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# AUTOMATION ANYWHERE ENTERPRISE

## 11.1.2

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### Control Room - User Guide

Product Version	11.1.2
Document Version	1.0
Date of Publication	6/19/2018
Update(s) to Document Edition	First Edition

# Getting started with Control Room

Here are some resources to help you get started with Control Room.

- [Control Room overview](#)
- [Control Room interface](#)
- [Configuring Control Room for the first time](#)
- [Logging on to Control Room](#)
- [Adding users to your installation of Control Room](#)
- [Assigning roles to the users you have created](#)

# Control Room overview

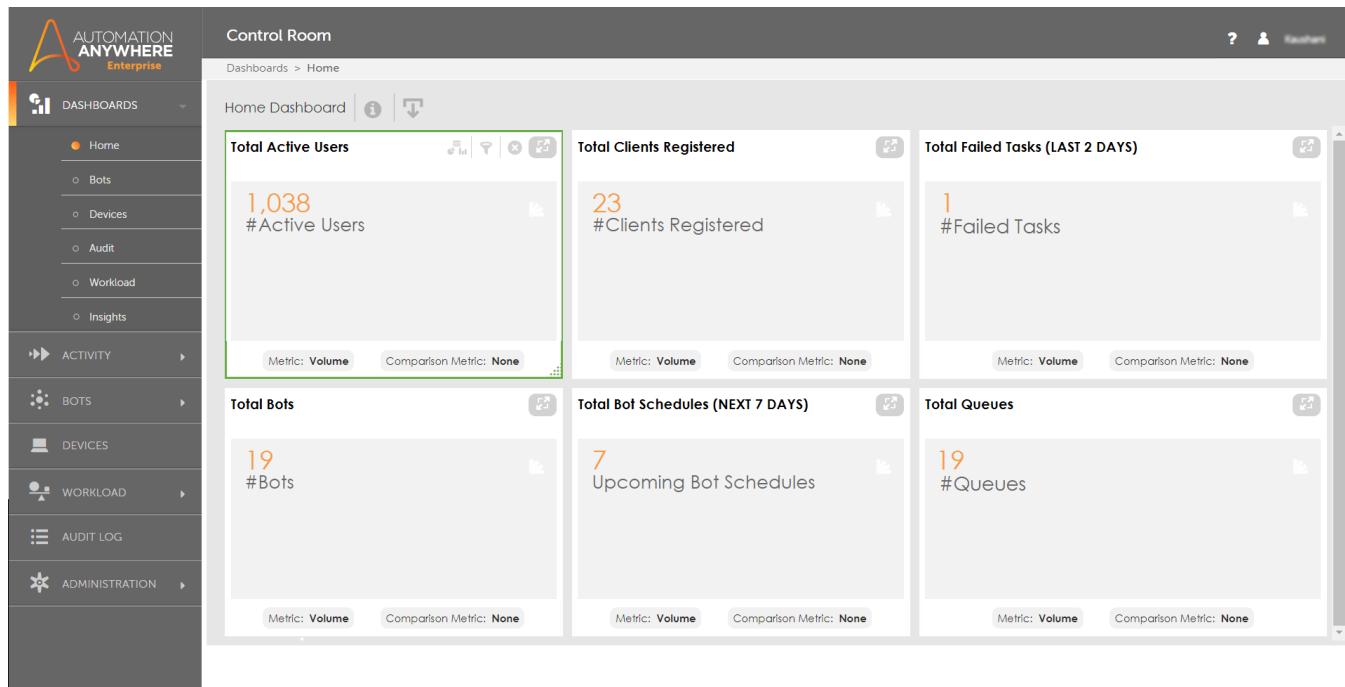
Automation Anywhere's Control Room is a central interface that allows you to manage and monitor all the processes of your RPA infrastructure. In a nutshell, it allows you to manage your bots, monitor activities, create and manage users and roles, monitor connected and disconnected devices, view audit logs, schedule when to run bot, and many more.

## Features

- View task relevant activities using the [Dashboard](#)
- View the history, tasks in progress and the tasks and activities carried out in control room using the [Activity](#) page.
- Manage the automation (bot) files repository and schedule or run tasks using the [Bots](#) page
- Manage credentials and lockers using the [Credentials](#) page.
- View and manage the statuses of devices using the [Bot runners and bot creators](#) page.
- View schedule details using the [Scheduled activity](#) page
- Manage various work items using [Workload](#) management page
- View recent activities of users and administrators using the [Audit Log](#) page.
- Create new and manage existing roles using the [Roles](#) page.
- Manage and configure users (client and administrator), assign roles and licenses using the [Users](#) page.

Some other features enable you to:

- Manage your own profile details using the profile tray
- Configure CR settings for VCS, SMTP etc.
- Configure email notification to notify users on important events and activities
- Configure version control to enable controlled edits to the bots
- Set up different authentication types - AD, Kerberos and Non-AD

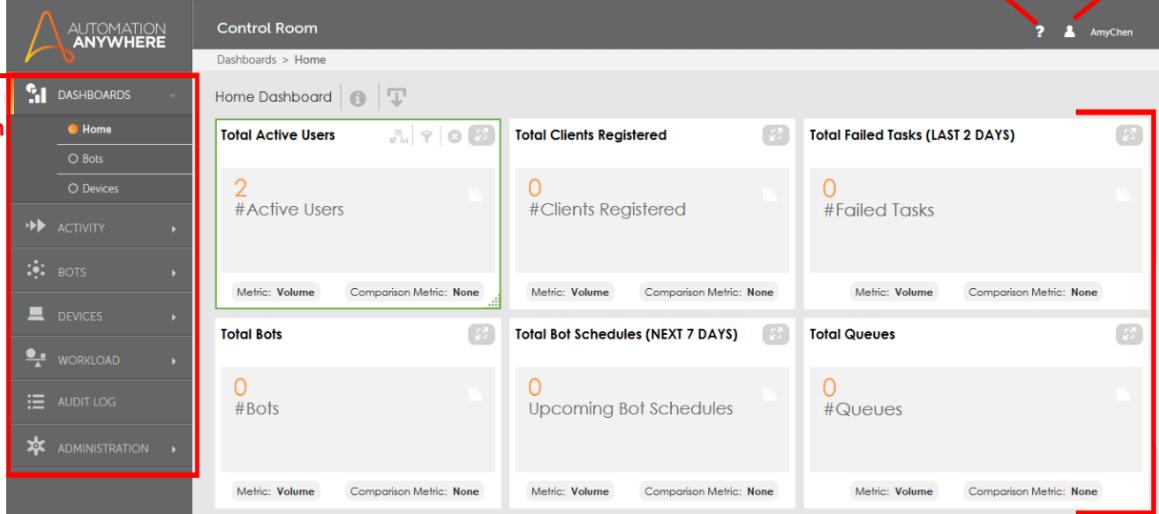


## Benefits

- Simplified and improved monitoring and administration of large multi-site complex automation infrastructure using the web based control room.
- Access and manage tasks, clients, and users from anywhere, anytime.
- Monitor task progress and status to enforce internal compliance regulations, as well as prevent tampering with mission-critical processes.
- Facilitate an environment for increased collaboration to optimize productivity.
- Accommodate scaling of multiple users and Client environments (machines).
- Enable an environment to enforce controlled edits using SVN.
- Facilitate uploading and downloading of MetaBots and MetaBot enabled tasks..
- Facilitate uploading and downloading of IQBots with Vision Skills.
- Provide role-based access to credentials
- Responsive web design helps to run the application in multiple devices such as tablets

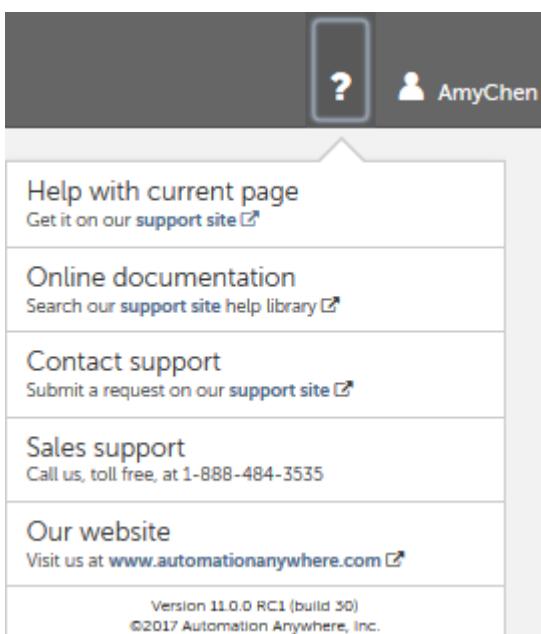
## Control Room interface

The interface of Control Room gives you several options to manage and monitor the different components of your RPA infrastructure. This is illustrated in the following figure.



The screenshot shows the Control Room interface. On the left is a navigation pane titled "Control Room left navigation pane" with sections for Dashboards, Activity, Bots, Devices, Workload, Audit Log, and Administration. The main area is the "Control Room" dashboard, which includes a breadcrumb trail "Dashboards > Home" and a title "Home Dashboard". It features six cards: "Total Active Users" (2 Active Users), "Total Clients Registered" (0 Clients Registered), "Total Failed Tasks (LAST 2 DAYS)" (0 Failed Tasks), "Total Bots" (0 Bots), "Total Bot Schedules (NEXT 7 DAYS)" (0 Upcoming Bot Schedules), and "Total Queues" (0 Queues). At the top right are links for "Access help" and "Your Profile". Red boxes highlight these three areas: the left navigation pane, the main dashboard area, and the top right profile link.

- **Control Room left navigation pane:** This is the first level of navigation. This area on the left holds the components of Control Room. These are Dashboards, Activity, Bots, Devices, Workload, and Administration. The views differ from user to user depending on the assigned roles, permissions, and rights.
- **Details area:** This is the second level of navigation. Depending on the page you are on, it displays a detailed list of users, roles, and bots. It provides you options to perform various actions like create, edit and delete on single or multiple records at a time. It also indicates the current page level in the breadcrumbs at the top. You can use this to navigate back to your previous view.
- **Your profile:** This area allows you to make changes to your profile. This includes changing your password and editing your personal details, such as first name, last name, and e-mail address.
- **Access help:** Clicking this displays a help menu, as shown in the following figure.



The screenshot shows the "Access help" menu. At the top are links for "Help with current page" (Get it on our support site) and "Online documentation" (Search our support site help library). Below these are sections for "Contact support" (Submit a request on our support site) and "Sales support" (Call us, toll free, at 1-888-484-3535). At the bottom is a link to "Our website" (Visit us at [www.automationanywhere.com](http://www.automationanywhere.com)) and copyright information: "Version 11.0.0 RC1 (build 30)" and "©2017 Automation Anywhere, Inc."

This provides you with links to the following resources.

- Help with the page you are currently on
- Access our online knowledge base
- Get support from the Automation Anywhere support team by submitting a support request on our support site
- Call the Automation Anywhere sales team for Sales inquiries
- Visit Automation Anywhere's Website

## Log on to Control Room

To log on to Control Room, double-click the Automation Anywhere Control Room icon on your desktop.

The log on screens are different for Control Room hosted in Active directory/Kerberos and Non-Active directory modes. These are explained in the following sections.

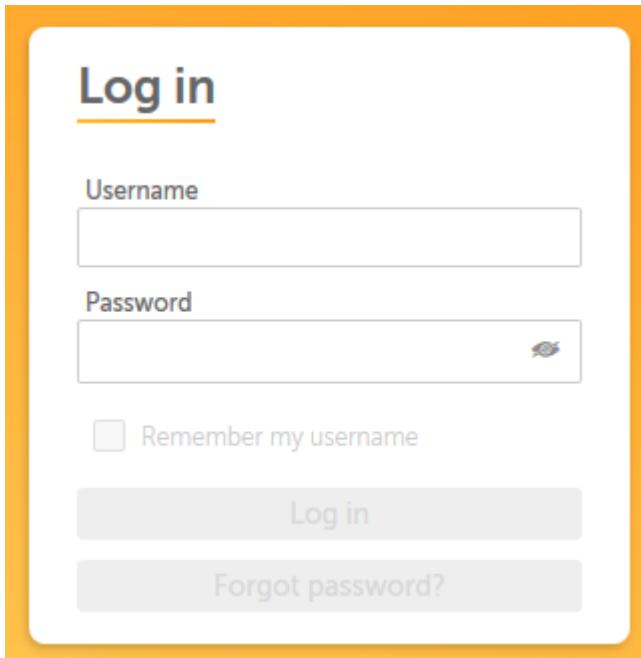
- [Log on to Control Room hosted in Active Directory/Kerberos mode](#)
- [Log on to Control Room hosted in Non-Active Directory mode](#)
- [Log on to Control Room hosted in Single Sign On mode](#)

**Note:** Control Room does not allow multiple sessions to the same account at the same time.

## Log on to Control Room hosted in Non-Active Directory mode

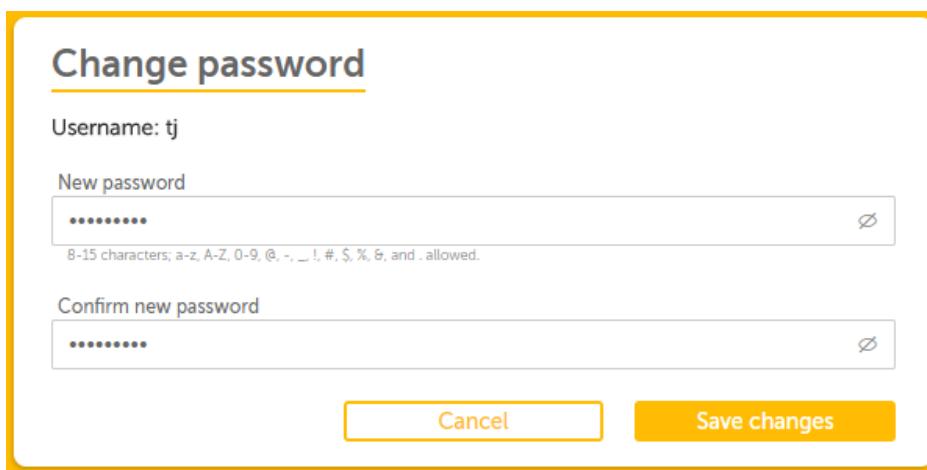
To log on to Control Room hosted in Non-Active Directory mode, perform the following steps.

1. Double-click the Automation Anywhere Control Room icon on your desktop or type the Control Room URL on your Web browser and press the Enter key. The Log in screen is displayed.



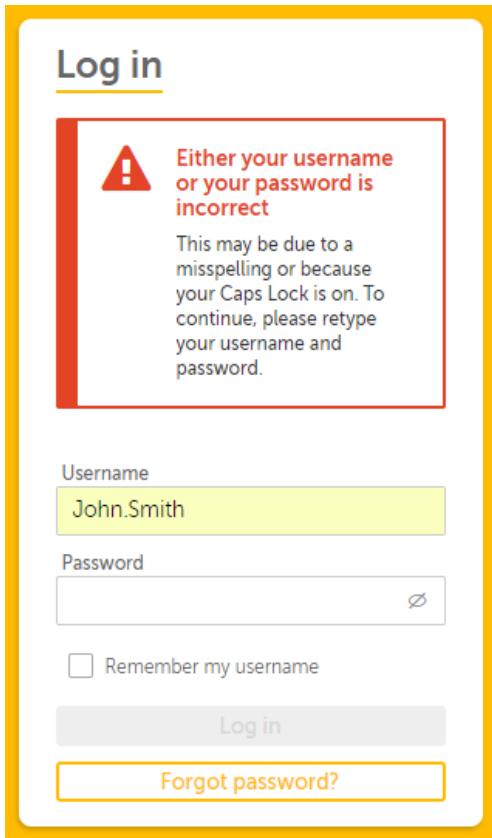
The screenshot shows the 'Log in' page of the Control Room. It features a yellow header bar. Below it is a white form area with a yellow border. The form includes a 'Username' input field, a 'Password' input field with a visibility toggle icon, a 'Remember my username' checkbox, a 'Log in' button, and a 'Forgot password?' link.

2. In the **Log in** area, do the following.
    - **Username:** Type your Automation Anywhere Enterprise (AAE) user name.
    - **Password:** Type your Automation Anywhere Enterprise (AAE) password to log on.
  3. Once the **Log in** button is enabled, click the **Log in** button. The credentials are authenticated directly with CR database.
- Note:** Your account will be locked if you enter the wrong password for a certain number of times depending on the password policy set by your administrator. For security reasons, failed log in attempts are audited, which allows the administrator to analyze and take appropriate actions.
- You can opt to select **Remember my username** if you want to quickly login to the Control Room.
  - Click on **Forgot password?** to reset your password.
    - If you are an admin user, you will have to provide answers to the security questions that were configured during user creation. Once you provide correct answers, you are taken to the navigation page.
    - If a normal user, you are directly taken to the change password page:



The screenshot shows the 'Change password' page. It has a yellow header bar. Below it is a white form area with a yellow border. The form includes a 'Username' field with the value 'tj', a 'New password' input field with a character restriction note below it, a 'Confirm new password' input field, and two buttons at the bottom: 'Cancel' and 'Save changes'.

- If you provide incorrect credentials during log in, you are shown:



**Log in**

**Either your username or your password is incorrect**

This may be due to a misspelling or because your Caps Lock is on. To continue, please retype your username and password.

Username  
John.Smith

Password

Remember my username

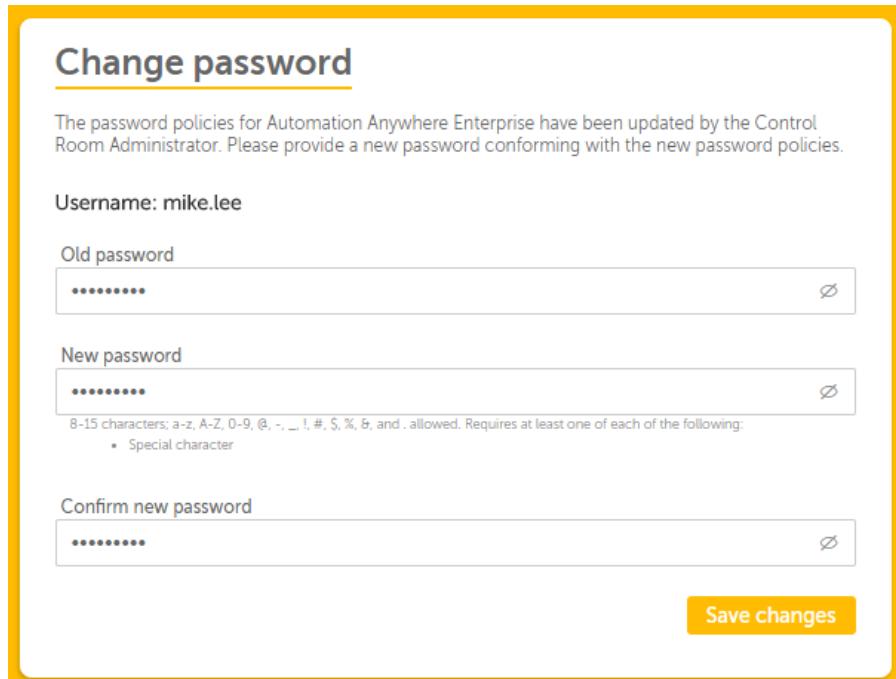
**Log in**

**Forgot password?**

#### Re-logon to Control Room when password policy is updated

You will have to change your password when the the Control Room admin updates the password policy in Control Room Settings.

If the policy is updated, next time you login to the Control Room, the Change Password screen is displayed, wherein you can update your password:



**Change password**

The password policies for Automation Anywhere Enterprise have been updated by the Control Room Administrator. Please provide a new password conforming with the new password policies.

Username: mike.lee

Old password

New password

8-15 characters; a-z, A-Z, 0-9, @, -, \_, !, #, \$, %, &, and . allowed. Requires at least one of each of the following:  
 • Special character

Confirm new password

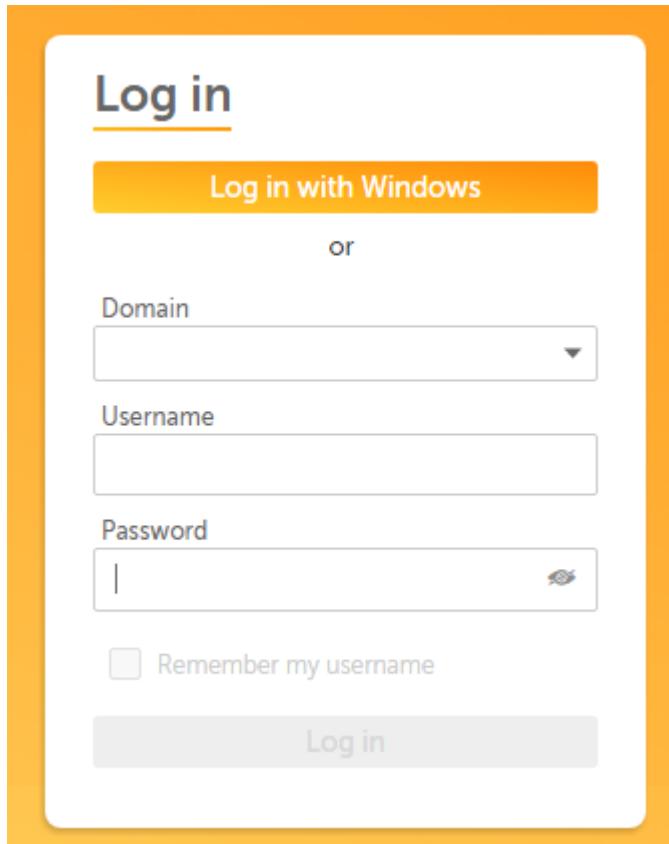
**Save changes**

Click **Save changes** to login successfully.

## Log on to Control Room hosted in Active Directory/Kerberos mode

To log on to Control Room hosted in Active Directory/Kerberos users, perform the following steps.

1. Double-click the Automation Anywhere Control Room icon on your desktop or type the Control Room URL on your Web browser and press the Enter key. The Log in screen is displayed.



2. In the **Log in** area, do the following.

- **Domain:** Select the domain of the active directory. Note that Automation Anywhere Enterprise Control Room single forest multi-domain environment.
- **Username:** Type your Active Directory user name.
- **Password:** Type your Active Directory password.

**Note:** For Kerberos installation, you do not need to enter your user name and password. Just click the **Log in with Windows** button and you will be logged in with your current Windows account.

3. Once the **Log in** button is enabled, click the **Log in** button. The log in details are authenticated directly with the Active Directory Domain Controller when you log in.

Note that,

- Your session will timeout in 20 minutes after you log in and the session is idle for that time period.
- Multiple sessions of the same user account is not allowed. If you are logged in at one instance and later log to another instance, for example different browser on same machine or different machine, you are allowed to log in with new session. However, when you perform a new request in the earlier session, you will be logged out.
- If you provide incorrect credentials, you are shown:

## Log in

 Either your username or your password is incorrect

This may be due to a misspelling or because your Caps Lock is on. To continue, please retype your username and password.

[Log in with Windows](#)

or

Domain

Username

Password

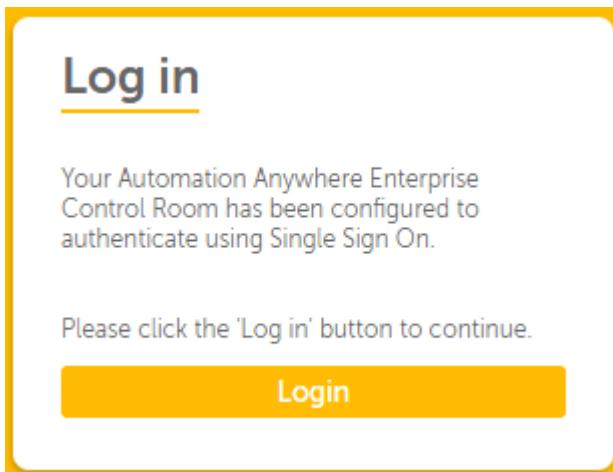
Remember my username

[Log in](#)

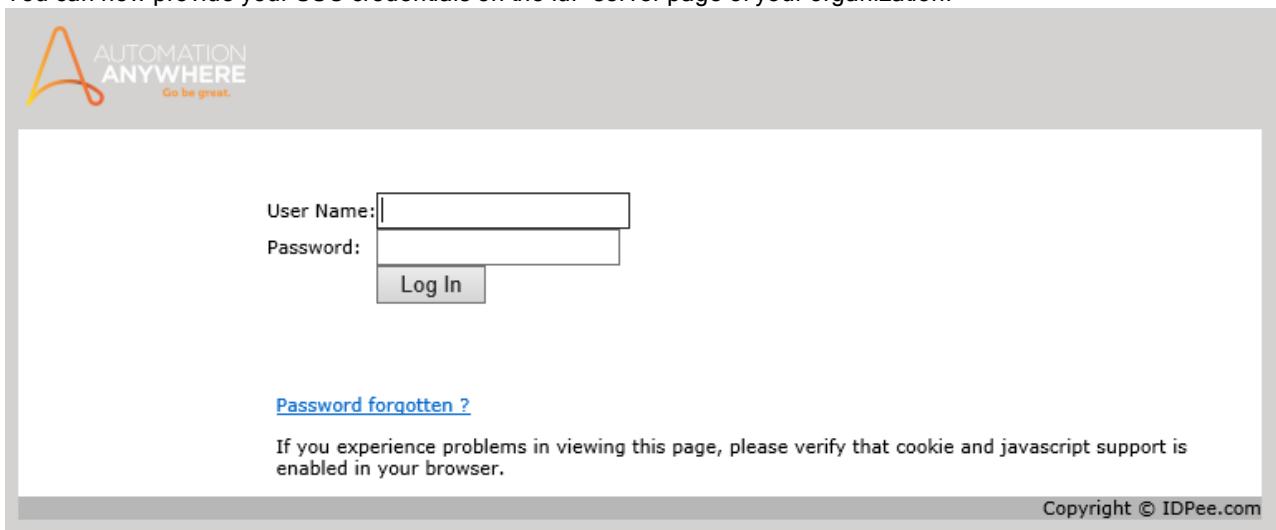
## Log on to Control Room hosted in Single Sign On mode

To log on to Control Room hosted in Single Sign On mode, perform the following steps:

1. Double-click the Automation Anywhere Control Room icon on your desktop or type the Control Room URL on your Web browser and press the Enter key. The **Log in** screen is displayed:



2. Click **Login**
3. You can now provide your SSO credentials on the IdP server page of your organization:



User Name:

Password:

**Log In**

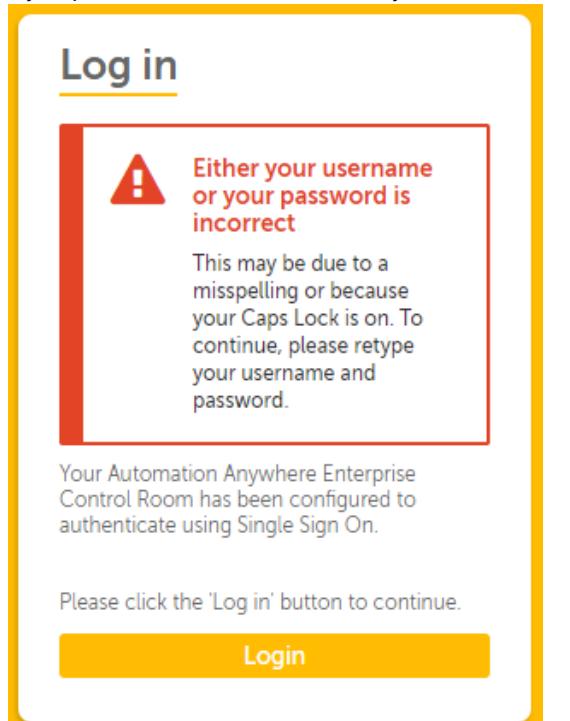
[Password forgotten ?](#)

If you experience problems in viewing this page, please verify that cookie and javascript support is enabled in your browser.

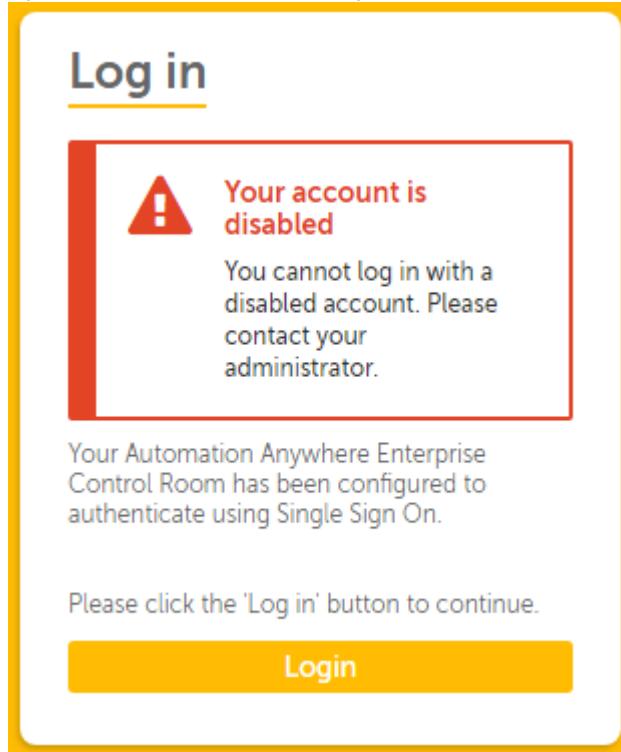
Copyright © IDPee.com

## 4. Click Log In.

- If you provide incorrect credentials, you are shown:

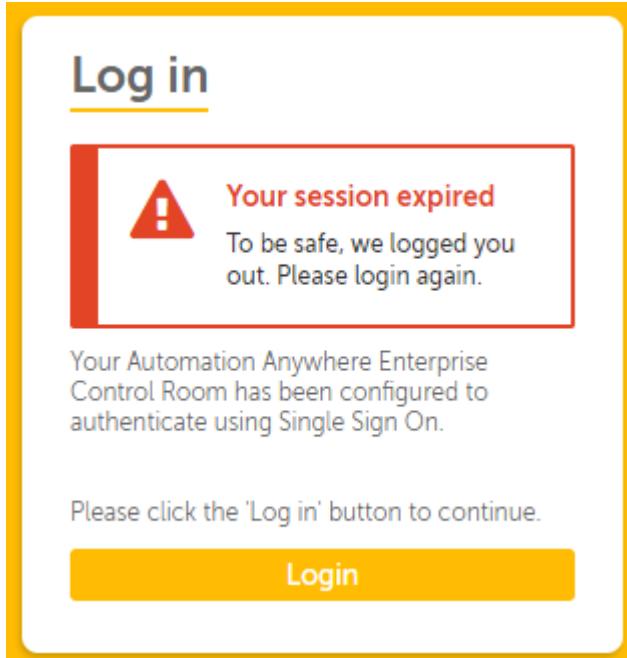


- If your user account is disabled, you are shown:

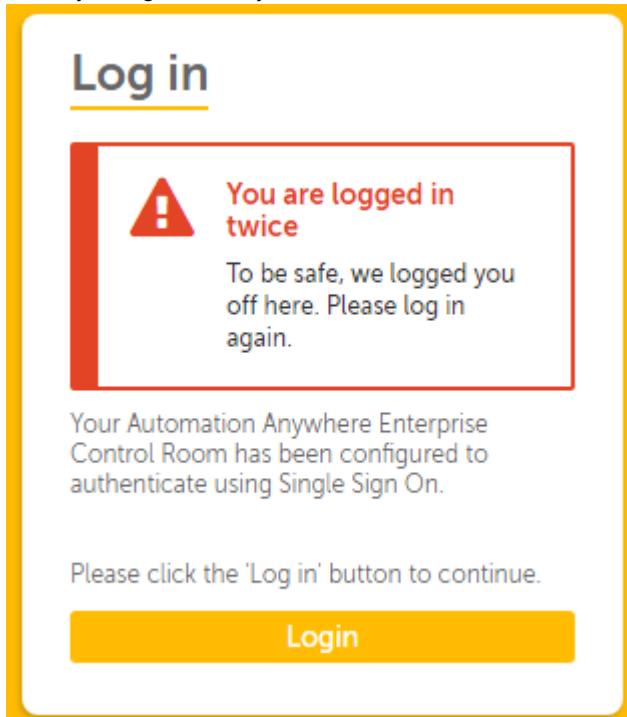


- If the you input invalid IdP Server credentials, you will not be taken to the Control Room login page.
- If the IdP Server URL is not valid or the server is down, you are shown appropriate message configured for it. For example, 404 or Bad Gateway.

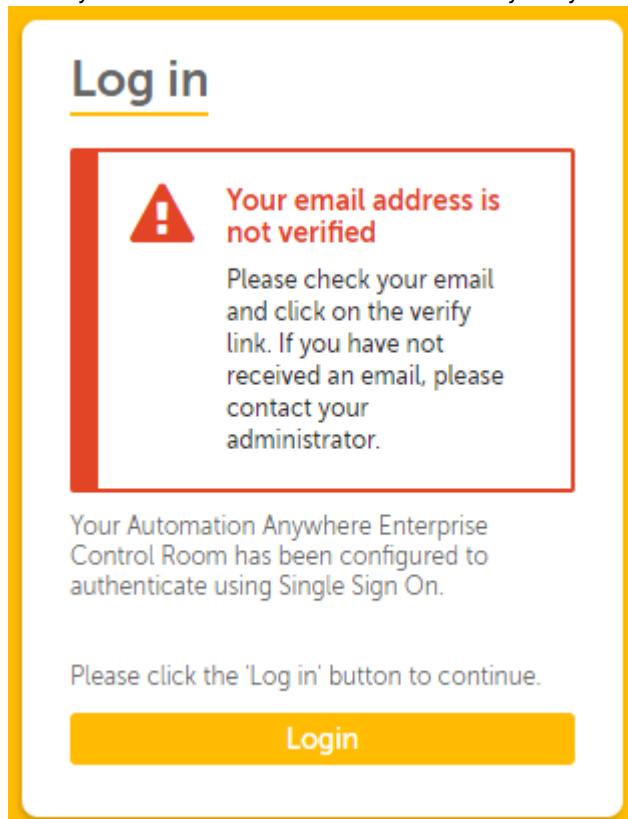
- When your Control Room session expires, you are shown:



- When you log in twice, you are shown:



- When your email address is not verified and if you try to login, you are shown



5. On successful authentication in the IdP server, you are logged into the Control Room.

**Note:**

- You are automatically logged into the Control Room if you open the Control Room in the same browser or refresh the page as you are already authenticated by the IdP server.
- When you **Logout** (available when you click <username> in the profile) of the Control Room, you are not logged out of other applications running with the same IdP Server.

Refer [Control Room Overview](#) article for a summary on Control Room

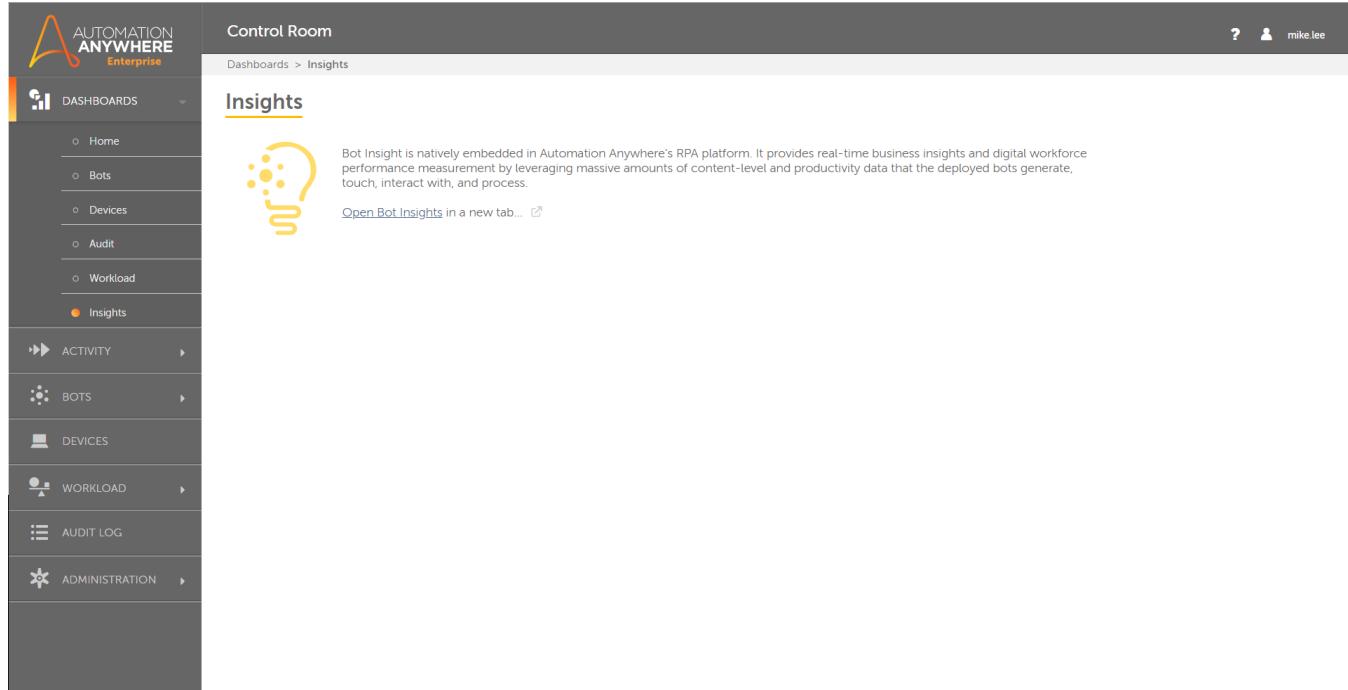
# Log on to Bot Insights

Bot Insights helps automation experts to get real-time business insights and digital workforce performance measurement by leveraging massive amounts of content-level and productivity data the deployed bots generate, touch, interact with, and process. It helps the automation experts and consumers to interactively analyze task data and enhance widgets.

## Single Sign-on

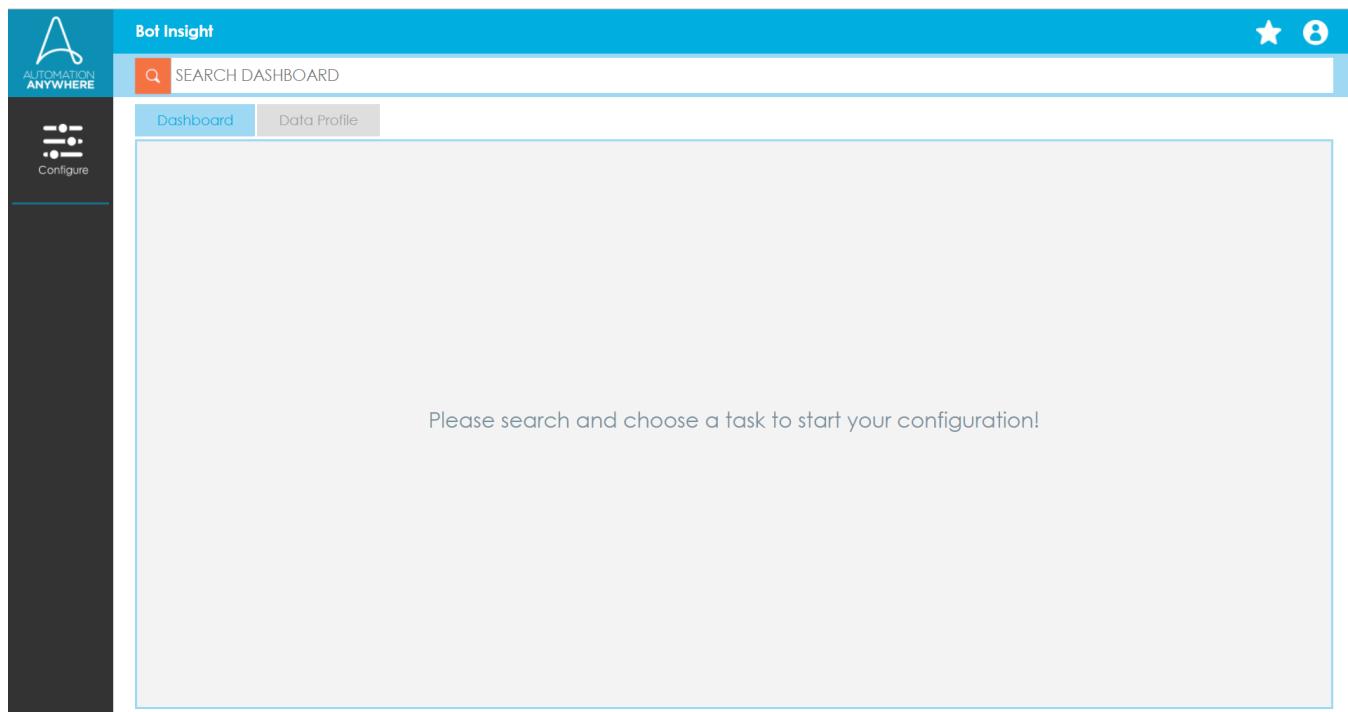
When you are logged into one component of Automation Anywhere Enterprise, you do not need to log into the other components. Single Sign-on automatically logs you into all the other components.

In the Control Room, on the left pane, click DASHBOARDS → Insights.



The screenshot shows the 'Control Room' interface. On the left sidebar, under 'DASHBOARDS', the 'Insights' option is selected, indicated by an orange dot. The main content area is titled 'Insights' and contains a brief description: 'Bot Insight is natively embedded in Automation Anywhere's RPA platform. It provides real-time business insights and digital workforce performance measurement by leveraging massive amounts of content-level and productivity data that the deployed bots generate, touch, interact with, and process.' Below this text is a link 'Open Bot Insights in a new tab...'. The top right corner of the main area shows a user profile icon and the name 'mike.lee'.

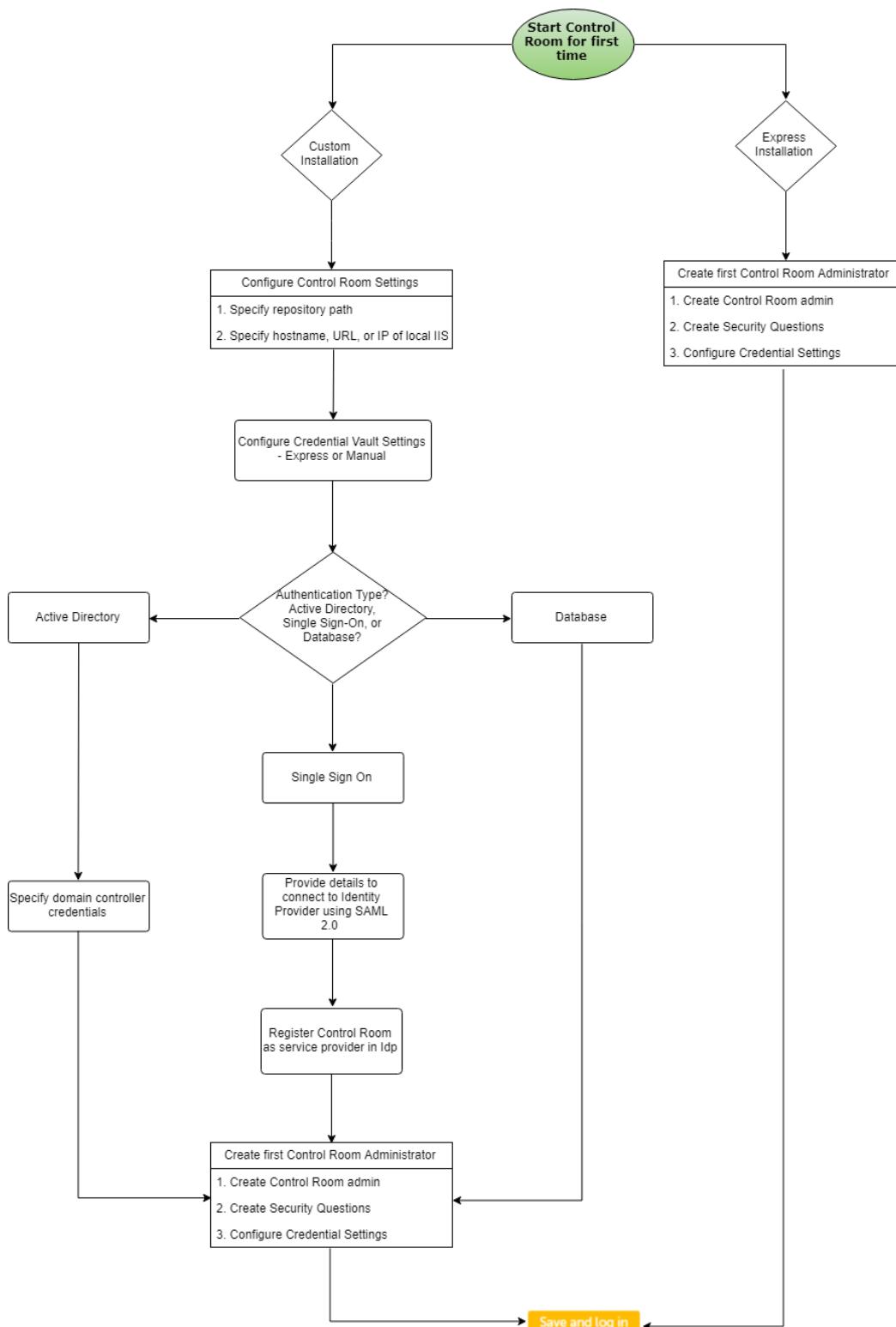
On the right pane, click on the **Open Bot Insights** link. The system opens the Bot Insights application in a separate tab without the need for you to login again into Bot Insights.



The screenshot shows the 'Bot Insight' application window. The top navigation bar includes the Automation Anywhere logo, a search bar labeled 'SEARCH DASHBOARD', and user icons for favoriting and logging out. The left sidebar has a 'Configure' button. The main content area has tabs for 'Dashboard' (which is active) and 'Data Profile'. A large central area contains the text 'Please search and choose a task to start your configuration!'. The top right corner of the main area shows a user profile icon and the name 'mike.lee'.

# Configure Control Room for the first time

Once you have installed Control Room, you must configure it when you launch it for the first time. Depending on the mode of your installation of Control Room, the flow and the pages displayed to you are different when you launch Control Room for the first time. This is illustrated in the following figure.

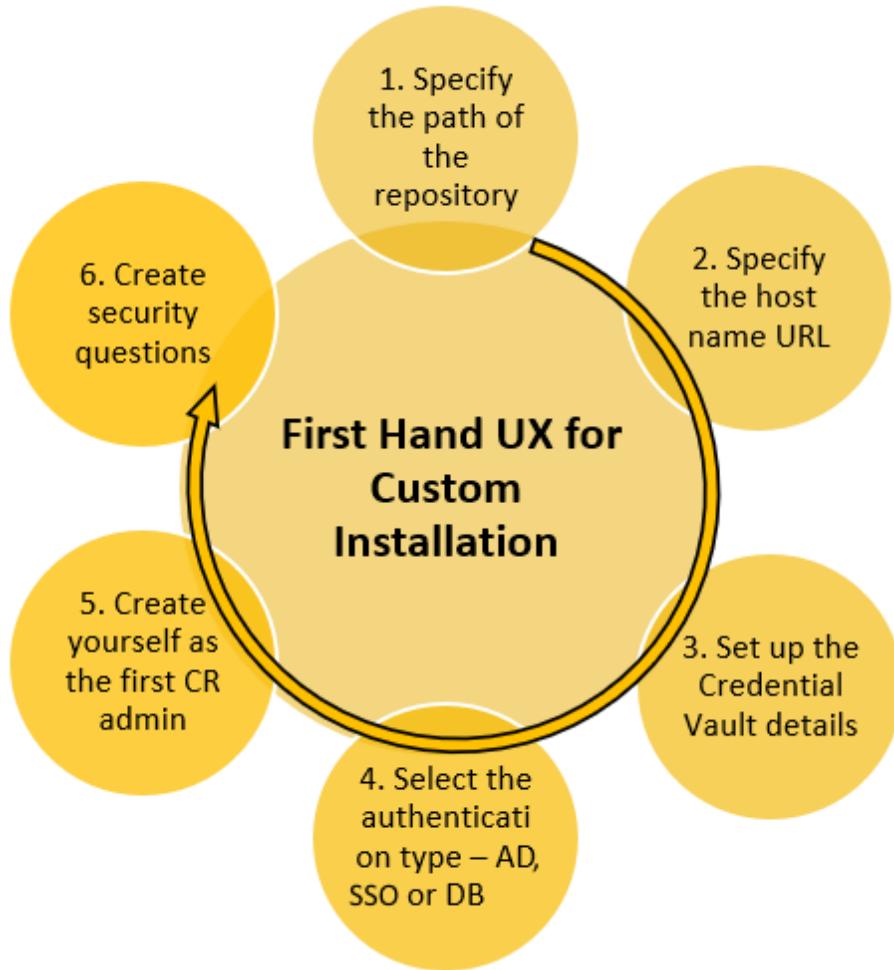


For more information on configuring Control Room for the first time, refer to the following sections.

- [Configuring Control Room for the first time - Custom installation](#)
- [Configuring Control Room for the first time - Express installation](#)

## Configuring Control Room for the first time - Custom installation

A typical work flow for configuring Control Room installed in custom mode is illustrated in the following figure.



When you install Control Room in Custom mode, the getting started wizard guides you through:

1. Specifying the path of the repository - this is the location where the uploaded automation files, such as meta bots, IQ Bots, and task bots will be stored.
2. Specifying the host name URL - this is the URL that users will use to access your installation of Control Room.
3. Setting up the Credential Vault details
4. Selecting the authentication type - Active Directory, Single Sign-On or Control Room database
5. Creating yourself as the first Control Room administrator
6. Creating security questions in case you lose your password

To configure Control Room when you start it for the first time for a custom installation, perform the following steps.

1. Double-click the Automation Anywhere Control Room icon on your desktop. The **Configure Control Room settings** page is displayed.

## Configure Control Room settings

[Save and continue >](#)

There are some settings that need to be configured before continuing to Control Room.

### Repository path

Specify the path or the shared path of the Control Room repository where the automation files are stored.

e.g. C:\ProgramData\AutomationAnywhere\Server Files

### Control Room access URL

Specify the host name, URL, or IP of local IIS, reverse proxy or load balancer.

e.g. CRServer, http://example.com/controlroom, or 192.163.2.100.8096

## 2. On the Configure Control Room settings page, do the following.

- **Repository Path:** Type the location where the uploaded automation files will be stored. For example, `ldap\My-Server-Server Files`.



**Note:** If you do not specify the correct location, an error message is displayed, as shown in the following figure.



### Unable to connect to the location mentioned in repository path

This is due to the following reasons:

- Repository path is invalid
- There is a network connectivity issue

Please enter a valid repository path and try again

- **Control Room access URL:** Type the URL that users will use to access your installation of Control Room.



**Note:** This URL is the URL of the load balancer, which routes request to different Control Room instances

## Configure Control Room settings

[Save and continue >](#)

There are some settings that need to be configured before continuing to Control Room.

