
GIM>
```

timezone

The **timzone** command lets you setup the timezone of the Guest and IoT Manager Virtual Machine.

Syntax

timezone

```
GIM>timezone
Configuring tzdata

Please select the geographic area in which you live. Subsequent configuration questions will narrow this down by presenting a list of cities, representing the time zones in which they are located.

1. Africa 5. Arctic Ocean 9. Indian Ocean 13. None of the above
2. America 6. Asia 10. Pacific Ocean
3. Antarctica 7. Atlantic Ocean 11. System V timezones
4. Australia 8. Europe 12. US

Geographic area: 12

Please select the city or region corresponding to your time zone.

1. Alaska 3. Arizona 5. Eastern 7. Starke County (Indiana) 9. Mountain 11. Samoa
2. Aleutian 4. Central 6. Hawaii 8. Michigan 10. Pacific Ocean

Time zone: 5

Current default time zone: 'US/Eastern'
Local time is now: Tue May 28 03:01:36 EDT 2019.
Universal Time is now: Tue May 28 07:01:36 UTC 2019.
```

tomcat

The **tomcat** command lets you start, stop, restart, or view the status of the Tomcat service that is hosting the Guest and IoT Manager web application.

Syntax

tomcat <start|stop|restart|status>

To restart the Tomcat service, enter tomcat restart.

Example

```
GIM>tomcat
tomcat <start|stop|restart|status>
starts, stops, restart the tomcat service.

GIM>tomcat stop
tomcat stop completed successfully
GIM>tomcat start
tomcat start completed successfully
GIM>tomcat completed successfully
GIM>tomcat restart
tomcat restart
```

user

The user command is used to enable / disable the root and debug users.

Syntax

user root enable

Example

GIM>user root enable Unlocking password for user root GIM>user root disable Locking password for user root GIM>