### Repository path

Specify the path or the shared path of the Control Room repository where the automation files are stored.

e.g. C:\ProgramData\AutomationAnywhere\Server Files

### Control Room access URL

Specify the host name, URL, or IP of local IIS, reverse proxy or load balancer.

e.g. CRServer, http://example.com/controlroom, or 192.163.2.100.8096

## 3. Once you have typed the **Repository Path** and **Control Room access URL**, click the **Save and continue** button. The **Credential Vault setting** page is displayed.

## Credential Vault settings

[Save and continue >](#)

The Credential Vault master key allows you to connect to the Credential Vault where you can create and store credentials that are required when running bots.

**IMPORTANT NOTE:** Save the master key, now, in a safe place for future reference. If you need it in the future, and you do not have it, you may not be able to access the Control Room.

Select the connection mode for the Credential Vault.

Express mode

Save your master key and automatically connect to the Credential Vault every time the Control Room restarts.

Manual mode

Every time the Control Room restarts, manually enter the master key to connect to the Credential Vault.

More secure and recommended for use in a production environment.

Master key

[Copy](#)

**IMPORTANT:** The back button of your Web browser is automatically disabled after you type the Repository path and Control Room access URL and click the Save and continue button. This is to ensure that the Credential vault master key that will be generated matches the repository path and Control Room access URL. To go back to the Configure Control Room settings page, press Ctrl+F5 on your keyboard and start over again.

 **Note:** The **Save and continue** button is not enabled if the correct path or URL is not specified.

4. On the **Credential Vault settings** page, do the following.

- **Express mode:** Select this option if you want the system to store your master key to connect to Credential Vault.

 **Note:** It is recommended that you do not use this option for a production environment.

- **Manual mode:** Select this option if you want to store the master key on your own. When you use this mode, you must enter the master key if the Credential vault is locked. The Master key is used to connect to the Credential Vault so that users can use the vault to secure their credentials and access it in their taskbots. Copy the master key to your Windows clipboard by clicking the **Copy** button and save it in a secure location.

## Credential Vault settings

[Save and continue >](#)

The Credential Vault master key allows you to connect to the Credential Vault where you can create and store credentials that are required when running bots.

**IMPORTANT NOTE:** Save the master key, now, in a safe place for future reference. If you need it in the future, and you do not have it, you may not be able to access the Control Room.

Select the connection mode for the Credential Vault.

Express mode

Save your master key and automatically connect to the Credential Vault every time the Control Room restarts.

Manual mode

Every time the Control Room restarts, manually enter the master key to connect to the Credential Vault.

More secure and recommended for use in a production environment.

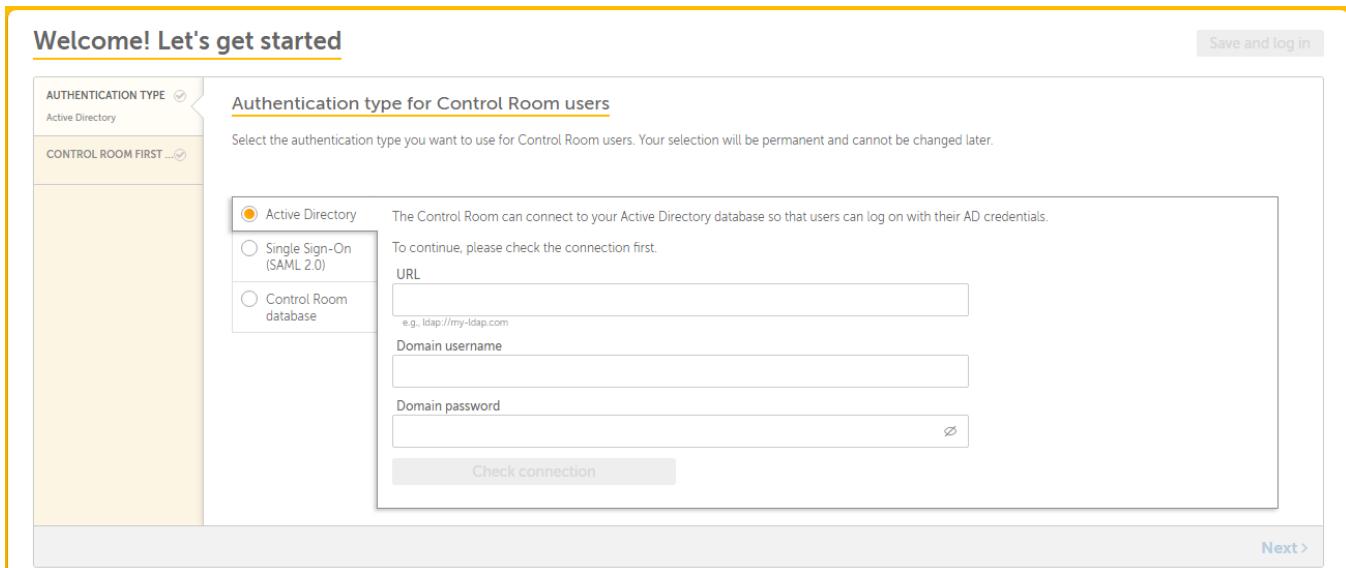
Master key

[Copy](#)

**IMPORTANT:** As an administrator, you must copy the master key to your clipboard and save it in a secure place. This key is required in the event that the credential vault is closed. If you lose the master key, your access to Control Room is locked.

5. Click **Save and Continue**. The **Authentication type for Control Room users** page is displayed. Use this page to specify the type of authentication your Control Room users will use to log on to Control Room.

**IMPORTANT:** The back button of your Web browser is automatically disabled after you click the Save and continue button on the Credential Vault settings page and you cannot make any further changes to the Control Room configuration or Credential Vault settings. To make changes, you must reinstall Control Room again.



Welcome! Let's get started

**Save and log in**

**AUTHENTICATION TYPE**  Active Directory

**CONTROL ROOM FIRST**

**Authentication type for Control Room users**

Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.

Active Directory      The Control Room can connect to your Active Directory database so that users can log on with their AD credentials.  
 To continue, please check the connection first.

Single Sign-On (SAML 2.0)

Control Room database

URL  
e.g., ldap://my-ldap.com

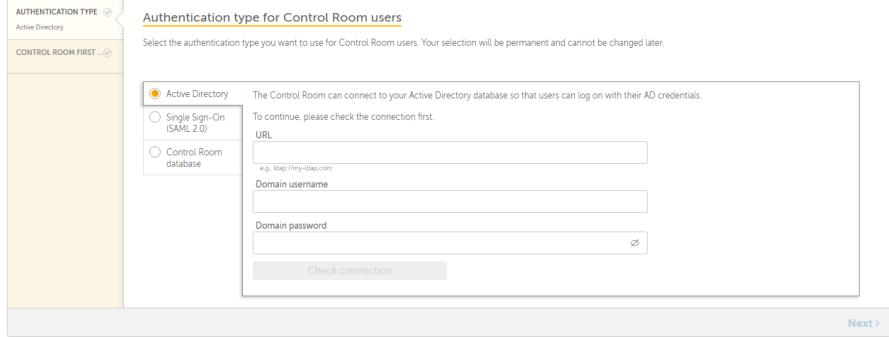
Domain username

Domain password

Check connection

Next >

6. On the **Authentication type for Control Room users** page, do one of the following.

Authentication type	Description
Active Directory	<p>Select this option if you want use Active Directory as the type of authentication. This allows users to log on to Control Room with Active Directory credentials.</p> <ul style="list-style-type: none"> <li><b>URL:</b> Type the LDAP URL. For example, ldap://my-ldap.com. This is the URL of the domain controller.</li> <li><b>Username:</b> Type the user name. This must be a user with domain controller rights (domain administrator.)</li> <li><b>Password:</b> Type the password for the user.</li> </ul>  <p>Type the details for the Active Directory and click the <b>Check connection</b> button. If Control Room is unable to connect to the Active Directory database, an error message is displayed, as shown in the following figure.</p>

	<div style="border: 2px solid red; padding: 10px; text-align: center;">  <b>Unable to connect to Active Directory server</b>          This may be due to a misspelling or because your Caps Lock is on. To continue, please retype the URL, username, and password. If you continue to see this error, please contact your system administrator.       </div>
Single Sign On	<p>Select this option if you want to use IdP server for authentication.</p> <p><b>Authentication type for Control Room users</b></p> <p>Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <input type="radio"/> Active Directory  <input checked="" type="radio"/> Single Sign-On (SAML 2.0)  <input type="radio"/> Control Room database       </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <b>SAML Metadata</b>          Unique Entity ID for Control Room (Service Provider)  <input type="text"/>  <input checked="" type="checkbox"/> Encrypt SAML Assertions          Public Key  <input type="text"/>          X.509 Certificate format          Private Key  <input type="text"/>          PKCS #8 format       </div> <div style="text-align: right;"> <a href="#">Next &gt;</a> </div>
	<p>Refer <a href="#">Configure Control Room for Single Sign On</a> for details.</p>
Control Room database	<p>Select this option if you want to use the Control Room database as the type of authentication.</p> <p><b>Authentication type for Control Room users</b></p> <p>Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <input type="radio"/> Active Directory  <input type="radio"/> Single Sign-On (SAML 2.0)  <input checked="" type="radio"/> Control Room database       </div> <div style="text-align: right;"> <a href="#">Next &gt;</a> </div>

7. After selecting the type of authentication. Click **Next**. The **Create yourself as the first Control Room administrator** page is displayed.

**Welcome! Let's get started**

[Save and log in](#)

<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <b>AUTHENTICATION TYPE</b> <input checked="" type="radio"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;">           Control Room database         </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <b>CONTROL ROOM FIRST...</b> <input checked="" type="radio"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;"> <b>SECURITY QUESTIONS</b> <input checked="" type="radio"/> </div>	<div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;"> <b>Create yourself as the first Control Room Administrator</b>          The Control Room first administrator is automatically assigned the system-created "Admin" role which has permissions for all functionality.       </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Username  <input type="text"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         First name (optional)  <input type="text"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Last name (optional)  <input type="text"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Email  <input type="text"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Confirm email  <input type="text"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Password  <input type="password"/> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 10px;">         Confirm password  <input type="password"/> </div> <div style="text-align: right; margin-top: 10px;"> <a href"="">&lt; Back</a> <a href="" style="margin-left: 10px;">Next &gt;</a> </div>
--	---

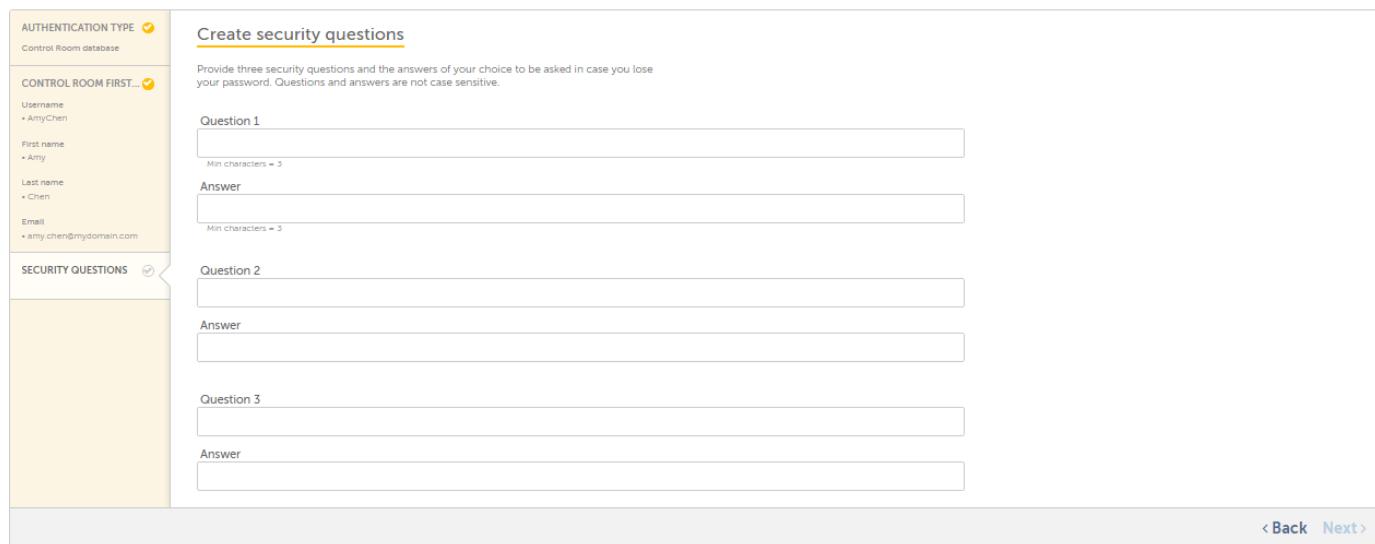
8. On the **Create yourself as the first Control Room administrator** page, do the following.

- **Username:** Type a user name for the administrator.
- **First name:** Type the first name of the administrator. This is optional.
- **Last name:** Type the last name of the administrator. This is optional.
- **Email:** Type an e-mail address for the administrator.
- **Confirm email:** Confirm the e-mail address.
- **Password:** Type a password for the administrator.
- **Confirm password:** Confirm the e-mail address.

9. Click **Next**. The **Create security questions** page is displayed.

Welcome! Let's get started

[Save and log in](#)



**Create security questions**

Provide three security questions and the answers of your choice to be asked in case you lose your password. Questions and answers are not case sensitive.

Question 1  
 Min characters = 3

Answer

Question 2

Answer

Question 3

Answer

[Back](#) [Next >](#)

10. On the **Create security questions** page, type three security questions and an answer to each. This will be used in case you forget your Control Room password.



**Note:** Each question must be unique. Set questions and answers that are easy to remember.

11. Click **Save and log in**. The first administrator user of your Control Room installation is created and you can now configure and manage your overall RPA environment with Control Room and its clients.

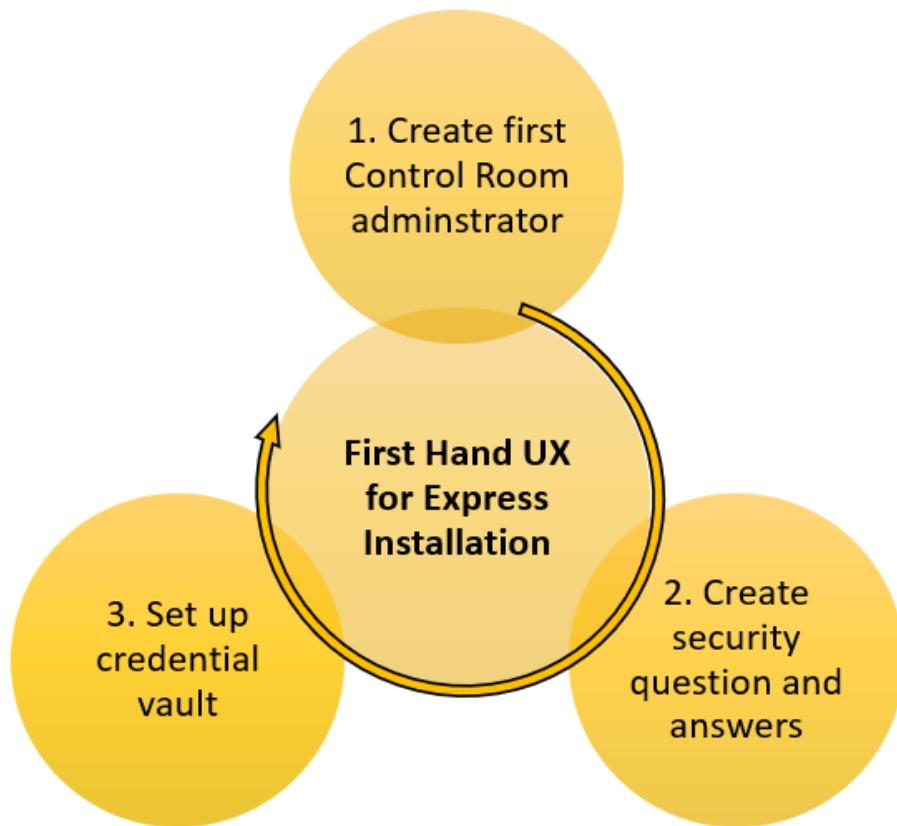


**Note:** For a non-active directory environment, you will be directly logged on to Control Room. However, for an active directory environment, a login dialog is displayed.

## Configuring Control Room for the first time - Express installation

When Control Room is installed in Express mode, the getting started wizard guides you through:

1. Creating yourself as the first Control Room administrator so that you can configure and manage the overall RPA environment of your organization.
2. Creating three security questions in case you forget your password.
3. Setting up your Credential Vault master key.

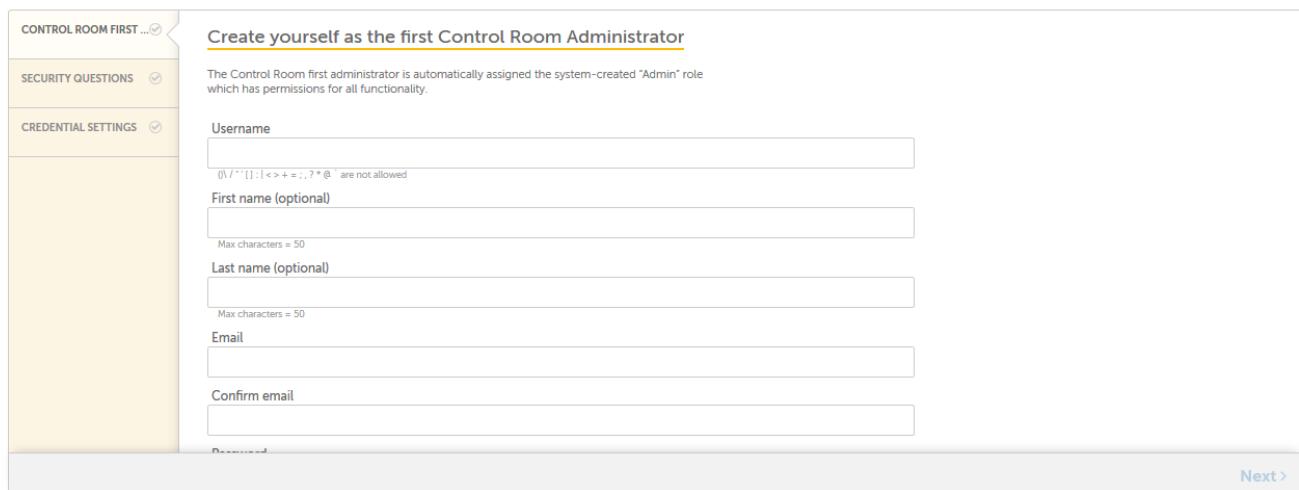


To configure Control Room for the first time for an express installation, perform the following steps.

1. Double-click the **Automation Anywhere Control Room** icon on your desktop. The getting started wizard is displayed.

### Welcome! Let's get started

[Save and log in](#)



**CONTROL ROOM FIRST...**

**Create yourself as the first Control Room Administrator**

The Control Room first administrator is automatically assigned the system-created "Admin" role which has permissions for all functionality.

Username

(\|/\*^{}[]:;<>+=;,:?\*@` are not allowed)

First name (optional)

Last name (optional)

Email

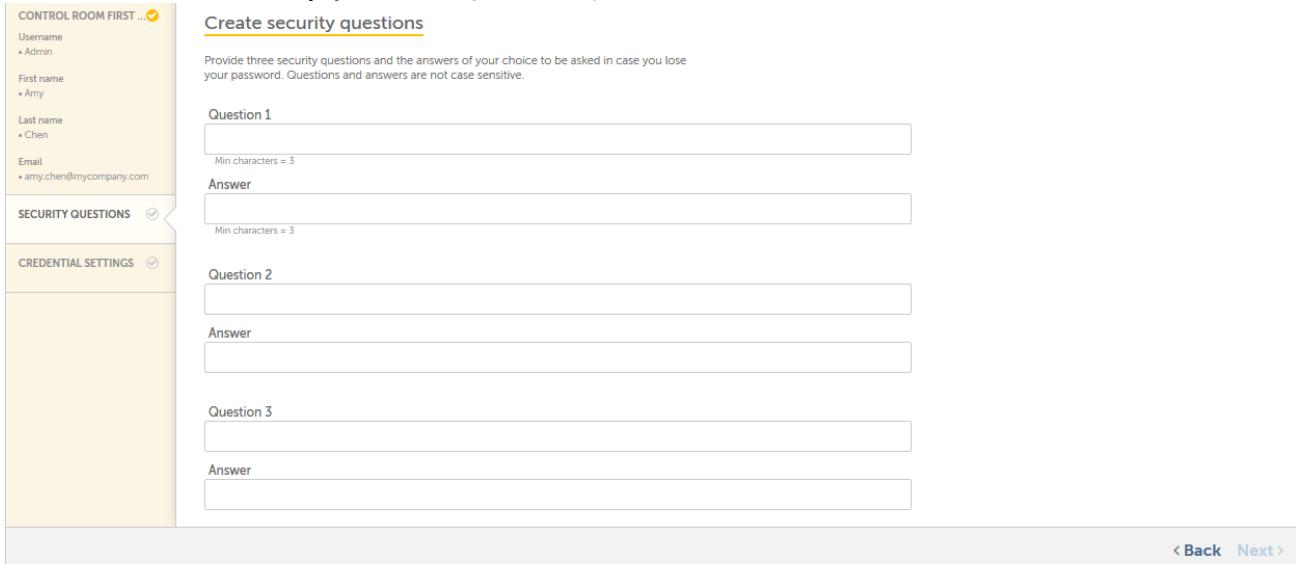
Confirm email

[Next >](#)

2. On the **Control Room First** tab, do the following.

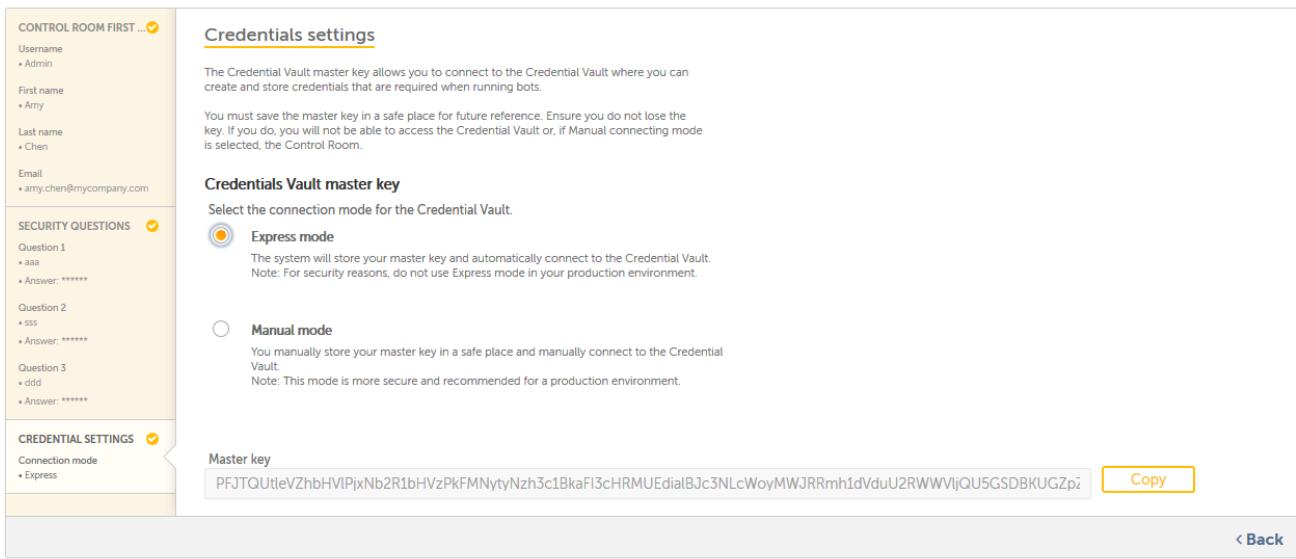
- **Username:** Type a user name of your choice.
- **First name:** Type your first name (this is optional)
- **Last name:** Type your last name (this is optional)
- **Email:** Type your e-mail address.
- **Password:** Type a password.
- **Confirm password:** Type your password again to confirm.

3. Click **Next**. The **Create security questions** page is displayed.



4. On the **Create security questions** page, type three security questions and an answer to each. This will be used in case you forget your Control Room password.

5. Click **Next**. The **Credential settings** page is displayed.



6. Depending on your requirements, select the **Express mode** or **Manual mode** options.

The Master key is used to connect to the Credential Vault so that users can use the vault to secure their credentials and access it in their taskbots.

**IMPORTANT:** As an administrator, you must copy the master key to your clipboard and save it in a secure place – use the **Copy** button to do this. This key is required in the event that the credential vault is closed. If you lose the master key, your access to Control Room is locked.

7. Click **Save and log in**. The first administrator user of your Control Room installation is created and you can now configure and manage your overall RPA environment with Control Room and its clients.

# Configure Control Room for Single Sign-On

As a Control Room administrator, you can configure the Control Room instance for Single Sign-On (SAML 2.0) if your organization uses IdP server for authentication.

You can select this option once you have specified the repository path, host name URL, and Credential Vault details. Refer [Configuring Control Room for the first time - Custom installation](#) for details.

## Steps to configure Single Sign-On authentication

Use the Single Sign-On option to allow your Control Room to connect to your identity provider database (Control Room) using SAML 2.0 protocol and log on using Single Sign-On.

1. On the **Authentication type for Control Room users** page select Single Sign-On (SAML 2.0) option:

### Authentication type for Control Room users

Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.

<input type="radio"/> Active Directory <input checked="" type="radio"/> Single Sign-On (SAML 2.0) <input type="radio"/> Control Room database	<p>The Control Room can connect to your Identity Provider database via SAML 2.0 protocol so that the user can log on with their single Sign-On credentials.</p> <p>To continue, please check the connection first.</p> <p>SAML Metadata</p> <div style="border: 1px solid #ccc; height: 60px; margin-bottom: 10px;"></div> <p>Unique Entity ID for Control Room (Service Provider)</p> <div style="border: 1px solid #ccc; height: 40px; margin-bottom: 10px;"></div> <p><input checked="" type="checkbox"/> Encrypt Saml Assertions</p> <p>Public Key</p> <div style="border: 1px solid #ccc; height: 60px; margin-bottom: 10px;"></div> <p>X509 Certificate format</p> <p>Private Key</p> <div style="border: 1px solid #ccc; height: 60px; margin-bottom: 10px;"></div> <p>PKCS #8 format</p>
<a href="#">Next &gt;</a>	

2. You need to check the connection to Control Room for which you need to provide SAML Metadata details.
3. Copy and paste the **SAML Metadata** from an xml file.
4. Provide the **Unique Entity ID for Control Room**. This is basically a user who is the Control Room admin and also has been given an admin role in the IdP Server.

<b>AUTHENTICATION TYPE</b> <input checked="" type="radio"/> Single Sign-On (SAML 2.0)  <b>REGISTERING CONTROLS</b> <input type="checkbox"/>  <b>CONTROL ROOM FIRST ...</b> <input type="checkbox"/>	<h3><u>Authentication type for Control Room users</u></h3> <p>Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.</p> <p><input type="radio"/> Active Directory  <input checked="" type="radio"/> Single Sign-On (SAML 2.0)  <input type="radio"/> Control Room database</p> <p>The Control Room can connect to your Identity Provider database via SAML 2.0 protocol so that the user can log on with their single Sign-On credentials.</p> <p>To continue, please check the connection first.</p> <p>SAML Metadata URL</p> <div style="border: 1px solid #ccc; width: 100%; height: 30px; margin-bottom: 10px;"></div> <p>e.g., <a href="https://ssologin.ultron.com/saml/service/metadata">https://ssologin.ultron.com/saml/service/metadata</a></p> <p>Unique Entity ID for Control Room (Service Provider)</p> <div style="border: 1px solid #ccc; width: 100%; height: 30px; margin-bottom: 10px;"></div> <p><input type="checkbox"/> Encrypt Saml Assertions</p> <p>Public Key</p> <div style="border: 1px solid #ccc; width: 100%; height: 60px; margin-bottom: 10px;"></div> <p>X509 Certificate format</p>
<a href="#">Next &gt;</a>	

5. Optionally, select **Encrypt SAML Assertions** for enhanced security. For this you will be provided a public and private key by the system admin which you must copy and paste from relevant files.

AUTHENTICATION TYPE
[Next >](#)

Single Sign-On (SAML 2.0)

REGISTERING CONTROLS

CONTROL ROOM FIRST ...

### Authentication type for Control Room users

Select the authentication type you want to use for Control Room users. Your selection will be permanent and cannot be changed later.

Active Directory
 

The Control Room can connect to your identity Provider database via SAML 2.0 protocol so that the user can log on with their single Sign-On credentials.

Single Sign-On (SAML 2.0)
 

To continue, please check the connection first.

Control Room database

**SAML Metadata URL**
  

e.g. https://soa.uipath.com/saml/service/metadata

**Unique Entity ID for Control Room (Service Provider)**

Encrypt SAML Assertions
 

```
-----BEGIN CERTIFICATE-----
MIIDBjCCAVQwHwYJKoZIhvcNAQcBQgJG4uJ05dP9+St6lEUq2cWoZcbaoBi6q7utvpyfO4=
-----END CERTIFICATE-----
```

**PKCS#12 format**
  

-----BEGIN PRIVATE KEY-----

6. Click **Next**. The **Registering Controls** panel is displayed wherein you need to register your Control Room as a service provider with the IdP.

**AUTHENTICATION TYPE**  Single Sign-On (SAML 2.0)

**REGISTERING CONTROLS**

**CONTROL ROOM FIRST ...**

## Registering Control Room as a Service Provider in IdP: Instructions

Steps:

1. Copy the Control Room Metadata from the text below.

```
<?xml version="1.0"?><md:EntityDescriptor  
 xmlns:md="urn:oasis:names:tc:SAML:2.0:metadata"  
 validUntil="2018-03-16T10:15:38Z" cacheDuration="PT604800S"  
 entityID="Telia" ID="ONEI_CIN_Qaa3a69-2a13-4b60-bd20..."
```

Copy

2. Login into the IdP Manager with the account that has privileges to add a new Service Provider.
3. Navigate to the Metadata Manager and add a new service provider.
4. Enter the Control Room Metadata into required fields.
5. Enter the Entity ID 'entity ID' for Control Room Service Provider.
6. Select the option to fetch user's information such as Username (mandatory), first name, last name, email ID
7. Save the new Service Provider.

Please refer the Control Room Documentation for more details.

The nominated Control Room Administrator has to login into IdP by clicking the 'Authenticate with IdP' button below. On successful authentication, the user will be added as Control Room Administrator.

Authenticate with IdP

◀ Back Next ▶

**Note:** If SAML Metadata URL that you provide is incorrect, you are given an error on this page.



## Invalid SAML Metadata

Please open the URL in a browser to ensure that the SAML Metadata is valid.

7. To register the Control Room with IdP as service provider, follow the instructions given on the page. To summarize,

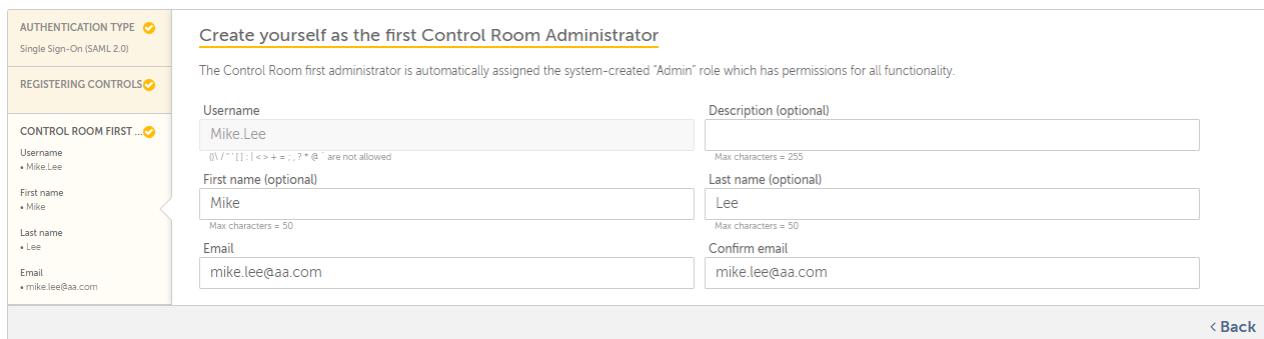
- a. Click **Copy** to copy the Control Room metadata to the IdP manager
  - b. **Login** to the IdP server as admin or a user with privilege to add a service provider
  - c. Click **Manage Metadata** to add a service provider
  - d. Select **Attributes** for assertion
  - e. Paste the **metadata** that you copied
  - f. Click **Submit** to import data

- ## 8 Go back to Control Room configuration page

9. Click 

10. Leave the page to go to IdP login

12. Once you are authenticated, log out of the IdP server. This will take you back to the Control Room First Admin page wherein you can create your **first control room admin**.



The screenshot shows a configuration interface for creating a new Control Room administrator. On the left, there's a sidebar with sections for Authentication Type (Single Sign-On (SAML 2.0) selected), Registering Controls (selected), and Control Room First Admin (selected). The main area has fields for Username (Mike.Lee), Description (optional), First name (optional) (Mike), Last name (optional) (Lee), Email (mike.lee@aa.com), and Confirm email (mike.lee@aa.com). Below the form is a 'Back' button.

**AUTHENTICATION TYPE**   
Single Sign-On (SAML 2.0)

**REGISTERING CONTROLS**

**CONTROL ROOM FIRST ...**

Username  
• Mike.Lee

First name  
• Mike

Last name  
• Lee

Email  
• mike.lee@aa.com

Create yourself as the first Control Room Administrator

The Control Room first administrator is automatically assigned the system-created "Admin" role which has permissions for all functionality.

Username: Mike.Lee (Max characters = 255)  
Description (optional):  
First name (optional): Mike (Max characters = 50)  
Last name (optional): Lee (Max characters = 50)  
Email: mike.lee@aa.com  
Confirm email: mike.lee@aa.com

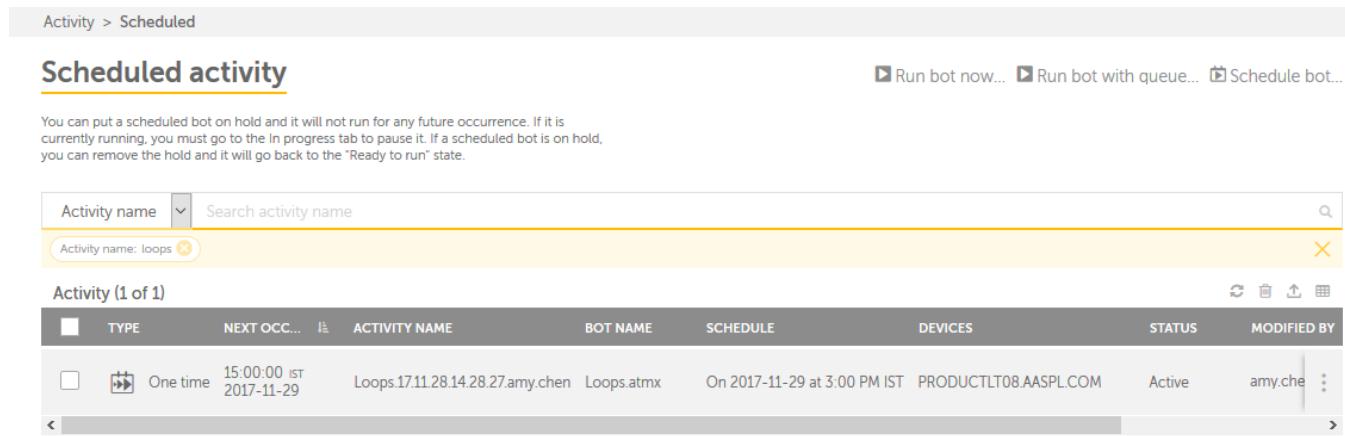
< Back

## Search and filter data

The search feature in Control Room allows you to search for the information that you are looking for thereby helping you work efficiently. It provides you dynamic suggestions as you type. For example, if you type 'CRM', the suggestion narrows down with every additional character that you type - this suggestion is based on the existing values already available in the database. The count of the auto-populated search terms are displayed and the data is dynamically updated. The search results are displayed in the format of **X of Y**, where:

- X = search result
- Y = total number of records in table

Besides this, you can also reset the search query and Control room remembers the last filter applied by each user per session. The following figure illustrates a search result for the **Scheduled activity** page.



The screenshot shows the 'Scheduled activity' page under the 'Activity > Scheduled' tab. A search bar at the top contains the text 'loops'. Below the search bar, a message states: 'You can put a scheduled bot on hold and it will not run for any future occurrence. If it is currently running, you must go to the In progress tab to pause it. If a scheduled bot is on hold, you can remove the hold and it will go back to the "Ready to run" state.' A button bar on the right includes 'Run bot now...', 'Run bot with queue...', and 'Schedule bot...'. The main table displays one scheduled activity named 'loops' with details: Type: One time, Next Occ.: 15:00:00 IST 2017-11-29, Activity Name: Loops.17.11.28.14.28.27.amy.chen, Bot Name: Loops.atmx, Schedule: On 2017-11-29 at 3:00 PM IST, Devices: PRODUCTTLT08.AASPL.COM, Status: Active, Modified By: amy.che. Navigation arrows are visible at the bottom of the table.

You can use the search feature in the following pages of Control Room.

- Activity tab
- Bots tab
- My bots tab
- Individual folders
- Credentials
- All credentials
- Individual lockers
- Devices tab
- Bot runners and bot creators
- Device pools
- Bot farm images
- Workload tab
- Queues
- Audit log
- Administration
- Users
- Roles

# Profile Management

User profiles in Control Room are created by administrators who can change your first name, last name, password, and role depending on the business requirements. If you are a user of Control Room configured with a non-directory environment, you can change the following details of your profile.

- Your password
- Your first name
- Your last name
- Your e-mail address

To personalize and maintain your Control room profile, refer to the following sections.

- [Changing your password](#)
- [Editing and updating your profile](#)

 **Note:** The process of managing your own profile is different for Control Room configured with an active directory and a non-active directory environment. Users cannot configure or make changes to their profile in an active directory environment.

# Change your password

To change your password, perform the following steps.

1. Click your user name located at the top right corner of Control Room. The **Edit Profile** and **Change Password** form is displayed.



 AmyChen  
 Amy Chen  
 amy.chen@mydomain.com

[Edit profile](#) | [Change password](#)  
[Log out](#)

2. Click **Change password**. The Change password form is displayed.



 AmyChen  
 Amy Chen  
 amy.chen@mydomain.com

**Change password**

Current password

New password

  
8-15 characters; a-z, A-Z, 0-9, @, -, \_, !, #, \$, %, &, and . allowed.

Confirm new password

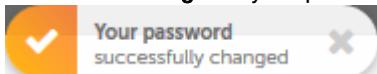
[Close](#) [Save changes](#)

3. On the **Change password** menu, type your current and new password.

- **Current password:** Type your current password.
- **New password:** Type your new password.
- **Confirm New password.** Type your password again for confirmation.

**Note:** The new password must be different than the current password and must meet the password policy set up by your Control Room administrator.

4. Click **Save changes**. If your password is successfully changed, a toast message is displayed.



**Note:** The **Save changes** button remains disabled if the mandatory fields are not filled. You do not need to log in again after changing your password.

# Edit and update your profile

You can change the following details about your profile by clicking your user name located at the top right corner of Control Room.

- First name
- Last name
- Email address

For this, perform the following steps.

1. Click your user name located at the top right corner of Control Room. The **Edit Profile** and **Change Password** form is displayed.

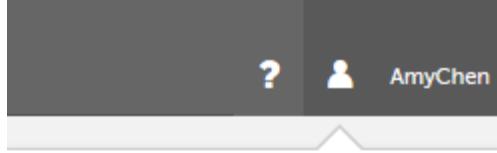


AmyChen  
Amy Chen  
amy.chen@mydomain.com

[Edit profile](#) | [Change password](#)

[Log out](#)

2. Click **Edit Profile**. The **Edit Profile** menu is displayed.



AmyChen  
Amy Chen  
amy.chen@mydomain.com

[Edit profile](#)

First name (optional)  
Amy  
Max characters = 50

Last name (optional)  
Chen  
Max characters = 50

Email  
amy.chen@mydomain.com  
Max characters = 255

Confirm email  
amy.chen@mydomain.com

[Close](#) [Save changes](#)

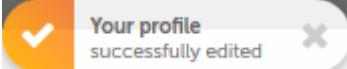
3. On the **Edit Profile** form, do one of the following.

- **First name:** Type your first name. This is optional.
- **Last name:** Type your last name. This is optional.
- **Email:** Type your e-mail. You can use this to reset your password. All important Control Room notifications will be sent to you on this e-mail address.
- **Confirm email.** Type your email again.



**Tip:** As you start typing and make changes to the fields of the **Edit profile** form, the text of the **Close** button changes to **Cancel** to visually indicate that you have made changes to the form. Clicking **Cancel** closes the **Edit profile** form.

4. Click the **Save changes** button. Your profile is updated and a toast message is displayed.



For information on updating user profiles from the administration page, refer to the following sections.

- [Edit active directory user details](#)
- [Edit non-active directory user details](#)

# Administration Overview

As a Control Room admin you can use the administration module of Control Room to:

- Manage roles by creating, editing, deleting, and viewing existing roles
- Manage users by creating, editing, deleting, and viewing existing users
- Change the general settings of Control Room
- Purchase an extended license or install a new license

# Settings - an overview

As a Control Room admin, you can use the Control Room **Settings**, to:

- Configure General Settings and Control Room Database & Software in [General](#)
- Enable or disable Version Control in [Bots](#)
- Enable or disable Secure recording, set Product help URLs, and configure Device health checks in [Client applications](#)
- Configure the connection mode to the Credential Vault in [Credentials](#)
- Enable or disable email settings in [Email](#)



The screenshot shows the Control Room interface with the 'Administration' section selected in the sidebar. Under 'Administration', 'Settings' is highlighted. The main content area displays a list of configuration sections:

- General
- Bots
- Client application
- Credentials
- Email

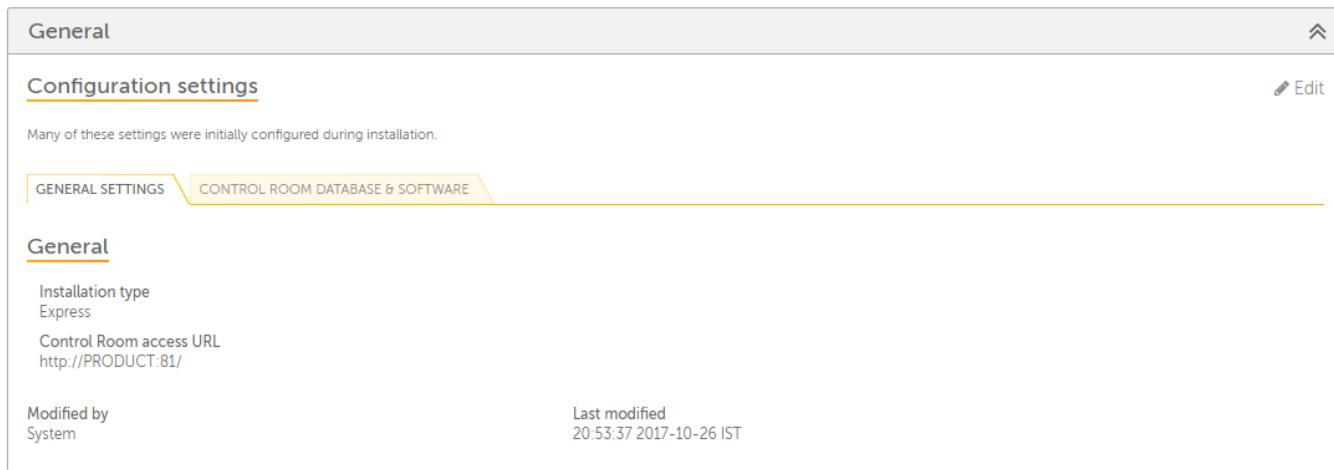
# Configuration settings

As a Control Room admin you can view and manage settings that are configured while setting up the Control Room. You can view configuration details of:

1. Control Room Installation type, access URL, and program files destination folder in [General Settings](#)
2. Website Security & Configuration details, Control Room Users, Database, and Repository details, Deployment settings, and Security details in [Control Room Database & Software](#)

## General settings

The General settings provide information about the installation type, the access URL and program files destination folder. You cannot edit these settings as they are configured during installation.



General

Configuration settings

Many of these settings were initially configured during installation.

GENERAL SETTINGS CONTROL ROOM DATABASE & SOFTWARE

General

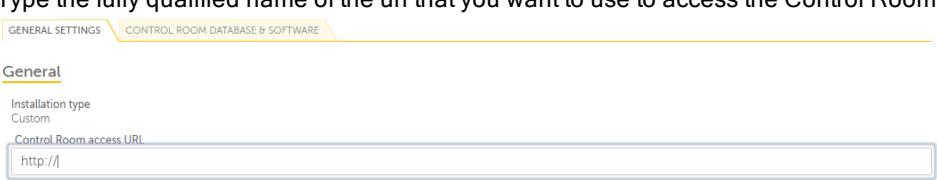
Installation type  
Express

Control Room access URL  
http://PRODUCT-81/

Modified by  
System

Last modified  
20:53:37 2017-10-26 IST

The table below describes the General settings:

Settings	Description
Control Room Installation type	<p>It is the type of setup used to install the Control Room. It can either be <b>Express</b> or <b>Custom</b>. This setting is configured during installation and is not editable.</p>
Control Room access URL	<p>It is the fully qualified name of the server that is used by Bot Creators, Bot Runners and Users to access the Control Room. You can change the access URL if the Control Room is setup in custom mode.</p> <p>To modify the URL,</p> <ol style="list-style-type: none"> <li>1. Click edit </li> <li>2. The <b>General Settings</b> page opens in edit mode.</li> <li>3. Type the fully qualified name of the url that you want to use to access the Control Room:</li> </ol>  <p>GENERAL SETTINGS CONTROL ROOM DATABASE &amp; SOFTWARE</p> <p>General</p> <p>Installation type Custom</p> <p>Control Room access URL http://</p> <p>4. Click <b>Save changes</b></p>

## Control Room Database & Software

The Control Room database and software settings provide details for website security and configuration, Control room users, database, and repository, deployment, and security settings. You can edit settings for the Control Room repository, Deployment, and Password.

### General

Configuration settings
 Edit

Many of these settings were initially configured during installation.

GENERAL SETTINGS
CONTROL ROOM DATABASE & SOFTWARE

#### Website security

Site security  
HTTP(S)

#### Website configuration

Web server host name (1 of 2)  
D1CR1

Web server host name (2 of 2)  
D1CR2

#### Control Room users

Authentication type  
ACTIVE\_DIRECTORY

#### Control Room database

Windows authentication Enabled	Server host name PRODUCT	Server port 1433
Database name CRDB_NEW	Username --	

#### Control Room repository

The repository stores application files, Bots, and supporting files.

Before updating the path

1. Ensure that the files in the earlier repository path are manually copied to the newer one
2. Put the Control Room in maintenance mode
3. Make sure that Devices are not connected to the Control Room when the Repository path is updated

Repository path  
\SUBVERSION\AutomationAnywhere\Server Files

#### Deployment settings

If enabled, users having bot run/schedule rights can choose to run the Bot Runner execution session on Control Room

Bot Runner deployment session on Control Room  
Enabled

Modified by System	Last modified 2017-12-19 14:57:36 IST
-----------------------	--

The table below describes the Control Room Database and Software settings:

Settings	Description
Website security	It shows the type of security protocol used - http or https. This setting is configured during installation and is not editable.
Website configuration	It shows the website configuration details such as web server host name, If the Control Room is configured for Express installation, only one host name is shown. However, if it is configured for Custom installation, multiple host names are shown. This setting is configured during installation and is not editable.

	Web server host name and port details of all registered and active users are listed. However, note that the username and password values are not shown.
Control Room users	<p>It shows the <b>Authentication type</b> used to log on to the Control Room instance by Bots. It could be Active Directory, Single Sign-On (SAML 2.0) or Database. This setting is configured during installation and is not editable.</p> <ul style="list-style-type: none"> <li>• <b>Active Directory</b> users are configured when you want Bots of a specific domain to be authenticated with their Active Directory credentials.</li> <li>• <b>Single Sign-On (SAML 2.0)</b> users are configured when you want Bots to be authenticated using SAML 2.0 protocol and log on using the organizations' IdP server credentials.</li> <li>• <b>Database</b> users or Non-Active Directory users are configured when you want Bots to be authenticated using the Control Room database.</li> </ul>
Control Room database	<p>It shows the settings for :</p> <ol style="list-style-type: none"> <li>1. <b>Windows authentication</b> - It is the authentication type used to connect to the database server. It shows <b>Enabled</b> when Windows Authentication is selected while configuring the database in installation. It shows <b>Disabled</b> when default database authentication is used.</li> <li>2. <b>Server host name</b> - It is the fully qualified name of the control room database server.</li> <li>3. <b>Server port</b> - It is the port to which the database is configured.</li> <li>4. <b>Database name</b> - It is the database that will be used to store Control Room data.</li> <li>5. <b>Username</b> - The values are not displayed.</li> </ol> <p>This setting is configured during installation and is not editable.</p>
Control Room repository	<p>It shows the location where all Bots, application files, and supporting files are stored. The default path is set to <b>C:\ProgramData\AutomationAnywhere\Server Files</b> during installation, if not updated during installation. You can also choose to modify this path post installation here.</p> <p>Before changing the repository path, ensure that you:</p> <ul style="list-style-type: none"> <li>• Copy the existing files to another location</li> <li>• Put the Control Room in maintenance mode</li> <li>• Inform users to disconnect their devices from the Control Room instance</li> </ul> <p>To modify,</p> <ol style="list-style-type: none"> <li>1. Click edit </li> <li>2. The page opens in edit mode.</li> <li>3. In the <b>Repository path</b> field, type the location of the repository ending with <b>Server Files</b>:  <u>Control Room repository</u>  <small>The repository stores application files, Bots and supporting files.</small> <p>Before updating the path</p> <ol style="list-style-type: none"> <li>1. Ensure that the files in the earlier repository path are manually copied to the newer one</li> <li>2. Put the Control Room in maintenance mode</li> <li>3. Make sure that Devices are not connected to the Control Room when Repository path is updated</li> </ol> <p>Repository path  <input type="text" value="D:\AutomationAnywhere\Server Files"/></p> <ul style="list-style-type: none"> <li>• You can use Network Drive folders for repository path.</li> <li>• When you type an invalid pathname, an error is shown:</li> </ul> <div style="border: 2px solid red; padding: 10px; margin-top: 10px;">  <b>Unable to connect to the location mentioned in repository path</b>  <p>This is due to the following reasons:</p> <ul style="list-style-type: none"> <li>• Repository path is invalid</li> <li>• There is a network connectivity issue</li> </ul> <p>Please address the above and try again</p> </div> </li> </ol>

	<p>4. Click <b>Save changes</b></p>																		
Deployment settings	<p>It shows whether the users with run and schedule privileges can choose to <b>Run bot runner session on Control Room</b> when you deploy or schedule a Bot. Refer <a href="#">Run a bot</a> and <a href="#">Schedule a Bot</a> for details.</p> <p>By default this setting is <b>Enabled</b>.</p> <p>To modify,</p> <ol style="list-style-type: none"> <li>1. Click edit </li> <li>2. The page opens in edit mode.</li> <li>3. Select Enabled or Disabled as required for <b>Bot Runner deployment session on Control Room</b>:</li> </ol> <p><u><a href="#">Deployment settings</a></u></p> <p>If enabled, users having bot run/schedule rights can choose to run the Bot Runner execution session on Control Room</p> <p>Bot Runner deployment session on Control Room</p> <p><input checked="" type="radio"/> Enabled</p> <p><input type="radio"/> Disabled</p>																		
Security	<p>These define the password policy settings for all Control Room users. Here, you can customize the password length, password content, and/or select the number of log on attempts allowed.</p> <p> Note: The password policy is applicable for a Control Room that is configured for <b>Database authentication type</b>.</p> <p>To modify,</p> <ol style="list-style-type: none"> <li>1. Click edit </li> <li>2. The page opens in edit mode.</li> <li>3. Specify the following as per your company policy:</li> </ol> <p><u><a href="#">Security</a></u></p> <p>Customize password requirements for all Control Room users.</p> <table border="0"> <tr> <td>Password length (characters)</td> <td>Minimum</td> <td>8</td> <td>Maximum</td> <td>15</td> <td>Password must include one</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td> <input checked="" type="checkbox"/> Alphabetical character  <input checked="" type="checkbox"/> Number  <input checked="" type="checkbox"/> Capital letter  <input checked="" type="checkbox"/> Special character         </td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td><input checked="" type="checkbox"/> Lock the user's account after <input type="text" value="3"/> consecutive unsuccessful login attempts</td> </tr> </table> <p> Tip: The user account is disabled in the Control Room when it is locked out.</p> <p>You cannot enter invalid values in the:</p> <ul style="list-style-type: none"> <li>• Password length field</li> </ul>	Password length (characters)	Minimum	8	Maximum	15	Password must include one						<input checked="" type="checkbox"/> Alphabetical character <input checked="" type="checkbox"/> Number <input checked="" type="checkbox"/> Capital letter <input checked="" type="checkbox"/> Special character						<input checked="" type="checkbox"/> Lock the user's account after <input type="text" value="3"/> consecutive unsuccessful login attempts
Password length (characters)	Minimum	8	Maximum	15	Password must include one														
					<input checked="" type="checkbox"/> Alphabetical character <input checked="" type="checkbox"/> Number <input checked="" type="checkbox"/> Capital letter <input checked="" type="checkbox"/> Special character														
					<input checked="" type="checkbox"/> Lock the user's account after <input type="text" value="3"/> consecutive unsuccessful login attempts														

Customize password requirements for all Control Room users.

Minimum password length should be between 8 to 64 characters.

Minimum:  Maximum:

• Log on attempts field

Unsuccessful login attempts value should be between 1 to 99 characters.

Lock the user's account after  consecutive unsuccessful login attempts

Cap  Spe

4. Click **Save changes**

## Audit Logs

All updates to the Configuration Settings are captured in the **Audit Log** page. For example, the following illustration lists all actions performed to edit general settings :

Audit log							
Time filter: Last 24 hours							
Status	Choose status	Action type	Item name	Action taken by	Source device	Source	More
<input type="checkbox"/> Successful	16:28:31 IST 2017-12-12	Edit Settings	General configuration settings	admin	127.0.0.0	Control Room	⋮
<input type="checkbox"/> Successful	16:26:45 IST 2017-12-12	Edit Settings	General configuration settings	admin	127.0.0.0	Control Room	⋮

To view details of each audit entry:

1. Go to the required data and mouse over 
2. Click 
3. The details page is launched where in you can view only those entries that are changed. The illustration below shows details of successful disabling of Bot Session on Control Room and setting of the password policy:

Audit log &gt; View action

## Edit Settings

[Back](#)

### ACTION DETAILS

Status	Item name
Successful	General configuration settings
Action taken by	Time
admin	2017-12-12 16:26:45 IST
Object type	Action type
Action	Edit Settings
Source device	Source
127.0.0.0	Control Room

### EDIT SETTINGS DETAILS

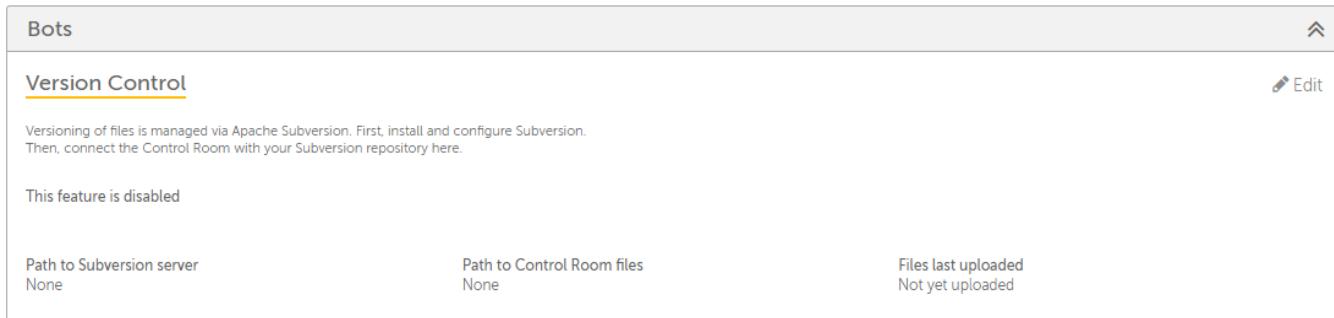
WHAT CHANGED?	OLD VALUE	NEW VALUE
Bot Session On Control Room	Enabled	Disabled
Password Include Alphabets	No	Yes
Password Include Numbers	No	Yes
Password Include Capital Letters	No	Yes
Password Include Special Letters	No	Yes

Refer [View Audit Details](#) for more information.

# Bots - Configure Version Control

To manage controlled edits of files that could include TaskBots, MetaBots, Reports, and Workflows, as a Control Room admin you can configure Version Control in Control Room Settings.

The Control Room is tightly integrated with SubVersion version control system so that the version, checkin/checkout, version history and version roll back functionality can be leveraged with ease for all files.



Bots

Version Control

Versioning of files is managed via Apache Subversion. First, install and configure Subversion. Then, connect the Control Room with your Subversion repository here.

This feature is disabled

Path to Subversion server None	Path to Control Room files None	Files last uploaded Not yet uploaded
-----------------------------------	------------------------------------	---

 Edit

By default, the feature is **disabled**.

## Version Control Pre-requisites

- For Version Control to be enabled and integrated from Control Room, it is necessary that SVN (SubVersion) should be installed and configured.



**Note:** Automation Anywhere supports Subversion v1.7.2, v1.9.7, and 1.8.15.

- SVN Administrator user should be created with required permissions.
- SVN repository should be created, which can be used to store all version control files.
- Control Room will be the basis of communication with SVN. Clients will not communicate with SVN directly.



**Note:** Once the Control Room integration with SVN is up and running, all communication for version control operations from Enterprise Client to SVN will take place via Control Room only.

## Enable Version Control

To enable Version Control for Bots:

- Select **Administration → Settings → Bots**
- Click **Edit**

3. The page opens in edit mode:

### Bots

#### Version Control

Versioning of files is managed via Apache Subversion. First, install and configure Subversion. Then, connect the Control Room with your Subversion repository here.

This feature is

Disabled  
 If disabled, you will not be able to access your bot's version history.

Enabled  
 When you click Save changes, we will connect to the Subversion server and upload your files to it. Once connected, all communications for version control from the Client UI will take place via the Control Room only. If enabled, you will only be able to schedule bots that have a production version.

#### Subversion server

Subversion server name

Subversion repository path  
  
(for example, /svn/svnrepositoryname)

When enabling, or when changing from one server to another, if there are bots

Do not assign "Production versions". I will do so manually

Automatically assign the latest version of a bot to be its "Production version"

#### Server settings

Use a secure connection with the Subversion server

Subversion server port

Log in credentials

Username

Password

Path to Subversion server	Path to Control Room files	Files last uploaded
None	C:\ProgramData\AutomationAnywhere\Server Files	Not yet uploaded

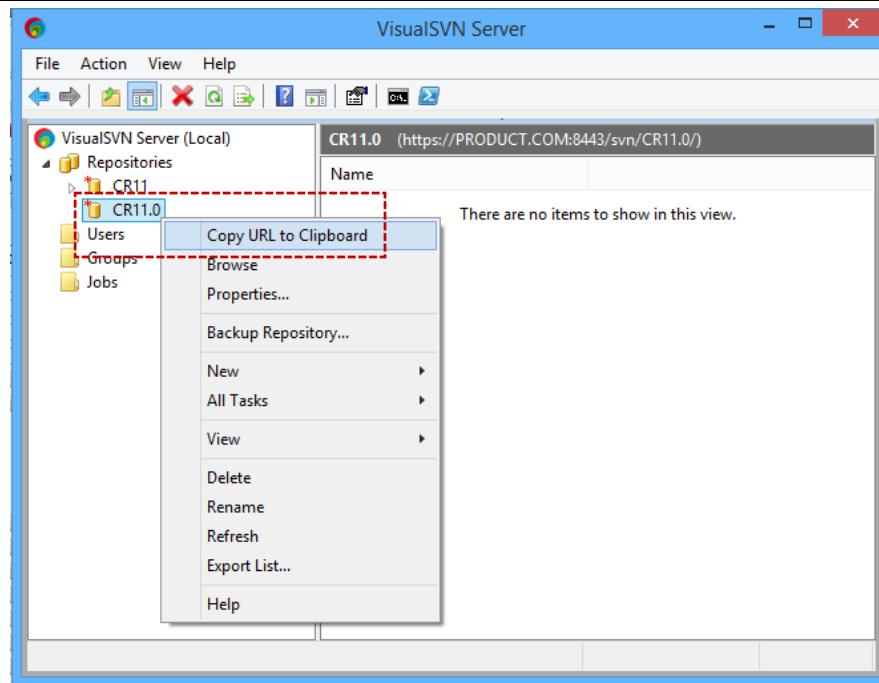
4. Select **Enabled**

5. Enter the following details:

- a. Subversion server name - Provide hostname of subversion server.
- b. Subversion repository path - Provide the SVN repository path.
  - The SVN repository must be empty if you are enabling these settings or switching from an old configured repository to new SVN repository.
  - You can configure only upto three levels of repository path.
  - Refer section on [Impact of enabling and disabling VCS settings](#) for details.



**Tip:** You can copy these details from the VisualSVN Server Manager as shown:



6. Select option for assigning Bot production version manually or automatically when you enable version control or configure version control to another Subversion repository.

The production version of a Bot is must for a schedule to run on the selected Bot. Your schedules will not be triggered unless the scheduled bots have their production versions set.

- Use **Do not assign "Production versions"**. I will do so manually when you want to manually assign a production version for Bots. Use this option when you want to set production versions in a controlled manner.
- Use **Automatically assign the latest version of a bot to be its "Production version"** when you want the Control Room to automatically select the latest version of Bots to Production version.

7. Optionally, select **Use a secure connection with the Subversion server**
8. Provide the **Subversion server port** number that is assigned for SVN. It should be between 1 and 65535.
9. Provide your Subversion **Login credentials - Username** and **Password**
10. The details for **Subversion path** and **Files last uploaded** are updated once you configure Version Control. The default path of **Control Room files** is also displayed.

11. Click **Save changes**

 **Note:** If VCS was earlier configured and you switch to a different Subversion repository, the bot version history is not stored. Refer [Impact of enabling and disabling...](#) section for details.

- You must confirm whether you want to continue:

Your VCS was earlier configured with '/svn/a/' repository on 'PRODUCT.COM' system. When you change to a new server, we do not keep the history of bot versions

Do you want to continue?

**No, cancel**

**Yes, continue to save changes**



**Note:** Bots which are deleted after VCS is disabled, will be deleted from SVN too.

- You can view the repository synching as shown:

Bots

**Version Control**

Syncing 10 / 10 files

100%

Versioning of files is managed via Apache Subversion. First, install and configure Subversion. Then, connect the Control Room with your Subversion repository here.

This feature is

Disabled  
 If disabled, you will not be able to access your bot's version history.

Enabled



12. The details are updated as shown:

Bots

**Version Control**

 Edit

Versioning of files is managed via Apache Subversion. First, install and configure Subversion. Then, connect the Control Room with your Subversion repository here.

This feature is enabled

**Subversion server**

Subversion server name or URL  
 PRODUCT.COM

Subversion repository path  
 /svn/CR11.0/

**Server settings**

Use a secure connection with the Subversion server

Subversion server port  
 8443

Log in credentials

Username  
 Mike Lee

Password  
 \*\*\*\*\*

Path to Subversion server <a href="https://PRODUCT.COM:8443/svn/CR11.0/">https://PRODUCT.COM:8443/svn/CR11.0/</a>	Path to Control Room files C:\ProgramData\AutomationAnywhere\Server Files	Files last uploaded 2017-11-16 17:29:25 IST
--	--	--

### Disable Version Control

You can also choose to disable Version Control.

1. Clear **Enable**
2. Click **Save changes**
3. A successful switch is denoted with:



## Impact of enabling and disabling version control settings

When you enable and disable version control settings in the Control Room, it affects the way a Client can access their Bots in the Client and upload those to the Control Room. While enabling and disabling this setting ensure you are aware about its impact, which is summarized here.

- When you **enable** version control settings, the system uploads the Bots from Control Room repository to SVN repository. During upload the Control Room repository is in read only mode and locked. Hence, you cannot update it. You will not be able to perform actions such as Upload, Delete, Set production version, Checkout /Check in /Undo checkout, and Force unlock.
- When you **disable** version control settings, the files that are in checked out state are listed for force unlock by the Control Room administrator or a user with unlock bots privileges. You are allowed to disable the settings only when you unlock the checked out files.
- When you **re-enable** version control settings, you can:
  - a. Connect to the repository that you had uploaded earlier. Version history of existing Bots is also retained. Hence, in this case,
    - i. The **version** of the Bots that are not updated **remains the same**.
    - ii. A **new version** of updated Bots is **created**.
    - iii. **Version 1.0** is allotted to new Bots that have the same name as that of a Bot that was deleted from the earlier repository.
    - iv. **Production version is not set** if the option **Do not assign production version. I will do so manually** is selected.
    - v. **Production version is set** to latest versions of the Bots if the option **Automatically assign the latest version of bots to production version** is selected
  - b. Connect to a new repository that does not have any Bots. Your version history of the earlier repository is not retained. Also, you can choose to set the production version manually or automatically.



**Note:** You cannot connect to a new repository that is not empty.

## Audit Logs

All updates to the VCS Settings are captured in the **Audit Log** page. For example, the following illustration lists all actions performed to connect and edit VCS settings :

**Audit log**

Actions (2 of 125)								
#	STATUS	TIME	IF	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
<input type="checkbox"/>	Successful	15:39:48 IST 2017-12-12		Edit Settings	Version Control Settings	admin	127.0.0.0	Control Room
<input type="checkbox"/>	Unsuccessful	15:39:32 IST 2017-12-12		Edit Settings	Version Control Settings	admin	127.0.0.0	Control Room

To view details of each audit entry:

1. Go to the required data and mouse over
2. Click
3. The details page is launched where in you can view only those entries that are changed. The illustration below shows details of successful connection of Version Control to a Subversion repository:

## Edit Settings

[< Back](#)

### ACTION DETAILS

Status	Item name
Successful	Version Control settings updated successfully
Action taken by	Time
admin	2017-12-12 15:39:48 IST
Object type	Action type
Action	Edit Settings
Source device	Source
127.0.0.0	Control Room

### EDIT SETTINGS DETAILS

WHAT CHANGED?	OLD VALUE	NEW VALUE
Version Control Status	Disabled	Enabled
Use a secure connection	No	Yes
Subversion server name or URL	(Encrypted)	(Encrypted)
Subversion server port	(Encrypted)	(Encrypted)
Subversion repository path	(Encrypted)	(Encrypted)
Log in credentials (username)	(Encrypted)	(Encrypted)
Login credentials (password)	(Encrypted)	(Encrypted)



**Note:** Some fields such as Subversion server name, port, repository path, and credentials are shown as **(Encrypted)** because these values are securely stored in the [Credential Vault](#).

Refer [View Audit Details](#) for more information.

# Client application

## Introduction

As a Control Room admin you can choose to configure the settings relevant to your Automation Anywhere Client in Client application. Here, you can:

- Enable or disable Secure recording
- Change Product help URLs
- Configure Device health checks

## Client application

### Configuration

These settings affect the Client UI, not the Control Room. When changing any of these settings, all logged-on clients will immediately be logged off.

#### Secure recording

When Secure Recording is on, images and control values will NOT be captured during business process recording by Bot creators.  
Recommended when you are automating secure applications (e.g. Bank accounts).

Secure recording is  
Off

#### Product help URLs

Changing to custom URLs enables users to access local Support or get help from in-house Automation experts.

AAE client application support URL  
Use Automation Anywhere's URL

Live chat with support URL  
Use Automation Anywhere's URL

Example online URL  
Use Automation Anywhere's URL

Request live 1-on-1 demo URL  
Use Automation Anywhere's URL

Technical support URL  
Use Automation Anywhere's URL

"Ask the expert" URL  
Use Automation Anywhere's URL

#### Device health check configuration

Settings to check the performance parameters (such as CPU, Memory, disk etc.) of bot runner devices.

Blip interval during bot execution  
2 Second(s)

Blip interval when device is idle  
600 Second(s)

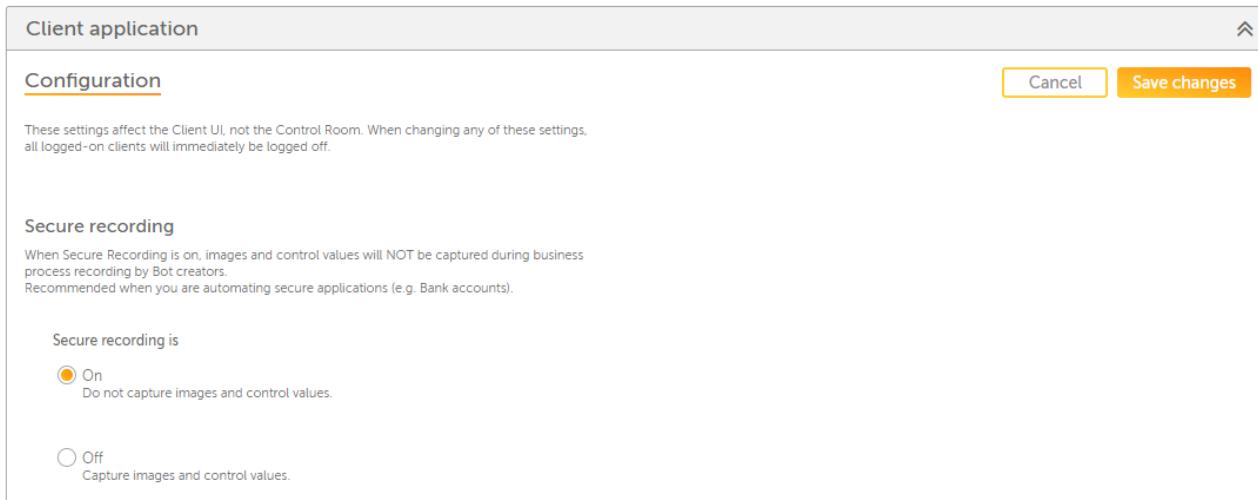
Modified by	Last modified
System	20:21:38 2017-10-16 IST

## Secure recording

Secure recording offers you a choice between capturing or not capturing images and control values during business process recording by Bot creators. You can enable secure recording when you are automating secure applications such as Bank accounts.

To modify secure recording settings:

1. Select Client application
2. Click  Edit
3. The page opens in edit mode wherein Secure recording is shown Off by default.
4. Select Secure recording is On



**Client application**

**Configuration**

These settings affect the Client UI, not the Control Room. When changing any of these settings, all logged-on clients will immediately be logged off.

**Secure recording**

When Secure Recording is on, images and control values will NOT be captured during business process recording by Bot creators.  
Recommended when you are automating secure applications (e.g. Bank accounts).

Secure recording is

On  
Do not capture images and control values.

Off  
Capture images and control values.

**Cancel** **Save changes**

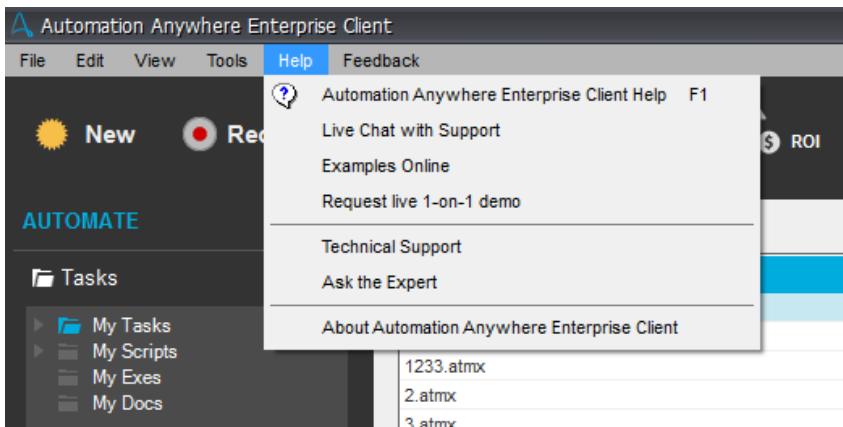
5. Click **Save changes**

## Product help URLs

Product help URLs allow you to redirect links to Automation Anywhere Support Site or to any Custom URL of your choice.

- **Use Automation Anywhere's URLs** - Use this to navigate your users to the default Automation Anywhere Support site. This disables all the other options such as Live Chat with Support URL etc.
- **Use Custom URLs** - Use this to navigate your users to your custom defined URLs for Product help. This allows your users to seek help from in-house automation experts.

The illustration below shows the URL's as seen in Enterprise Client → Help:



- Table below summarizes Product help URLs:

URL	Description
AAE client application support	It allows you to add your customized Product Help URL and re-direct users to your in-house support site.
Live chat with support	It allows you to access in-house Live Chat and speak to online Experts.
Example online	It allows you to look for available Online Examples.
Request live 1-on-1 demo	It allows you to request for live demonstration of features and experts would answer your questions.
Technical support	It allows you to access in-house Technical Support.
Ask the expert	It allows you to speak to an expert and get their expert advice.

To modify Product help URL settings:

1. Select **Client application**
2. Click  **Edit**
3. The page opens in edit mode wherein **Use Automation Anywhere URLs** are selected by default.
4. Select **Use Custom URLs** as required. For example, you might want to redirect Live chat support to a specific chat group.

#### Product help URLs

Changing to custom URLs enables users to access local Support or get help from in-house Automation experts.

AAE client application support URL

Use Automation Anywhere's URL

Use custom URL

Live chat with support URL

Use Automation Anywhere's URL

Use custom URL

https://www.yourhelpurl.com

Example online URL

Use Automation Anywhere's URL

Use custom URL

Request live 1-on-1 demo URL

Use Automation Anywhere's URL

Use custom URL

Technical support URL

Use Automation Anywhere's URL

Use custom URL

"Ask the expert" URL

Use Automation Anywhere's URL

Use custom URL

https://www.yourhelpurl.com

- You must use http(s) protocol in the URLs. If you do not, then you are shown an error:

Live chat

Unable to continue because the format of the URL is incorrect.  
To continue, please retype the URL in the following format:  
`http(s)://www.exmaple.com.`

Use default URL

Use custom URL

`www.yourhelpurl.com|`

5. Click **Save changes**

## Device health check configuration

These settings allows you to set the time interval for Device Health check that includes parameters such as CPU, Memory, and Disk usage etc. You can therefore set the frequency at which the data is exchanged between the Control Room and connected Clients.

To modify **Device health check settings**

1. Select **Client application**
2. Click  **Edit**
3. The page opens in edit mode wherein the **Blip interval for bot execution** and **device** status can be enabled. The default value for:
  - **Bot execution** is set to 60 seconds
  - **device** status i.e. how long it is **idle** is set to 600 seconds.

## Device health check configuration

Settings to check the performance parameters (such as CPU, Memory, disk etc.) of bot runner devices.

Blip interval during bot execution

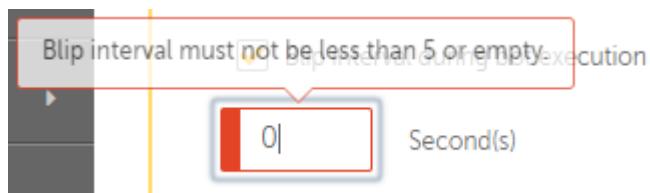
Second(s)

Blip interval when device is **ideal**

Second(s)

4. Change the **Blip** interval time as required

- You cannot input less than 5 or empty value. If you do, then you are shown an error:

5. Click **Save changes****Modification details**

The modification details such as **Modified by** and **Last modified** date/time are captured. The Client application tab shows **System** and the Control Room installation/configuration **date and time** by default when you launch the **Settings** page:

**Modified by**

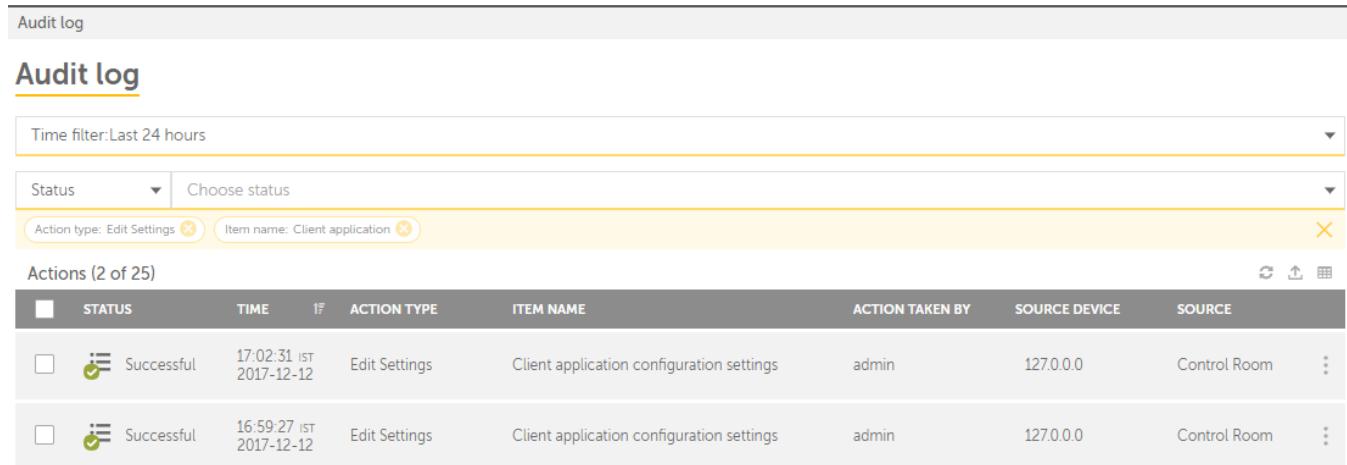
System

**Last modified**

20:21:38 2017-10-16 IST

## Audit Logs

All updates to the Client application settings are captured in the **Audit Log** page. For example, the following illustration lists all actions performed to update the Client application configuration settings:

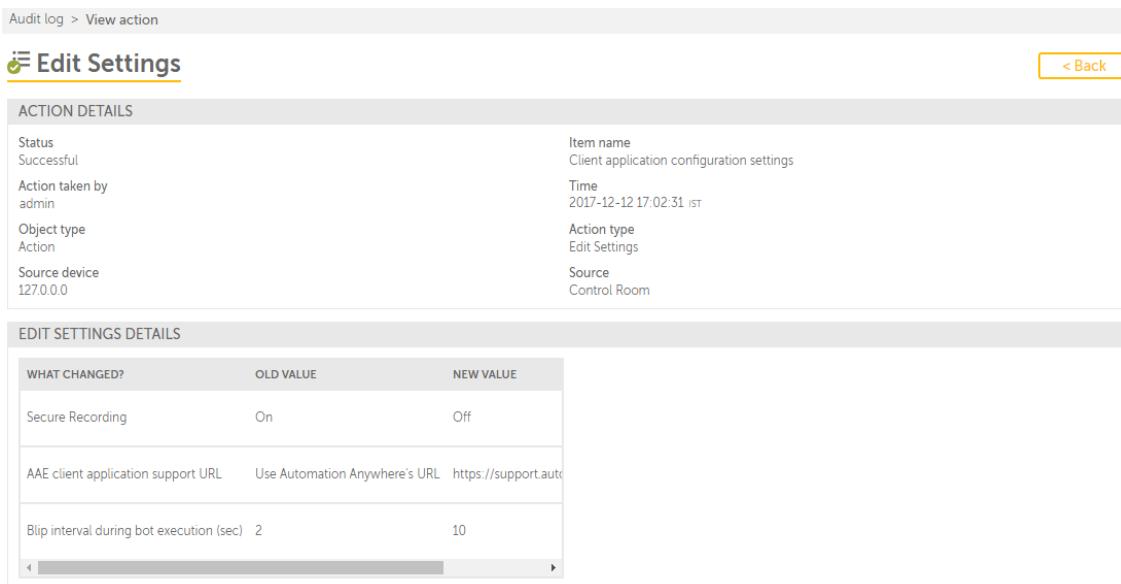


The screenshot shows the 'Audit log' interface. At the top, there's a time filter set to 'Last 24 hours'. Below it, there are filters for 'Status' (set to 'Successful') and 'Action type' ('Edit Settings'). A search bar shows 'Item name: Client application'. The main table lists two actions:

Status	Action Type	Item Name	Action Taken By	Source Device	Source
Successful	Edit Settings	Client application configuration settings	admin	127.0.0.0	Control Room
Successful	Edit Settings	Client application configuration settings	admin	127.0.0.0	Control Room

To view details of each audit entry:

1. Go to the required data and mouse over 
2. Click 
3. The details page is launched where in you can view only those entries that are changed. The illustration below shows details of successful disabling of Secure Recording mode, change in Client application support URL, and change in Blip Interval:



The screenshot shows the 'Edit Settings' details page. It has two main sections: 'ACTION DETAILS' and 'EDIT SETTINGS DETAILS'.

**ACTION DETAILS**

Status	Successful	Item name	Client application configuration settings
Action taken by	admin	Time	2017-12-12 17:02:31 IST
Object type	Action	Action type	Edit Settings
Source device	127.0.0.0	Source	Control Room

**EDIT SETTINGS DETAILS**

WHAT CHANGED?	OLD VALUE	NEW VALUE
Secure Recording	On	Off
AAE client application support URL	Use Automation Anywhere's URL	<a href="https://support.automationanywhere.com">https://support.automationanywhere.com</a>
Blip interval during bot execution (sec)	2	10

Refer [View Audit Details](#) for more information.

# Configure credential vault connection mode

Credential Vault is a centralized location for securely storing credential information used by Bots. As a Control Room admin, you can configure the **Connection mode** that allows you to connect to the Credential Vault using a **Master key**.

The connection mode is first configured during Control Room's initial setup as illustrated below:

## Credentials settings

The Credential Vault master key allows you to connect to the Credential Vault where you can create and store credentials that are required when running bots.

You must save the master key in a safe place for future reference. Ensure you do not lose the key. If you do, you will not be able to access the Credential Vault or, if Manual connecting mode is selected, the Control Room.

**Credentials Vault master key**



Select the connection mode for the Credential Vault.

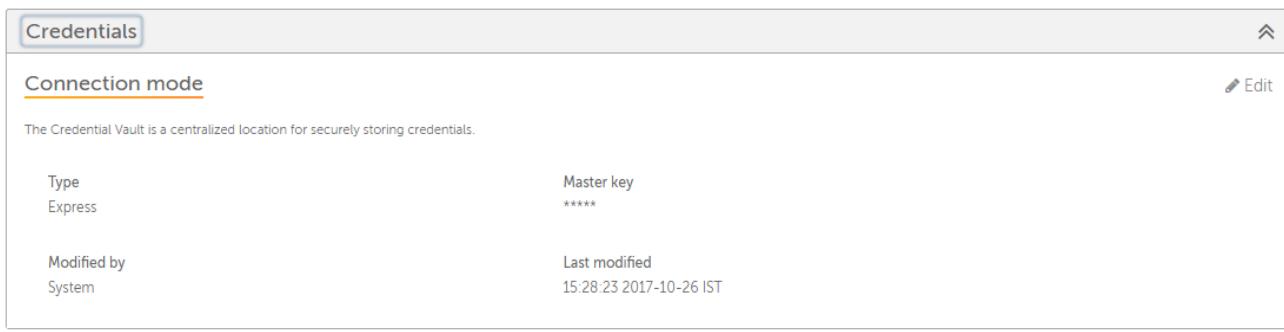
Express mode

The system will store your master key and automatically connect to the Credential Vault.  
Note: For security reasons, do not use Express mode in your production environment.

Manual mode

You manually store your master key in a safe place and manually connect to the Credential Vault.  
Note: This mode is more secure and recommended for a production environment.

You can view the **Connection mode** details in Settings → Credentials tab



The screenshot shows the 'Credentials' tab selected in the top navigation bar. Under the 'Connection mode' section, it displays the following details:

Type	Master key
Express	*****

Below this, there is another row of details:

Modified by	Last modified
System	15:28:23 2017-10-26 IST

To configure settings for Credential Vault, you have to choose between **Express** or **Manual** mode.

Credentials

Connection mode

The Credential Vault is a centralized location for securely storing credentials.

Type

Express  
Save your master key and automatically connect to the Credential Vault every time the Control Room restarts.

Master key  
\*\*\*\*\*

Manual  
Every time the Control Room restarts, manually enter the master key (given to you during installation) to connect to the Credential Vault.  
More secure and recommended for use in a production environment.

Master key

Modified by System Last modified 16:05:13 IST 2017-10-05

Cancel Save changes

- **Express Mode** - Use this to auto connect to the Credential Vault with the master key that is stored in the system during Control Room configuration.
- **Manual Mode** - Use this to manually connect to the Credential Vault using the master key that was available during Control Room configuration.

 **Note:** You will have to provide this key every time you start / re-start the Control Room.

 **Important:** Store the master key at a secured location if using the Manual mode. Any modification or loss may result in your losing complete access to the Control Room.

- Compared to **Express**, the **Manual** mode is more secure and recommended for use in production environment.
- While switching modes, you must provide the **Master Key** in the field and click **Save** for the changes to take effect.
- When you do not enter a valid key, you are shown:



#### The master key is incorrect

This may be due to a misspelling or because your Caps Lock is on. To continue, please retype the master key.

- If the field is empty, you are shown:

Manual

Every time the Control Room restarts, manually enter the master key (given to you during installation) to connect to the Credential Vault.

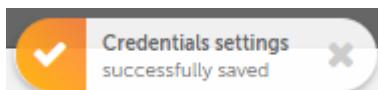
More secure and recommended for use in a

Credential key is empty. To continue, please type in a valid credential key.

Master key

|

- A successful switch is denoted with:



**Tip:** Restart the server machine (on which the Control Room is installed) or services to allow changes to take effect.

## Audit Log

All updates to the Credential Vault connection mode are captured in the **Audit Log** page. For example, the following illustration lists all actions performed to connect and edit connection settings to the Credential Vault :

Audit log

### Audit log

Time filter: Last 24 hours

Status	Action Type	Item Name	Action Taken By	Source Device	Source
<span>Unsuccessful</span>	Edit Settings	Credential Vault settings	admin	127.0.0.0	Control Room
<span>Successful</span>	Edit Settings	Credential Vault settings	admin	127.0.0.0	Control Room
<span>Successful</span>	Connect Credential Vault	Express	N/A	127.0.0.0	Control Room

To view details of each audit entry:

1. Go to the required data and mouse over 
2. Click 
3. The details page is launched. The illustration below shows details of successful Credential Vault connection switch from **Express** to **Manual** mode:

Audit log > View action

### Edit Settings

< Back

ACTION DETAILS	
Status	Item name
Successful	Credential Vault Settings
Action taken by	Time
admin	2017-11-13 12:12:48 IST
Object type	Action type
Action	Edit Settings
Device	Source
127.0.0.0	Control Room

EDIT SETTINGS DETAILS		
WHAT CHANGED?	OLD VALUE	NEW VALUE
Credential configuration mode	Express	Manual

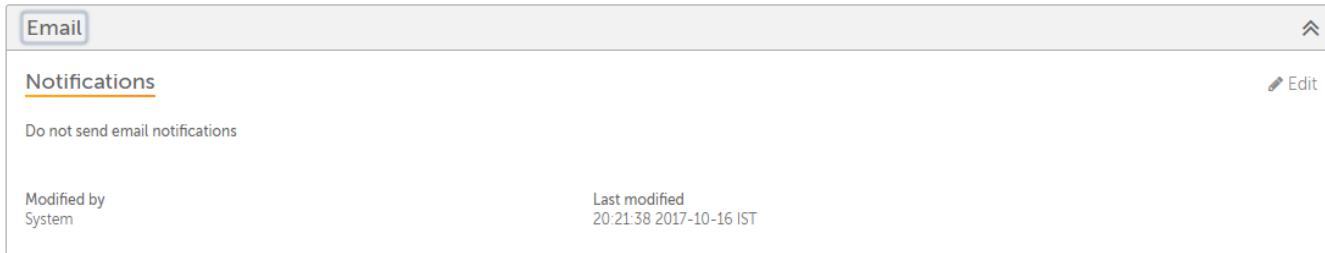
Refer [View Audit Details](#) for more information.

# Email-settings

As a Control Room admin, you can opt to send email notifications to other Control Room users when certain activities that affect the users are updated such as user information, account activation/de-activation, TaskBot execution status etc.

Also, when this setting is enabled, all users have to confirm their account by clicking on the confirmation link that they receive in their email account, set the password & security questions, and login to the Control Room.

By default, email notifications are disabled.



The screenshot shows a configuration interface for 'Email' settings. The 'Notifications' section is active, with a switch labeled 'Do not send email notifications' set to off. Below the switch, it says 'Modified by System' and 'Last modified 20:21:38 2017-10-16 IST'. There is also an 'Edit' button with a pencil icon.

## Enable Email notifications

To modify **Email** settings:

1. Select **Email**
2. Click  **Edit**
3. The page opens in edit mode
4. Select **Send email notifications**
5. Enter the following details:
  - a. **Email address** - this is the address from which the notification will be sent to the user
  - b. **Email server host** - this is the email server host name
  - c. **Email server port** - this should be between 1 and 65535
  - d. **My server uses a secure connection (SSL/TLS)** - This is optional. Select this if you have enabled SSL/TLS protocol.
  - e. **Username and Password** - This is only enabled if you select **My server requires authentication**
6. Select any or all activities for which you want to send the notification to the user when:
  - a. **The user information changes**. For example when the Control Room admin updates the Firstname and Lastname of user Mike.Lee, he receives an email notification stating that his user account information has been updated.
  - b. **The user is activated, deactivated or deleted**. For example, if the Control Room admin disables the user Mike.Lee, he receives an email stating that his user account has been disabled.
  - c. **The Taskbot scheduled or run by the user fails execution**. For example, if Mike.Lee who has scheduling privileges schedules a Bot to run on the Bot Runner Amy.Chen's machine and the Bot fails to,
    - **deploy** to Bot Runner machine
    - **execute** because it was either stopped, timed-out or encountered an error,
 Mike.Lee receives an email notification stating that the Bot scheduled on the Bot Runner Amy.Chen could not finish execution.
  - d. **An ALM package is exported or imported by the user**. For example, if Mike.Lee exports or imports an ALM package, he will receive an email notification providing status of the export or import package.

## 7. Click **Save changes**

Email

**Notifications**

Send email notifications

From this email address  
john.smith@automationanywhere.com  
(for example, yourname@company.com)

Email server host  
outlook.office365.com  
(for example, my.mySP.com)

Email server port  
587

My server uses a secure connection (SSL/TLS)

My server requires authentication

Username  
john.smith@automationanywhere.com

Password  
\*\*\*\*\*

Send an email when

User information changes, to the user

A user is activated, deactivated or deleted, to the user

A Task Bot stops running because it is unsuccessful, to the user who started or scheduled it

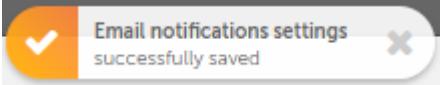
An ALM package is exported or imported, to the user who performed ALM export or import

Modified by admin

Last modified 12:36:06 2017-10-23 IST

**Cancel** **Save changes**

## 8. The settings are saved successfully



### Disable Email notifications

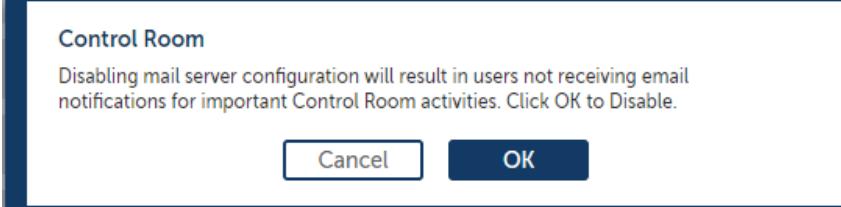
You can also choose to disable the notifications if required.

1. Clear the **Send email notifications** option.

**Save changes**

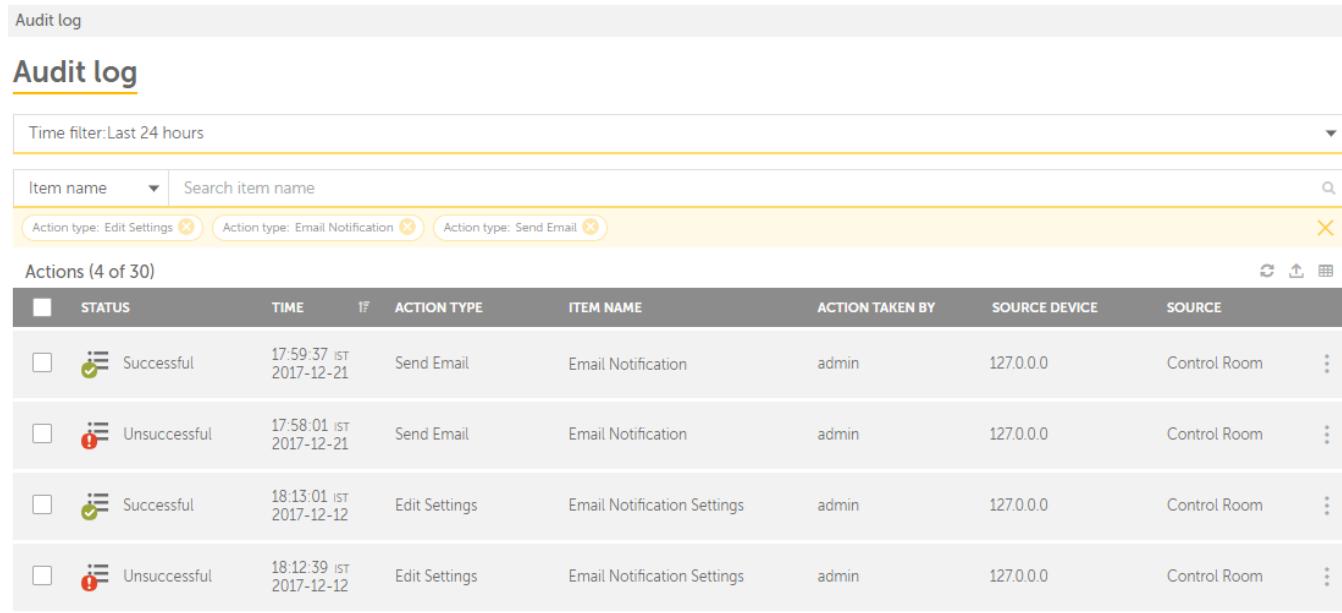
2. Click **Save changes**

3. Click OK



## Audit Logs

All updates to the Email notification settings are captured in the **Audit Log** page. For example, the following illustration lists all actions performed to connect to the mail server and edit email notification settings :

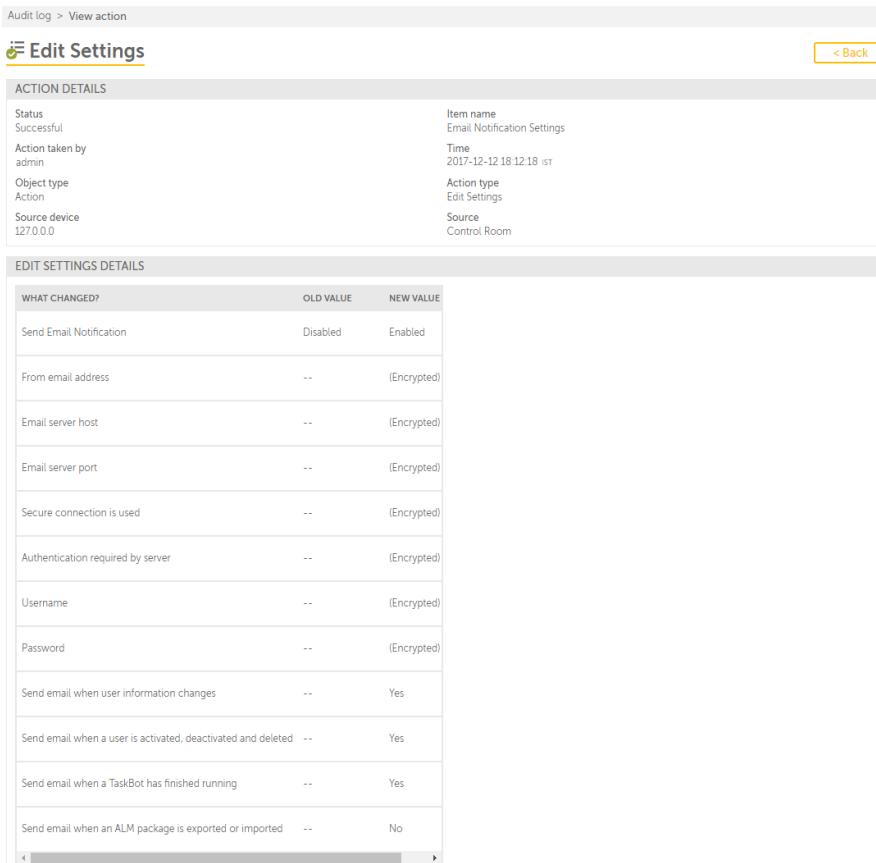


The screenshot shows the 'Audit log' interface. At the top, there is a search bar with 'Time filter: Last 24 hours'. Below it is a search bar with 'Item name' and a search icon. Underneath are three filters: 'Action type: Edit Settings', 'Action type: Email Notification', and 'Action type: Send Email'. The main area displays a table titled 'Actions (4 of 30)' with columns: STATUS, TIME, ACTION TYPE, ITEM NAME, ACTION TAKEN BY, SOURCE DEVICE, and SOURCE. Each row contains an action entry with its status (Successful or Unsuccessful), timestamp, action type, item name, user, source device, and source. The last column has a three-dot menu icon.

STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
Successful	17:59:37 IST 2017-12-21	Send Email	Email Notification	admin	127.0.0.0	Control Room
Unsuccessful	17:58:01 IST 2017-12-21	Send Email	Email Notification	admin	127.0.0.0	Control Room
Successful	18:13:01 IST 2017-12-12	Edit Settings	Email Notification Settings	admin	127.0.0.0	Control Room
Unsuccessful	18:12:39 IST 2017-12-12	Edit Settings	Email Notification Settings	admin	127.0.0.0	Control Room

To view details of each audit entry:

1. Go to the required data and mouse over 
2. Click 
3. The details page is launched where in you can view only those entries that are changed. The illustration below shows details of successful enabling of email notification settings, connection to the mail server, email server details, and actions for which notification will be sent:



The screenshot shows the 'Edit Settings' details page. At the top, there is a breadcrumb 'Audit log > View action' and a back button ' Back'. The main area is divided into two sections: 'ACTION DETAILS' and 'EDIT SETTINGS DETAILS'.

**ACTION DETAILS**

Status	Successful	Item name	Email Notification Settings
Action taken by	admin	Time	2017-12-12 18:12:18 IST
Object type	Action	Action type	Edit Settings
Source device	127.0.0.0	Source	Control Room

**EDIT SETTINGS DETAILS**

WHAT CHANGED?	OLD VALUE	NEW VALUE
Send Email Notification	Disabled	Enabled
From email address	--	(Encrypted)
Email server host	--	(Encrypted)
Email server port	--	(Encrypted)
Secure connection is used	--	(Encrypted)
Authentication required by server	--	(Encrypted)
Username	--	(Encrypted)
Password	--	(Encrypted)
Send email when user information changes	--	Yes
Send email when a user is activated, deactivated and deleted	--	Yes
Send email when a TaskBot has finished running	--	Yes
Send email when an ALM package is exported or imported	--	No

 Note: Some fields such as From email address, server host, port, authentication required or not, and credentials are shown as **(Encrypted)** because these values are securely stored in the [Credential Vault](#).

Refer [View Audit Details](#) for more information.

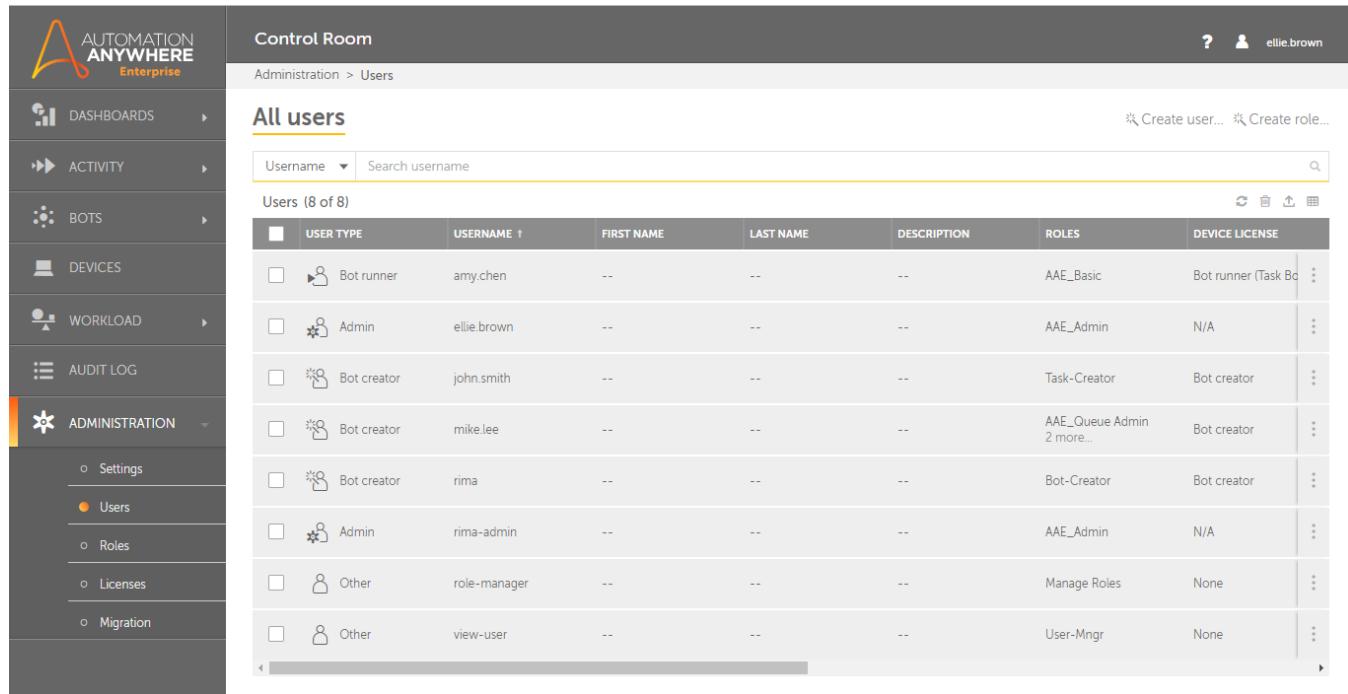
# Users - An Overview

The **Users** page of Control Room gives a detailed information of existing users. As a Control Room user with user management privileges, you can view, edit, delete, and enable or disable a user. You can also perform other actions, such as delete multiple users, export the list of users in CSV format, refresh the list in the **Users** table, and show or hide columns in the **Users** table depending on your preferences,

Besides the above tasks, you can:

- [Create a user](#)
- [Create a role](#)

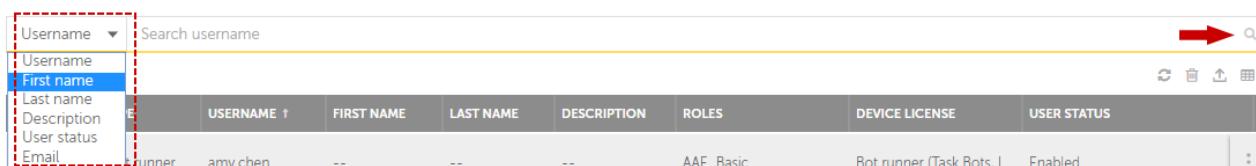
The page is illustrated in the following figure.



	USER TYPE	USERNAME	FIRST NAME	LAST NAME	DESCRIPTION	ROLES	DEVICE LICENSE
<input type="checkbox"/>	Bot runner	amy.chen	--	--	--	AAE_Basic	Bot runner (Task Bots, I...)
<input type="checkbox"/>	Admin	ellie.brown	--	--	--	AAE_Admin	N/A
<input type="checkbox"/>	Bot creator	john.smith	--	--	--	Task-Creator	Bot creator
<input type="checkbox"/>	Bot creator	mike.lee	--	--	--	AAE_Queue Admin 2 more...	Bot creator
<input type="checkbox"/>	Bot creator	rima	--	--	--	Bot-Creator	Bot creator
<input type="checkbox"/>	Admin	rima-admin	--	--	--	AAE_Admin	N/A
<input type="checkbox"/>	Other	role-manager	--	--	--	Manage Roles	None
<input type="checkbox"/>	Other	view-user	--	--	--	User-Mngr	None

For ease of access, you can apply search parameters to Username, First Name, Last Name, Description, User Status, and Email columns.

- You can use specify the search parameters in the search bar for Username, First Name, Last Name, Description, and Email columns:



Search parameters dropdown menu:

- Username
- First name
- Last name
- Description
- User status
- Email

**Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

**Known Behavior:** When you use special keys "-" or "\_", the system lists all **Usernames** instead of **Usernames** having these parameters.

- You can choose the search parameters from a list in the search bar for **user status**:

User status	Choose user status
	Choose user status
	Enabled
	Disabled

Users (3 of 3)

USER TYPE	USERNAME	FIRST NAME	LAST NAME	DESCRIPTION	ROLES	DEVICE LICENSE	USER STATUS
<input type="checkbox"/>	Bot runner	amy.chen	--	--	--	AAE_Basic	Bot runner (Task Bots, I... Enabled
<input type="checkbox"/>							...



**Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

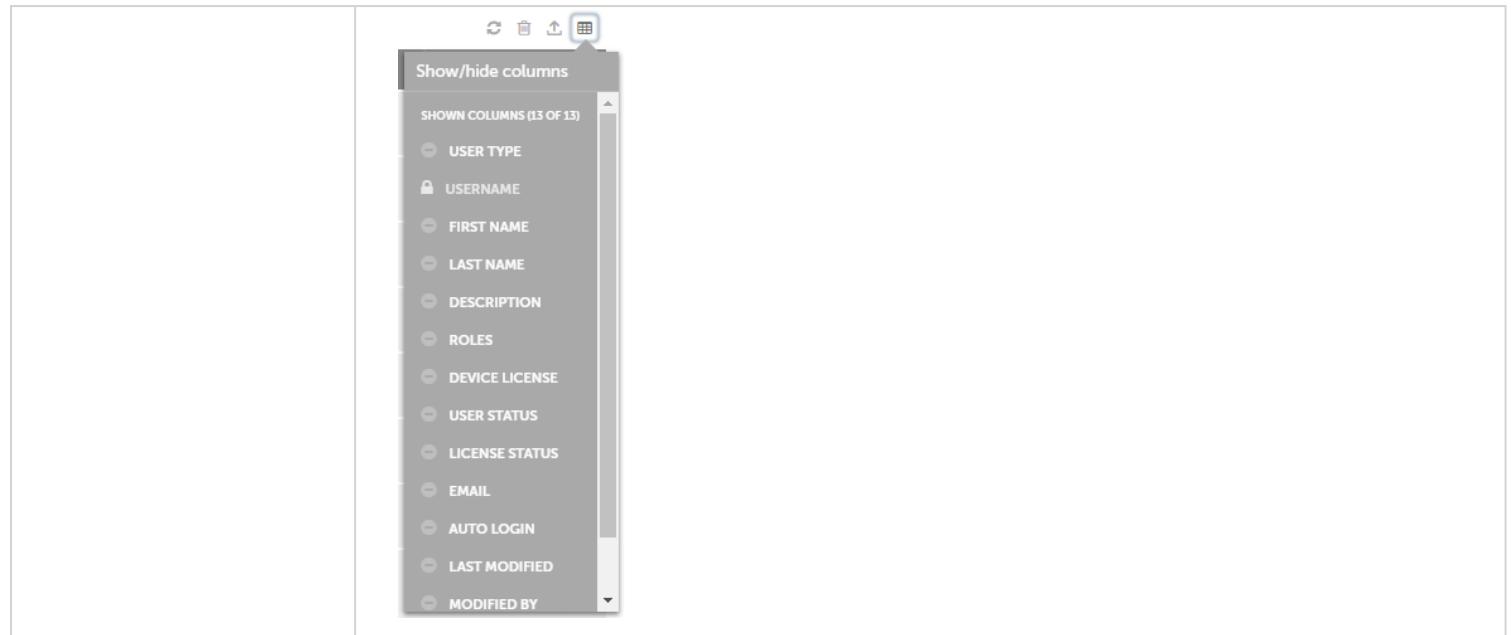
You can perform the following tasks on an individual User by moving your mouse over the Actions  icon.

Item	Description
 Edit	Click this icon to <a href="#">Edit details about the user</a> .   <b>Note:</b> <ul style="list-style-type: none"> <li>• An email is sent when you edit a user if SMTP is enabled.</li> <li>• A non admin user with user management permissions can <b>only view</b> the <b>Admin</b> and <b>Locker Admin</b> users in the Users list but cannot edit these users.</li> </ul>
 View	Click this icon to view additional information about the user. Refer <a href="#">View user details</a> .
 Enable/ Disable	Click this icon to activate or deactivate the user. This is useful in scenarios when you want to temporarily restrict a user's access to Client or Control Room.   <b>Note:</b> When you activate or deactivate a user, an email is sent to the user if SMTP is enabled.
 Delete	Click this icon to delete the user. You can use this feature in scenarios when a user leaves the organization or is moved to another role. This frees the device to which the user was attached and the license allocated to the user is freed. <a href="#">Learn more</a>   <b>Note:</b> When you delete a user, an email is sent to the user if SMTP is enabled.

You can also perform the following table-level actions for a set of multiple activities.

 **Note:** These actions can be performed only at a table-level and not on individual items.

Table Item	Description
 Refresh	Refreshes the table and reflects the latest data.
 Delete	Deletes the selected users. <a href="#">Learn more</a>   <b>Note:</b> You cannot delete a user who is currently logged in.
 Export to CSV	Exports the selected items in the table in CSV format.
 Show/ Hide columns	Allows you to select the columns that you want to show or hide in the table.



# Create a non-active directory user

To create a user, perform the followings steps.

1. Log on to Control Room with administration privileges.
2. Navigate to the [users page](#). The Users page is displayed.
3. Click the  [Create user](#) link . The **Create user** page is displayed.

## Create user

[Cancel](#) [Create user](#)

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license below (users with the Admin role cannot have a license).

If SMTP is enabled, once you create this user, an email will be sent to them inviting them to log in.

### General details

Enable user

Username

amy.chang

0\/\*/\*|:|<>+\_=,?\*^ are not allowed

Description (optional)

Control Room Administrator

Max characters = 255

First name (optional)

Max characters = 50

Last name (optional)

Password

\*\*\*\*\*

8-15 characters; a-z, A-Z, 0-9, @, ., -, \_, #, \$, %, &, and . allowed.

Confirm password

Email

amy.chang@automationanywhere.com

Confirm email

amy.chang@automationanywhere.com

### Select roles

Select one or more roles

Search name																	
<input type="text"/> Available roles (13)																	
<table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>NAME</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td>AAE_Admin</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Basic</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Bot Insight Admin</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Bot Insight Consu...</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Bot Insight Expert</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_BotFarm Admin</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_BotFarm Agent</td></tr> </tbody> </table>		<input type="checkbox"/>	NAME	<input type="checkbox"/>	AAE_Admin	<input type="checkbox"/>	AAE_Basic	<input type="checkbox"/>	AAE_Bot Insight Admin	<input type="checkbox"/>	AAE_Bot Insight Consu...	<input type="checkbox"/>	AAE_Bot Insight Expert	<input type="checkbox"/>	AAE_BotFarm Admin	<input type="checkbox"/>	AAE_BotFarm Agent
<input type="checkbox"/>	NAME																
<input type="checkbox"/>	AAE_Admin																
<input type="checkbox"/>	AAE_Basic																
<input type="checkbox"/>	AAE_Bot Insight Admin																
<input type="checkbox"/>	AAE_Bot Insight Consu...																
<input type="checkbox"/>	AAE_Bot Insight Expert																
<input type="checkbox"/>	AAE_BotFarm Admin																
<input type="checkbox"/>	AAE_BotFarm Agent																
<table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>NAME</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td></td></tr> </tbody> </table>		<input type="checkbox"/>	NAME	<input type="checkbox"/>													
<input type="checkbox"/>	NAME																
<input type="checkbox"/>																	
<input type="button" value="→"/> <input type="button" value="←"/>																	

### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input type="radio"/> Bot runner (100 license(s) available)	This user will have access to the Control Room only.
<input type="radio"/> Bot creator (100 license(s) available)	
<input checked="" type="radio"/> None	

4. In the **General details** area, do the following

- **Username:** Type a user name for the user.



**Note:** You can use the "@" character to accommodate email user-names.

- **Description:** Type a description for the user. This is optional.
- **First name:** Type the first name for the user. This is optional.
- **Last name:** Type the last name for the user. This is optional.



**Note:** The number of characters allowed in First name and Last name is 50.

- **Password:** Type a password for the user. Ensure that you are assigning a password that follows the password policy of your organization. For more information on password policy settings, refer [Security in Configuration Settings](#).



**Note:** If [Email Notification](#) is enabled then the password field is not displayed to the user; an email is sent to the user to set the password.

- **Confirm password:** Type the password again. This should be same to what you typed in the **Password** field.
- **Email:** Type the e-mail address for the user. If e-mail setting are enabled, the user is sent an email to this address to confirm the account. All important Control Room notifications will be sent to this e-mail address.
- **Confirm email:** Type the email address again. This should be same to what you typed in the **Email** field.

5. Select a role for the user from the **Available roles** table in the **Select roles** area and click the add button . You can select multiple roles for the user. The role is added to the **Selected roles** area. Depending on the role that you assign to a user, the user will have privileges and permissions to access and perform action in certain areas of Control Room. For example, a user with an AAE\_Basic role can view the Dashboard, Activities, Bots, and to manage lockers and queues.



**Note: View Dashboard, Manage my credentials and locker, View and manage my queues:** These permissions are available to any Control Room user by default. A non-admin user does not have access to **Admin, BotFarm Admin, Pool Admin, Locker Admin** roles.

#### Select roles

Select one or more roles

X

Available roles (4 of 5)

<input type="checkbox"/> AAE_Admin	<input type="checkbox"/> NAME
<input type="checkbox"/> AAE_Locker Admin	<input type="checkbox"/> AAE_Basic
<input type="checkbox"/> NAME	
<input type="checkbox"/> AAE_Queue Admin	

Selected roles (1)

<input checked="" type="checkbox"/> NAME
<input checked="" type="checkbox"/> AAE_Basic

>
<

6. Select a license to be allocated to the user from the **Allocate a device license to user** area.

#### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

Bot runner (97 license(s) available) 

Select the other types of bots that you want the user to be able to run:

IQ Bots (49 license(s) available)

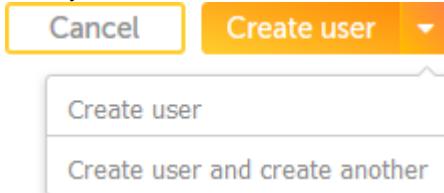
Bot creator (92 license(s) available) 

Enable auto login 

None 

- **Bot runner:** This allows the user to run bots and requires a run-time license. Additionally, select the **IQ Bots** check box, if you want to grant the user to run Bots.
- **Bot creator:** This allows the user to create and build automation, such as TaskBots, MetaBots, and Workflows and requires a development license. Additionally, you can select the **Enable auto login** check box, if you want the Client UI of the user to remember the credentials of the user. A column in [users page](#) is displayed, wherein the value for auto login is either **N/A** or **Can auto login**. **N/A** is displayed when auto login option is not checked, hence disabled. **Can auto login** is displayed when auto login option is enabled.
- **None:** This allows the user to only access Control Room. Users with this license cannot run or create bots. This option can also be used to release the allocated license.

7. Once you allocate a license to the user, the **Create user** button is enabled.



The **Create user** button has two options.

- **Create user:** This creates the user and the [Users](#) page is displayed.
- **Create user and create another:** This creates the user and the **Create user** page is refreshed so that you can create another user.

8. After clicking one of the **Create user** options, the user is created and the following message is displayed.



The user "amy.chang" is reflected in the **All users** list

All users							
<a href="#">Create user...</a> <a href="#">Create role...</a>							
Username	USER TYPE	USERNAME	FIRST NAME	LAST NAME	ROLES	DEVICE LICENSE	USER STATUS
<input type="checkbox"/>	Other	amy.chang	--	--	AAE_Basic	None	Enabled
<input type="checkbox"/>	Bot creator	amy.chen	--	--	AAE_Locker Admin and 1 more	Bot creator	Enabled
<input type="checkbox"/>	Bot creator	ellie.black	--	--	AAE_Basic and 1 more	Bot creator	Enabled
<input type="checkbox"/>	Bot creator	ellie.brown	--	--	AAE_Basic and 1 more	Bot creator	Enabled

## Edit non-active directory user details

As a Control Room user having edit user permission, you can modify the details of a user from the [Users page](#). This is useful in scenarios where you may want to change the role of a user or when users forget their password or when their email address is changed.

 **Note:** If roles/ permissions for any user is updated, the user must re-login or refresh the browser for the changes to be immediately reflected on Control Room UI.

You can change the following details for a user.

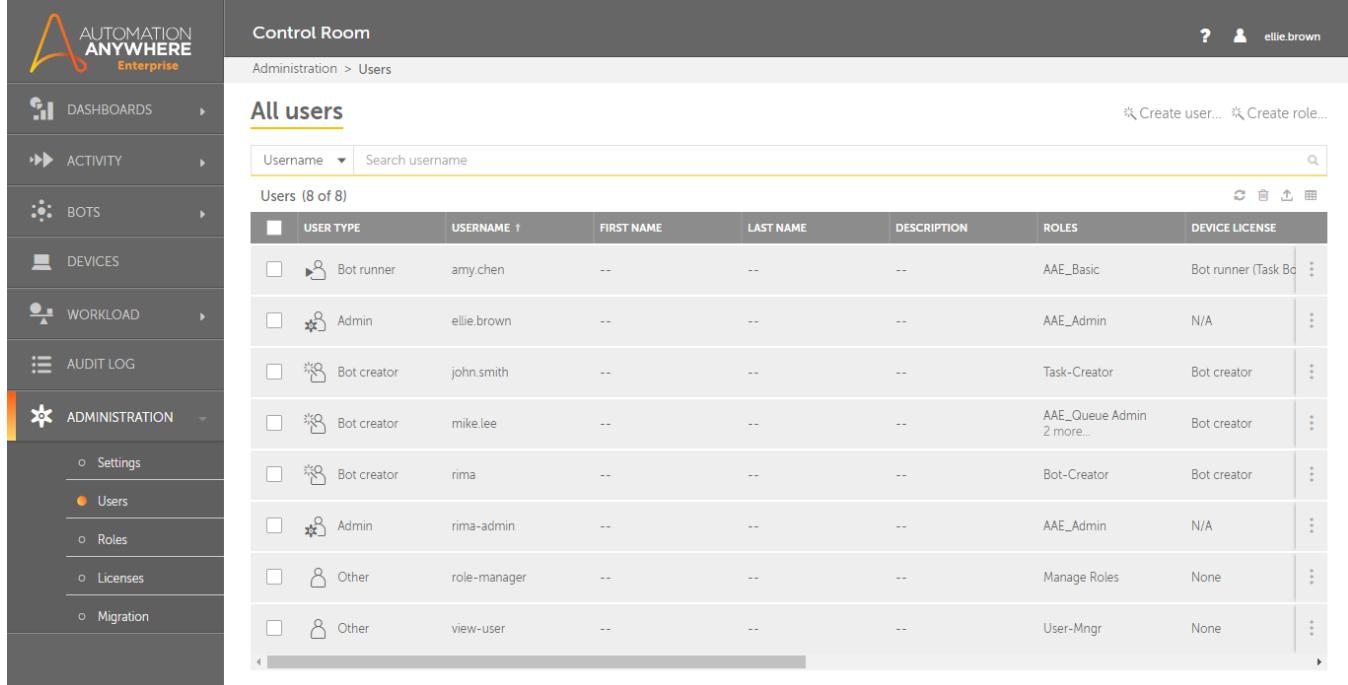
- First name
- Last name
- Password
- Email
- Roles
- Licenses

 **Note:**

- You cannot change the **User name** for a user.
- You cannot change or edit your own details except from User Profile tray. To change the details of your own profile, refer to [Edit and update your profile](#).
- In case when Email Notification is enabled when you edit the details of a user, an email is sent to the user. [Learn more](#)

To edit the details of a user, perform the following steps.

1. Log on to Control Room as an administrator and navigate to Administration → Users. The **Users** page is displayed



USER TYPE	USERNAME	FIRST NAME	LAST NAME	DESCRIPTION	ROLES	DEVICE LICENSE
Bot runner	amy.chen	--	--	--	AAE_Basic	Bot runner (Task Bd)
Admin	ellie.brown	--	--	--	AAE_Admin	N/A
Bot creator	john.smith	--	--	--	Task-Creator	Bot creator
Bot creator	mike.lee	--	--	--	AAE_Queue Admin 2 more...	Bot creator
Bot creator	rima	--	--	--	Bot-Creator	Bot creator
Admin	rima-admin	--	--	--	AAE_Admin	N/A
Other	role-manager	--	--	--	Manage Roles	None
Other	view-user	--	--	--	User-Mngr	None

2. Move your mouse over the Actions icon  and click the Edit user  icon . The **Edit user** page is displayed.

## Edit user

[Close](#)
[Save changes](#)

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license, below.

### General details

<input checked="" type="checkbox"/> Enable user	Description (optional)
Username amy.chang	Control Room user with basic permission Max characters = 255
First name (optional)	Last name (optional)
	Max characters = 50
Password (optional)	Confirm password (optional)
8-15 characters; a-z, A-Z, 0-9, @, -, _, !, #, \$, %, &, and . allowed.	
Email amy.chang@automationanywhere.com	Confirm email amy.chang@automationanywhere.com

### Select roles

Select one or more roles

Search name

Available roles (17 of 18)

<input type="checkbox"/>	NAME ↑
<input type="checkbox"/>	a
<input type="checkbox"/>	AAE_Admin
<input type="checkbox"/>	AAE_Bot Insight Admin
<input type="checkbox"/>	AAE_Bot Insight Consu...
<input type="checkbox"/>	AAE_Bot Insight Expert
<input type="checkbox"/>	AAE_BotFarm Admin
<input type="checkbox"/>	AAE_BotFarm Agent

Selected (1)

<input type="checkbox"/>	NAME
<input type="checkbox"/>	AAE_Basic

### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input type="radio"/> Bot runner (99 licenses(s) available)	Requires a Development license, which enables the user to create AND run Task Bots.
<input type="checkbox"/> Enable auto login	
<input checked="" type="radio"/> Bot creator (99 licenses(s) available)	This allows the Client UI to remember the password and automatically log into the Control Room.
<input type="radio"/> None	

GENERAL DETAILS			
Last modified 14:20:17 IST 2018-03-01	Modified by <small>username</small>	Object type User	User type Bot creator

3. Make changes to the fields depending on your requirements. For example, you can reallocate license of a Bot Creator to Bot Runner.

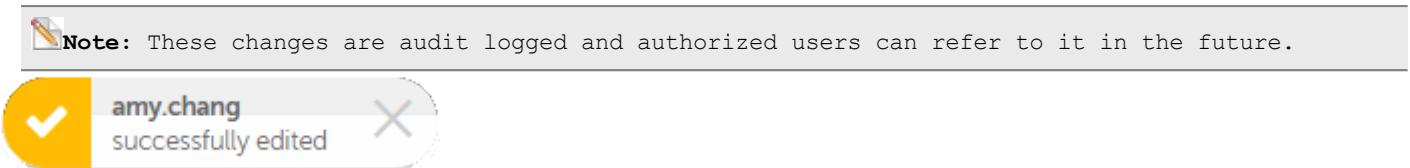
### Reallocate license

Do you want to reallocate the license from Bot creator to Bot runner? This will not allow to create or edit task bots from the Bot creator device registered with this user.



While making any updates, ensure that you are aware as to what changes are applicable.

4. Click the **Save Changes** button. The changes are made and a successfully edited message is displayed.



## Create an active directory user

The process of creating an active directory user is different from creating a non-active directory user as the user must be a part of an active directory.

To create an active directory user, perform the following steps.

1. Log on to Control Room with administration privileges.
2. Navigate to the [Users](#) page. The **Users** page is displayed.

3. Click the  **Create user** link . The **Create user** page is displayed.

## Create user

Cancel Create user ▾

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license below (users with the Admin role cannot have a license).

If SMTP is enabled, once you create this user, an email will be sent to them inviting them to log in.

### General details

<input checked="" type="checkbox"/> <b>Enable user</b> <b>Username</b> <input type="text" value="amy.chang"/> <small>(\ /*{}: &lt;&gt;+=;,?*) are not allowed</small> <b>Description (optional)</b> <input type="text"/> <small>Max characters = 255</small> <b>First name (optional)</b> <input type="text"/> <small>Max characters = 50</small> <b>Email</b> <input type="text" value="amy.chang@automationanywhere.com"/> <small>Max characters = 255</small>	<b>Active Directory domain</b> <input type="text" value="CRTEST"/> <span style="border: 1px solid #ccc; padding: 2px 10px; border-bottom: none;">Check name in Active Directory</span>
<b>Last name (optional)</b> <input type="text"/> <small>Max characters = 50</small> <b>Confirm email</b> <input type="text" value="amy.chang@automationanywhere.com"/> <small>Max characters = 255</small>	

### Select roles

Select one or more roles

<input type="text" value="Search name"/> <span style="border: 1px solid #ccc; padding: 2px 10px; border-bottom: none;">🔍</span>																			
<b>Available roles (9)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10px;"></th> <th style="width: 90px;">NAME</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td>AAE_Admin</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Basic</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Bot Insight Admin</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_IQ Bot Services</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_IQ Bot Validator</td></tr> <tr><td><input type="checkbox"/></td><td>AAE_Locker Admin</td></tr> </tbody> </table>		NAME	<input type="checkbox"/>	AAE_Admin	<input type="checkbox"/>	AAE_Basic	<input type="checkbox"/>	AAE_Bot Insight Admin	<input type="checkbox"/>	AAE_IQ Bot Services	<input type="checkbox"/>	AAE_IQ Bot Validator	<input type="checkbox"/>	AAE_Locker Admin	<b>Selected (0)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10px;"></th> <th style="width: 90px;">NAME</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/></td><td></td></tr> </tbody> </table>		NAME	<input type="checkbox"/>	
	NAME																		
<input type="checkbox"/>	AAE_Admin																		
<input type="checkbox"/>	AAE_Basic																		
<input type="checkbox"/>	AAE_Bot Insight Admin																		
<input type="checkbox"/>	AAE_IQ Bot Services																		
<input type="checkbox"/>	AAE_IQ Bot Validator																		
<input type="checkbox"/>	AAE_Locker Admin																		
	NAME																		
<input type="checkbox"/>																			
<span style="border: 1px solid #ccc; padding: 2px 10px; border-bottom: none;">→</span> <span style="border: 1px solid #ccc; padding: 2px 10px; border-bottom: none;">←</span>																			

### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input type="radio"/> Bot runner (100 license(s) available)	This user will have access to the Control Room only.
<input type="radio"/> Bot creator (100 license(s) available)	
<input checked="" type="radio"/> None	

4. In the **General details** area, do the following

- **Enable user:** Select this check box to enable the user.
- **Active Directory domain:** Select the active directory name for the user. The list displays all domains that are available in AD domain controller.

 **Note:** Control Room Active Directory supports single forest multi-domain environment.

- **Username:** Type a user name for the user, the **CHECK NAME IN ACTIVE DIRECTORY** button is enabled. When you click the **CHECK NAME IN ACTIVE DIRECTORY** button, one of the following happens.

 **Note:** The "@" character is supported to accommodate email user-names.

- If the user name is present in the active directory, the **First name**, **Last name**, **Email**, and **Confirm email** fields are automatically displayed, as shown in the following figure.

[Create user](#)

[Cancel](#) [Create user](#)

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license below (users with the Admin role cannot have a license).

If SMTP is enabled, once you create this user, an email will be sent to them inviting them to log in.

#### General details

Enable user

Active Directory domain

BARODA

Username  
amy.chang  
0\!^~!|<>+~.;?\* are not allowed

[Check name in Active Directory](#)

- If the user name is not present in the active directory, an error message is displayed, as shown in the following figure. Contact your network administrator to resolve the issue.

[Create user](#)

[Cancel](#) [Create user](#)



Unable to find that username in Active Directory.

This may be because of a spelling error or your Caps Lock is on. To continue, please retype the username.

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license below (users with the Admin role cannot have a license).

If SMTP is enabled, once you create this user, an email will be sent to them inviting them to log in.

#### General details

Enable user

Active Directory domain

BARODA

Username  
amy.chen  
0\!^~!|<>+~.;?\* are not allowed

[Check name in Active Directory](#)

- In Active Directory environment details such as: First Name, Last Name, Email address are auto-populated from AD and hence user does not need to type-in. In case the data is not populated from AD then user must specify the details.

5. Select a role for the user from the **Available roles** table in the **Select roles** area and click the add button . The role is added to the **Selected roles** area.

#### Select roles

Select one or more roles

Available roles (4 of 5)		Selected roles (1)	
<input type="checkbox"/>	AAE_Admin	<input type="checkbox"/>	NAME
<input type="checkbox"/>	AAE_Locker Admin	<input type="checkbox"/>	AAE_Basic
<input type="checkbox"/>	NAME	<input type="checkbox"/>	
<input type="checkbox"/>	AAE_Queue Admin	<input type="checkbox"/>	

Search name

Name: aae 

6. Select a license to be allocated to the user from the **Allocate a device license to user** area. By default, there are three licenses available.

Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

Bot runner (97 license(s) available) i

Select the other types of bots that you want the user to be able to run:

IQ Bots (49 license(s) available)

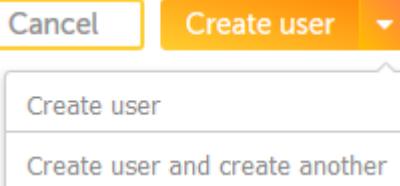
Bot creator (92 license(s) available) i

Enable auto login i

None i

- **Bot runner:** This allows the user to run bots and requires a run-time license. Additionally, select the **IQ Bots** check box, if you want to grant the user to run IQ Bots.
- **Bot creator:** This allows the user to create and run task bots and requires a development license. Additionally, you can select the **Enable auto login** check box, if you want the Client UI of the user to remember the credentials of the user. A column in [users page](#) is displayed, wherein the value for auto login is N/A or Can auto login. **N/A** is displayed when auto login option is not checked and **Can auto login** is displayed when auto login option is enabled.
- **None:** This allows the user to only access Control Room. Users with this license cannot run or create bots.

7. Once you allocate a license to the user, the **Create user** button is enabled.



The **Create user** button has two options.

- **Create user:** This creates the user and the [Users](#) page is displayed.
- **Create user and create another:** This creates the user and the **Create user** page is refreshed so that you can create another user.

8. After clicking one of the **Create user** options, the user is created and the following message is displayed.



# Edit active directory user details

As an administrator, you can edit the details of an active directory user from the [Users](#) page. This is useful in scenarios where you may want to change the role, email address of users or when users forget their password.

 **Note:** If roles/ permissions for any user is updated, the user must re-login or refresh the browser for the changes to be immediately reflected on Control Room UI.

You can change the following details for a user.

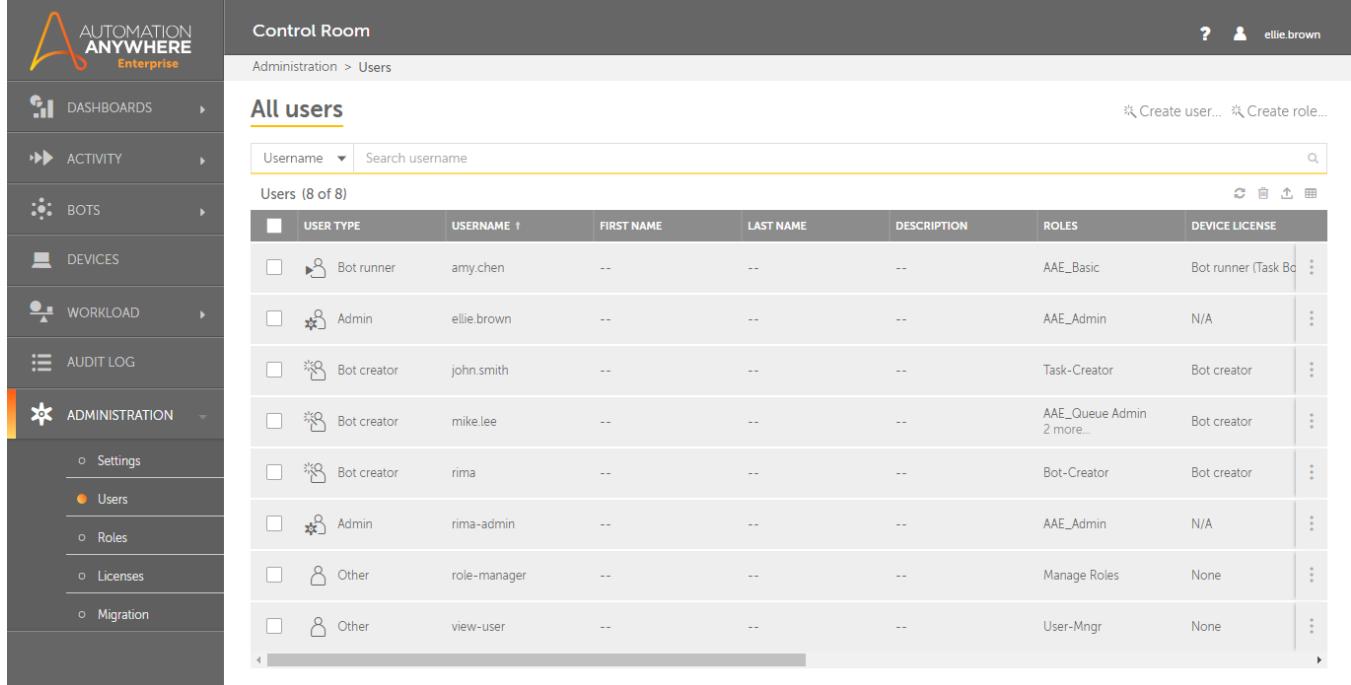
- First name
- Last name
- Password
- Roles and Licenses

**Notes:**

- You cannot change the **User name** and **Active Directory domain** for a user.
- You cannot change or edit your own profile. Contact your administrator to make the changes.
- When you edit the details of a user, an email is sent to the user.

To edit the details of a user, perform the following steps.

1. Log on to Control Room as an administrator and navigate to Administration → Users. The **All Users** page is displayed



	USER TYPE	USERNAME	FIRST NAME	LAST NAME	DESCRIPTION	ROLES	DEVICE LICENSE
<input type="checkbox"/>	Bot runner	amy.chen	--	--	--	AAE_Basic	Bot runner (Task Bd
<input type="checkbox"/>	Admin	ellie.brown	--	--	--	AAE_Admin	N/A
<input type="checkbox"/>	Bot creator	john.smith	--	--	--	Task-Creator	Bot creator
<input type="checkbox"/>	Bot creator	mike.lee	--	--	--	AAE_Queue Admin 2 more...	Bot creator
<input type="checkbox"/>	Bot creator	rima	--	--	--	Bot-Creator	Bot creator
<input type="checkbox"/>	Admin	rima-admin	--	--	--	AAE_Admin	N/A
<input type="checkbox"/>	Other	role-manager	--	--	--	Manage Roles	None
<input type="checkbox"/>	Other	view-user	--	--	--	User-Mngr	None

2. Move your mouse over the Actions icon  and click the Edit user  icon. The **Edit user** page is displayed.

## Edit user

[Close](#)
[Save changes](#)

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license, below.

### General details

 Enable user

Active Directory domain  
CRTEST

Username  
amy.chang

Description (optional)

Max characters = 255

First name (optional)

Max characters = 50

Email

amy.chang@automationanywhere.com

Max characters = 255

Last name (optional)

Max characters = 50

Confirm email

amy.chang@automationanywhere.com

Max characters = 255

### Select roles

Select one or more roles

Available roles (7 of 8)		Selected (1)	
<input type="checkbox"/>	NAME ↑	<input type="checkbox"/>	NAME
<input type="checkbox"/>	AAE_Basic	<input type="checkbox"/>	AAE_Admin
<input type="checkbox"/>	AAE_Bot Insight Admin		
<input type="checkbox"/>	AAE_Bot Insight Consu...		
<input type="checkbox"/>	AAE_Bot Insight Expert		
<input type="checkbox"/>	AAE_Locker Admin		
<input type="checkbox"/>	NAME ↑		
<input type="checkbox"/>	AAE_Pool Admin		
<input type="checkbox"/>	AAE_Queue Admin		

Search name

→ ←

### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input checked="" type="radio"/> Bot runner (5 license(s) available)	This user will have access to the Control Room only.
<input type="radio"/> Bot creator (25 license(s) available)	
<input type="radio"/> None	

GENERAL DETAILS			
Last modified 18:41:04 IST 2018-03-01	Modified by CRTEST\jugal	Object type User	User type Admin

3. Make changes to the fields depending on your requirements.

4. Click the **Save Changes** button. The changes are made and a successfully edited message is displayed.

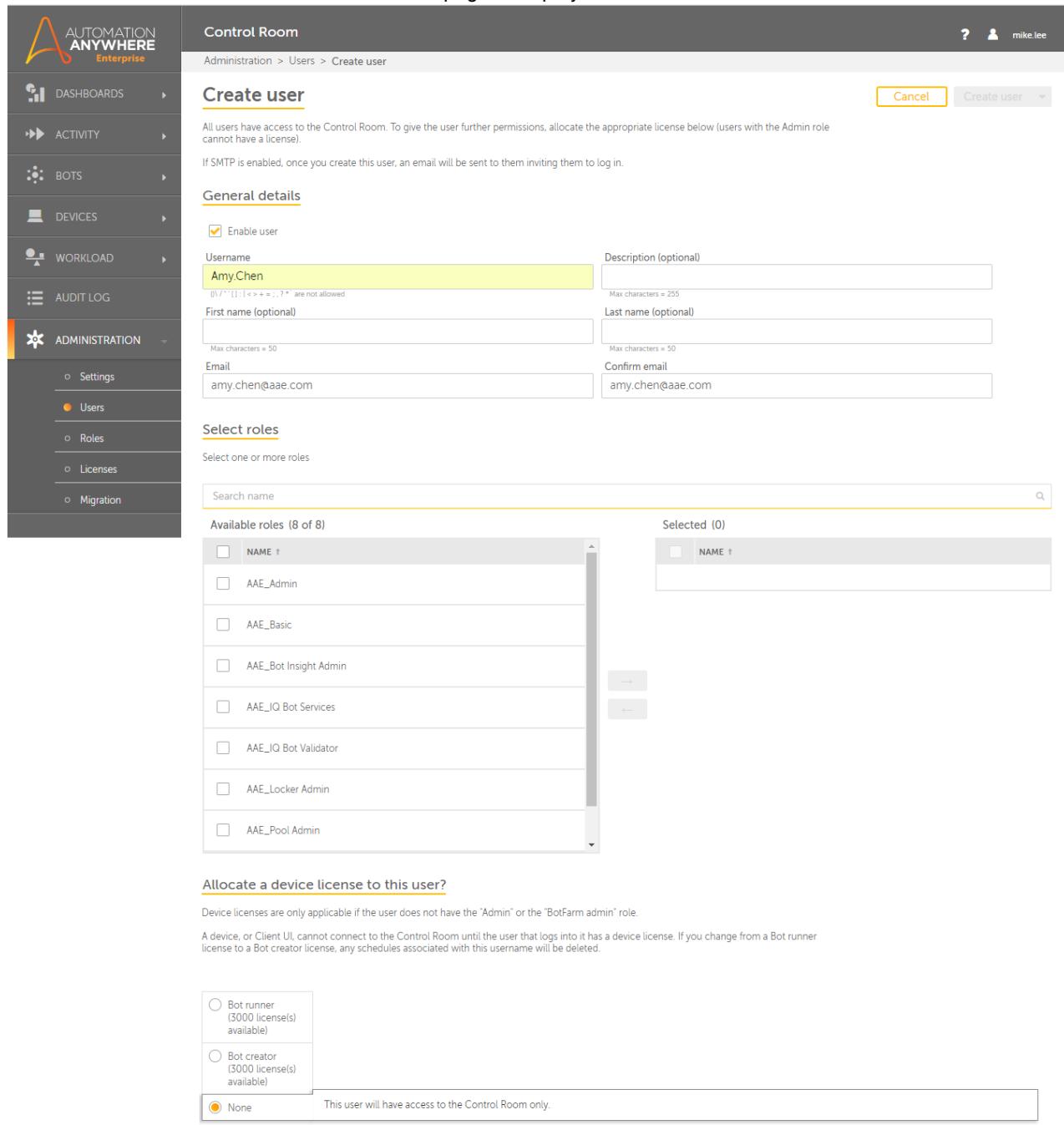


# Add user from IdP server for single sign on

The process of adding a user from the IdP server in a Control Room that is configured for Single Sign On is similar to creating an active directory user.

To create an sso user, perform the following steps.

1. Log on to Control Room with administration privileges.
2. Navigate to the [Users](#) page. The **Users** page is displayed.
3. Click the  [Create user](#) link . The **Create user** page is displayed.



**Control Room**

Administration > Users > Create user

**Create user**

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license below (users with the Admin role cannot have a license).

If SMTP is enabled, once you create this user, an email will be sent to them inviting them to log in.

**General details**

Enable user

**Username**: Amy.Chen

Description (optional)

Max characters = 255

**First name (optional)**

Last name (optional)

Max characters = 50

**Email**: amy.chen@aae.com

Confirm email: amy.chen@aae.com

**Select roles**

Select one or more roles

Search name

Available roles (8 of 8)

<input type="checkbox"/>	NAME
<input type="checkbox"/>	AAE_Admin
<input type="checkbox"/>	AAE_Basic
<input type="checkbox"/>	AAE_Bot Insight Admin
<input type="checkbox"/>	AAE_IQ Bot Services
<input type="checkbox"/>	AAE_IQ Bot Validator
<input type="checkbox"/>	AAE_Locker Admin
<input type="checkbox"/>	AAE_Pool Admin

Selected (0)

NAME

—

—

**Allocate a device license to this user?**

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input type="radio"/>	Bot runner (3000 license(s) available)
<input type="radio"/>	Bot creator (3000 license(s) available)
<input checked="" type="radio"/>	None This user will have access to the Control Room only.

4. In the **General details** area, do the following

- **Username:** Type a user name for the user.



Tip: Ensure that the **Username** is the same as provided in the **IdP Server**.

 **Note:** The "@" character is supported to accommodate email user names.

- **Description:** Type a description for the user. This is optional.
- **First name:** Type the first name for the user. This is optional.
- **Last name:** Type the last name for the user. This is optional.

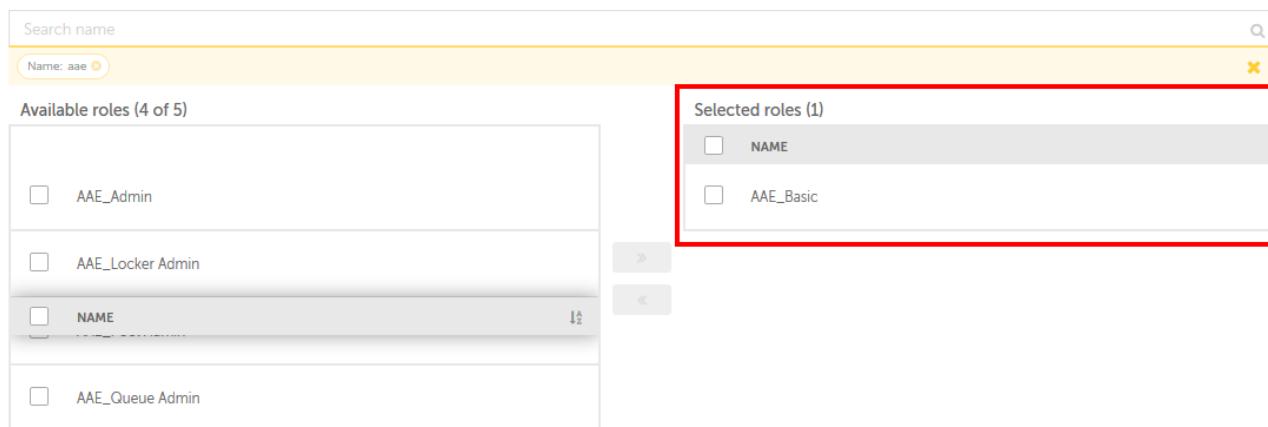
 **Note:** The number of characters allowed in First name and Last name is 50.

- **Email:** Type the e-mail address for the user. If e-mail setting are enabled, the user is sent an email to this address to confirm the account. All important Control Room notifications will be sent to this e-mail address.
- **Confirm email:** Type the email address again. This should be same to what you typed in the **Email** field.

7. Select a role for the user from the **Available roles** table in the **Select roles** area and click the add button . The role is added to the **Selected roles** area.

#### Select roles

Select one or more roles



The screenshot shows a user interface for selecting roles. On the left, under 'Available roles (4 of 5)', there is a list of four roles: AAE\_Admin, AAE\_Locker Admin, NAME, and AAE\_Queue Admin. Each role has a checkbox next to it. On the right, under 'Selected roles (1)', there is a list with one item: NAME, also preceded by a checkbox. A red box highlights the 'Selected roles (1)' section. Below the available roles list are two buttons: a right-pointing arrow and a left-pointing arrow.

8. Select a license to be allocated to the user from the **Allocate a device license to user** area. By default, there are three licenses available.

#### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the "Admin" or the "BotFarm admin" role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

- Bot runner (97 license(s) available) 

Select the other types of bots that you want the user to be able to run:

- IQ Bots (49 license(s) available)

- Bot creator (92 license(s) available) 

- Enable auto login 

- None 

- **Bot runner:** This allows the user to run bots and requires a run-time license. Additionally, select the **IQ Bots** check box, if you want to grant the user to run IQ Bots.
- **Bot creator:** This allows the user to create and run task bots and requires a development license. Additionally, you can select the **Enable auto login** check box, if you want the Client UI of the user to remember the credentials of the user. A column in [users page](#) is displayed, wherein the value for auto login is N/A or Can auto login. **N/A** is displayed when auto login option is not checked and **Can auto login** is displayed when auto login option is enabled.
- **None:** This allows the user to only access Control Room. Users with this license cannot run or create bots.

## View user details

A Control Room user with view user permission, you have access to **View users** page.

When you click the **View** icon  for an individual user in the **All users** page, the **View user** page is opened in read only mode. It provides information, such as the user details, roles, and general details, such as Last modified, Modified by, Object type, and User type. Besides this, you can also [edit details of the user](#) and enable or disable the user using the enable/ disable toggle button .

 **Note:** For Active Directory users, the password field is not displayed.

 **amy.chang**  Edit  Disable < Back

USER DETAILS		
First name --	Last name --	Description Control Room Administrator
Email amy.chang@automationanywhere.com	Password ****	User status Enabled
License N/A	License status Verified	Auto login N/A

Roles (1)

NAME 
AAE_Admin

GENERAL DETAILS

Last modified 18:23:12 IST 2018-03-01	Modified by  amy.chang	Object type User	User type Admin
---	--	---------------------	--------------------

The different areas of the **View user** page are explained in the following table.

Area	Description
User details	Use this area to view the following details of the folder <ul style="list-style-type: none"> <li>• <b>First name:</b> The first name of the user.</li> <li>• <b>Last name:</b> The last name of the user</li> <li>• <b>Description:</b> The description of the user.</li> <li>• <b>Email:</b> The email address of the user</li> <li>• <b>Password:</b> The password of the user</li> <li>• <b>User status:</b> The status of user, whether enabled or disabled.</li> <li>• <b>License:</b> The license type of the user, such as bot runner, bot creator and other license types.</li> <li>• <b>License status:</b> The status of the license for the user. This may be verified or unverified.</li> </ul>
Roles	The roles assigned to the user.
General details	Use this area to view the following details for the folder. <ul style="list-style-type: none"> <li>• <b>Last Modified:</b> Displays the last time changes were made to the user in date and time.</li> <li>• <b>Modified by:</b> Displays the name of the user who last made changes to the user in date and time.</li> <li>• <b>Object type:</b> Displays the type of the bot, such as Task Bot, Meta Bot, or IQ Bot.</li> <li>• <b>User type:</b> The type of user, such as Bot creator, Bot runner, Admin or Other.</li> </ul>

## Edit idp user details

As a Control Room user having edit user permission, you can modify the details of a user from the [Users page](#). This is useful in scenarios where you may want to change the role of a user or when users forget their password or when their email address is changed.

 **Note:** If roles/ permissions for any user is updated, the user must re-login or refresh the browser for the changes to be immediately reflected on Control Room UI.

You can change the following details for a user.

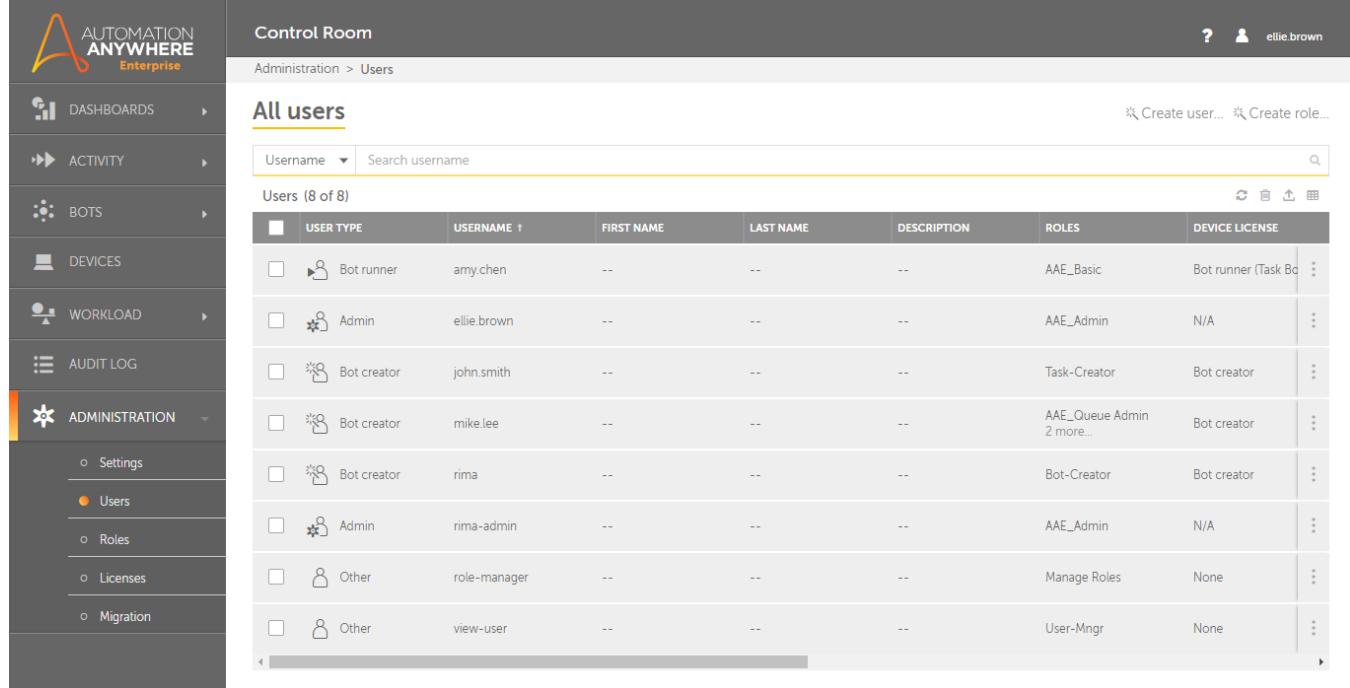
- First name
- Last name
- Email
- Roles
- Licenses

 **Note:**

- You cannot change the **User name** for a user.
- You cannot change or edit your own details except from User Profile tray. To change the details of your own profile, refer to [Edit and update your profile](#).
- In case when Email Notification is enabled when you edit the details of a user, an email is sent to the user. [Learn more](#)

To edit the details of a user, perform the following steps.

1. Log on to Control Room as an administrator and navigate to Administration → Users. The Users page is displayed



USER TYPE	USERNAME	FIRST NAME	LAST NAME	DESCRIPTION	ROLES	DEVICE LICENSE
Bot runner	amy.chen	--	--	--	AAE_Basic	Bot runner (Task Bg)
Admin	ellie.brown	--	--	--	AAE_Admin	N/A
Bot creator	john.smith	--	--	--	Task-Creator	Bot creator
Bot creator	mike.lee	--	--	--	AAE_Queue Admin 2 more...	Bot creator
Bot creator	rima	--	--	--	Bot-Creator	Bot creator
Admin	rima-admin	--	--	--	AAE_Admin	N/A
Other	role-manager	--	--	--	Manage Roles	None
Other	view-user	--	--	--	User-Mngr	None

2. Move your mouse over the Actions icon  and click the Edit user  icon . The [Edit user](#) page is displayed.

[Close](#)
[Save changes](#)

## Edit user

All users have access to the Control Room. To give the user further permissions, allocate the appropriate license, below.

### General details

 Enable user

**Username**

amy.chen

**Description (optional)**

Max characters = 255

**First name (optional)**

Max characters = 50

**Last name (optional)**

Max characters = 50

**Email**

amy.chen@aae.com

**Confirm email**

amy.chen@aae.com

### Select roles

Select one or more roles

Available roles (8 of 8)		Selected (2)	
	NAME ↑		NAME ↑
<input type="checkbox"/>	AAE_Admin	<input type="checkbox"/>	AAE_Locker Admin
<input type="checkbox"/>	AAE_Basic	<input type="checkbox"/>	AAE_Pool Admin
<input type="checkbox"/>	AAE_Bot Insight Admin		
<input type="checkbox"/>	AAE_IQ Bot Services		
<input type="checkbox"/>	AAE_IQ Bot Validator		
<input type="checkbox"/>	AAE_Locker Admin		
<input type="checkbox"/>	AAE_Pool Admin		

### Allocate a device license to this user?

Device licenses are only applicable if the user does not have the 'Admin' or the 'BotFarm admin' role.

A device, or Client UI, cannot connect to the Control Room until the user that logs into it has a device license. If you change from a Bot runner license to a Bot creator license, any schedules associated with this username will be deleted.

<input type="radio"/> Bot runner (3000 license(s) available)	
<input type="radio"/> Bot creator (3000 license(s) available)	
<input checked="" type="radio"/> None	This user will have access to the Control Room only.

GENERAL DETAILS			
Last modified 15:10:03 IST 2018-04-03	Modified by mike.lee	Object type User	User type Other

3. Make changes to the fields depending on your requirements.
4. Click the **Save Changes** button. The changes are made and a successfully edited message is displayed.



 **Note:** These changes are audit logged and authorized users can refer to it in the future.

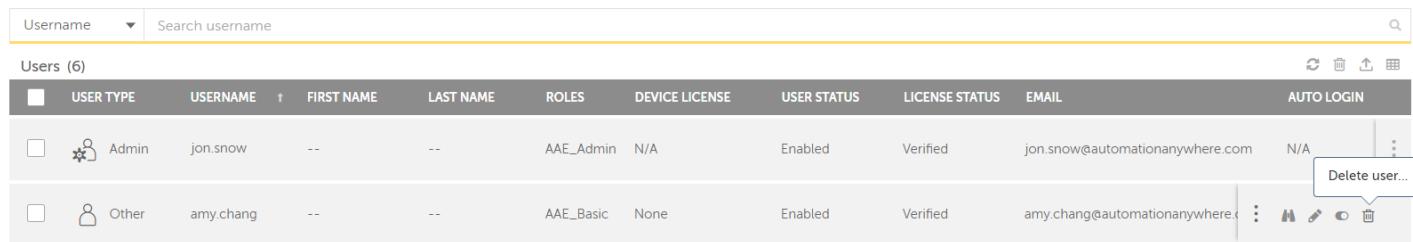
# Delete a user

To remove redundant users, and free allocated license, a Control Room Admin user can Delete users.

To Delete a user, follow the steps mentioned below:

1. Go to Administration → Users
2. In the **Users** list, choose the user that you wish to delete. Then mouse over to the actions list and click **Delete user**

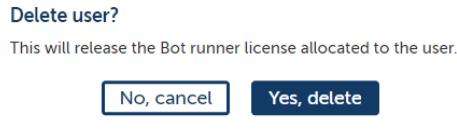
## All Users



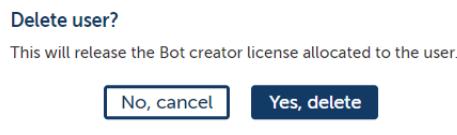
Username	Search username								
Users (6)									
User Type	USERNAME	FIRST NAME	LAST NAME	ROLES	DEVICE LICENSE	USER STATUS	LICENSE STATUS	EMAIL	AUTO LOGIN
<input type="checkbox"/>	 Admin	jon.snow	--	--	AAE_Admin	N/A	Enabled	Verified	jon.snow@automationanywhere.com N/A
<input type="checkbox"/>	 Other	amy.chang	--	--	AAE_Basic	None	Enabled	Verified	amy.chang@automationanywhere.com

3. The following messages are displayed if the user is assigned:

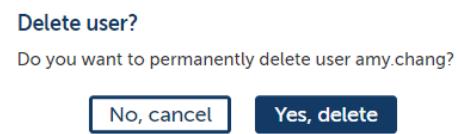
- **Bot Runner license**



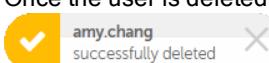
- **Bot Creator license**



- **None**



4. Once the user is deleted, the following notification is displayed:



5. When an admin user deletes "amy.chang" from Control Room, "amy.chang" is displayed as **Inactive**. As shown in the below mentioned screen shot. The deleted users are shown as Inactive appended to their name. This helps to identify the users that are not in use any more and have left the organization.



Administration > Roles					
Type	Role Name	# of Users	Last Modified	Modified By	
<input type="checkbox"/>	 User-created	HR	0	18:46:55 IST 2018-02-02	amy.chang (Inactive)

# Roles - An Overview

This page allows an admin or user with roles permission to perform actions such as: Create, Edit, Delete roles for various features and operations in Control Room. RBAC (role based access control) grants access to users based on the assigned roles and the accessibility provided to the user.

## Benefits of creating roles

- Increased security by controlling users access according to their specified roles.
- Decreased need of customer support
- Easy and accurate monitoring of the use and access of data by higher management, leading to better research management.

In Control Room you can see two types of roles:

- System-created:** These roles are pre-configured during Control Room installation.
- User-created:** These roles are created by user themselves and can be customized accordingly.

 **Note:** If a **custom role /user-created role** is created with all Control Room permission then it is not considered as a Control Room Admin role. Only system created Admin role has this privilege.

Administration > Roles

## All roles

 Create role...  Create user...

Role name	Search role name				
Roles (6 of 6)					
Type	Role Name	# of Users	Last Modified	Modified By	
 System-created	AAE_Admin	2	18:54:59 IST 2017-10-12	System	
 System-created	AAE_Basic	2	18:54:59 IST 2017-10-12	System	
 System-created	AAE_Locker Admin	1	18:54:59 IST 2017-10-12	System	
 System-created	AAE_Pool Admin	0	18:54:59 IST 2017-10-12	System	
 System-created	AAE_Queue Admin	0	18:54:59 IST 2017-10-12	System	
 User-created	loc	1	18:43:24 IST 2017-10-13	kaush	

- Create role:** Allows user to create roles. [Learn More](#)
- Create user:** Allows to create users in Control Room. [Learn More](#)
- In the search pane you can filter roles according to role name and role type.

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.



**Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session..
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

The following describes the list of items that can be viewed in the table:

Table Item	Description
Type	Shows the type of role as system-created or user-created.
Role Name	Shows name of the role.
# of Users	Shows number of users accessing the role.
Last Modified	Shows date and time of role when it was last modified.
Modified By	Shows name of the user who last modified the role.

Table Item	Description
 View	Allows you to view role details. <a href="#">Learn More</a>
 Edit	Allows you to edit a role. <a href="#">Learn More</a>
 Delete	Allows you to delete a role. <a href="#">Learn More</a>
 Copy	Allows you to copy a role. <a href="#">Learn More</a>

Alternatively, you can select all roles and perform the following actions:

Table Item	Description
 Refresh	Allows you to refresh the list of roles.
 Delete	Allows you to delete selected roles from the list.
 Show/ hide columns	Allows you to show or hide specific columns. By default, all the columns are displayed.



 Tip: To **hide** a column, click the column name.

## Audit Logs

All the **Create, Update, Delete** actions are tracked in audit log for record keeping and future use. You can refer those entries in the Audit Log page:

### Audit log

Time filter: Last 24 hours

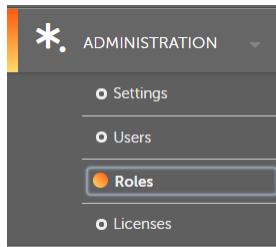
Status	Choose status						
Actions (1282 of 2708)							
STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE	
<input type="checkbox"/>	 Successful	17:52:35 IST 2018-01-09	Create Role	HR	admin	172.16.16.61	Control Room
<input type="checkbox"/>	 Successful	17:54:01 IST 2018-01-09	Edit Role	HR	admin	172.16.16.61	Control Room
<input type="checkbox"/>	 Successful	18:22:45 IST 2018-01-09	Delete Role	HR	admin	172.16.16.61	Control Room

## Create a role

Activities and access to Control Room for Users (Administrators, Clients, and non-Clients) are governed by the role defined for each. The role based accessibility model ensures each User has privileges to view information or data that is relevant to the role assigned by the Control Room Administrator. Therefore, only an admin or Control Room user with roles permission can assign roles to users and provide access to them for various features and operations.

To create a role, follow the steps mentioned below:

1. Go to *Administration → Roles*.



2. Click on Create Role.



3. Input the following information:

- Name and description of the role.
- Click individual sub-tabs such as: **Features, Bots, Devices, Users** and select required permissions that are relevant to the role you are creating.

 **Note:** **Bots and Devices** sub-tabs are displayed only if the required permission is selected from the Features sub-tab.

4. Input required information such as- role name, description, and check desired permissions. Click next, if you wish to add users.

 **Note:** Bot Insight, BotFarm, and IQ Bot roles are displayed only if you have respective licenses.

### Create role

[Cancel](#) [Create role](#)

<b>FEATURES</b> Name <input checked="" type="checkbox"/> <input type="checkbox"/> HR  Features <input type="checkbox"/> <input type="checkbox"/> DASHBOARDS <input type="checkbox"/> ACTIVITY <input type="checkbox"/> BOTS <input type="checkbox"/> DEVICES <input type="checkbox"/> WORKLOAD <input type="checkbox"/> AUDIT LOG	<p><u>Users with this role will be able to use which features?</u></p> <p>Role name <input type="text" value="HR"/> Max characters = 255      Role description (optional) <input type="text"/> Max characters = 255</p> <p><b>DASHBOARDS</b></p> <p><input checked="" type="checkbox"/> View dashboards</p> <p><b>ACTIVITY</b></p> <p><input checked="" type="checkbox"/> View my In progress activity</p> <p><input type="checkbox"/> Manage my In progress activity</p> <p><input type="checkbox"/> View everyone's In progress activity</p> <p><input type="checkbox"/> Manage everyone's In progress activity</p> <p><b>USERS</b></p> <p><input type="checkbox"/> View my scheduled bots</p> <p><input type="checkbox"/> Schedule my bots to run</p> <p><input type="checkbox"/> Edit my scheduled activity</p> <p><input type="checkbox"/> Delete my scheduled activity</p> <p><input type="checkbox"/> View and manage ALL scheduled activity from my Folders</p> <p><b>VIEW MY SCHEDULED BOTS</b></p> <p><input type="checkbox"/> Users will see their bots, here, if they are scheduled to run in the future, even if they were scheduled by someone else.</p>
---	--

[Next >](#)

- You can assign the following permissions to your role:

Features	Permissions
Dashboard	<ul style="list-style-type: none"> <li>• <b>View dashboards</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px;">  <b>Note:</b> This permission is checked and disabled by default since it is available to all users.       </div>
Activity	<ul style="list-style-type: none"> <li>• <b>View my In progress activity</b></li> <div style="border: 1px solid #ccc; padding: 5px;">  <b>Note:</b> This permission is checked and disabled by default since it is available to all users.         </div> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p style="text-align: center;"><b>VIEW MY IN PROGRESS ACTIVITY</b></p> <ul style="list-style-type: none"> <li>▪ All users can view their own activity.</li> </ul> </div> <li>• <b>Manage my In progress activity</b></li> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>MANAGE MY IN PROGRESS ACTIVITY</b></p> <ul style="list-style-type: none"> <li>▪ All users can pause, resume, cancel their own activity and will be able to move their finished activities to history</li> </ul> </div> <li>• <b>View everyone's In progress activity</b></li> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>VIEW EVERYONE'S IN PROGRESS ACTIVITY</b></p> <ul style="list-style-type: none"> <li>▪ This allows the user to monitor those ongoing automations where the user has either run or schedule access on the respective TaskBot.</li> </ul> </div> <li>• <b>Manage everyone's In progress activity</b></li> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p style="text-align: center;"><b>MANAGE EVERYONE'S IN PROGRESS ACTIVITY</b></p> <ul style="list-style-type: none"> <li>▪ This allows the user to monitor and manage (pause, resume, cancel) those ongoing automations where the user has either run or schedule access on the respective TaskBot. Users can also move the finished automations to history.</li> </ul> </div> <li>• <b>View my scheduled bots</b></li> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  <b>Note:</b> <ul style="list-style-type: none"> <li>▪ Schedule my bots to run</li> </ul> </div> </ul>

	<p>SCHEDULE MY BOTS TO RUN</p> <ul style="list-style-type: none"> <li>▪ This requires the ability to view and manage Bot runners</li> <li>▪ Therefore, if you select this feature, the following features will automatically be selected</li> <li>▪ View and manage my Bot runners and Bot creators</li> </ul> <p>• <b>Edit my scheduled activity</b></p> <p>EDIT MY SCHEDULED ACTIVITY</p> <ul style="list-style-type: none"> <li>▪ Users can edit their scheduled bots, even if they were scheduled by someone else.</li> </ul> <p>• <b>Delete my scheduled activity</b></p> <p>DELETE MY SCHEDULED ACTIVITY</p> <ul style="list-style-type: none"> <li>▪ Users can delete their scheduled bots, even if they were scheduled by someone else.</li> </ul> <p>• <b>View and manage ALL scheduled activity from my Folders</b></p> <p>VIEW AND MANAGE ALL SCHEDULED ACTIVITY FROM MY FOLDERS</p> <ul style="list-style-type: none"> <li>▪ Users can view, edit and delete all the schedules on the bot Folders which the user has access to. This includes the schedules that the user has created and also created by others.</li> </ul> <p>• <b>View and manage ALL scheduled activity</b></p> <p>VIEW AND MANAGE ALL SCHEDULED ACTIVITY</p> <ul style="list-style-type: none"> <li>▪ Users can view, edit and delete all the schedules in the system. This includes the schedules that the user has created and also created by others.</li> </ul>
Bots	<p>• <b>View my bots</b></p> <p>VIEW MY BOTS</p> <ul style="list-style-type: none"> <li>▪ This allows users to view bots that you will choose on the next page of the wizard</li> </ul> <p>• <b>Run my bots</b></p>

	<p>RUN MY BOTS</p> <ul style="list-style-type: none"><li>▪ This requires the ability to view and manage Bot runners</li><li>▪ Therefore, if you select this feature, the following features will automatically be selected<ul style="list-style-type: none"><li>▪ View and manage my Bot runners and Bot creators</li></ul></li></ul>	
	<ul style="list-style-type: none"><li>• <b>Export bots</b></li></ul>	
	<p>EXPORT BOTS</p> <ul style="list-style-type: none"><li>▪ This allows user to export bots and their dependencies from Control Room. User can export only those bots and dependencies on which user has download permission.</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Import bots</b></li></ul>	
	<p>IMPORT BOTS</p>	
	<ul style="list-style-type: none"><li>▪ This allows user to import bots and their dependencies into Control Room. User can import only those bots and dependencies on which user has upload permission.</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Create Folders</b></li></ul>	
	<p>CREATE FOLDERS</p>	
	<ul style="list-style-type: none"><li>▪ This allows user to create folders within the folders that they have access to</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Rename Folders</b></li></ul>	
	<p>RENAME FOLDERS</p>	
	<ul style="list-style-type: none"><li>▪ This allows user to rename folders within the folders that they have access to. Note that only empty folders can be renamed</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Manage my credentials and lockers</b></li></ul>	
	<p> <b>Note:</b> This permission is checked and disabled by default since it is available to all users.</p>	

	<p><b>MANAGE MY CREDENTIALS AND LOCKERS</b></p> <ul style="list-style-type: none"> <li>▪ By default, all users see the Credentials tab and they can manage their own credentials</li> <li>▪ In addition, they can interact with other's lockers if they are given permission to do so</li> </ul>
	<ul style="list-style-type: none"> <li>• <b>Manage my lockers</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>MANAGE MY LOCKERS</b></p> <ul style="list-style-type: none"> <li>▪ This feature will allow the user to create and manage their own lockers</li> </ul> </div>
	<ul style="list-style-type: none"> <li>• <b>Administer all lockers</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> <b>Note:</b> This permission is available only for Locker Admin role and cannot be granted to any other roles.</p> </div>
Devices	<ul style="list-style-type: none"> <li>• <b>Create Standard Attributes for a Credential</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> <b>Note:</b> This permission is available only for Locker Admin role and cannot be granted to any other roles.</p> </div> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p><b>CREATE STANDARD ATTRIBUTES FOR A CREDENTIAL</b></p> <ul style="list-style-type: none"> <li>▪ Ability for the user to create standard, shared attributes for a credential, in addition to user-provided attributes</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>View and manage my Bot runners, and device pools</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> <b>Note:</b> This permission is checked and enabled by default since it is available to all users.</p> </div>

	<p><b>VIEW AND MANAGE MY BOT RUNNERS, BOT CREATORS AND DEVICE POOLS</b></p> <ul style="list-style-type: none"> <li>▪ This feature is required if the user will need to run bots or schedule bots</li> </ul> <p><b>Create device pools</b></p> <p><b>CREATE DEVICE POOLS</b></p> <ul style="list-style-type: none"> <li>▪ This feature will allow the user to create and manage their own pools</li> </ul> <p><b>Administer all device pools</b></p> <p> <b>Note:</b> This permission is available only for Locker Admin role and cannot be granted to any other roles.</p> <p><b>ADMINISTER ALL DEVICE POOLS</b></p> <ul style="list-style-type: none"> <li>▪ This feature will allow the user to manage all pools in the system.</li> </ul> <p><b>View and manage BotFarm</b></p> <p><b>VIEW AND MANAGE BOTFARM</b></p> <ul style="list-style-type: none"> <li>▪ Only users with the system-created Admin role can view and manage BotFarm functionality</li> </ul>
Workload	<p><b>View and manage my queues</b></p> <p> <b>Note:</b> This permission is checked and disabled by default since it is available to all users.</p> <p><b>VIEW AND MANAGE MY QUEUES</b></p> <ul style="list-style-type: none"> <li>▪ This feature will allow the user to create and manage queues</li> </ul> <p><b>Create queue</b></p> <p><b>CREATE QUEUES</b></p> <ul style="list-style-type: none"> <li>▪ This feature will allow the user to create and manage their own queues</li> </ul> <p><b>Administer all queues</b></p>

	<p><b>ADMINISTER ALL QUEUES</b></p> <ul style="list-style-type: none"> <li>This feature will allow the user to manage all queues in the system.</li> </ul>
	<ul style="list-style-type: none"> <li><b>SLA Calculator</b></li> </ul> <p><b>SLA CALCULATOR</b></p> <ul style="list-style-type: none"> <li>This feature will allow the user to calculate SLA.</li> </ul>
Audit Log	<ul style="list-style-type: none"> <li><b>View everyone's audit log actions</b></li> </ul> <p><b>VIEW EVERYONE'S AUDIT LOG ACTIONS</b></p> <ul style="list-style-type: none"> <li>This feature allows the user to view everyone's actions in the Audit Log, not just their own</li> </ul> <ul style="list-style-type: none"> <li><b>Archive audit log actions</b></li> </ul> <p>This allows the user to archive selected audit log records. Archived audit log will be removed from Audit Log table and stored separately.</p>
Administration	<ul style="list-style-type: none"> <li><b>View and manage settings</b></li> </ul> <p> <b>Note:</b> This permission is available only for Control Room Admin role and cannot be granted to any other roles</p> <p><b>VIEW AND MANAGE SETTINGS</b></p> <ul style="list-style-type: none"> <li>Only users with the system-created Admin role can view and manage Settings</li> </ul> <ul style="list-style-type: none"> <li><b>View users</b></li> </ul> <p><b>VIEW USERS</b></p> <ul style="list-style-type: none"> <li>This will allow the user to View all users in the system, although they will not be able to edit them</li> </ul> <ul style="list-style-type: none"> <li><b>Create users</b></li> <li><b>Edit users</b></li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Edit users</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>EDIT USERS</b> <ul style="list-style-type: none"> <li>▪ This will allow the user to Edit all users in the system, even if they did not create them</li> </ul> </div>
	<ul style="list-style-type: none"> <li>• <b>Delete users</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>DELETE USERS</b> <ul style="list-style-type: none"> <li>▪ This will allow the user to Delete any user in the system, even if they did not create them</li> </ul> </div>
API	<ul style="list-style-type: none"> <li>• <b>View and manage roles</b></li> <li>• <b>View and manage Migration</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>VIEW AND MANAGE MIGRATION</b> <ul style="list-style-type: none"> <li>▪ Only users with the system-created Admin role can view and manage migration</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>View licenses</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>VIEW LICENSES</b> <ul style="list-style-type: none"> <li>▪ This will allow the user to view the license details</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>Manage user's device licenses</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>MANAGE USER'S DEVICE LICENSES</b> <ul style="list-style-type: none"> <li>▪ This allows to assign device licenses to users.</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>Install License</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>INSTALL LICENSES</b> <ul style="list-style-type: none"> <li>▪ This allows the user to install Automation Anywhere Enterprise licenses from Control Room</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>Bot Auto-Login Credentials API</b></li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>BOT AUTO-LOGIN CREDENTIALS API</b> <ul style="list-style-type: none"> <li>▪ This allows the user to set the Auto-Login Credentials of other users via API.</li> </ul> </div> <ul style="list-style-type: none"> <li>• <b>Bot Insight Data API</b></li> </ul>

	<p><b>BOT INSIGHT DATA API</b></p> <ul style="list-style-type: none"> <li>This feature will allow access to Bot Insight RESTful APIs to the data logged by the Control Room, and by a task during 'Production' runs.</li> </ul>
IQ Bot	<ul style="list-style-type: none"> <li><b>Validator</b></li> </ul> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <p><b>VALIDATOR</b></p> <ul style="list-style-type: none"> <li>Permissions to access IQ Bot Validator screen for reviewing documents with exceptions. Limited access to Control Room features.</li> </ul> </div> <ul style="list-style-type: none"> <li><b>Console</b></li> </ul> <div style="border: 1px solid #ccc; padding: 10px;"> <p><b>CONSOLE</b></p> <ul style="list-style-type: none"> <li>Permissions to manage Learning Instances and Bots on the IQ Bot Platform along with Dashboard access. Limited access to Control Room features.</li> </ul> </div>

- System-created roles:** These roles are pre-configured during Control Room installation

 **Note:** System-created roles cannot be deleted or edited, except assigning or removing users from the role.

Default Roles	Description
AAE_Admin	This role allows access to all features, including creating other Admin users and access to all folders and files. The only role that can access Control Room settings.
AAE_Locker Admin	This role allows to view all credentials and all lockers. A Locker Admin can change the owner of a credential that they do not own. For lockers they do not own, they can delete the locker, edit permissions, and remove credentials.
	 <b>Note:</b> This permission is not applicable to Control Room Admin role.
AAE_Basic	This role provides permissions to upload and download Task Bots in the My Tasks folder. Limited access to other features.
AAE_Pool Admin	This role allows user to view and manage all device pools.
	 <b>Note:</b> Users with AAE_Pool Admin do not have permission to see any bots and supporting files.

AAE_Queue Admin	This role allows user to view and manage all queues.
AAE_Bot Insight Admin	This role provides permission to view and manage data in Bot Insight. Limited access to Control Room features. (If Bot Insight license is installed). It allows a user to access BotInsight RESTful APIs to get access to the data logged by the Control Room, and by a task during 'Production' run.
AAE_Bot Insight Consumer	This role allows permissions to view data in Bot Insight. Limited access to Control Room features. (If Bot Insight license is installed)
AAE_Bot Insight Expert	This role provides permission to manage data in Bot Insight. Limited access to Control Room features. (If Bot Insight license is installed)
AAE_BotFarm Admin	This role provides BotFarm admin privileges to the user.
AAE_BotFarm Agent	This role provides view and manage privileges to the user.
AAE_IQ Bot Validator	This role allows user to install Automation Anywhere Enterprise licenses from Control Room
AAE_IQ Bot Services	This role grants a user the permissions to access IQ Bot Validator screen for reviewing documents with exceptions. Limited access to Control Room features.

5. In the **Bots tab**, you can check permissions for the following:

 **Note:** Bots tab is visible only if '**View my bots**' permission is selected in Features tab.

- **TaskBots and other supporting files** - You can check the following permissions:
- **Select all** - This permission includes upload, download, execute, delete, Run + Schedule actions.
- **Run + Schedule** - This permission includes run and schedule permission for TaskBots i.e. allows user to run and/or schedule Bots. This permission is enabled only if user has either **Run my bots** or **Schedule my bots to run** permission.
  - This permission is termed as **Run** when the user has **Run my bots** feature permission. You can explicitly select Run permission on a specific folder to allow the user to run all bots that belong to this folder.
  - Similarly, this permission is termed as **Schedule** when the user has **Schedule my bots to run** feature permission. You can explicitly select Run permission on a specific folder to allow the user to schedule all bots that belong to this folder.
  - It is termed as **Run + Schedule** when user has both feature permissions. This allows the user to run and schedule bots that belong to this specific folder on which the permission is selected.
- **Upload:** This permission allows uploading TaskBot files/ folder to Control Room from Client.
- **Download:** This permission allows downloading TaskBot from Control Room.
- **Delete:** This permission allows removing files and its dependencies from Control Room.

[Create role](#)

[Cancel](#) [Create role](#)

FEATURES

Name  
+ IR

Features  
• DASHBOARDS  
• ACTIVITY  
• BOTS  
• DEVICES  
• WORKLOAD

Which bots and supporting files?

Users with this role will have access to the Bots tab. Please select the permissions they will have. Selecting a folder means that the role will automatically have permission to any bots or files that are added to it in the future.

This step is optional. You can add this information later.

TASK BOTS AND OTHER SUPPORTING FILES  META BOTS

The Client UI permissions allow the user to, from the Client UI, upload and download bots.

Folder (6)	Select All	Run + Schedule	Upload	Download	Delete
My Docs	<input type="checkbox"/>				
My Exes	<input type="checkbox"/>				
My Reports	<input type="checkbox"/>				
My Scripts	<input type="checkbox"/>				
My Tasks	<input type="checkbox"/>				
My Workflow	<input type="checkbox"/>				

[< Back](#) [Next >](#)

- **MetaBots**- MetaBot supports role based access control (RBAC) on individual MetaBot files, and folders containing MetaBots. When a MetaBot is uploaded to Control Room, it inherits permission of the immediate parent folder. To change or modify permission on individual MetaBot file, you must perform the action manually.

 **Note:** If the applied permissions are different on a MetaBot file and its folder, precedence is given to permission applied at the MetaBot file level.

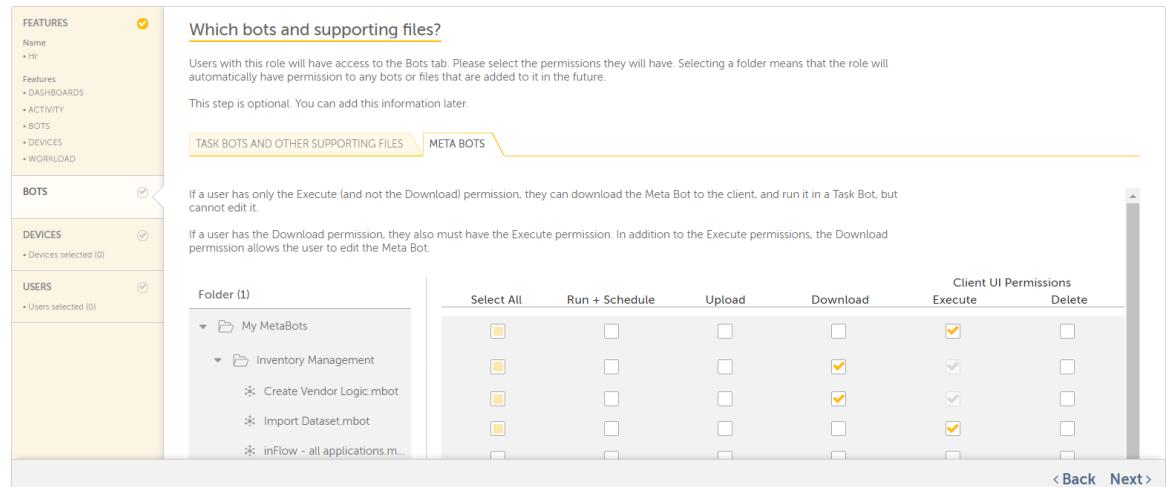
You can check the following permissions:

- **Select all** - This permission includes upload, download, execute, delete, run + schedule actions.
- **Run + Schedule** - This permission includes run and schedule permission for MetaBots i.e. allows user to run and/or schedule Bots. This permission is enabled only if user has either **Run my bots** or **Schedule my bots to run** permission.
  - This permission is termed as **Run** when the user has **Run my bots** feature permission. You can explicitly select Run permission on a specific folder to allow the user to run all bots that belong to this folder.
  - Similarly, this permission is termed as **Schedule** when the user has **Schedule my bots to run** feature permission. You can explicitly select Run permission on a specific folder to allow the user to schedule all bots that belong to this folder.
  - It is termed as **Run + Schedule** when user has both feature permissions. This allows the user to run and schedule bots that belong to this specific folder on which the permission is selected.
- **Upload** - This permission includes uploading MetaBot files/ folder to Control Room.
- **Download** - This permission includes downloading MetaBot files/ folder from Control Room to Client. **Please note**, if download is selected then execute is auto-selected.
- **Execute** - This permission includes using MetaBot in a task.
- **Delete** - This permission includes removing file/ folder from Control Room.

[Create role](#)

[Cancel](#)

[Create role](#)



The screenshot shows the 'Create role' interface for Automation Anywhere. On the left, there's a sidebar with sections for FEATURES (Name, HR), BOTS, DEVICES (Devices selected (0)), and USERS (Users selected (0)). The BOTS section is expanded, showing a list of MetaBots under 'My MetaBots'. The main area is titled 'Which bots and supporting files?' and contains a note about selecting permissions for a folder. Below this is a table for 'Client UI Permissions' with columns: Select All, Run + Schedule, Upload, Download, Execute, and Delete. The table rows correspond to the MetaBots listed in the sidebar. The 'Execute' column has checked boxes for all rows, while other columns have mixed or empty status. Navigation buttons '< Back' and 'Next >' are at the bottom right.

	Select All	Run + Schedule	Upload	Download	Execute	Delete
My MetaBots	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Inventory Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Create Vendor Logic.mbot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Import Dataset.mbot	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
inFlow - all applications.m...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Note:** The **Run + Schedule** permission replaces the earlier behaviour of 11.0 where user was allowed to run or schedule a bot when the user had download permission for a folder.

3. In **Devices tab**, you can select the devices your role will have access to. A non-admin user will have access to Bot runners that are tagged to user's role.

## Create role

[Cancel](#) [Create role](#)

**FEATURES**

Name: baba

Features:

- DASHBOARDS
- ACTIVITY
- BOTS
- DEVICES
- WORKLOAD

BOTS

DEVICES

USERS

**Which devices?**

Please select devices this role will have access to on the Devices tab.

This step is optional. You can add this information later.

Status

Available devices (1 of 1)				Selected (0)		
<input type="checkbox"/>	STATUS	NAME	USERNAME	DEVICE POOL	<input type="button" value="→"/>	<input type="button" value="←"/>
<input type="checkbox"/>	Disconnected	INDUSTRIALMPL-BRDCOM	run	--	<input type="button" value="→"/>	<input type="button" value="←"/>

[◀ Back](#) [Next ▶](#)

4. In **Users tab**, you can assign your role to existing users, select users from the list of available users and click on . After you complete selecting users for your role, click on **Create role**.



**Tip:** You can select multiple users for your role in users tab. This allows more than one user to be assigned the same role at a time, which reduces the effort unlike the Users landing page.

## Create role

[Cancel](#) [Create role](#)

**FEATURES**

Name: HR

Features:

- DASHBOARDS
- ACTIVITY
- BOTS
- DEVICES
- WORKLOAD

BOTS

DEVICES

USERS

**Which users?**

This step is optional. You can add this information later.

Username

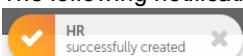
Available users (26 of 26)				Selected (0)			
<input type="checkbox"/>	USERNAME	FIRST NAME	LAST NAME	<input type="checkbox"/>	USERNAME	FIRST NAME	EMAIL
<input type="checkbox"/>	admin	--		<input type="button" value="→"/>			
<input type="checkbox"/>	amy.chen	--		<input type="button" value="→"/>			
<input type="checkbox"/>	ellie.brown	--		<input type="button" value="→"/>			
<input type="checkbox"/>	tom.watson	--		<input type="button" value="→"/>			

[◀ Back](#)



**Note:** Users that are shown **disabled** cannot be selected if they have been deactivated by an Admin user. Also, your own user is reflected as disabled in the users' list and it cannot be removed.

5. The following notification indicates that your role has been successfully created:



**Next...**

Create users in Control Room based on the roles and permissions assigned. [Learn More](#)

# View a role

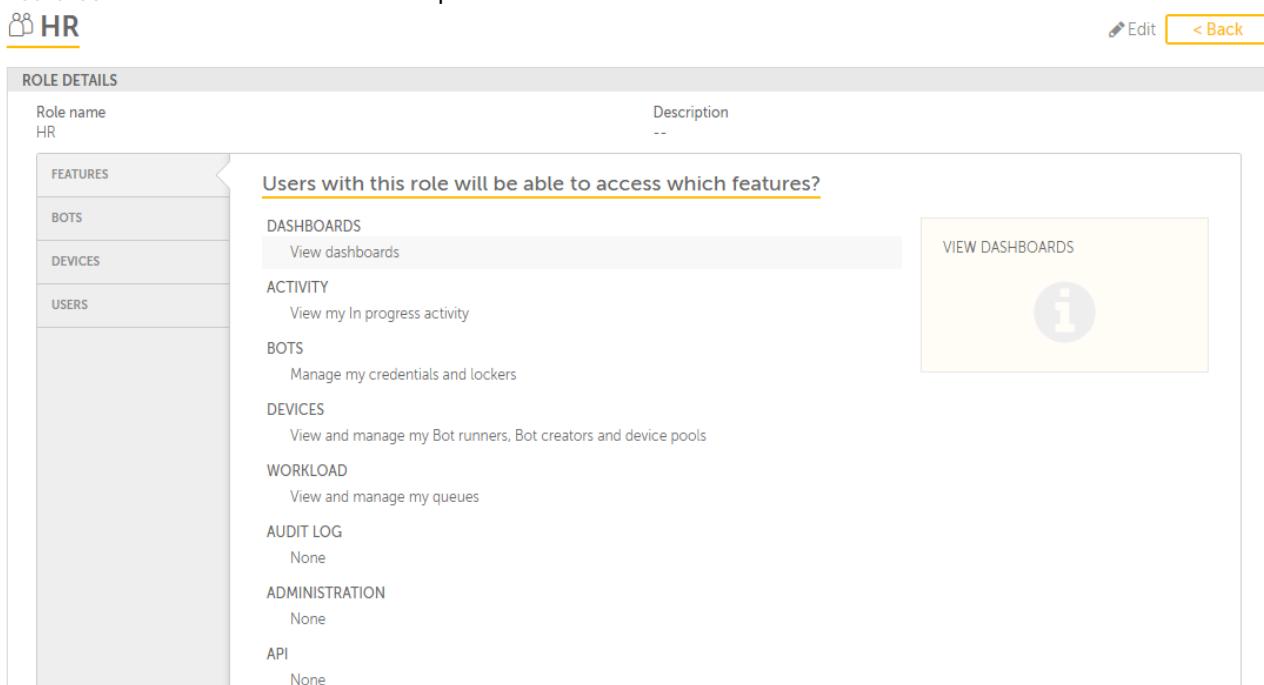
An admin user, or a user with permission to view and/or manage role can access **View role** page.

1. Go to Administration → Roles
2. In the roles page, choose the role that you wish to view. Go to the actions list and click **View Role**.

Administration > Roles	Type	Role Name	# of Users	Last Modified	Modified By	
	User-created	HR	0	15:44:44 IST 2018-01-08	admin	<a href="#">View role</a> <a href="#"></a> <a href="#"></a> <a href="#"></a>

3. The following page is displayed with information such as selected: **Features**, **Bots**, **Devices**, and **Users** for the role in read-only mode:

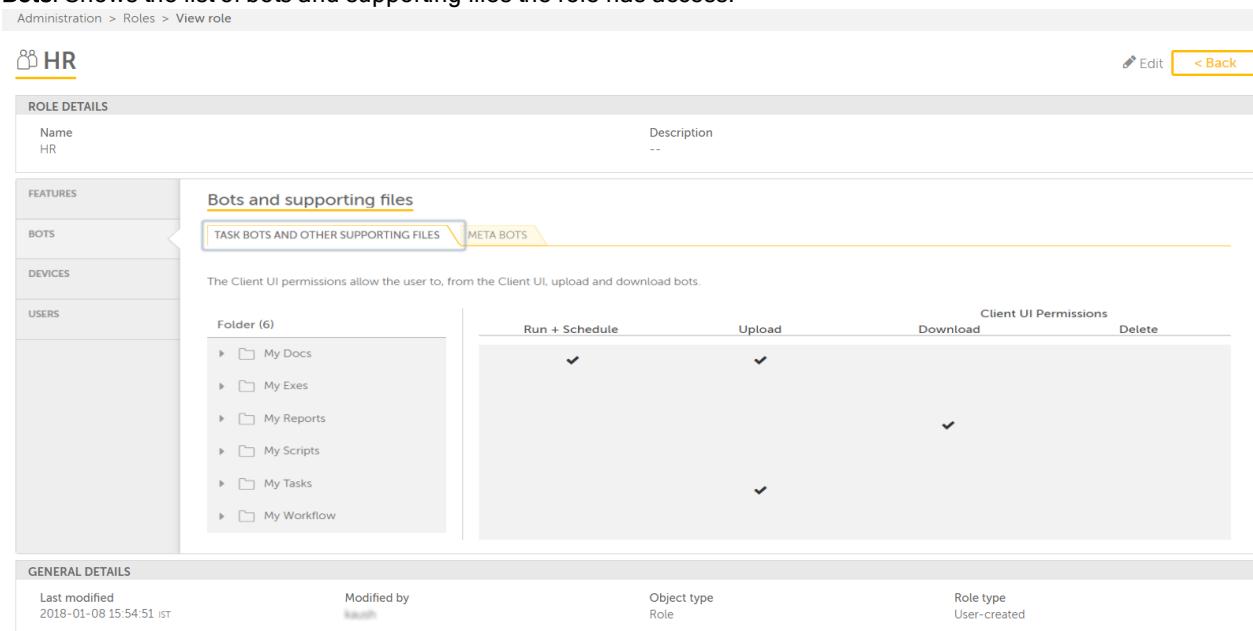
- **Features:** Shows the list of features and permissions the role has access.



**ROLE DETAILS**

Role name	HR	Description	--
FEATURES	<b>Users with this role will be able to access which features?</b> <ul style="list-style-type: none"> <li>DASHBOARDS           <ul style="list-style-type: none"> <li><a href="#">View dashboards</a></li> </ul> </li> <li>ACTIVITY           <ul style="list-style-type: none"> <li><a href="#">View my In progress activity</a></li> </ul> </li> <li>BOTS           <ul style="list-style-type: none"> <li><a href="#">Manage my credentials and lockers</a></li> </ul> </li> <li>DEVICES           <ul style="list-style-type: none"> <li><a href="#">View and manage my Bot runners, Bot creators and device pools</a></li> </ul> </li> <li>WORKLOAD           <ul style="list-style-type: none"> <li><a href="#">View and manage my queues</a></li> </ul> </li> <li>AUDIT LOG           <ul style="list-style-type: none"> <li><a href="#">None</a></li> </ul> </li> <li>ADMINISTRATION           <ul style="list-style-type: none"> <li><a href="#">None</a></li> </ul> </li> <li>API           <ul style="list-style-type: none"> <li><a href="#">None</a></li> </ul> </li> </ul>		

- **Bots:** Shows the list of bots and supporting files the role has access.



**ROLE DETAILS**

Name	HR	Description	--															
FEATURES	<b>Bots and supporting files</b> <ul style="list-style-type: none"> <li>TASK BOTS AND OTHER SUPPORTING FILES <a href="#">META BOTS</a></li> </ul> <p>The Client UI permissions allow the user to, from the Client UI, upload and download bots.</p> <table border="1"> <thead> <tr> <th>Folder (6)</th> <th>Run + Schedule</th> <th>Upload</th> <th>Client UI Permissions</th> <th>Delete</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>My Docs</li> <li>My Exes</li> <li>My Reports</li> <li>My Scripts</li> <li>My Tasks</li> <li>My Workflow</li> </ul> </td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Folder (6)	Run + Schedule	Upload	Client UI Permissions	Delete	<ul style="list-style-type: none"> <li>My Docs</li> <li>My Exes</li> <li>My Reports</li> <li>My Scripts</li> <li>My Tasks</li> <li>My Workflow</li> </ul>	✓	✓	✓						
Folder (6)	Run + Schedule	Upload	Client UI Permissions	Delete														
<ul style="list-style-type: none"> <li>My Docs</li> <li>My Exes</li> <li>My Reports</li> <li>My Scripts</li> <li>My Tasks</li> <li>My Workflow</li> </ul>	✓	✓	✓															
GENERAL DETAILS	Last modified 2018-01-08 15:54:51 IST	Modified by <a href="#">kaushik</a>	Object type Role	Role type User-created														

- **Devices:** Shows the list of devices the role has access.

 **HR** [Edit](#) [< Back](#)

ROLE DETAILS	
Name	HR
Description	
--	

FEATURES		Devices				
BOTS	Status	Choose status				
DEVICES	Devices (1 of 1)					
USERS	STATUS	ID	NAME	USERNAME	DEVICE POOL	TYPE

GENERAL DETAILS					
Last modified	2018-01-08 15:54:51 IST	Modified by	Kaushik	Object type	Role
			Role type User-created		

- **Users:** Shows the list of users having access to the respective role.

 **HR** [Edit](#) [< Back](#)

ROLE DETAILS	
Name	HR
Description	
--	

FEATURES		Users				
BOTS	Username	Search username 				
DEVICES	Users (3 of 3)					
USERS	USERNAME	ID	FIRST NAME	LAST NAME	EMAIL	

GENERAL DETAILS					
Last modified	2018-01-08 15:54:51 IST	Modified by	Kaushik	Object type	Role
			Role type User-created		

**Note:** A user with **View and Manage Role** permission can view all the roles. However, the user cannot view details of Admin and Locker Admin roles. When the user clicks , the view page is launched with an error:

Administration > Roles > View role

## **View role**



**You do not have permission to edit the Admin role.**

Because you are not a member of the Admin role, you cannot edit it. To make changes to the system-created Admin role, please contact your system administrator.

## Edit a role

When you click the **Edit** icon  for a role in the **Roles** table of the **All roles** page, the Edit role page is opened. Only an admin user, or a user with permission to edit role can access Edit role option. User has access to modify information, such as feature permissions, bots, devices and users

 **Note:** If a role/ permission for a user is updated, the user must re-login or refresh the browser for the changes to be immediately reflected on Control Room UI.

1. Go to Administration → Roles
2. In the roles list, choose the role that you wish to edit. Then mouse over to the Actions list and click **Edit role**.

### All roles

[Create role...](#) [Create user...](#)

Role name	Search role name				
Roles (7 of 7)					
TYPE	ROLE NAME	# OF USERS	LAST MODIFIED	MODIFIED BY	
<input type="checkbox"/>  System-created	AAE_Admin	2	18:54:59 IST 2017-10-12	System	
<input type="checkbox"/>  System-created	AAE_Basic	3	18:54:59 IST 2017-10-12	System	
<input type="checkbox"/>  System-created	AAE_Locker Admin	1	18:54:59 IST 2017-10-12	System	
<input type="checkbox"/>  System-created	AAE_Pool Admin	0	18:54:59 IST 2017-10-12	System	
<input type="checkbox"/>  System-created	AAE_Queue Admin	0	18:54:59 IST 2017-10-12	System	
<input type="checkbox"/>  User-created	HR	2	17:27:33 IST 2017-10-27	kaush	<div style="border: 1px solid #ccc; padding: 2px; margin-right: 10px;"></div> <div style="border: 1px solid #ccc; padding: 2px; border-radius: 50%;"></div>

3. In the Edit role page, user can make changes : [Features](#), [Bots](#), [Devices](#), and [Users](#)

- **Features:** Allows you to add or revoke role permissions.

### Edit role

[Cancel](#)
[Save changes](#)

ROLE DETAILS

Name	<input type="text" value="HR"/> Max characters = 255
Description (optional)	

FEATURES

FEATURES

**Users with this role will be able to access which features?**

View dashboards

View my In progress activity

Manage my In progress activity

View everyone's In progress activity

Manage everyone's In progress activity

View my scheduled bots

Schedule my bots to run

Edit my scheduled activity

Delete my scheduled activity

View and manage ALL scheduled activity from my Folders

**VIEW MY SCHEDULED BOTS**

- Users will see their bots, here, if they are scheduled to run in the future, even if they were scheduled by someone else.

- Bots:** Allows you to add or revoke access to folders on the Bots tab. Also, you can select the actions a user can perform on files within the folder.

### Edit role

[Cancel](#) [Save changes](#)

 Role name  
 HR

Role description (optional)

Max characters = 255

FEATURES	Which bots and supporting files?																																							
BOTS	Please select folders this role will have access to on the Bots tab. Also, select the actions they will be able to take on objects within the folder. Selecting a folder means that the role will automatically inherit permission to any objects that are added to it in the future.  This step is optional. You can add this information later.																																							
DEVICES																																								
USERS																																								
	<b>TASK BOTS AND OTHER SUPPORTING FILES</b> <b>META BOTS</b> <table border="1"> <thead> <tr> <th>Folders (6)</th> <th>Select All</th> <th>Upload </th> <th>Download </th> <th>Delete </th> </tr> </thead> <tbody> <tr> <td>▶ My Docs</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>▶ My Exes</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>▶ My Reports</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>▶ My Scripts</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>▶ My Tasks</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>▶ My Workflow</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>					Folders (6)	Select All	Upload	Download	Delete	▶ My Docs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	▶ My Exes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▶ My Reports	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	▶ My Scripts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	▶ My Tasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	▶ My Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Folders (6)	Select All	Upload	Download	Delete																																				
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▶ My Workflow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																																				

**Devices:** Allows you to add or remove devices a role has access to on the Devices tab.

**Note:** If a Bot is scheduled on a device, the device is shown disabled in the "selected" area.

### Edit role

[Cancel](#) [Save changes](#)

 Role name  
 HR

Role description (optional)

Max characters = 255

FEATURES	Which devices?																		
BOTS	Please select devices this role will have access to on the Devices tab.  This step is optional. You can add this information later.																		
DEVICES	<div style="display: flex; align-items: center;"> <span>Status</span> <span>▼</span> <span>Choose status</span> </div> <table border="1"> <thead> <tr> <th>Available devices (1 of 2)</th> <th>Selected (1)</th> </tr> </thead> <tbody> <tr> <td> <table border="1"> <thead> <tr> <th>STATUS</th> <th>NAME</th> <th>USERNAME</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Connected</td> <td>PRODUCTLT07AASPL-...</td> <td>tom.watson</td> </tr> </tbody> </table> </td> <td> <table border="1"> <thead> <tr> <th>STATUS</th> <th>NAME</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Connected</td> <td>PRODUCTLT07AASPL-...</td> </tr> </tbody> </table> </td> </tr> </tbody> </table>					Available devices (1 of 2)	Selected (1)	<table border="1"> <thead> <tr> <th>STATUS</th> <th>NAME</th> <th>USERNAME</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Connected</td> <td>PRODUCTLT07AASPL-...</td> <td>tom.watson</td> </tr> </tbody> </table>	STATUS	NAME	USERNAME	<input type="checkbox"/> Connected	PRODUCTLT07AASPL-...	tom.watson	<table border="1"> <thead> <tr> <th>STATUS</th> <th>NAME</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> Connected</td> <td>PRODUCTLT07AASPL-...</td> </tr> </tbody> </table>	STATUS	NAME	<input type="checkbox"/> Connected	PRODUCTLT07AASPL-...
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STATUS	NAME	USERNAME																	
<input type="checkbox"/> Connected	PRODUCTLT07AASPL-...	tom.watson																	
STATUS	NAME																		
<input type="checkbox"/> Connected	PRODUCTLT07AASPL-...																		
USERS																			
	<b>GENERAL DETAILS</b> <table border="1"> <tr> <td>Last modified 16.03.01 IST 2018-02-16</td> <td>Modified by</td> <td>Object type Role</td> <td>Role type User-created</td> </tr> </table>					Last modified 16.03.01 IST 2018-02-16	Modified by	Object type Role	Role type User-created										
Last modified 16.03.01 IST 2018-02-16	Modified by	Object type Role	Role type User-created																

- **Users:** Allows you to add or remove users who have permission to access the role.

### Edit role

[Cancel](#) [Save changes](#)

 Role name  
 HR

Role description (optional)

Max characters = 255

**FEATURES**

**BOTS**

**DEVICES**

**USERS**

**Which users?**

This step is optional. You can add this information later.

Username	Search username
admin	--
AdminLockerAutomationUser	Automation
asd	asd
BotCreator	--
CreateUserDropDownAutomationUser2	CreateUser2
DeleteUsersPermissionAutoUser	Automation

**Selected (3)**

USERNAME	FIRST NAME	LAST NAME	EMAIL
amy.chen	--	--	amy.chen@autom...
ellie.brown	--	--	ellie.brown@autor...
tom.watson	--	--	tom.watson@auto...

4. Once the changes are done, click **Save changes**. Your role is successfully edited.



**Note:** A user with **View and Manage Role** permission can view all the roles. However, the user cannot edit details of **Admin** and **Locker Admin** roles. When the user clicks , the following message is displayed:

**You do not have permission to edit the Admin role.**

Because you are not a member of the Admin role, you cannot edit it.  
 To make changes to the system-created Admin role, please contact your system administrator.

[Close](#)

## Copy a role

An admin user, has permission to select **Copy** role option in Control Room. This ensures that user can create similar roles in the system without having to perform the action manually.

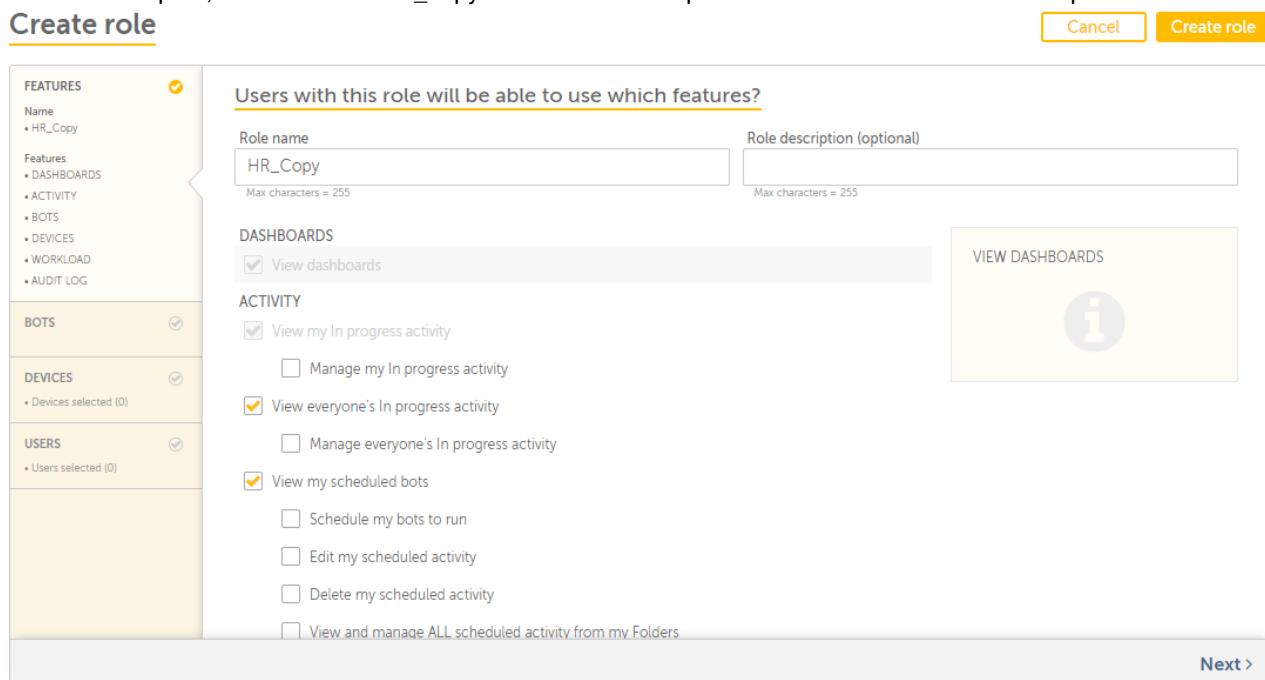
To copy a role, follow the steps mentioned below:

1. Go to Administration → Roles
2. In the roles list, choose the role that you wish to copy. Mouse over to the actions list and click **Copy role**.



TYPE	ROLE NAME	# OF USERS	LAST MODIFIED	MODIFIED BY
User-created	HR	1	15:14:11 IST 2018-01-22	admin

3. A new role page is launched, wherein the role is created with "copy" appended to the Role Name. **Example:** In the previous image, role "HR" is copied, so a new role "HR\_copy" is created. All the permissions that were selected are pre-filled in the new role.



**Create role**

**FEATURES**

- Name: HR\_Copy
- Features:
  - DASHBOARDS
  - ACTIVITY
  - BOTS
  - DEVICES
  - WORKLOAD
  - AUDIT LOG

**Users with this role will be able to use which features?**

Role name: **HR\_Copy**      Role description (optional)

DASHBOARDS

View dashboards

ACTIVITY

View my In progress activity

Manage my In progress activity

View everyone's In progress activity

Manage everyone's In progress activity

View my scheduled bots

Schedule my bots to run

Edit my scheduled activity

Delete my scheduled activity

View and manage ALL scheduled activity from my Folders

**Next >**

4. Click Save changes. The following success notification is displayed:



## Delete a role

An admin user, or a user with permission to delete role can select **Delete** option to remove redundant roles from the system.

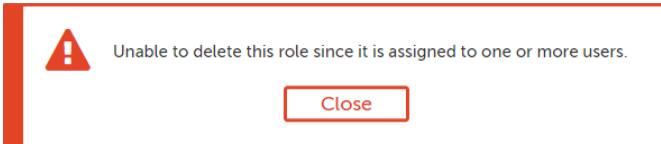
To delete a role, follow the steps mentioned below:

1. Go to Administration → Roles
2. In the roles list, choose the role that you wish to delete. Then mouse over to the actions list and click **Delete role**

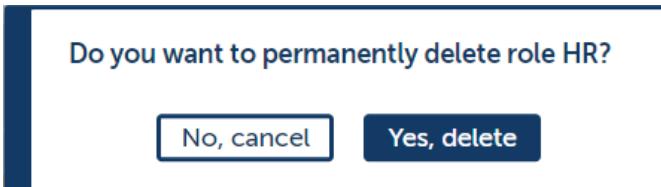
 **Note:** System-created roles cannot be deleted.

Administration > Roles	Type	Role Name	# of Users	Last Modified	Modified By	Action
	<input type="checkbox"/> User-created	HR	2	17:12:50 IST 2018-01-08	admin	

- If users are assigned to your role, then the following message is displayed:



- If users are not assigned to your role, then the following message is displayed. Click **Yes, delete** to delete your role and **No, cancel** to cancel deletion:



- You can also delete multiple roles . Check the roles that you wish to delete and click on **Delete Checked Items** icon

All roles					
Role name ▾		Search role name	Actions		
Roles (29 of 29) 2 checked					
Type	Role Name	# of Users	Last Modified	Modified By	Action
<input checked="" type="checkbox"/> User-created	Finance	0	17:21:32 IST 2018-01-08	admin	
<input checked="" type="checkbox"/> User-created	HR	0	17:22:59 IST 2018-01-08	admin	

- A success notification is displayed as follows:

- In case when **single role** is deleted:



- In case when **multiple roles** are deleted:



# Licenses- An Overview

Control Room License page provides detailed information about the current license that is installed. It also gives the Admin user privilege to monitor license details and usage statistics. Therefore, an Admin user can view these details any time and avail information about the number of products purchased, the number of device licenses purchased, and number of licenses that are exactly in use. A first time user has access to trial license for a period of 30 days, after which a user can continue with an extended [trial license](#) or [install a new license](#).

## Benefits of purchasing a license

- Genuine license ensures reliable support system
- Enables user to utilize the product features for the license period they have purchased
- Helps gain access to latest updates, upgrades, security patches, hot fixes.

## Product licenses

Control Room integrates with other Automation Anywhere products such as BotFarm, Bot Insight and Cognitive Platform. The **product license details** shows the list of purchased products, along with license version and product license status as used, not used, or N/A.

 **Note:** If you have Bot Insight license, Operational Analytics is available by default with Control Room v11.0

### Product licenses

License type PURCHASE	Expires Sep 25, 2017	Last updated Sep 15, 2017	
Product types TYPE	VERSION	PURCHASED	USED
Control Room	11.0	Purchased	Used
Cognitive Platform	0	Purchased	Not used
BotFarm	0	Not purchased	N/A
Bot Insight	0	--	--
Business Analytics	--	Not purchased	N/A
API	--	Not purchased	N/A

Column	Value
Type	Product Name
Version	Latest version no. of the current installed product
Purchased	Product has been purchased or not purchased
Used	Product is in used, not used, or N/A status

## Bot user licenses

Bot user license detail shows the number of device licenses that have been purchased and are currently in use.

### Bot user licenses

Bot user types

TYPE	PURCHASED	USED
Bot creator (Development)	100	29
Bot runner (Run time with TaskBots)	100	3
IQ Bots	50	0
BotFarm (Run time)	00:00:00 hours	00:00:00 hours
Bot Insight	--	--
Business Analytics	0	0
API	0 rows	0 rows

**Bot creator (Development):** Users with privilege to automate Bot(s) in Client.

**Bot runner (Runtime):** Users with privilege to run Bot(s).

**BotFarm (Runtime) :** Bot user count of licenses is measured in number of hours used by all runtime clients within BotFarm to execute a Bot.

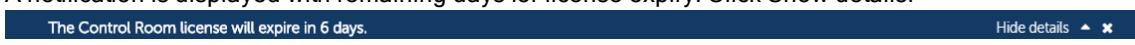
**BotInsight:** It shows the number of user count having Business Analytics role -Bot Insight Consumer or Expert. And API count is measured in number of rows that API fetches from Bot Insight database.

Column	Value
Type	Type of license
Purchased	No. of licenses purchased
Used	No. of licenses in use

## Trial license

Automation Anywhere Control Room ships trial License with an evaluation period of 30 days. This provides the user with an ability to assess the product and make an informed decision. Trial license offers 3 Bot Creators and 2 Bot Runners to begin with; also a user can contact System Administrator or Automation Anywhere Sales to purchase a new license or extend the existing trial license.

To purchase an extended license or to install a new license, follow the below mentioned steps:

1. Login to Control Room as an Admin and the Dashboard homepage is displayed.
2. A notification is displayed with remaining days for license expiry. Click Show details.  


The Control Room license will expire in 6 days. Hide details ▾ ×
3. A message appears with a link to [Install a new license](#) or to [contact System Administrator or Automation Anywhere Sales](#)

**The Control Room license will expire in 6 days.**

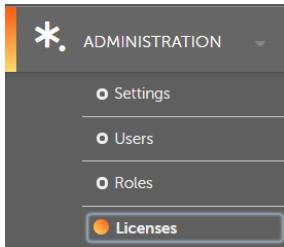
At 2017-09-18 23:59:59 IST, users will no longer be able to log on. [Install a new license](#) under Administration > Licenses.

If you do not have a license, please contact your system administrator or Automation Anywhere Sales.

To view Bot license and usage statistics, follow the below mentioned steps:

 **Note:** Product and Bot user license statistics is only visible to users with Admin role and users with License management permission,

1. Go to Administrations Tab → Click Licenses.



2. The License page shows Product and Bot User license statistics with details.

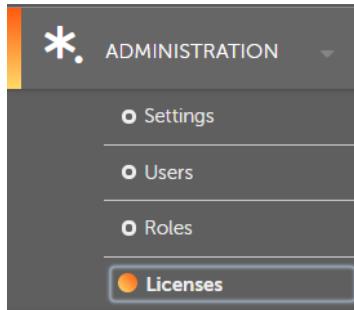
For detailed information, refer [Install a new license](#).

## Install a license

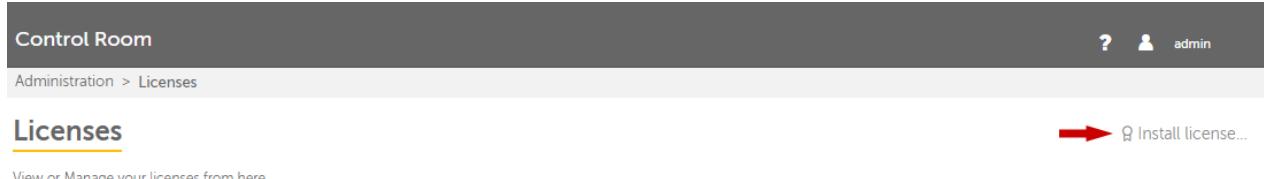
A Control Room Admin or a user with License management permission can install a license, and evaluate Control Room version 11.0. A trial license is shipped with validity of 30 days; on expiry of [Trial license](#) the user must contact System Administrator or Automation Anywhere Sales to purchase a new license.

To install a license, follow the steps mentioned below:

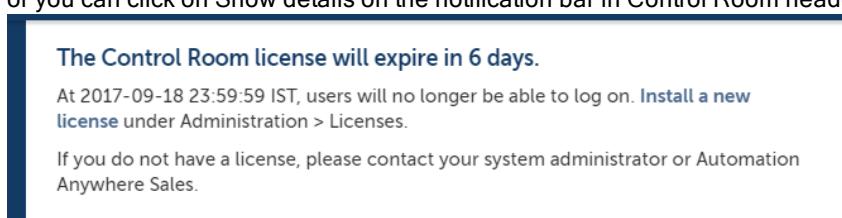
1. Go to Administration Tab → Click Licenses.



2. Click Install license button.



or you can click on Show details on the notification bar in Control Room header and then click Install a new license link.



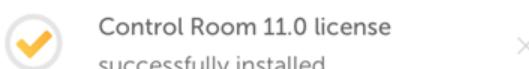
3. Click on browse to select a '.license' file from the list of licenses. Make sure you select a valid '.license' file.



4. Click Install license button.



5. The following message indicates that your license is successfully updated:



## Errors

- If a user has **invalid or an expired license** file, then the following error is displayed:

**Install license**

 **Unable to continue because the file you selected is either invalid or its license period has expired.**

To continue, please install a new Control Room license. If you do not have one, please contact your system administrator or Automation Anywhere Sales.

Select your license

- If user selects a **file with a different extension** other than ".license", then the following error is displayed:

**Install license**

Select your license

 **Unable to continue because the file you selected does not end with ".license". To continue, please select an Automation Anywhere license file which ends with ".license".**

- If user selects a file that is either **deleted or moved to another location**, then the following error is displayed:

**Install license**

 **The file you selected is no longer available**

This may be because it was moved or deleted. To continue, please select another license file.

Select your license

## License Expiry

You would be unable to access Control Room, if your current license has expired. You must install a new license or contact system administrator or Automation Anywhere Sales.

- The following message is displayed when your current license expires:

**Install license**

 **The Control Room license has expired**

To continue, please install a new license. If you do not have one, please contact your system administrator or Automation Anywhere Sales.

Select your license

# Migration - an overview

Use the **Migration** page to migrate data from a previous Control Room version 10.x to the current version - 11 LTS. You should be a Control Room administrator with **View and Manage Migration** permission to be able to use the migration tool - Migration wizard. The wizard can be launched anywhere in a browser from Control Room version 11 LTS.

You can use the tool to migrate data either on the basis of **Roles** or **Users** in phases depending on your business requirements. Dependent data such as licenses, credentials, bots, and schedules are also migrated automatically when you migrate roles or users.

## Prerequisites

To ascertain whether you can initiate migration of data, ensure the following prerequisites are met:

1. You should have
  - a. Access to Control Room v10.x\* repository path via a shared drive
  - b. Credentials to connect to Control Room v10.x\* SQL database
  - c. Master key to connect to Credential Vault of Control Room v10.x\*
  - d. Credentials to connect to Bot Insight SQL database (applicable only if using Bot Insight with Control Room v10.x\*)
  - e. URL of Bot Insight meta-data database
2. A new infrastructure (that is separate from 10.x\* environment) with Automation Anywhere Enterprise v11.1 already installed
3. It is recommended that you backup,
  - Control Room v10.x\* SQL database
  - Control Room v10.x\* shared repository
  - Control Room v10.x\* SVN database (if applicable)
  - Bot Insight SQL database (if applicable)
  - Bot Insight meta-data database (if applicable)
4. It is recommended that if a migration is already in progress, you do not initiate another migration process.

\* Includes Automation Anywhere Enterprise 10 LTS, 10 SP2, and hot-fixes with these as base version. Refer Installation Guide of particular versions on how to install.

## Important Considerations

1. The Automation Anywhere Enterprise 10.x environment should be strictly controlled and monitored once the migration process is initiated. Hence, it is recommended that you,
  - Do not,
    - a. Create users, roles, and permissions
    - b. Create and upload any meta data. For example, new automation bots
    - c. Create new schedules
    - d. Check out bots (if version control is enabled)
  - Schedule and deploy only on demand bots.
2. If you are using a version less than 10 LTS, you should first migrate to 10 LTS using the 10 LTS Migration Utility and then migrate from 10 LTS to 11 LTS.

**Note:** The hot fixes on 10 LTS are supported for migration to 11 LTS.

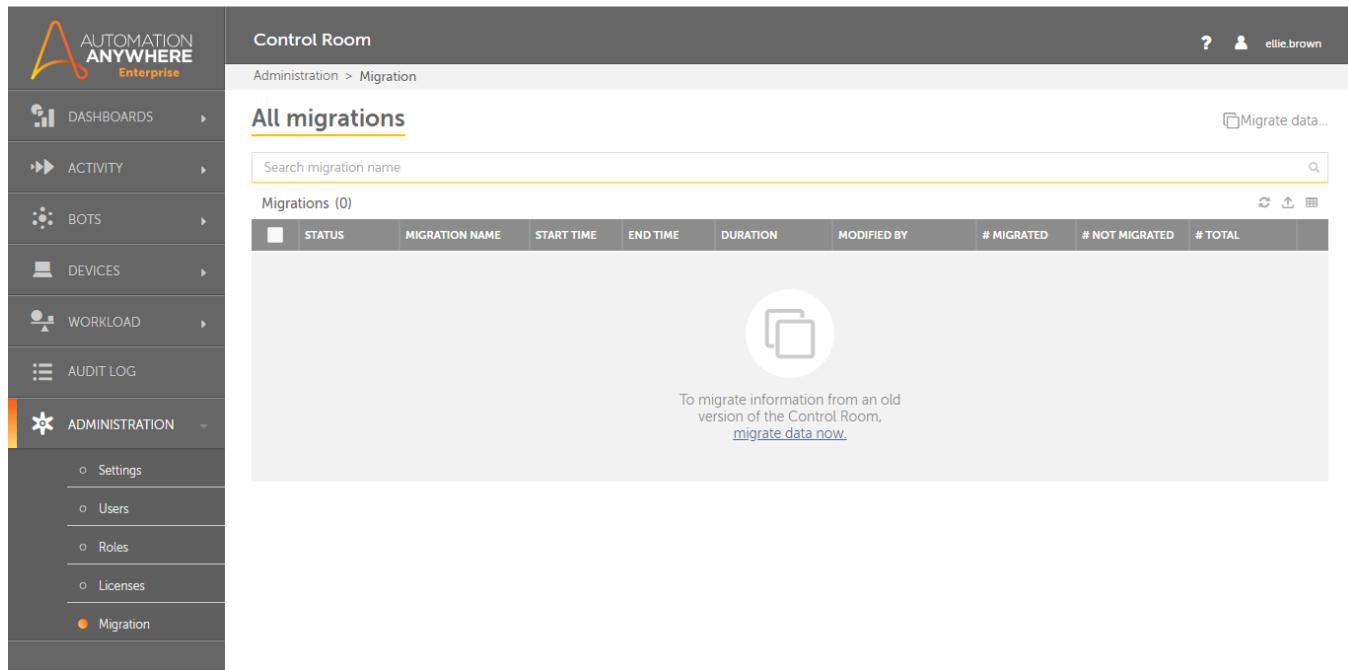
3. You cannot migrate from Automation Anywhere Enterprise version 9.x. For this you should first migrate to 10 LTS. Refer AAE 10 LTS Installation Guide and AAE 10 LTS Data Migration Utility Guide.
4. Migrating data from 11 GA (11.0) to 11 LTS is NOT supported
5. Migration of data includes,
  - a. Repository data
  - b. Meta-data available in database
  - c. Users, roles, licenses, and permissions

- d. Automation schedules
  - e. System defined credentials
  - f. Application settings
  - g. Automation bots with version history if applicable
  - h. Bot Insight data
6. Migration of data excludes,
- a. Devices/Clients
  - b. Audit logs
  - c. License information of source Control Room
  - d. User defined credentials
  - e. Version Control Settings
  - f. Schedule history
7. If Version Control is enabled in 10.x Control Room then you must enable the same in 11 LTS Control Room manually since the settings for Version Control is not migrated. It is mandatory to use a fresh SVN database for 11 LTS which is different than 10.x SVN database.
8. Ensure the SQL database service is running during the migration process.
9. Data from source Control Room configured for one user type cannot be migrated to destination Control Room configured for another user type. For example, data for Control Room configured for Active Directory cannot be migrated to Control Room with either Non Active Directory or Single Sign On users.
10. Migration of SAML configuration data is NOT supported.

Refer the article on [Frequently asked questions \(FAQs\)](#) for other details.

### Role-based access to Migration tool

You can access the migration tool from **Administration → Migration** page as illustrated:



	STATUS	MIGRATION NAME	START TIME	END TIME	DURATION	MODIFIED BY	# MIGRATED	# NOT MIGRATED	# TOTAL

**Note:** Only a Control Room admin can access the Migration page as the admin user is granted View and Manage Migration permission. Refer [Create a role](#) for details.

For ease of access, you can search the entries based on the unique **Migration Name**

🔍

The following describes the list of items that can be viewed in the table:

Table Item	Description
Status	Shows the status of the saved migration - successful or unsuccessful
Migration Name	Shows the name of the migration for the corresponding migration run i.e. <timestamp>.<username>
Start Time	Shows the time and date when the migration process began
End Time	Shows the time and date when the migration process ended
Duration	Shows the time it took for the migration to run
Modified by	Shows name of the user who initiated the migration i.e. name of the Control Room administrator
# Migrated	Shows the number of entities that were migrated successfully
# Not Migrated	Shows the number of entities that failed to migrate
# Total	Shows the total number of entities that were attempted for migration

**Tip:** You can perform the following actions on a table column:

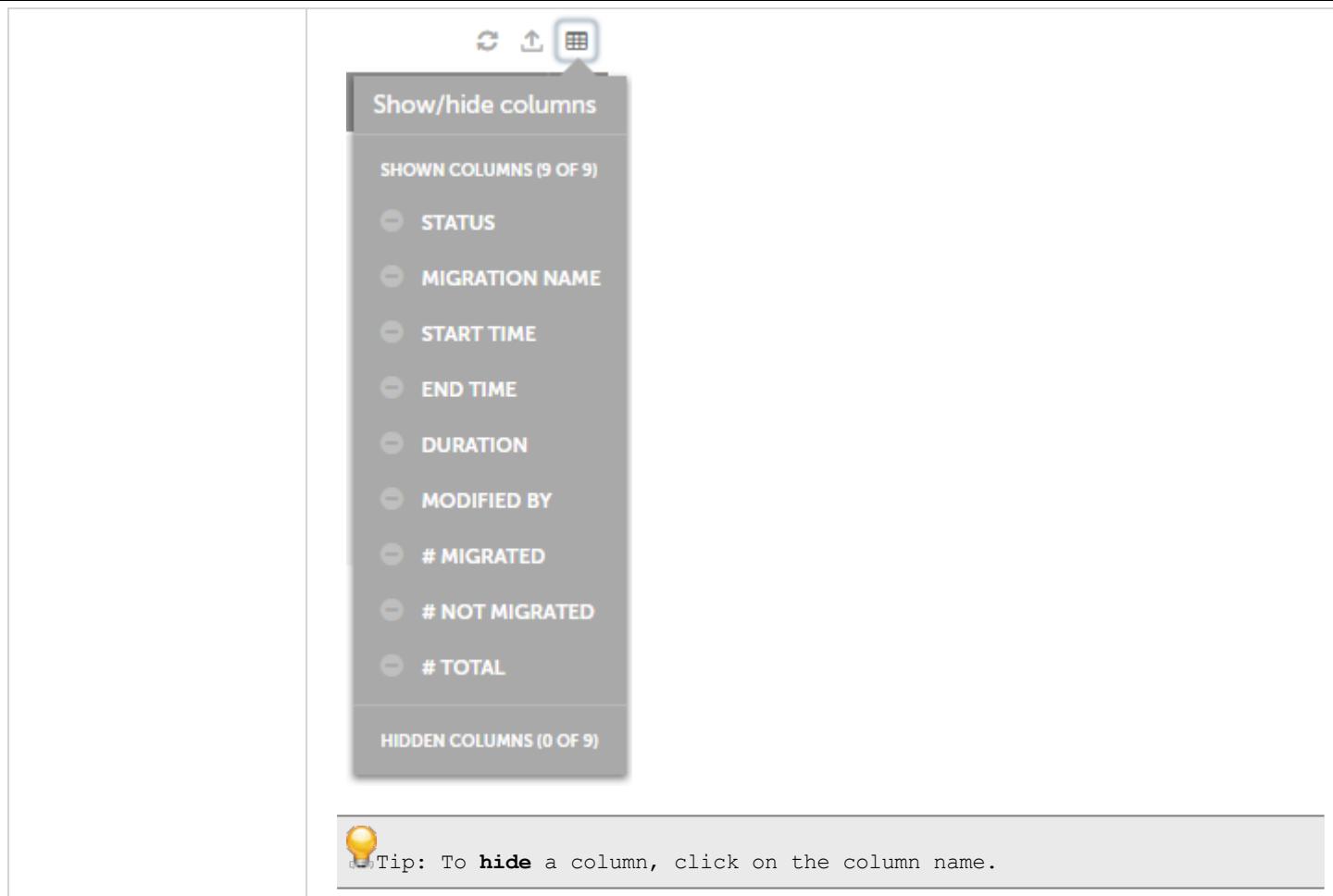
- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

The following describes the tasks that you can perform on an individual migration:

Table Item	Description
 View details	Allows you to <a href="#">view details</a> of the selected migration run

At table level you can perform the following actions:

Table Item	Description
 Refresh	Allows you to refresh the table contents so that you can view the latest migration status
 Export to CSV	Allows you to export the selected data to a csv file. You can export data based on: <ul style="list-style-type: none"> <li>• Filters</li> <li>• Selection</li> </ul>
 Show / Hide columns	Allows you to show or hide specific columns. By default, all columns are displayed:



## Migrating Data

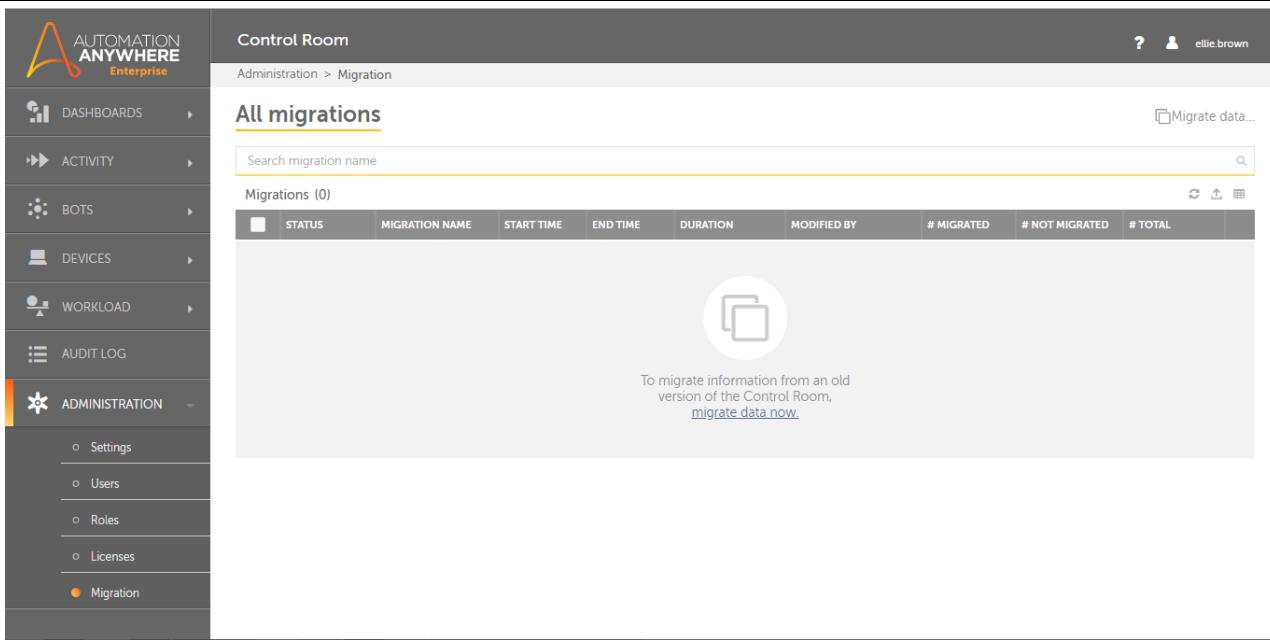
To migrate data, first ensure following preconditions are met,

1. Control Room 11 LTS must be installed
2. First Control Room Admin user is created
3. Credential Vault is configured
4. Control Room 11 LTS license is installed.
5. If using Version Control, the Version Control Settings should be configured under Administration → Settings. Refer [Control Room settings](#) for details.
6. If using Windows Authentication to connect to source database, the user who is configured to run all destination Control Room Windows Services has access on source database.
7. If using Secure Connection, the source Control Room certificates is imported to the Java trust store. To import the certificate,
  - a. Run command prompt in administrator mode
  - b. Go to the AAE installation path - for example, C:\Program Files\Automation Anywhere\Enterprise
  - c. Type or paste the following command at the prompt:

```
jre\bin\java -jar certmgr.jar -appDir "C:\Program Files\Automation Anywhere\Enterprise" -importTrustCert "<Certificate Path>"
```

Once the above is done, follow below steps to start the migration process:

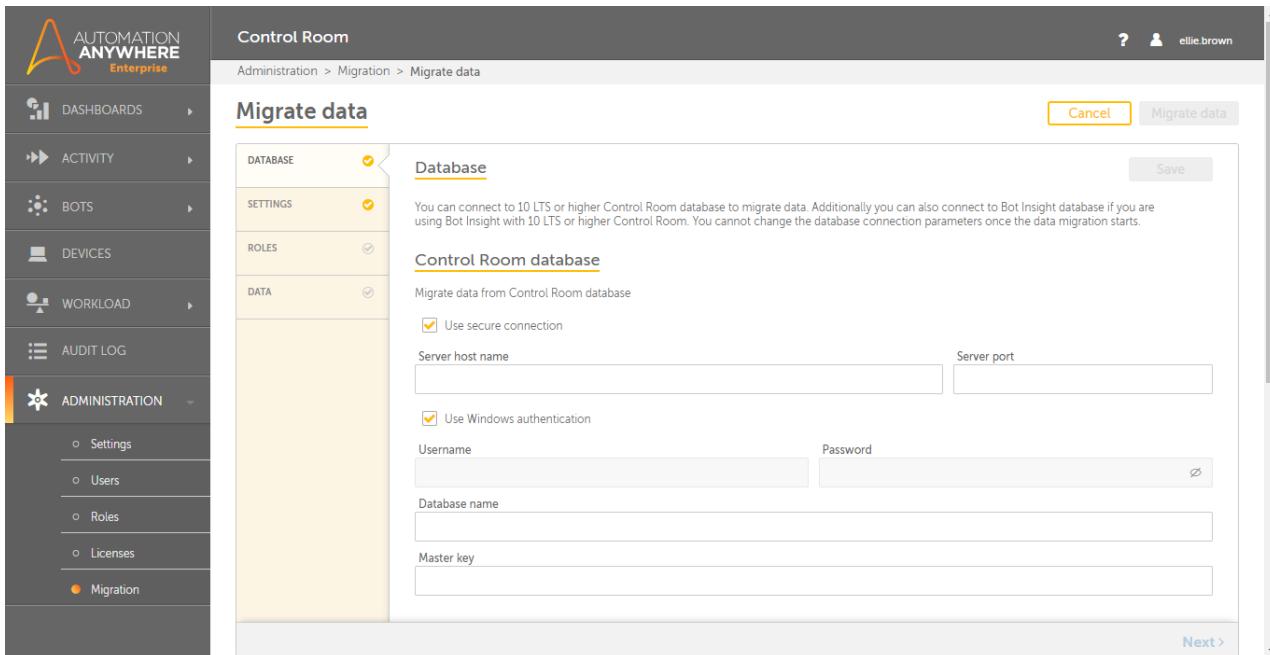
1. Launch the 11 LTS Control Room
2. Login using your first admin credentials
3. Go to **Administration** → **Migration** tab
4. Click  available above the **Migrations** table or the **Migrate data now** link in the **Migrations** table.



The screenshot shows the 'Control Room' interface under 'Administration > Migration'. The left sidebar has 'Migration' selected under 'ADMINISTRATION'. The main area is titled 'All migrations' and shows a message: 'To migrate information from an old version of the Control Room, [migrate data now](#)'. There is a search bar and a 'Migrate data...' button.

**Note:** The migrate data now link is visible only if no migration process has been done.

## 5. The Migration wizard is launched



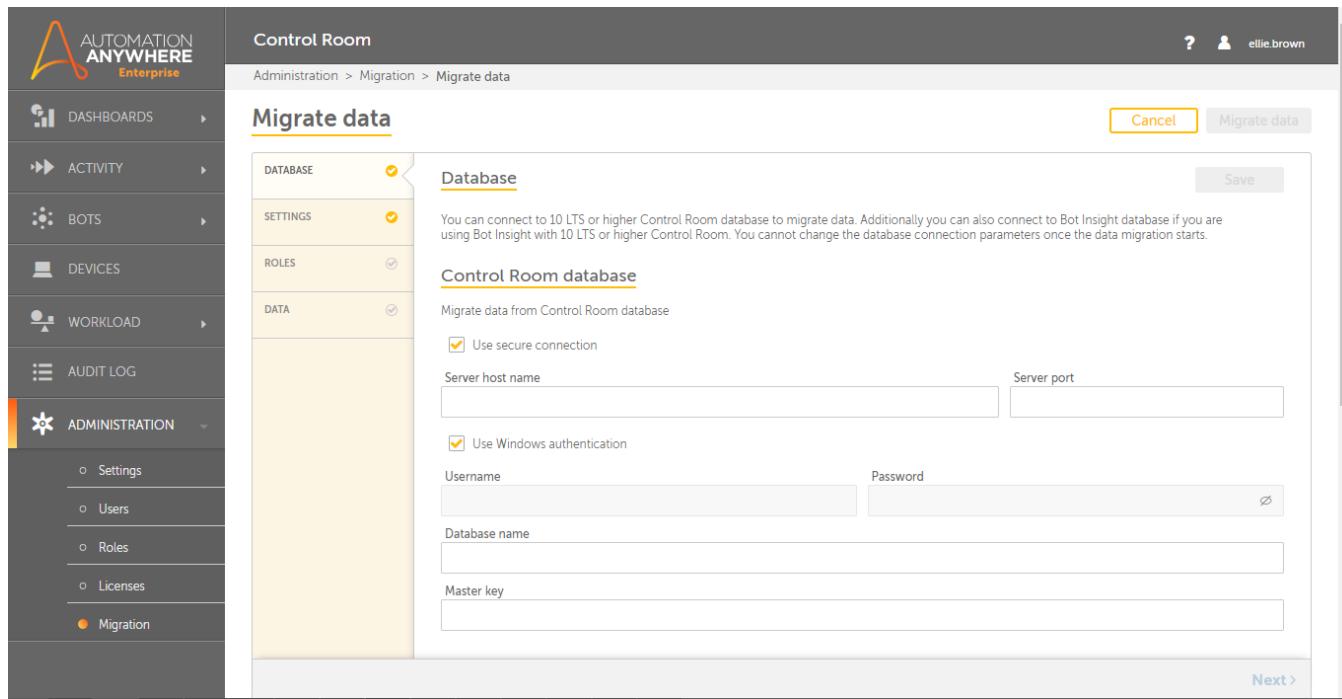
The screenshot shows the 'Migrate data' wizard. The left sidebar has 'Migration' selected under 'ADMINISTRATION'. The main area is titled 'Migrate data' and shows the 'Database' tab selected. It includes fields for 'Server host name', 'Server port', 'Username', 'Password', 'Database name', and 'Master key'. There are checkboxes for 'Use secure connection' and 'Use Windows authentication'. Buttons for 'Cancel', 'Save', and 'Next >' are at the bottom.

## 6. The Migration wizard comprises of following tabs,

1. [Database](#)
2. [Settings](#)
3. [Roles/Users](#)
4. [Data](#)

# Migration wizard

As a Control Room administrator with **View and Manage Migration** privileges you can use the **Migrate data** wizard to migrate data from Automation Anywhere Enterprise v10.x to v11.1 in a systematic and phased manner.

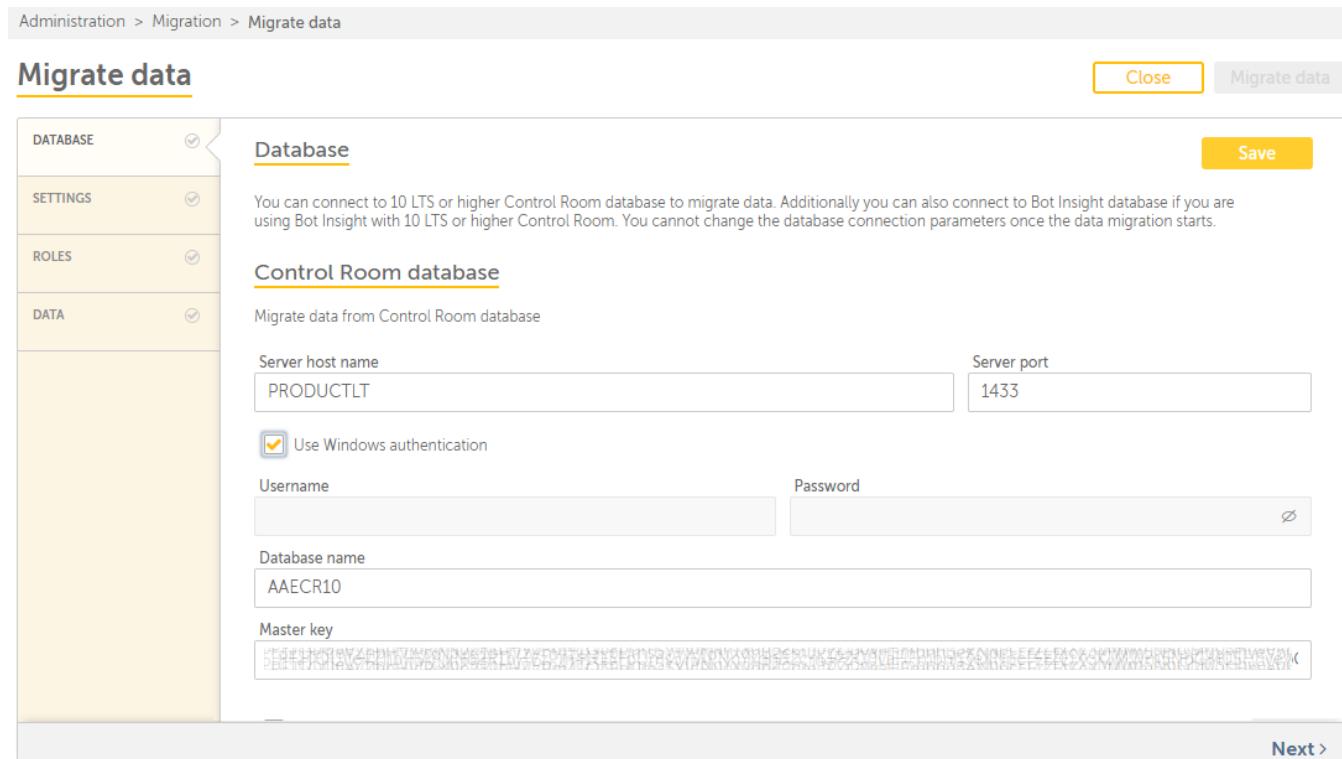


The screenshot shows the 'Migrate data' wizard in the 'Control Room' interface. The left sidebar shows navigation options like Dashboards, Activity, Bots, Devices, Workload, Audit Log, Administration (with Migration selected), Settings, Users, Roles, Licenses, and Migration. The main panel is titled 'Migrate data' under 'Database'. It includes sections for 'Control Room database' and 'Bot Insight database'. Under 'Control Room database', there are fields for Server host name (PRODUCTLT), Server port (1433), Username, Password, Database name (AAECR10), and Master key. A note states: 'You can connect to 10 LTS or higher Control Room database to migrate data. Additionally you can also connect to Bot Insight database if you are using Bot Insight with 10 LTS or higher Control Room. You cannot change the database connection parameters once the data migration starts.' Buttons for 'Save', 'Cancel', and 'Migrate data' are at the top right, and a 'Next >' button is at the bottom right.

## Database

The system allows you to connect to the source Control Room and migrate data from the source database to the destination Control Room database. You can also migrate your Bot Insight data if it is installed in the source Control Room.

### Control Room database



This screenshot shows the 'Database' step of the 'Migrate data' wizard. The left sidebar has 'DATABASE' selected. The main panel has 'Control Room database' selected. It shows fields for 'Server host name' (PRODUCTLT), 'Server port' (1433), 'Username', 'Password', 'Database name' (AAECR10), and 'Master key'. A note at the top says: 'You can connect to 10 LTS or higher Control Room database to migrate data. Additionally you can also connect to Bot Insight database if you are using Bot Insight with 10 LTS or higher Control Room. You cannot change the database connection parameters once the data migration starts.' Buttons for 'Save', 'Close', and 'Migrate data' are at the top right, and a 'Next >' button is at the bottom right.

To migrate Control Room database from 10.x, you must first connect to 10.x source Control Room and follow the steps given below:

1. Keep the **Use secure connection** selected if the SQL instance hosting 10.x Control Room database is configured with a secure connection. Clear this if the source SQL Server is not configured with secure connection.
2. Provide the **host name** and **port** number of the SQL Server where v10.x Control Room database is hosted. For example, PRODUCTLT and 1433
3. Keep the **Use Windows authentication** selected if the source SQL Server is configured using Windows authentication. Alternatively, clear the option and provide **Username** and **Password** if SQL Server is configured with SQL authentication.
4. Type the source Control Room database name. For example, AAECR10
5. Copy the source Control Room master key and paste it in the **Master key** field. This allows you to connect to the credential vault of the source Control Room. This is shown encrypted once you save the migration process.
6. Click **Save** at this juncture if you do not want to migrate Bot Insight database and move on to the next step of migrating data.

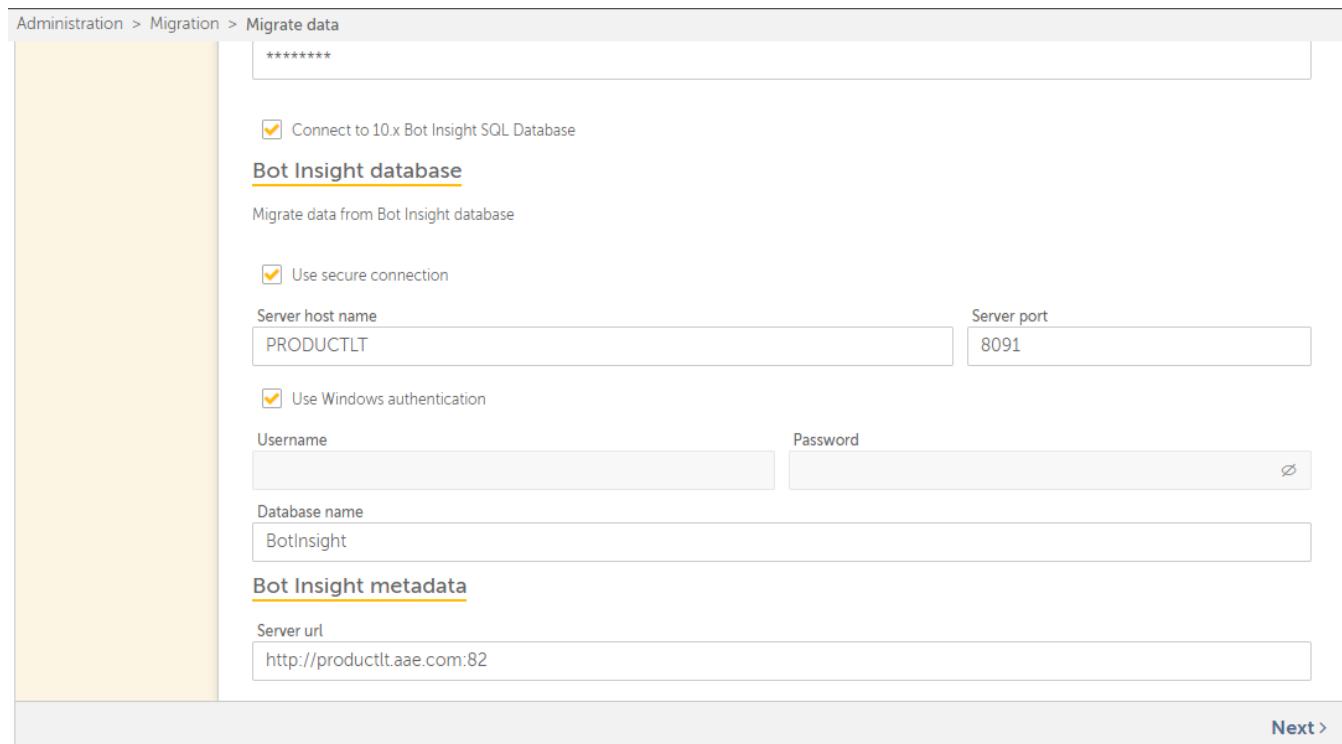
**Tip:** You can **Close** the page if you do not provide any data or **Cancel** if you want to go back to the Migration page without saving the data.

**Note:** You can change the **Database** connection settings until the migration process is started. The database tab is disabled once the process starts.

7. Click **Next >**

### Bot Insight Database

*Applicable only if Bot Insight is installed on source Control Room 10.x*



Administration > Migration > Migrate data

\*\*\*\*\*

Connect to 10.x Bot Insight SQL Database

**Bot Insight database**

Migrate data from Bot Insight database

Use secure connection

Server host name: PRODUCTLT      Server port: 8091

Use Windows authentication

Username:      Password:

Database name: BotInsight

**Bot Insight metadata**

Server url: http://productlt.aae.com:82

**Next >**

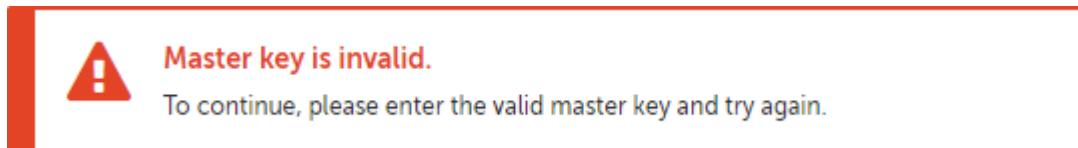
To migrate data from source Bot Insight database,

1. Select **Connect to 10.x Bot Insight SQL Database**. This enables all other fields for Bot Insight database connection.
2. Keep the **Use secure connection** selected if the SQL instance hosting 10.x Bot Insight database is configured with a secure connection. Clear this if the source SQL Server is not configured with secure connection.
3. Provide the **host name** and **port** number of the SQL Server where v10.x Bot Insight database is hosted. For example, PRODUCTLT and 8091

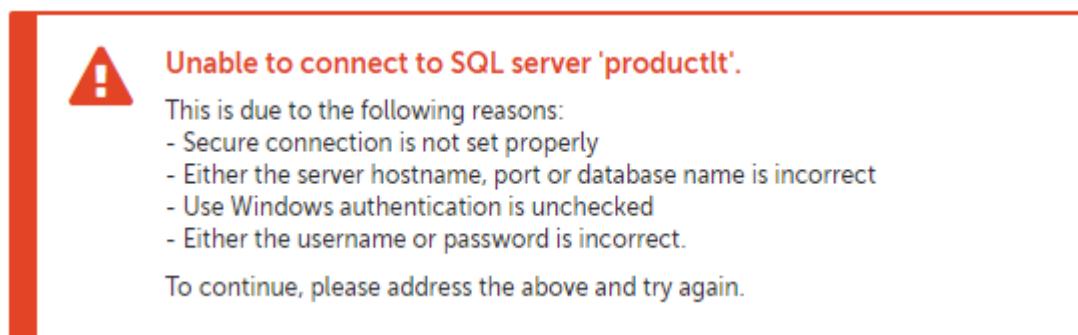
4. Keep the **Use Windows authentication** selected if the source SQL Server is configured using Windows authentication. Alternatively, clear the option and provide **Username** and **Password** if SQL Server is configured with SQL authentication.
5. Type the source Control Room Bot Insight database name. For example, BOTINSIGHT10
6. Type the Server URL where Bot Insight Visualization ServerPort is configured. For example, <http://productlt.aae.com:82/analytics>
7. Click **Save** to connect to the database. When the connection is established, you can move to the next step.
8. Click **Next >** to select migration of data based on roles or users.

## Errors

1. If the master key is invalid, you are shown:



2. If a connection could not be established, you are shown:



## Settings

You can choose to migrate data from your source Control Room based on roles or users in the **Settings** page. Though it is possible to migrate entire data at one go, this method is not recommended. Hence, you can migrate selected data in different phases.

Administration > Migration > Migrate data

### Migrate data

[Cancel](#)

[Migrate data](#)

<input checked="" type="checkbox"/> DATABASE <input checked="" type="checkbox"/> SETTINGS <input checked="" type="checkbox"/> ROLES <input checked="" type="checkbox"/> DATA	<p><u>Migration settings</u></p> <p>You can migrate data from a Control Room 10 LTS or higher version based on roles or users. All associated data will migrate automatically. You can migrate as many or as few items as you like and return to migrate more another time.</p> <p><u>How you want to choose data to migrate?</u></p> <p>Migrate</p> <p><input checked="" type="radio"/> Roles and associated data  <input type="radio"/> Users and associated data</p>
---	---

[< Back](#) [Next >](#)

Migration of data can be done using two options,

1. Migrate data based on **Roles**. This option allows you to migrate selected roles data from source Control Room database. When you migrate the roles, data associated with those roles such as users, license, bots, credentials, and schedules are also migrated.
2. Migrate data based on **Users**. This option allows you to migrate selected user data from source Control Room database. When you migrate the users, data associated with those users such as roles, license, bots, credentials, and schedules are also migrated.

**Tip:**

- It is recommended that you migrate data using **Roles** as on migrating roles all users associated with that role are migrated along with related data such as its bots, folder access permissions, schedules, and information regarding the user who created the bot.
- If you migrate data using **Users**, the Roles that are NOT associated with any User might not be migrated. Similarly, the Schedules that are associated with the Users that were NOT selected for migration shall not be migrated.

Click **Next >** once you select an option.

- When you select **Roles and associated data** and click **Next >**, the **Roles** page is displayed. This option is selected by default.
- When you select **Users and associated data** and click **Next >**, the **Users** page is displayed
- You can switch between the two options. Use **Cancel** if you have not made any updates or click **< Back** to return to the previous page.

## Roles

The Roles page allows you to migrate all or only selected roles from source to destination Control Room. When you select roles, other related data such as license, users, credentials, and schedules are also migrated. This tab is shown only if you select **Roles and associated data** in **Settings** tab.

**Tip:** For ease of access, you can search for role names to migrate.

Administration > Migration > Migrate data

Migrate data
Cancel
Migrate data

DATABASE 
SETTINGS 
ROLES 
DATA

**Select one or more roles to migrate**

All data related to the roles, such as users, credentials, schedules, etc, also will be migrated.

Available roles (17 of 17)	Selected (0)
<input type="checkbox"/> ROLE NAME ↑	<input type="checkbox"/> ROLE NAME ↑
<input type="checkbox"/> Bot-Creator	
<input type="checkbox"/> Bot-Manager	
<input type="checkbox"/> Bot-Runner	
<input type="checkbox"/> BotAgentUser	
<input type="checkbox"/> BotFarmAdmin	
<input type="checkbox"/> Credential-Manager	

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<https://support.automationanywhere.com>

## Select Roles

- In the **Available roles** list, select the check-box beside **Role Name** if you want to select all roles. Alternatively, select each role from the list of roles.

**Note:** The **Available roles** display all roles – both system and user defined that exist in 10.x CR database.

- Click 

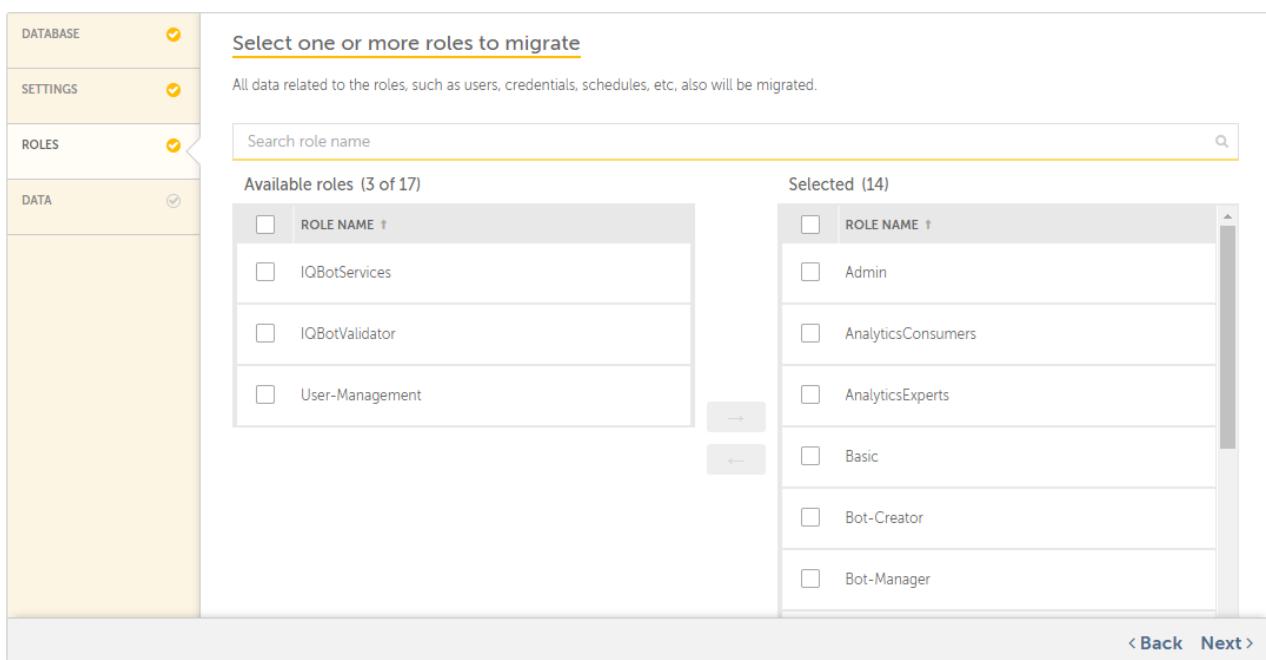
- The roles are added to the **Selected** list.

Administration > Migration > Migrate data

## Migrate data

[Cancel](#)

[Migrate data](#)



DATABASE

SETTINGS

ROLES

DATA

Select one or more roles to migrate

All data related to the roles, such as users, credentials, schedules, etc, also will be migrated.

Search role name

Available roles (3 of 17)

- ROLE NAME ↑
- IQBotServices
- IQBotValidator
- User-Management

→ ←

Selected (14)

- ROLE NAME ↑
- Admin
- AnalyticsConsumers
- AnalyticsExperts
- Basic
- Bot-Creator
- Bot-Manager

< Back Next >

- Click [Next >](#) to go to Data page

### Migration behavior - roles

- The system defined roles from source 10.x Control Room are mapped to the destination 11 LTS Control Room
- Similarly, user permissions from source 10.x Control Room are mapped to the destination 11 LTS Control Room
- Roles that have any of the Upload, Download or Delete permissions, are granted Run/Schedule permission by default on migration
- User defined roles with same name will have \_1 suffixed to its name. For example, If a role **Bot\_Manager** is available in both versions of the Control Room, the 10.x Control Room role will be created as a new role with the name **Bot\_Manager\_1**
- For next migration run, the **Available roles** list will display all roles irrespective whether they are migrated or not

## Users

The Users page allows you to migrate all or only selected users from source to destination Control Room. When you select users, other related data such as license, roles, credentials, bots, and schedules are also migrated. This tab is shown only if you select **Users and associated data** in **Settings** tab.

**Tip:** For ease of access, you can search on user names for migration.

Administration > Migration > Migrate data

### Migrate data

[Cancel](#)

[Migrate data](#)

**DATABASE**

**SETTINGS**

**USERS**

**DATA**

Select one or more users to migrate

All data related to the users, such as roles, credentials, schedules, etc, also will be migrated.

Search user name

**Available users (13 of 13)**

<input type="checkbox"/> USER NAME ↑
<input type="checkbox"/> Admin
<input type="checkbox"/> Agatha.Christi
<input type="checkbox"/> Amy.Chen
<input type="checkbox"/> Charles.Dickens
<input type="checkbox"/> Ellie.Brown
<input type="checkbox"/> Enid.Blyton

**Selected (0)**

<input type="checkbox"/> USER NAME ↑

[◀ Back](#) [Next ▶](#)

1. In the **Available users** list, select the check-box beside **User Name** if you want to select all users. Alternatively, select each user from the list of users.

2. Click 

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<https://support.automationanywhere.com>

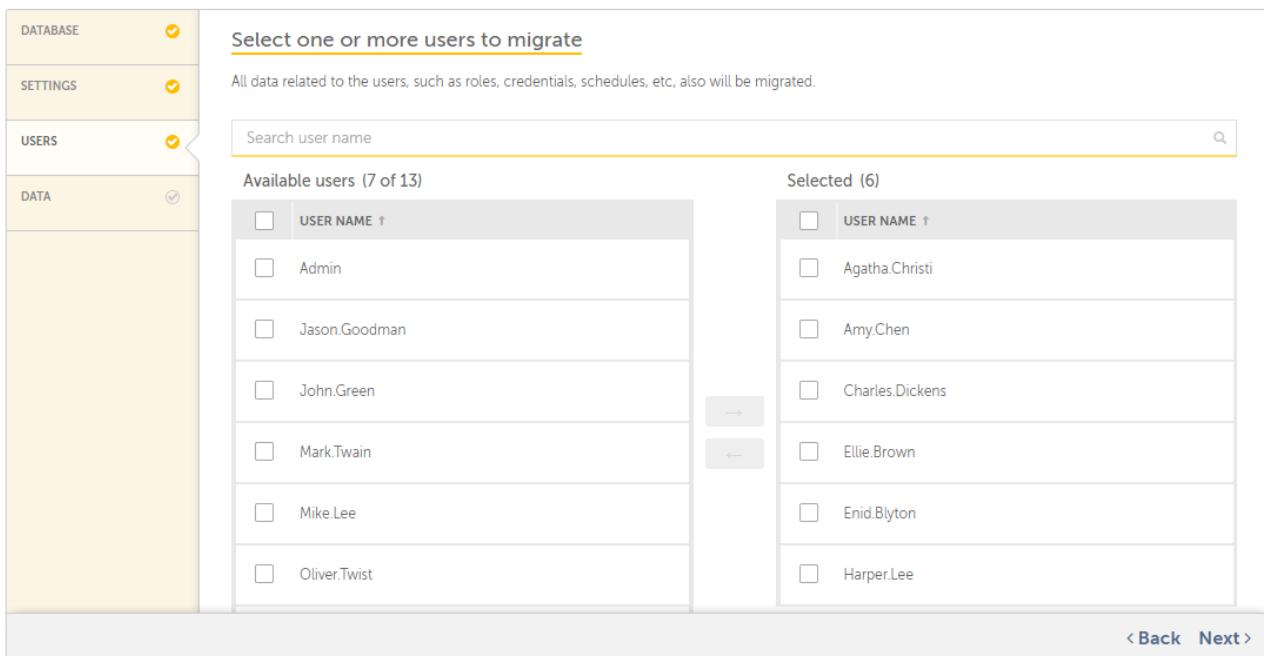
3. The users are added to the **Selected** list.

Administration > Migration > Migrate data

## Migrate data

[Cancel](#)

[Migrate data](#)



The screenshot shows the 'Migrate data' interface. On the left, there's a sidebar with checkboxes for 'DATABASE', 'SETTINGS', 'USERS' (which is checked), and 'DATA'. The main area has two lists: 'Available users (7 of 13)' and 'Selected (6)'. Both lists have columns for a checkbox and 'USER NAME'. In the 'Available users' list, the users are: Admin, Jason.Goodman, John.Green, Mark.Twain, Mike.Lee, and Oliver.Twist. In the 'Selected' list, the users are: Agatha.Christi, Amy.Chen, Charles.Dickens, Ellie.Brown, Enid.Blyton, and Harper.Lee. There are 'Next' and 'Back' buttons at the bottom right.

Available users (7 of 13)	Selected (6)
USER NAME ↑	USER NAME ↑
Admin	Agatha.Christi
Jason.Goodman	Amy.Chen
John.Green	Charles.Dickens
Mark.Twain	Ellie.Brown
Mike.Lee	Enid.Blyton
Oliver.Twist	Harper.Lee

4. Click [Next >](#) to go to **Data** page

### Migration behavior - users

- Users with same name will have \_1 suffixed to its name. For example, If a user **Mike\_Lee** is available in both versions of the Control Room, the 10.x Control Room role will be created as a new user with the name **Mike\_Lee\_1**. However for Active Directory users, if the domain user with same name already exists in the destination Control Room, then such users and their dependencies are skipped during migration.
- For next migration run, the **Available users** list will display all users irrespective whether they are migrated or not
- Deleted users shall not be migrated

## Migration - View Data

You should now verify whether the data that you selected is ready for migration. The data not only includes the Roles and/or Users that were selected, but also dependent or associated data such as Bots, Schedules, and Credentials if any.

1. The **Roles** tab is displayed first wherein you can verify the roles that you selected are available for migration:

Administration > Migration > Migrate data

### Migrate data

Cancel Migrate data

DATABASE <input checked="" type="checkbox"/>	SETTINGS <input checked="" type="checkbox"/>	USERS <input checked="" type="checkbox"/>	DATA <input checked="" type="checkbox"/>							
<p><u>Review associated data that will be migrated (optional)</u></p> <p>The data below is associated with the users that you chose and so will also be migrated.</p> <ul style="list-style-type: none"> <li><span> ROLES </span> <span> USERS </span> <span> BOTS </span> <span> SCHEDULES </span> <span> CREDENTIALS </span></li> </ul> <p> Roles (7) </p> <table border="1"> <thead> <tr> <th>NAME</th> </tr> </thead> <tbody> <tr><td>IQBotValidator</td></tr> <tr><td>AnalyticsExperts</td></tr> <tr><td>AnalyticsConsumers</td></tr> <tr><td>IQBotServices</td></tr> <tr><td>Bot-Creator</td></tr> <tr><td>Finance-Manager</td></tr> </tbody> </table>				NAME	IQBotValidator	AnalyticsExperts	AnalyticsConsumers	IQBotServices	Bot-Creator	Finance-Manager
NAME										
IQBotValidator										
AnalyticsExperts										
AnalyticsConsumers										
IQBotServices										
Bot-Creator										
Finance-Manager										

< Back

2. Verify the **Users** are available for migration. These could either be the ones that you selected or the ones that were included based on roles that you selected:

Administration > Migration > Migrate data

### Migrate data

Cancel Migrate data

DATABASE <input checked="" type="checkbox"/>	SETTINGS <input checked="" type="checkbox"/>	USERS <input checked="" type="checkbox"/>	DATA <input checked="" type="checkbox"/>							
<p><u>Review associated data that will be migrated (optional)</u></p> <p>The data below is associated with the users that you chose and so will also be migrated.</p> <ul style="list-style-type: none"> <li><span> ROLES </span> <span> USERS </span> <span> BOTS </span> <span> SCHEDULES </span> <span> CREDENTIALS </span></li> </ul> <p> Users (6) </p> <table border="1"> <thead> <tr> <th>NAME</th> </tr> </thead> <tbody> <tr><td>Ellie.Brown</td></tr> <tr><td>Amy.Chen</td></tr> <tr><td>Harper.Lee</td></tr> <tr><td>Charles.Dickens</td></tr> <tr><td>Enid.Blyton</td></tr> <tr><td>Agatha.Christi</td></tr> </tbody> </table>				NAME	Ellie.Brown	Amy.Chen	Harper.Lee	Charles.Dickens	Enid.Blyton	Agatha.Christi
NAME										
Ellie.Brown										
Amy.Chen										
Harper.Lee										
Charles.Dickens										
Enid.Blyton										
Agatha.Christi										

< Back

3. Verify the **Bots** are available for migration.

## Migrate data

[Cancel](#)
[Migrate data](#)

<input checked="" type="checkbox"/> DATABASE <input checked="" type="checkbox"/> SETTINGS <input checked="" type="checkbox"/> ROLES <input checked="" type="checkbox"/> DATA	<p><b>Review associated data that will be migrated (optional)</b></p> <p>The data below is associated with the roles that you chose and so will also be migrated.</p> <p>ROLES    USERS    <b>BOTS</b>    SCHEDULES    CREDENTIALS</p> <table border="1"> <thead> <tr> <th>NAME</th> </tr> </thead> <tbody> <tr> <td>Automation Anywhere\My Tasks\200MB\5MB - Copy (131) - Copy.atmx</td> </tr> <tr> <td>Automation Anywhere\My Tasks\SST\Security\IWF07\SS_CBP.atmx</td> </tr> <tr> <td>Automation Anywhere\My Tasks\SST\Security\TradeProcessing\SS_LoadingAccounting.atmx</td> </tr> <tr> <td>Automation Anywhere\My Tasks\Biggest folder1\Sample_CreateExeDependencyTest - Copy.atmx</td> </tr> <tr> <td>Automation Anywhere\My Tasks\Biggest folder1\44 - Copy.atmx</td> </tr> <tr> <td>Automation Anywhere\My Tasks\Biggest folder1\Master Test - Copy - Copy (2) - Copy.atmx</td> </tr> </tbody> </table>	NAME	Automation Anywhere\My Tasks\200MB\5MB - Copy (131) - Copy.atmx	Automation Anywhere\My Tasks\SST\Security\IWF07\SS_CBP.atmx	Automation Anywhere\My Tasks\SST\Security\TradeProcessing\SS_LoadingAccounting.atmx	Automation Anywhere\My Tasks\Biggest folder1\Sample_CreateExeDependencyTest - Copy.atmx	Automation Anywhere\My Tasks\Biggest folder1\44 - Copy.atmx	Automation Anywhere\My Tasks\Biggest folder1\Master Test - Copy - Copy (2) - Copy.atmx
NAME								
Automation Anywhere\My Tasks\200MB\5MB - Copy (131) - Copy.atmx								
Automation Anywhere\My Tasks\SST\Security\IWF07\SS_CBP.atmx								
Automation Anywhere\My Tasks\SST\Security\TradeProcessing\SS_LoadingAccounting.atmx								
Automation Anywhere\My Tasks\Biggest folder1\Sample_CreateExeDependencyTest - Copy.atmx								
Automation Anywhere\My Tasks\Biggest folder1\44 - Copy.atmx								
Automation Anywhere\My Tasks\Biggest folder1\Master Test - Copy - Copy (2) - Copy.atmx								

[« Back](#)

**Note:** Migration of Bots is based on the User role as well as the folder permission granted to that user. Hence Bots that correspond to that folder are displayed.

#### 4. Verify the **Schedules** associated with the Bots are available for migration:

## Migrate data

[Cancel](#)
[Migrate data](#)

<input checked="" type="checkbox"/> DATABASE <input checked="" type="checkbox"/> SETTINGS <input checked="" type="checkbox"/> ROLES <input checked="" type="checkbox"/> DATA	<p><b>Review associated data that will be migrated (optional)</b></p> <p>The data below is associated with the roles that you chose and so will also be migrated.</p> <p>ROLES    USERS    BOTS    <b>SCHEDULES</b>    CREDENTIALS</p> <table border="1"> <thead> <tr> <th>NAME</th> </tr> </thead> <tbody> <tr> <td>Weekly_Everyday_Files_Folders.atmx</td> </tr> <tr> <td>Weekly_Everyday_Files_Folders.atmx_Mon</td> </tr> <tr> <td>Weekly_Everyday_Files_Folders.atmx_Tue</td> </tr> <tr> <td>Weekly_Everyday_Files_Folders.atmx_Wed</td> </tr> <tr> <td>Weekly_Everyday_Files_Folders.atmx_Thu</td> </tr> <tr> <td>Weekly_Everyday_Files_Folders.atmx_Fri</td> </tr> </tbody> </table>	NAME	Weekly_Everyday_Files_Folders.atmx	Weekly_Everyday_Files_Folders.atmx_Mon	Weekly_Everyday_Files_Folders.atmx_Tue	Weekly_Everyday_Files_Folders.atmx_Wed	Weekly_Everyday_Files_Folders.atmx_Thu	Weekly_Everyday_Files_Folders.atmx_Fri
NAME								
Weekly_Everyday_Files_Folders.atmx								
Weekly_Everyday_Files_Folders.atmx_Mon								
Weekly_Everyday_Files_Folders.atmx_Tue								
Weekly_Everyday_Files_Folders.atmx_Wed								
Weekly_Everyday_Files_Folders.atmx_Thu								
Weekly_Everyday_Files_Folders.atmx_Fri								

[« Back](#)

5. Verify the system **Credentials** associated with the Users are available for migration:

Administration > Migration > Migrate data

## Migrate data

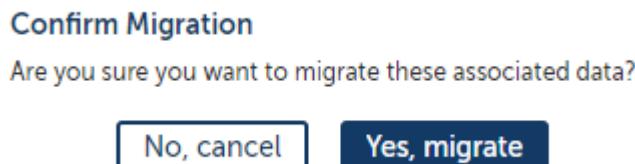
Cancel
Migrate data

DATABASE <input checked="" type="checkbox"/> SETTINGS <input checked="" type="checkbox"/> ROLES <input checked="" type="checkbox"/> DATA <input checked="" type="checkbox"/>	<p><b>Review associated data that will be migrated (optional)</b></p> <p>The data below is associated with the roles that you chose and so will also be migrated.</p> <p style="text-align: center;"> <span style="border: 1px solid #ccc; padding: 2px 5px; border-radius: 4px;">ROLES</span> <span style="border: 1px solid #ccc; padding: 2px 5px; border-radius: 4px;">USERS</span> <span style="border: 1px solid #ccc; padding: 2px 5px; border-radius: 4px;">BOTS</span> <span style="border: 1px solid #ccc; padding: 2px 5px; border-radius: 4px;">SCHEDULES</span> <span style="border: 1px solid #ccc; padding: 2px 5px; border-radius: 4px;">CREDENTIALS</span> </p> <p><b>Credentials (4)</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">NAME</th> </tr> </thead> <tbody> <tr> <td>Amy.Chen - EmailSettings</td> </tr> <tr> <td>Harper.Lee - LoginSettings</td> </tr> <tr> <td>Amy.Chen - EmailSettings</td> </tr> <tr> <td>Harper.Lee - LoginSettings</td> </tr> </tbody> </table>	NAME	Amy.Chen - EmailSettings	Harper.Lee - LoginSettings	Amy.Chen - EmailSettings	Harper.Lee - LoginSettings
NAME						
Amy.Chen - EmailSettings						
Harper.Lee - LoginSettings						
Amy.Chen - EmailSettings						
Harper.Lee - LoginSettings						

[< Back](#)

6. Click Migrate data

7. Confirm:



8. You can view the progress as shown:

Administration > Migration > View migration

## 2018.04.11.06.31.57.admin

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<b>MIGRATION DETAILS</b>		
Migration name 2018.04.11.06.31.57.admin	Start time 12:01:57 IST 2018-04-11	End time N/A
<b>MIGRATION PROGRESS INDICATOR</b>		
<ul style="list-style-type: none"> <li><span style="color: red;">✗</span> 27 user migration failed</li> <li><span style="color: green;">✓</span> 185 user(s) migrated successfully</li> <li><span style="color: blue;">⌚</span> Migrating roles</li> <li>Bot migration pending</li> <li>Schedule migration pending</li> <li>Credential migration pending</li> </ul>		
<b>GENERAL DETAILS</b>		
Last modified 12:01:57 IST 2018-04-11	Modified by admin	Object type Migration

9. Once the migration process finishes, the status of data is shown in separate tabs:

- a. The following illustrates a **Roles** tab with the Status, Name, and Reason for each data:

Administration > Migration > View migration

### 2018.04.27.15.44.28.ellie.brown

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MIGRATION DETAILS		
Migration name 2018.04.27.15.44.28.ellie.brown	Start time 15:44:28 IST 2018-04-27	End time 15:45:05 IST 2018-04-27
<b>ROLES</b>	<b>USERS</b>	<b>BOTS</b>
<b>SCHEDULES</b>	<b>CREDENTIALS</b>	
<b>Roles (7)</b>		
STATUS	NAME	REASON
Success	IQBotValidator	--
Success	AnalyticsExperts	--
Success	AnalyticsConsumers	--
Success	IQBotServices	--
Success	Bot-Creator	This role is already migrated.
Success	Finance-Manager	--
Success	Product-Management	--
GENERAL DETAILS		
Last modified 15:45:05 IST 2018-04-27	Modified by ellie.brown	Object type Migration

- b. The following illustrates a **Users** tab with the Status, Name, and Reason for each data:

Administration > Migration > View migration

### 2018.04.27.15.44.28.ellie.brown

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MIGRATION DETAILS		
Migration name 2018.04.27.15.44.28.ellie.brown	Start time 15:44:28 IST 2018-04-27	End time 15:45:05 IST 2018-04-27
<b>ROLES</b>	<b>USERS</b>	<b>BOTS</b>
<b>SCHEDULES</b>	<b>CREDENTIALS</b>	
<b>Users (6)</b>		
STATUS	NAME	REASON
Success	Ellie.Brown	This user is already migrated.
Success	amy.chen_1	--
Success	harper.lee	--
Success	charles.dickens	--
Success	enid.blyton	--
Success	agatha.christi	--
GENERAL DETAILS		
Last modified 15:45:05 IST 2018-04-27	Modified by ellie.brown	Object type Migration

- c. The following illustrates a **Bots** tab with the Status, Name, and Reason for each data:

Administration > Migration > View migration

**2018.04.19.12.14.09.ellie.brown**

[< Back](#)

MIGRATION DETAILS		
Migration name 2018.04.19.12.14.09.ellie.brown	Start time 12:14:10 IST 2018-04-19	End time 12:14:12 IST 2018-04-19

ROLES    USERS    **BOTS**    SCHEDULES    CREDENTIALS

Bots (7)		
STATUS	NAME	REASON
Success	Automation Anywhere\My Tasks\Sample Tasks\Variables.atmx	--
Success	Automation Anywhere\My Tasks\Sample Tasks\Prompt.atmx	--
Success	Automation Anywhere\My Tasks\Sample Tasks\Download...	--
Success	Automation Anywhere\My Tasks\Sample Tasks\Files-Folder...	--
Success	Automation Anywhere\My Tasks\Sample Tasks\Import-Tab...	--
Success	Automation Anywhere\My Tasks\Sample Tasks>List-Variab...	--
Failed	Automation Anywhere\My Tasks\Sample Tasks\Loops.atmx	A bot with same name on same path already exists

GENERAL DETAILS		
Last modified 15:45:05 IST 2018-04-27	Modified by ellie.brown	Object type Migration

- d. The following illustrates a **Schedules** tab with the Status, Name, and Reason for each data:

Administration > Migration > View migration

**2018.04.19.12.14.09.ellie.brown**

[< Back](#)

MIGRATION DETAILS		
Migration name 2018.04.19.12.14.09.ellie.brown	Start time 12:14:10 IST 2018-04-19	End time 12:14:12 IST 2018-04-19

ROLES    USERS    BOTS    **SCHEDULES**    CREDENTIALS

Schedules (3)		
STATUS	NAME	REASON
Success	SCH-Daily-Weekdays	--
Success	SCH-Weekly-MWF	--
Failed	SCH-Monthly-Day-5-July-Dec	User 'Rakesh' for this schedule does not exist

GENERAL DETAILS		
Last modified 12:14:12 IST 2018-04-19	Modified by ellie.brown	Object type Migration

**Note:** By default, all schedules are migrated as disabled. These should be activated once the migration process is finished.

- e. The following illustrates a **Credentials** tab with the Status, Name, and Reason for each data:

Administration > Migration > View migration

**2018.04.19.12.14.09.ellie.brown** < Back

MIGRATION DETAILS		
Migration name 2018.04.19.12.14.09.ellie.brown	Start time 12:14:10 IST 2018-04-19	End time 12:14:12 IST 2018-04-19
<a href="#">ROLES</a> <a href="#">USERS</a> <a href="#">BOTS</a> <a href="#">SCHEDULES</a> <a href="#">CREDENTIALS</a>		
<b>Credentials (4)</b>		
STATUS	NAME	REASON
Success	Amy.Chen - EmailSettings	--
Success	Harper.Lee - LoginSettings	--
Success	Amy.Chen - EmailSettings	--
Success	Harper.Lee - LoginSettings	--

GENERAL DETAILS		
Last modified 12:14:12 IST 2018-04-19	Modified by ellie.brown	Object type Migration

- The status of an entity can either be success or failed. Status is successful if the **Not Migrated** column shows 0 (zero) and unsuccessful if it shows > 0 (more than zero).
- When the data fails to migrate, you can verify why it was not migrated in the **Reason** column. The commonly seen messages are:
  - Role <RoleName> has been renamed
  - User <UserName> has been renamed
  - This <EntityName> is already migrated.

**Note:** The <EntityName> is for Role, User, Bot, Schedule or Credential

- General Details** pertaining to the process are displayed such as **Last modified** for the date and time, **Modified by** for user who initiated the migration and **Object type** for the type of action performed.

10. Once you have analyzed the migrated data, click < Back to return to the [Migration](#) page wherein the migration activity is listed with status and other details:

**Control Room**

Administration > Migration

**All migrations** Migrate data...

Search migration name

Migrations (7 of 7)

STATUS	MIGRATION NAME	START TIME	END TIME	DURATION	MODIFIED BY	# MIGRATED	# NOT MIGRATED	# TOTAL	
In progress	2018.04.11.06.31.57.admin	12:01:57 IST 2018-04-11	N/A	00:00:00 hours	admin	18	0	18	⋮
Successful	2018.04.24.12.22.30.CRT...	17:52:30 IST 2018-04-24	17:52:30 IST 2018-04-24	00:00:00 hours	CRTEST\\ellie.brown	18	0	18	⋮
Successful	2018.04.24.12.13.00.CRT...	17:43:00 IST 2018-04-24	17:43:01 IST 2018-04-24	00:00:00 hours	CRTEST\\ellie.brown	20	0	20	⋮
Successful	2018.04.24.10.56.30.CRT...	16:26:30 IST 2018-04-24	16:26:30 IST 2018-04-24	00:00:00 hours	CRTEST\\ellie.brown	23	0	23	⋮
Successful	2018.04.24.09.56.15.CRT...	15:26:15 IST 2018-04-24	15:26:16 IST 2018-04-24	00:00:00 hours	CRTEST\\ellie.brown	22	0	22	⋮
Unsuccessful	2018.04.24.09.23.03.CRT...	14:53:03 IST 2018-04-24	14:53:04 IST 2018-04-24	00:00:00 hours	CRTEST\\ellie.brown	20	1	21	⋮
Unsuccessful	2018.04.24.08.26.42.CRT...	13:56:42 IST 2018-04-24	13:56:48 IST 2018-04-24	00:00:06 hours	CRTEST\\ellie.brown	32	2	34	⋮

11. On successful migration, you should perform the post migration steps as summarized in the next section.

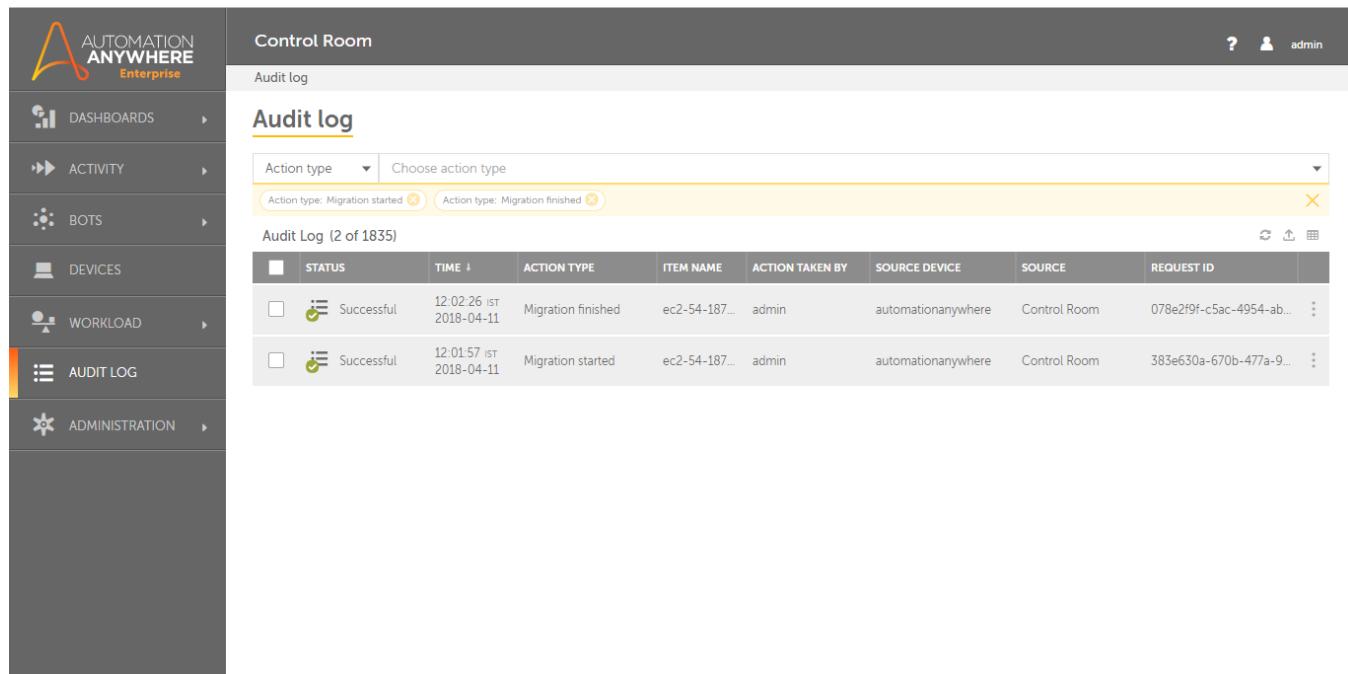
## Post Migration Steps

Since all schedules are migrated as disabled by default, you should manually add the devices to the migrated schedules to activate them. You can perform the following to on-board the migrated schedules,

1. Install AAE 11 LTS Client. Refer [AAE Client Installation Guide](#) for details.
2. Register the Client devices with the migrated user. Refer [Bot creators and bot runners - an overview](#) for details.
3. Edit the schedules to add relevant devices
4. Enable the schedule.  
Refer [Schedule a bot](#) for step 3 and 4.

## Audit Log

The **Audit Log** displays individual entry for each entity that is migrated.

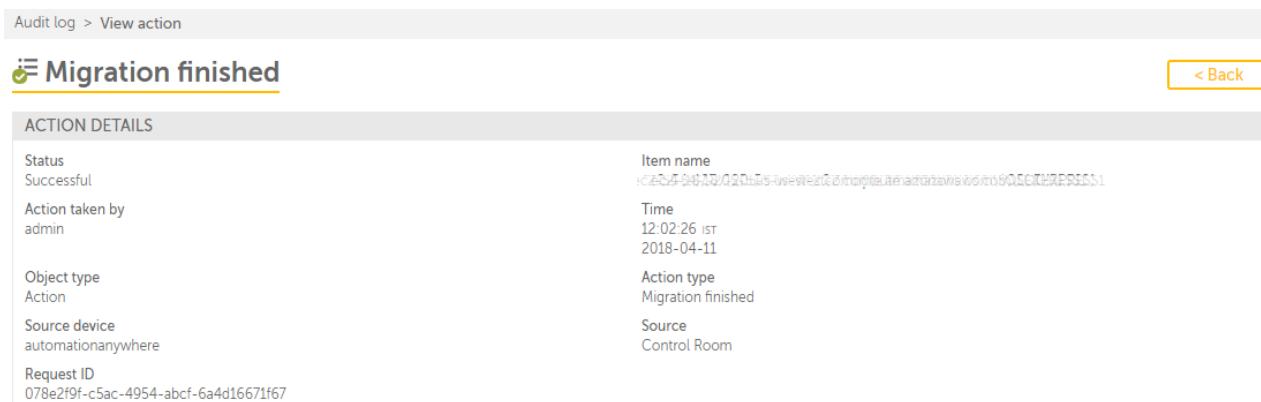


Action type	Choose action type
Migration started	
Migration finished	

Audit Log (2 of 1835)								
	STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE	REQUEST ID
<input type="checkbox"/>	Successful	12:02:26 IST 2018-04-11	Migration finished	ec2-54-187...	admin	automationanywhere	Control Room	078e2f9f-c5ac-4954-ab...
<input type="checkbox"/>	Successful	12:01:57 IST 2018-04-11	Migration started	ec2-54-187...	admin	automationanywhere	Control Room	383e630a-670b-477a-9...

When the migration process is initiated, a **Migration started** entry is logged in Audit log. Similarly when the migration process is completed, a **Migration finished** entry is logged. Between these two entries, migration entries are logged for each entity that is migrated such as **Create** or **Update** operation.

- Click to view details of the process. For example, the following illustrates details of a successful migration:



ACTION DETAILS	
Status	Item name
Successful	Automation Anywhere Control Room
Action taken by	Time
admin	12:02:26 IST 2018-04-11
Object type	Action type
Action	Migration finished
Source device	Source
automationanywhere	Control Room
Request ID	
078e2f9f-c5ac-4954-abcf-6a4d16671f67	

## Known behavior of data migration

1. Bots and Files are migrated based on user having at least one folder permission viz Upload, Download or Delete. Similarly MetaBots are migrated based on user having at least one folder permission viz Upload, Download Delete or Execute.
  - Note that 'My MetaBots' folder permissions are not propagated when a new folder is migrated in the destination Control Room.
  - If a 10.x bot to be migrated already exists in 11.x then the same will not be migrated
2. If the source Control Room has Version Control enabled then
  - The version history of both the bots and its dependencies is migrated
  - The production version which is last set will be migrated
  - Locked bots and files are unlocked and then migrated to 11.x
  - Client Last Modified and Modified by fields for each version of the migrated bot will be set to name of the current Control Room user running the migration process or else the Modified by field of the migrated bot is set to SYSTEM if the user referencing this field is not migrated in 11.x
3. In case of failure to migrate the Modified by field for bot(s), the field shows the name as SYSTEM in the My bots and Edit page.
4. You can migrate only those bots and files for which you have at least one permission for a Folder - Upload, Download or Delete. Similarly, you can migrate individual Metabots for which you have at least one permission - Upload, Download, Delete or Execute.
5. All user licenses are migrated automatically when you migrate the users. Note that license migration is not visible on the Control Room user interface.
  - If the number of licensed in destination 11 LTS Control Room are less than the ones available in source 10.x Control Room, and all are consumed in the destination Control Room, then a user might not be assigned a license.
6. During the first migration run, the entities related to CR Settings viz. Mail Server Configuration, Email Notification, and Client Configuration are migrated automatically.
7. All dependencies for a user or role are migrated based on the folder permissions the user has for the assigned role.
8. On migrating a 10.x role having any of the Upload, Download or Delete permission on a folder, the role is granted Run/Schedule permission by default in 11.1.
  - All system created roles in 10.x are mapped to the corresponding 11.x roles and hence are not migrated.
  - All default permissions available in 11.x are granted to all the 10.x roles that are migrated.
9. Password protect tasks and its schedules are not supported in 11.x and hence they cannot be migrated. These entities will be shown as Failed in the migration history details page
10. When migrating users, the following entities are automatically migrated,
  - License assigned to the user
  - System-defined Credentials related to Auto-login and Email Settings that are set in AAE 10.x Client by the userA license migration for the user may fail if the destination Control Room does not have sufficient user licenses. If a user or role already exists in 11.x then on migrating such user or role, they will be renamed with suffix \_1 added to their name. The existing entity will not be modified in 11.x. Deleted users in 10.x will not be migrated to 11.x.
11. If a schedule has some manual dependencies added in 10.x then they will not be migrated. Post migration the user will have to edit the TaskBot and add these manual dependencies as references and upload it to Control Room
12. When migrating a bot and its schedule, if the user who created the schedule is not migrated in 11.x then such schedules will not be migrated. If an entity viz. role, user, bot or schedule is migrated once then it will be available for next migration run however they will not be migrated again and the migration history detail page will show their status as Success and Reason as already migrated.
13. If you select a bot from 10.x that has the same name in 11.x, the bot and its' schedules are not migrated.
14. Schedules that are password protected are also not migrated.
15. Dashboard bookmarks are also not migrated. You will have to recreate those.

# Migration - FAQs

1. What is the recommended migration strategy?
  - You can migrate data from source Control Room (version 10.x) to destination Control Room (version 11 LTS) in phases using the web based Migration wizard available in the Control Room for a user with Manage migration permission.
  - You can choose to either migrate Roles or Users from source to destination based on which all associated entities shall also be migrated automatically.
  - It is recommended that you migrate data using **Roles** as on migrating roles all users associated with that role are migrated along with related data such as its bots, folder access permissions, schedules, and information regarding the user who created the bot.
2. Are the AAE 10.x Bots compatible with 11 LTS Control Room? Can those be migrated?
  - To ensure the AAE 10.x Bots are compatible, you need to migrate them to 11 LTS Control Room. If you are using AAE 10.2, you should first migrate to either AAE 10 LTS or AAE 10 SP2 using the AAE Migration utility.
3. Are MetaBots created in AAE 10.2 or less compatible? Can those be migrated?
  - If you are using AAE 10.2 or a lower version, you should first migrate to either AAE 10 LTS or AAE 10 SP2 using the AAE Migration Utility to ensure your MetaBots are compatible.
4. Is Database migration required during platform upgrade?
  - Database migration can be done post the platform upgrade.
5. Is version history available once the data is migrated?
  - Yes, the version history is available. However note that you need to configure Version Control in destination Control Room manually as the source 10.x Version Control settings are not migrated. Also, the SVN repository should be different in both - source and destination Control Rooms.
6. Are credential variables and audit log entries migrated?
  - Only system credentials are migrated. The audit logs although migrated, are not available on the destination Control Room user interface.
7. If existing AAE 10.2 database or backup of AAE 10.2 database is used for AAE 11 LTS during setup, would there be challenges for AD mode setup specially when SSO with SAML 2.0 needs to be integrated?
  - You should create a new unused database for AAE 11 LTS. You cannot use the AAE 10.2 database for AAE 11 LTS. To ensure the data from this version is available, you should first migrate to either AAE 10 LTS or AAE 10 SP2 using the desktop migration utility. Thereon you can migrate your data to AAE 11 LTS.
8. Can schedules from the source Control Room that has version control enabled be migrated to the destination Control Room that does not have version control enabled? or the other way round?
  - The status of version control should be same in both Control Rooms. If it is enabled in source Control Room, you should manually configure version control in destination Control Room using an SVN repository that is independent/separate from the AAE 10.x version.
9. Is it possible to migrate schedules from different time zones?
  - This is not supported.
10. Do the migrated schedules retain their status and work as before?
  - The schedules do not retain their status and fire on their own - they are deactivated by default. To activate such schedules, you should perform certain steps - open it in edit mode, add devices, update time/date, etc.
11. What happens to schedules that have manual dependencies created in source Control Room that has version control configured?
  - To retain the manual dependencies after migration, you should,
    - a. Download the required file(s) i.e. perform a rollback from Version History
    - b. Manually add the reference dependencies
    - c. Save the task
    - d. Set the production version to run the task.
12. Is it possible to migrate schedules from source Control Room that are already present in the destination Control Room?  
Yes. Such schedules are migrated with the same name unlike Roles/Users which have suffix \_1.

13. If a role or user is already migrated, will it be available for migration?  
 Yes such roles and users are available for migration. However, the reason would be shown as "This <entity name> is already migrated."
14. Can I migrate all the entities that were completely migrated?  
 Yes such entities are available for selection. However, the reason would be shown as "This <entity name> is already migrated."
15. Can I switch to User option of migration, once i have already migrated using Roles?  
 Yes you can.
16. Can I connect to multiple 10.x Control Room database for migration?  
 No. You cannot once the migration run is initiated.
17. If during migration, if my machine restarts, will I be able to continue the migration?  
 If your machine restarts when the migration is in progress, you can initiate the migration process despite the status being In progress. Also the entities that were already migrated will be shown as migrated.
18. Would the schedules created by a user who already exists in destination Control Room or is deleted from source Control Room be migrated?  
 Such schedules are not migrated. Refer examples given below for both Active Directory User and Non Active Directory user
  - **Active Directory user** - If the user Mike.Lee who has created a schedule say SCH1 in source Control Room also exists in destination Control Room, then the first run of the migration shows the following status for **Schedules**:

Status	Name	Reason
Failed	MyDomain.com\Mike.Lee	Unable to proceed as the user with same name already exists

- **Non-Active Directory user** - If the user Mike.Lee who has created a schedule say SCH1 in source Control Room does not exist or is deleted in destination Control Room, then the first run of the migration shows the following status for **Schedules**:

Status	Name	Reason
Failed	Mike.Lee	User 'Mike.Lee' for this schedule does not exist

19. Since IQBots and My Lists are deprecated from 11 LTS, what happens to the bots that have IQBots as dependent files or the files that are there in My Lists?  
 IQBot dependency and My Lists are filtered out in the pre-scan as it is deprecated in 11 LTS. These are not listed in the preview.

## Bots - Overview

As a Control Room user with administrator or My Bots privileges, you can use the Bots module of Control Room to:

- Run and schedule uploaded bots
- Run bot with queue
- Export bot files for Business Life-cycle Management
- Import bot files for Business Life-cycle Management
- Work with secure and centralized credentials

**Note:** To perform these actions, you must be an administrator or have the following roles and privileges.

- View my bots
- Run my bots
- Export bots
- Import bots

# Credentials - Overview

This page provides a centralized location for securely creating and storing sensitive information that is included in automation tasks in the form of credentials. All Control Room users can create credentials. Users with **Manage my lockers** permission can create lockers and users with Administer all lockers can manage all the lockers in the vault..

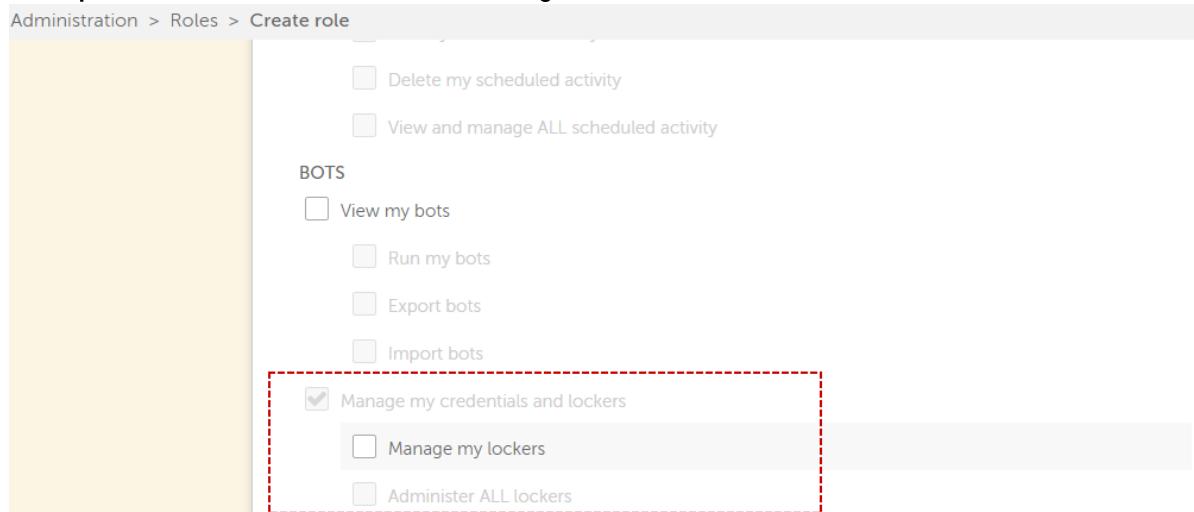
## Benefits of creating credentials and lockers

Apart from providing a secure and centralized location for storing credentials, it:

- Minimizes the possibility of credential fraud.
- Provides an environment to enable improved security.
- Enables businesses to adhere to processes and credential management compliance.
- Offers increased Automation opportunities with secure data/ applications.

## Roles permission for credential and locker management

Administration > Roles > Create role



Delete my scheduled activity  
View and manage ALL scheduled activity

BOTS

View my bots  
Run my bots  
Export bots  
Import bots

Manage my credentials and lockers  
 Manage my lockers  
 Administer ALL lockers

- **Manage my credentials and lockers:** By default, you (all users) can see the Credentials tab and manage your own credentials. In addition, you can interact with locker of other users, if they provide locker access permission.
- **Manage my lockers:** This permission allows you to create and manage your own locker.
- **Administer ALL lockers:** This permission allows you to view all the lockers and perform limited actions on them.



**Note:** This permission is available for AAE\_Locker Admin role only

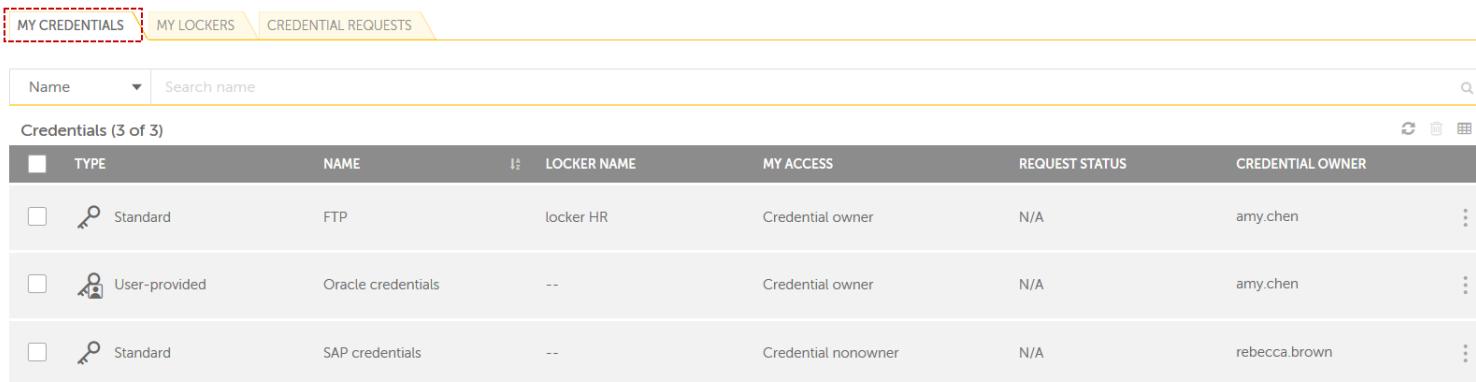
This page covers:

- [My Credentials](#)
- [My Lockers](#)
- [Credential Requests](#)

## My Credentials

This tab consists the list of credentials created by a user. All users have permission to see their credentials.

 **Note:** In case you have "AAE\_Locker Admin" permission, then you are able to view credentials of all the users.



Credentials (3 of 3)						
Type	Name	Locker Name	My Access	Request Status	Credential Owner	
 Standard	FTP	locker HR	Credential owner	N/A	amy.chen	
 User-provided	Oracle credentials	--	Credential owner	N/A	amy.chen	
 Standard	SAP credentials	--	Credential nonowner	N/A	rebecca.brown	

In the search pane you can filter credentials according to the following:

Search Item	Description
Type	<b>User-provided:</b> Credential owner and Locker consumers can input the value with usage access. <b>Standard:</b> User must input the value.
Name	Based on credential name
My Access	<b>Credential owner:</b> Credential has been created by you. <b>Credential non-owner:</b> Credential has been created by other user.
Request Status	All values provided or requests sent.

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

 **Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session..
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

The following describes the list of items that can be viewed in the table:

Table Item	Description
Type	Shows the type of credential as user-provided or standard.
Name	Name of the credential.
Locker Name	Name of the assigned locker for the credential .
My Access	<b>Credential owner:</b> Credential has been created by you. <b>Credential non-owner:</b> Credential has been created by other user.
Request Status	<b>All values provided:</b> Value has been given . <b>Requests sent:</b> Request has been sent to users to input credential value.

Credential Owner	Name of the user who has created the credential.
------------------	--

Actions	Description												
 View	Allows you to view credential details. <a href="#">Learn more</a>												
 Edit	Allows you to edit a credential. <a href="#">Learn more</a>												
 Delete	<p>Allows you to delete a credential. <a href="#">Learn more</a></p> <p> <b>Note:</b> To delete a credential, user must be a credential owner</p> <p>To delete a credential, click Accept.</p> <div style="border: 2px solid red; padding: 10px; width: fit-content; margin-left: auto; margin-right: auto;">  <b>Delete credential?</b>            Do you want to permanently delete the credential "fin_cred"?           <div style="display: flex; justify-content: space-around; width: 100%;"> <a href="#" style="border: 1px solid black; padding: 2px 5px;">Cancel</a> <a href="#" style="background-color: red; color: white; border: 1px solid red; padding: 2px 5px;">Accept</a> </div> </div>												
 Transfer Credential Ownership	<p>Allows you to transfer the ownership of the credential. If locker is assigned to your credential then the ownership can be transferred to any member of the locker. Else it can be transferred to any user in the system.</p> <p> <b>Note:</b> Once the ownership is transferred to another user, the previous owner can no longer access the credentials. Also, only a Locker Admin has permission to transfer credential ownership.</p> <p>Select the user and click Submit.</p> <div style="border: 2px solid #00529F; padding: 10px; width: fit-content; margin-left: auto; margin-right: auto;"> <p><b>Transfer ownership of credential</b></p> <p>Which user do you want to transfer the credential "admin_cred" to?</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">USERNAME</th> <th style="text-align: center; padding: 2px;">I A Z</th> <th style="text-align: left; padding: 2px;">FIRST NAME</th> <th style="text-align: left; padding: 2px;">LAST NAME</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"><input type="radio"/> amy.chen</td> <td style="text-align: center; padding: 2px;">A-Z</td> <td style="padding: 2px;">amy</td> <td style="padding: 2px;">chen</td> </tr> <tr> <td style="padding: 2px;"><input checked="" type="radio"/> jon.snow</td> <td style="text-align: center; padding: 2px;">A-Z</td> <td style="padding: 2px;">jon</td> <td style="padding: 2px;">snow</td> </tr> </tbody> </table> <div style="display: flex; justify-content: space-around; width: 100%; margin-top: 5px;"> <a href="#" style="border: 1px solid black; padding: 2px 5px;">Cancel</a> <a href="#" style="background-color: #00529F; color: white; border: 1px solid #00529F; padding: 2px 5px;">Submit</a> </div> </div>	USERNAME	I A Z	FIRST NAME	LAST NAME	<input type="radio"/> amy.chen	A-Z	amy	chen	<input checked="" type="radio"/> jon.snow	A-Z	jon	snow
USERNAME	I A Z	FIRST NAME	LAST NAME										
<input type="radio"/> amy.chen	A-Z	amy	chen										
<input checked="" type="radio"/> jon.snow	A-Z	jon	snow										

Alternatively, you can select all credentials and perform the following table-level actions:

Table Item	Description
 Refresh	Allows you to refresh the list of credentials.
 Delete	Allows you to delete multiple credentials.
 Show/ hide columns	Allows you to show or hide specific columns. By default, all the columns are displayed.

SHOWN COLUMNS (6 OF 8)

- TYPE
- 🔒 NAME
- LOCKER NAME
- MY ACCESS
- REQUEST STATUS
- CREDENTIAL OWNER

HIDDEN COLUMNS (2 OF 8)

- + LAST MODIFIED
- + MODIFIED BY

**Tip:** To **show/ hide** a column, click the column name.

## My Lockers

This tab shows the list of lockers that has been created by a user. A locker can only be created by an authorized user with Locker\_Admin permission or a user having 'Manage my locker' permission.

 **Note:** Users can see lockers only if they have created them or if they are a member of that locker.

## Credentials

 Create credential...  Create locker...

MY CREDENTIALS	MY LOCKERS	CREDENTIAL REQUESTS				
Name	Search name					
Lockers (3 of 3)						
NAME	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS	MANAGERS	OWNERS	CREDENTIALS	
<input type="checkbox"/> FinAdmin locker	Not a consumer	Locker owner	--	ellie.brown and 1 more	0	
<input type="checkbox"/> FinHR Locker	Not a consumer	Locker owner	--	amy.chen and 1 more	2	
<input type="checkbox"/> FinOps Locker	Not a consumer	Locker owner	--	John.Smith and 1 more	2	

In the search pane you can filter lockers according to the following:

Search Item	Description
Type	<b>User-provided:</b> Credential owner and Locker consumers can input the value with usage access. <b>Standard:</b> User must input the value.
Name	Based on locker name.

My consumer permission	Consumer or not a consumer.
My additional permission	Locker participant, manager, owner.

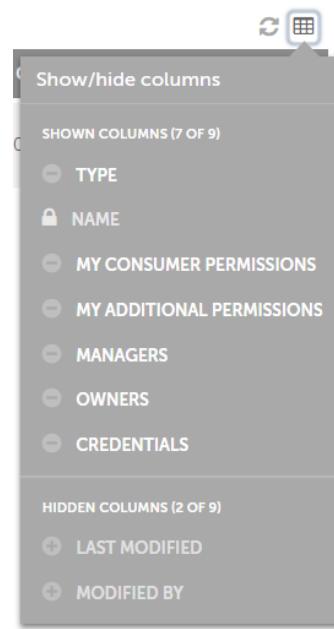
The following describes the list of items that can be viewed in the table:

Table Item	Description
Name	Name of the locker.
My consumer permission	Consumer or not a consumer.
My additional permission	Locker participant, Locker manager, Locker owner.
Managers	Users having locker manager permission.
Credentials	No. of credentials assigned to a locker.
Owners	Name of user who created the locker.

Actions	Description
 View	Allows you to view locker. <a href="#">Learn more</a>
 Edit	Allows you to edit a locker. <a href="#">Learn more</a>
 Delete	Allows you to delete a locker. <a href="#">Learn more</a>

Alternatively, you can select all lockers and perform the following actions:

Table Item	Description
 Refresh	Allows you to refresh the list of lockers.
 Delete	Allows you to delete multiple lockers. <a href="#">Learn more</a>
 Show/ hide columns	Allows you to show or hide specific columns. By default, all the columns are displayed.



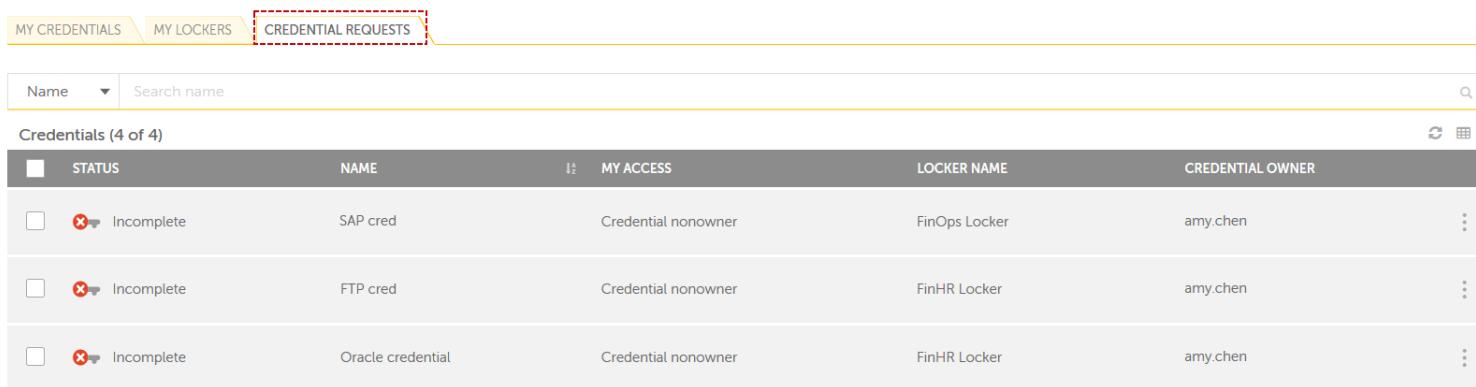
The dialog box shows the current state of column visibility. It lists 'SHOWN COLUMNS (7 OF 9)' and 'HIDDEN COLUMNS (2 OF 9)'. The shown columns include TYPE, NAME, MY CONSUMER PERMISSIONS, MY ADDITIONAL PERMISSIONS, MANAGERS, OWNERS, and CREDENTIALS. The hidden columns include LAST MODIFIED and MODIFIED BY. Each column name has a plus sign (+) next to it, indicating they can be shown by clicking.

 **Tip:** To **show/ hide** a column, click the column name.

## Credential Requests

This tab shows the list of user-provided credential requests sent to a Locker Admin and Locker owner i.e. when a credential is created with attribute as user-provided, all the consumers in the locker receive a request to fill in the credential value.

### Credentials

[Create credential...](#)


Name	Search name			
Credentials (4 of 4)				
Status	Name	My Access	Locker Name	Credential Owner
<input type="checkbox"/> Incomplete	SAP cred	Credential nonowner	FinOps Locker	amy.chen
<input type="checkbox"/> Incomplete	FTP cred	Credential nonowner	FinHR Locker	amy.chen
<input type="checkbox"/> Incomplete	Oracle credential	Credential nonowner	FinHR Locker	amy.chen

In the search pane you can **filter lockers** according to the following:

Table Item	Description
Status	Status of credential is complete or incomplete.
Name	Based on locker name.
My access	<b>Credential owner:</b> Credential has been created by you. <b>Credential non-owner:</b> Credential has been created by other user.

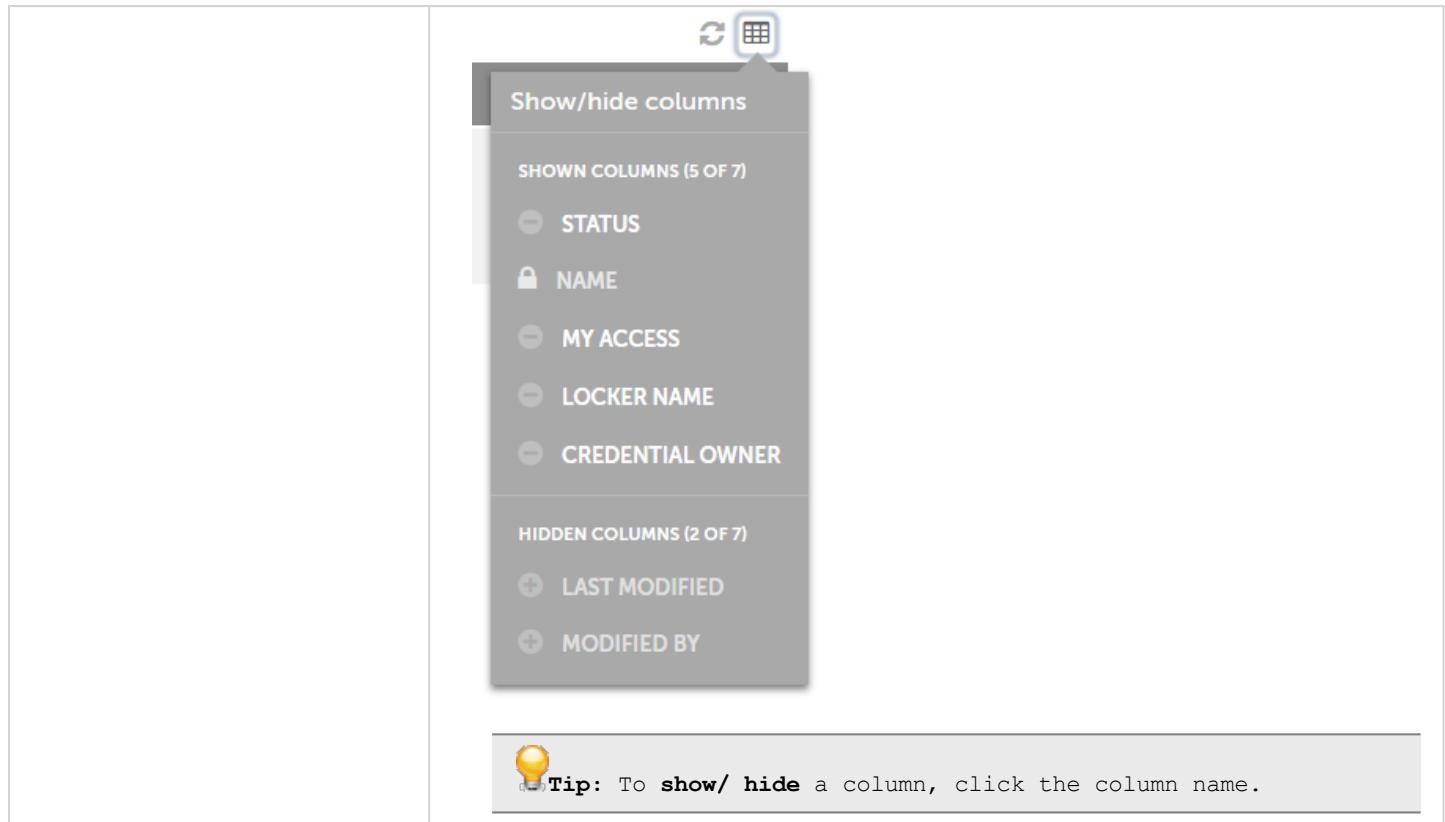
The following describes the list of items that can be viewed in the table:

Table Item	Description
Status	Shows the current status of your credential request.
Name	Name of the credential.
My access	Shows the current access status as credential owner or credential non-owner.
Locker Name	Name of locker assigned to the credential.
Credential Owner	Name of the credential owner.

Table Item	Description
View	Allows you to view credential requests. <a href="#">Learn more</a>
Edit	Allows you to edit credential requests. <a href="#">Learn more</a>

Alternatively, you can perform the following actions:

Table Item	Description
Refresh	Allows you to refresh the list of user- provided credential request.
Show/ hide columns	Allows you to show or hide specific columns. By default, all the columns are displayed.



**Show/hide columns**

**SHOWN COLUMNS (5 OF 7)**

- STATUS
- NAME
- MY ACCESS
- LOCKER NAME
- CREDENTIAL OWNER

**HIDDEN COLUMNS (2 OF 7)**

- + LAST MODIFIED
- + MODIFIED BY

**Tip:** To **show/ hide** a column, click the column name.

## Audit Logs

- Credentials:** All the **Create, Update, Delete, Transfer Credential Ownership** actions are tracked in audit log for record keeping and future use. You can refer those entries in the Audit Log page:

### Audit log

Actions (1303 of 2742)							
	STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
<input type="checkbox"/>	 Successful	18:37:19 IST 2018-01-09	Add Credential	FTP	amy.chen	172.16.16.61	Cont
<input type="checkbox"/>	 Successful	18:37:36 IST 2018-01-09	Update Credential	FTP	amy.chen	172.16.16.61	Cont
<input type="checkbox"/>	 Successful	18:38:00 IST 2018-01-09	Transfer Credential Ownership	FTP	amy.chen	172.16.16.61	Cont
<input type="checkbox"/>	 Successful	18:38:20 IST 2018-01-09	Delete Credential	FTP	amy.chen	172.16.16.61	Cont

- Lockers:** All the **Create, Update, Delete** actions are tracked in audit log for record keeping and future use. You can refer those entries in the Audit Log page:

### Audit log

Actions (1340 of 2779)							
	STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
<input type="checkbox"/>	 Successful	18:58:45 IST 2018-01-09	Add Locker	FinHR Locker	amy.chen	172.16.16.61	Cont
<input type="checkbox"/>	 Successful	18:58:55 IST 2018-01-09	Update Locker	FinHR Locker	amy.chen	172.16.16.61	Cont
<input type="checkbox"/>	 Successful	18:59:09 IST 2018-01-09	Delete Locker	FinHR Locker	amy.chen	172.16.16.61	Cont

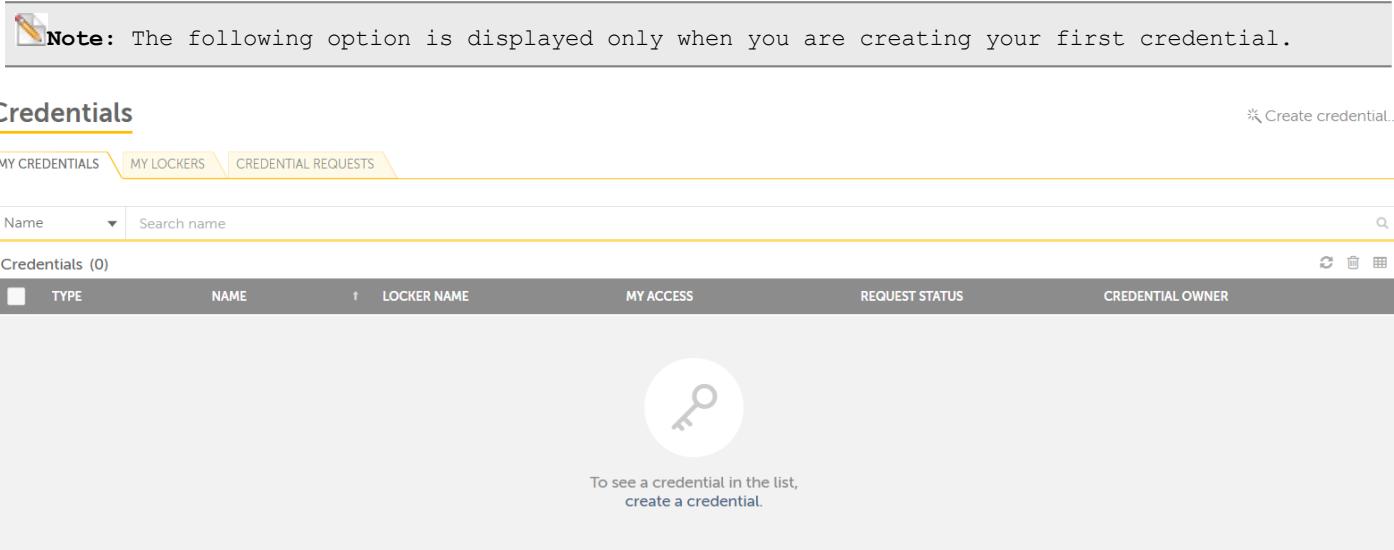
# Create a credential

As an Automation Expert, Credential Vault provisions you to securely create and store your credentials. Therefore, it ensures that your credentials can be used in Bots without compromising security with safe deployment of tasks. Any authorized user can create credentials.

To create credential, follow the steps mentioned below:

1. Login to Control Room, click Bots → Credentials.

2. Click **Create credential** button or click **create a credential** under the credentials tab.



 **Note:** The following option is displayed only when you are creating your first credential.

To see a credential in the list,  
create a credential.

3. This opens the Create credentials page in which you can add attributes to your credentials. Provide Credential details such as Credential name and Description (optional) and Attribute details such as Attribute Name, Description (optional), Value (masked and

unmasked), and also you can check or clear whether you want your credential attributes to be **User-specific** or **Standard**.

## Create credential

Cancel

Please name your credential and start adding attributes to it.

Credential name	Description (Optional)
<input type="text" value="FTP"/>	<input type="text"/>
<small>Max characters = 50</small>	<small>Max characters = 255</small>

## General

### **Locker (optional)**

A credential must be in a locker for a bot to use it. You can also give other users permission to use credentials that are in a locker.

NAME ↑	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS

## Attributes

A masked value will be shown as asterisks at all times.

Attribute name	Value
Password	(user-provided)
Max characters = 50	
Description (optional)	<input type="radio"/> Standard <input checked="" type="checkbox"/> Masked <input checked="" type="radio"/> User-provided
Max characters = 255	

Attribute name	Value
<input type="text" value="Server Name"/>	<input type="text" value="*****"/>
Max characters = 50	
Description (optional)	<input checked="" type="radio"/> Standard <input type="checkbox"/> Masked <input type="radio"/> User-provided
<input type="text" value="Max characters = 255"/>	

- **Standard:** In case of standard attribute, user must input the value.
  - **User specific:** In case of user-specific attribute, the value field is greyed-out.



**Note:** Only consumers of the locker containing this credential can provide the value

4. Click on Create credential.

## Create credential

Cancel

Please name your credential and start adding attributes to it.

Credential name	Description (Optional)
FTP	
<small>Max characters: 50</small>	<small>Max characters: 255</small>

 **Note:** If you already have an existing locker, then you can assign your credential to the respective one while adding Credential details. If no locker has been created then you must create a locker and then assign your credential.

5. The following notification indicates that your credential has been successfully created:



6. Once your credential is successfully created, it is visible in the list of credentials tab.

## Credentials

 Create credential...  Create locker...

Name	Search name	Actions			
TYPE	NAME	LOCKER NAME	MY ACCESS	REQUEST STATUS	CREDENTIAL OWNER
<input type="checkbox"/>  User-provided	FTP	--	Credential owner	N/A	amy.chen

 **Note:** If email notification setting is enabled and credentials are added to a locker, then all the locker consumers shall receive an email. [Learn more](#)

## Next...

The next step is to add your credentials to a secure locker. [Learn More](#)

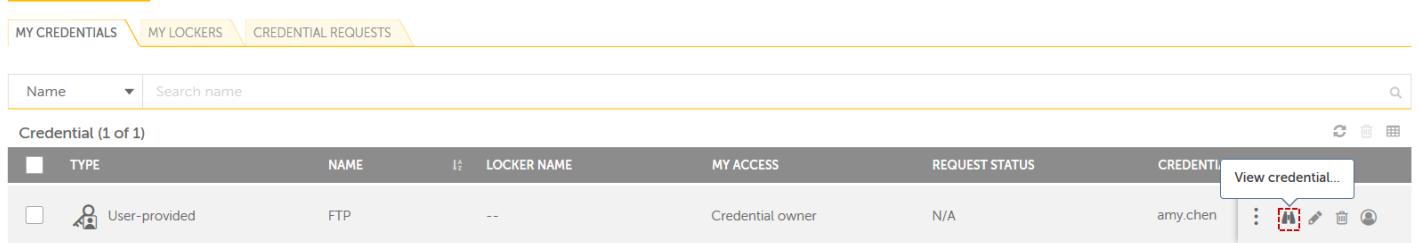
## View a credential

As an authorized user, this page allows user to view details of any credential. When you click the **View** icon  for an individual credential. It provides information, such as the Credential details, Attribute name, Description, Credential Type and Value, and General details such as Last modified, Modified by, Object type, and Credential type.

To view a credential, follow the steps mentioned below:

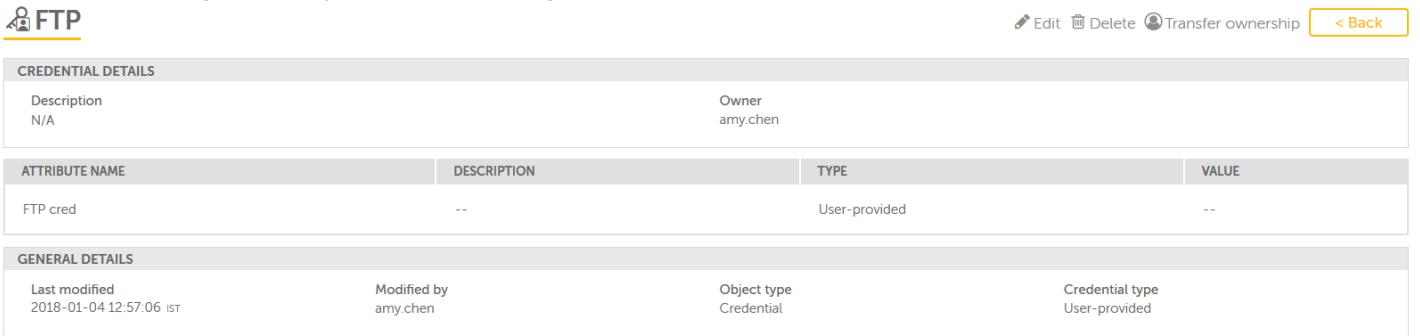
1. Go to **Bots → Credentials**.
2. In **My Credentials** tab, choose the credential that you wish to view. Go to action list and click **View credential**.

### Credentials



MY CREDENTIALS							 Create credential...	 Create locker...
Name	Search name							
Credential (1 of 1)							 View credential...	
Type	Name	Locker Name	My Access	Request Status	Credential			
User-provided	FTP	--	Credential owner	N/A	amy.chen		  	

3. View credential page is displayed with the following details:



 FTP							
<span> Edit</span> <span> Delete</span> <span> Transfer ownership</span> <span>&lt; Back</span>							
<b>CREDENTIAL DETAILS</b>							
<table border="1"> <tr> <td>Description</td> <td>Owner</td> </tr> <tr> <td>N/A</td> <td>amy.chen</td> </tr> </table>				Description	Owner	N/A	amy.chen
Description	Owner						
N/A	amy.chen						
<b>ATTRIBUTE NAME</b>							
FTP cred	--	User-provided	--				
<b>GENERAL DETAILS</b>							
Last modified 2018-01-04 12:57:06 IST	Modified by amy.chen	Object type Credential	Credential type User-provided				



• **Edit credential**- Allows you to modify the your credential.



• **Delete credential**- Allows you to delete your credential.

• **Credential details**- Description and credential owner.

• **Attribute name, credential description, type, value.**

• **General details**- last modified (date and time), modified by, object type, credential type.

# Edit a credential

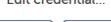
As an Control Room user, edit credential allows you to edit details of any credential. This is useful in scenarios where you may want to make changes to your credential definition and value.

 **Note:** If a credential type is user-provided, then locker consumers have permission to edit the credential and their credential value.

1. Go to *Bots → Credentials*
2. Choose the credential that you wish to edit on the **actions list** click on **edit credential**.

 **Note:** If your credential is assigned to a locker, then you can only edit the value of common attribute. And if the attribute is user-specific then the locker consumers can edit the value.

## Credentials

MY CREDENTIALS						
MY LOCKERS						
CREDENTIAL REQUESTS						
Name	Search name					
Credential (1 of 1)						
Type	Name	Locker Name	My Access	Request Status	Credential Owner	
<input type="checkbox"/> User-provided	FTP	--	Credential owner	N/A	amy.chen	

3. In the edit credentials page, make the required changes.

 If email notification setting is enabled and credentials are added to a locker, then all the locker consumers shall receive an email. [Learn more](#)

- In case of **user-provided credential**, you can only edit **General** information such as adding or removing a locker.
- In case of standard credential, you can edit **General** information such as adding or removing a locker and **Attribute** detail such as credential value

 **Note:** You can choose to **Close** or **Cancel** your updates. **Close** option is available when you do not make any updates. It changes to **Cancel** when you make any change to the page.

4. Once you complete editing the credential, click on save changes or you may click on cancel to undo the changes. A credential can be edited by a credential owner, or if the credential type is **user-provided** then locker consumers can **edit the credential value**

## Edit credential

[Cancel](#) [Save changes](#)

Only the owner of a credential can edit the attribute name and descriptions;  
A consumer of a credential can only edit the user-specific values of a credential.

Credential name	Description (Optional)
FTP	Max characters = 255
<b>General</b>	
Locker (optional)	
LOCKER NAME	Add →

## Attributes

Attribute name	Value	
Password	12345678	
Description (optional)		
Max characters = 50		
Max characters = 255		
<input checked="" type="radio"/> Standard <input type="radio"/> User-provided		<input type="checkbox"/> Masked

5. The following notification indicates that your credential has been successfully edited.



# Delete a credential

A credential owner can select the **delete** option to remove redundant credentials from the system.

To delete a credential, follow the steps mentioned below:

1. Go to Bots → Credentials
2. In **My credentials** tab, choose the credential that you wish to delete. Mouse over to actions list and click **delete** .

 **Note:** If a locker is assigned to a credential, then it cannot be deleted.

The following message is displayed, click **Yes, delete** to delete your credential and **No, cancel** to cancel deletion:

**Do you want to permanently delete credential FTP?**

**No, cancel**

**Yes, delete**

 **Note:** If you are a credential non-owner, then you cannot delete a credential.

3. To delete multiple credentials, you must perform table level delete action. Select the multiple credentials and click **delete** .

**Credentials**

Credentials (3 of 3) 2 checked						
	TYPE	NAME	LOCKER NAME	MY ACCESS	REQUEST STATUS	CREDENTIAL OWNER
<input checked="" type="checkbox"/>	Standard	FTP	--	Credential owner	N/A	amy.chen
<input checked="" type="checkbox"/>	User-provided	Oracle credentials	--	Credential owner	N/A	amy.chen
<input type="checkbox"/>	Standard	SAP credentials	--	Credential nonowner	N/A	rebecca.brown

The following message is displayed, click **Yes, delete** to delete your credential and **No, cancel** to cancel deletion:

**Do you want to permanently delete these 2 credentials?**

**No, cancel**

**Yes, delete**

4. Once the credentials is deleted, the following notification is displayed:



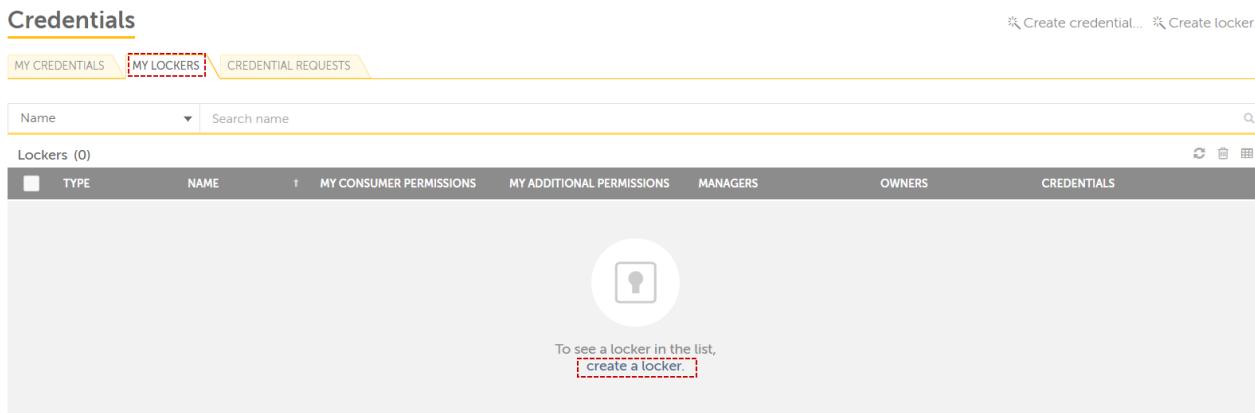
# Create a locker

A user with locker admin or manage my locker permission is authorized to create a locker. A locker can be used to group similar credentials and share it with other users.

To create a locker, follow the steps mentioned below:

1. Go to Bots → Credentials
2. In **My Lockers** tab, click **Create locker**. If you are creating locker for the **first time**, then the following screen is displayed:

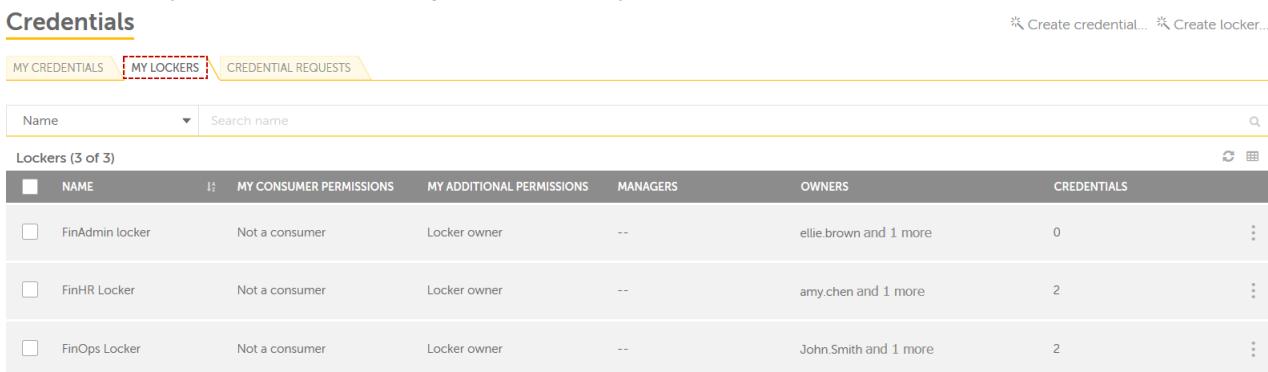
**Credentials**



The screenshot shows the 'Credentials' interface with the 'MY LOCKERS' tab selected. At the top right are 'Create credential...' and 'Create locker...'. Below is a search bar and a table header for 'Lockers (0)'. The table columns are: TYPE, NAME, MY CONSUMER PERMISSIONS, MY ADDITIONAL PERMISSIONS, MANAGERS, OWNERS, and CREDENTIALS. In the center, there's a large circular icon with a keyhole symbol and a message: 'To see a locker in the list, create a locker.' A red dashed box highlights the 'Create a locker...' button.

If lockers already exist, then the following screen is displayed:

**Credentials**



The screenshot shows the 'Credentials' interface with the 'MY LOCKERS' tab selected. At the top right are 'Create credential...' and 'Create locker...'. Below is a search bar and a table header for 'Lockers (3 of 3)'. The table columns are: NAME, MY CONSUMER PERMISSIONS, MY ADDITIONAL PERMISSIONS, MANAGERS, OWNERS, and CREDENTIALS. Three rows are listed: 'FinAdmin locker' (Not a consumer, Locker owner, --, ellie.brown and 1 more, 0), 'FinHR Locker' (Not a consumer, Locker owner, --, amy.chen and 1 more, 2), and 'FinOps Locker' (Not a consumer, Locker owner, --, John.Smith and 1 more, 2). A red dashed box highlights the 'Create locker...' button at the top right.

3. The create locker page is displayed. You can add locker details such as:

- Name and Description
- Add credentials, owners, managers, participants, consumers.
- **Credentials:** Shows the available credentials owned by the user. You can select one or multiple credentials from the list and add it to the locker.

 **Note:** If email notification setting is enabled and credentials are added to a locker, then all the locker consumers shall receive an email. [Learn more](#)

## Create locker

[Cancel](#) [Create locker](#)

Locker name  Max characters = 50 Description (Optional)  Max characters = 255

**CREDENTIALS** (Optional)  
• Credentials selected (0)

**OWNERS**   
• User selected (1)

**MANAGERS** (Optional)  
• Users selected (0)

**PARTICIPANTS** (Optional)  
• Users selected (0)

**CONSUMERS** (Optional)  
• Users selected (0)

**Locker credentials**

Search name

Available credentials (2 of 2)

<input type="checkbox"/> NAME	<input type="checkbox"/> FTP
<input type="checkbox"/> Oracle credentials	

Selected (0)

<input type="checkbox"/> NAME
-------------------------------

[Next >](#)

- Owners:** A locker owner can edit, view, delete a locker and can add or remove other owners. Also, an owner can be a locker consumer but **cannot be a manager or participant** within the same locker.

Locker name  Max characters = 50 Description (Optional)  Max characters = 255

**CREDENTIALS** (Optional)  
• Credentials selected (0)

**OWNERS**   
• User selected (1)

**MANAGERS** (Optional)  
• Users selected (0)

**PARTICIPANTS** (Optional)  
• Users selected (0)

**CONSUMERS** (Optional)  
• Users selected (0)

**Locker owners**

As a Locker administrator, you can remove owners. However, every locker should have at least one owner. Therefore, if there is only one owner, and it is disabled, add another owner and then the disabled owner will become enabled.

Search username

Available users (19 of 20)

<input checked="" type="checkbox"/> Jason.Goodman
<input type="checkbox"/> tom.watson
<input checked="" type="checkbox"/> Mike.Lee
<input type="checkbox"/> ks

Selected (1)

<input type="checkbox"/> USERNAME
amy.chen

[Back](#) [Next >](#)

- Managers:** A locker manager has access to all the functionality like a locker owner, but they do not have permission to add owners, managers, or participants to the locker.



**Note:** Disabled users cannot be selected as locker managers if they were already selected as owners in the previous tab.

## Create locker

[Cancel](#) [Create locker](#)

Locker name  Max characters = 50 Description (Optional)  Max characters = 255

**CREDENTIALS** (Optional)  Credentials selected (2)

**OWNERS**  Users selected (3)

**MANAGERS** (Optional)  Users selected (0)

**PARTICIPANTS** (Optional)  Users selected (0)

**CONSUMERS**  Users selected (0)

**Locker managers**

Locker managers have all the permissions that owners do except they cannot add other owners or managers.

In the table, disabled users cannot be selected because they were already selected as owners or managers on the previous tab.

Available users (21 of 21)		Selected (0)	
<input type="checkbox"/>	USERNAME	<input type="checkbox"/>	USERNAME
<input type="checkbox"/>	tom.watson		
<input type="checkbox"/>	Ellie.brown		
<input type="checkbox"/>	amy.chen		
<input type="checkbox"/>	fpermission		
<input type="checkbox"/>	Jason.Goodman		

← Back Next →

- Participants:** A locker participant has access to view a locker and participants can also add their own credentials to a locker.

 **Note:** A **locker participant** does not have access or visibility of credentials created by other users.

## Create locker

[Cancel](#) [Create locker](#)

Locker name  Max characters = 50 Description (Optional)  Max characters = 255

**CREDENTIALS** (Optional)  Credentials selected (2)

**OWNERS**  Users selected (3)

**MANAGERS** (Optional)  User selected (1)

**PARTICIPANTS** (Optional)  Users selected (0)

**CONSUMERS**  Users selected (0)

**Locker participants**

Locker participants will be able to view this locker. They will be able to add (but not remove) their own credentials to this locker. They will be able to see their credentials, but no other credentials, that are in the locker. They will not be able to use their credentials, when running a bot, unless they are also a locker consumer (see next tab).

In the table, disabled users cannot be selected because they were already selected as owners or managers on the previous tabs.

Available users (21 of 21)		Selected (0)	
<input type="checkbox"/>	USERNAME	<input type="checkbox"/>	USERNAME
<input type="checkbox"/>	admin		
<input type="checkbox"/>	AdminLockerAutomationUser		
<input type="checkbox"/>	amy.chen		

← Back Next →

- Consumers:** You must select one or more roles. The users belonging to these selected roles are the consumers of the lockers. These users have access to view a locker and input credential value.

If the credential type is:

**Standard:** Locker consumers can view the locker and all the credentials inside the locker. They are able to utilize credentials in the locker when running a bot. All consumers are able to see the same value of the credential that is set by the owner of the credential.

**User-provided:** Consist of same usability as Standard credential; locker consumers are able to input their information in user-provided credentials with user-provided attributes (i.e. credential value).

**Note:** System-created roles are not displayed in the consumer list.

### Create locker

Locker name	Description (Optional)							
FinHR Locker	Max characters = 255							
<input checked="" type="checkbox"/> CREDENTIALS (Optional) • Credentials selected (2)								
<input checked="" type="checkbox"/> OWNERS (Optional) • Users selected (3)								
<input checked="" type="checkbox"/> MANAGERS (Optional) • User selected (1)								
<input checked="" type="checkbox"/> PARTICIPANTS (Optional) • User selected (1)								
<input checked="" type="checkbox"/> CONSUMERS (Optional) • Users selected (0)								
<b>Locker consumers</b> <p>Locker consumers will be able to view this locker. They will be able to view all the credentials in the locker.</p> <p>They have 2 additional permissions: 1) They will be able to input their information in user-provided credentials with user-provided attributes. 2) They will be able to use credentials in this locker when running a bot.</p>								
Available roles (6 of 6) <table border="1"> <tr> <td><input type="checkbox"/> NAME</td> <td>BotCreator</td> <td>BotRunner</td> </tr> <tr> <td><input type="checkbox"/> all</td> <td>fpermssn</td> <td>LockerAndLicenseManager</td> </tr> </table> Selected (0) <table border="1"> <tr> <td><input type="checkbox"/> NAME</td> </tr> </table>		<input type="checkbox"/> NAME	BotCreator	BotRunner	<input type="checkbox"/> all	fpermssn	LockerAndLicenseManager	<input type="checkbox"/> NAME
<input type="checkbox"/> NAME	BotCreator	BotRunner						
<input type="checkbox"/> all	fpermssn	LockerAndLicenseManager						
<input type="checkbox"/> NAME								

#### 4. Click on **Create locker**.

### Create locker

Locker name	Description (Optional)							
FinHR Locker	Max characters = 255							
<input checked="" type="checkbox"/> CREDENTIALS (Optional) • Credential selected (1)								
<input checked="" type="checkbox"/> OWNERS (Optional) • Users selected (2)								
<input checked="" type="checkbox"/> MANAGERS (Optional) • User selected (1)								
<input checked="" type="checkbox"/> PARTICIPANTS (Optional) • User selected (1)								
<input checked="" type="checkbox"/> CONSUMERS (Optional) • Users selected (2)								
<b>Locker consumers</b> <p>Locker consumers will be able to view this locker. They will be able to view all the credentials in the locker.</p> <p>They have 2 additional permissions: 1) They will be able to input their information in user-provided credentials with user-provided attributes. 2) They will be able to use credentials in this locker when running a bot.</p>								
Available roles (4 of 6) <table border="1"> <tr> <td><input type="checkbox"/> NAME</td> <td>all</td> <td>fpermssn</td> <td>LockerAndLicenseManager</td> </tr> </table> Selected (2) <table border="1"> <tr> <td><input type="checkbox"/> NAME</td> </tr> <tr> <td><input type="checkbox"/> Bot Creator</td> </tr> <tr> <td><input type="checkbox"/> BotRunner</td> </tr> </table>		<input type="checkbox"/> NAME	all	fpermssn	LockerAndLicenseManager	<input type="checkbox"/> NAME	<input type="checkbox"/> Bot Creator	<input type="checkbox"/> BotRunner
<input type="checkbox"/> NAME	all	fpermssn	LockerAndLicenseManager					
<input type="checkbox"/> NAME								
<input type="checkbox"/> Bot Creator								
<input type="checkbox"/> BotRunner								

#### 5. The following message indicates that your locker has been successfully created:

Bots > Credentials

 FinHR Locker successfully created 

### Credentials

NAME	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS	MANAGERS	OWNERS	CREDENTIALS
FinHR Locker	Not a consumer	Locker owner	--	Ellie.brown and 2 more	1

 **Note:** In case of [email notification setting](#) enabled, all the locker consumers will receive an email to edit the credential value if credential type is user-provided. [Learn more](#)

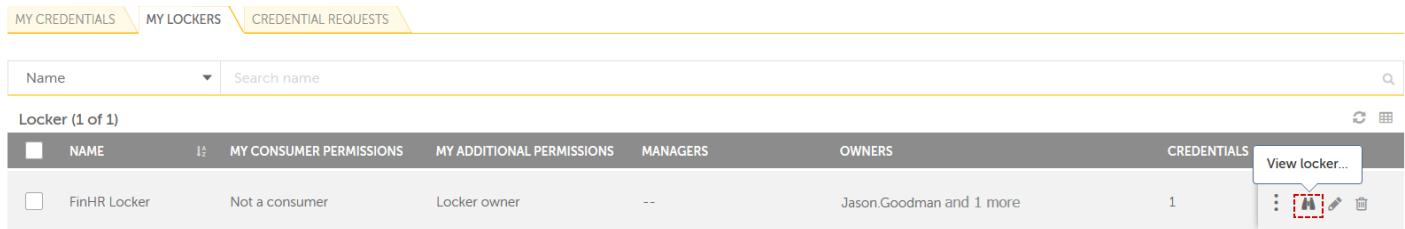
# View a locker

Any user with "Manage my locker" permission can view their own lockers. This provides information such as credentials assigned to the locker, locker owners, locker managers, locker consumers, and locker participants.

To view a locker, follow the steps mentioned below:

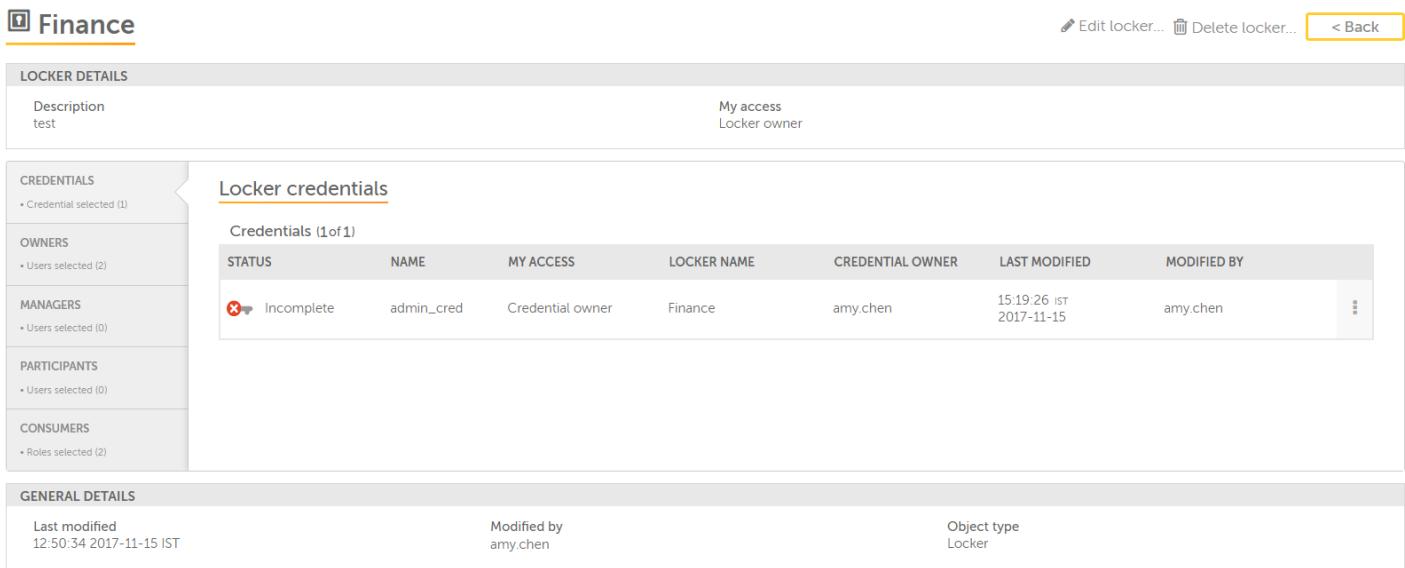
1. Go to Bots → Credentials
2. In **My Lockers** tab, choose the locker that you wish to view. Go to action list and click **View locker...**

## Credentials



NAME	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS	MANAGERS	OWNERS	CREDENTIALS
FinHR Locker	Not a consumer	Locker owner	--	Jason.Goodman and 1 more	1

3. View locker page displays the following details:



LockeR CredentiaLs						
Credentials (1 of 1)						
STATUS	NAME	MY ACCESS	LOCKER NAME	CREDENTiaL OWNER	LAST MODIFIED	MODIFIED BY
<span style="color: red;">X</span> Incomplete	admin_cred	Credential owner	Finance	amy.chen	15:19:26 IST 2017-11-15	amy.chen



- **Edit locker-** Allows you to modify your locker. [Learn more](#)



- **Delete locker-** Allows you to delete your locker.
- **Credentials-** Shows list of credentials added to the locker.
- **Owners-** Shows list of locker owners.
- **Managers-** Shows list of locker managers.
- **Participants-** Shows the list of locker participants. **Locker participants** are able to view this locker. They can add their own credentials to a locker. They will be able to see their credentials, but no other credentials, that are in the locker.
- **Consumers-** Shows the list of locker consumers. **Locker consumers** are able to view this locker and all the credentials inside the locker. A locker consumer with user-provided credential type have two additional permissions:  
1) They will be able to input their information in user-provided credentials with user-provided attributes. 2) They will be able to use credentials in this locker when running a bot.

# Edit a locker

Control Room users with Locker Admin permission or any user having edit permission can edit their own lockers and access this feature.

To edit a locker, follow the steps mentioned below:

1. Go to Bots → Credentials.
2. In **My Lockers** tab, choose the locker that you wish to edit. Then on the action list, click **edit locker**.

 **Note:** Only a locker owner or locker admin has permission to edit a locker.

**Credentials**

MY CREDENTIALS MY LOCKERS CREDENTIAL REQUESTS

Name	Search name				
Locker (1 of 1)					
<input type="checkbox"/> NAME	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS	MANAGERS	OWNERS	CREDENTIALS
<input type="checkbox"/> FinHR Locker	Not a consumer	Locker owner	--	Jason.Goodman and 1 more	1



3. You can make changes to the following:

 If email notification setting is enabled and credentials are added to a locker, then all the locker consumers shall receive an email. [Learn more](#)

- **Credentials**- Add or remove credentials that are assigned to a locker.
- **Owners**- Add or remove locker owners.
- **Managers**- Add or remove locker managers.
- **Participants**- Add or remove locker participants.
- **Consumers**- Add or remove locker consumers.

4. Once you finish editing the locker. Click **Save changes**.

 **Note:** You can choose to **Close** or **Cancel** your updates. **Close** option is available when you do not make any updates. It changes to **Cancel** when you make any change to the page.

**Edit locker**

Locker name	FinHR Locker	Description (Optional)										
		Max characters = 50										
CREDENTIALS (Optional) + Credential selected (1)	<b>Locker credentials</b> <input type="text" value="Search name"/> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;">           Available credentials (1 of 2)           <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">NAME</th> <th style="width: 90%;"></th> </tr> <tr> <td><input type="checkbox"/> Oracle credentials</td> <td><input type="button" value="→"/></td> </tr> </table> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 5px;">           Selected (1)           <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 10%;">NAME</th> <th style="width: 90%;"></th> </tr> <tr> <td><input type="checkbox"/> Oracle credentials</td> <td><input type="button" value="←"/></td> </tr> <tr> <td><input type="checkbox"/> FTP</td> <td><input type="button" value="←"/></td> </tr> </table> </div> </div>		NAME		<input type="checkbox"/> Oracle credentials	<input type="button" value="→"/>	NAME		<input type="checkbox"/> Oracle credentials	<input type="button" value="←"/>	<input type="checkbox"/> FTP	<input type="button" value="←"/>
NAME												
<input type="checkbox"/> Oracle credentials	<input type="button" value="→"/>											
NAME												
<input type="checkbox"/> Oracle credentials	<input type="button" value="←"/>											
<input type="checkbox"/> FTP	<input type="button" value="←"/>											
OWNERS + Users selected (2)												
MANAGERS (Optional) + User selected (1)												
PARTICIPANTS (Optional) + User selected (1)												
CONSUMERS + User selected (1)												
<b>GENERAL DETAILS</b>												
Last modified 2018-01-03 17:31:28 IST	Modified by amy.chen	Object type Locker										

5. The following message indicates that your locker has been **successfully edited**:



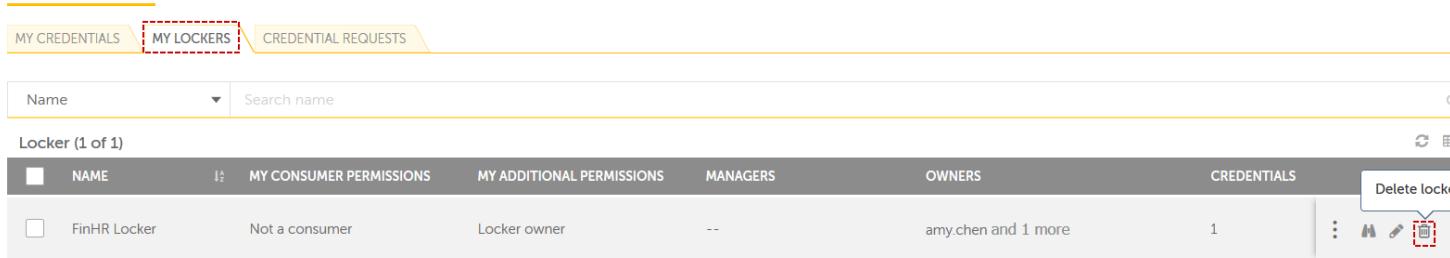
## Delete a locker

To eliminate redundant lockers from the system, a locker owner can perform the delete action.

To delete a locker, follow the steps mentioned below:

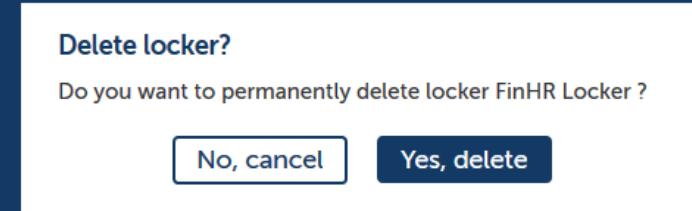
1. Go to Bots → Credentials
2. In My Lockers tab, choose the locker that you wish to delete. Mouse over to actions list and click delete .

**Credentials**



NAME	MY CONSUMER PERMISSIONS	MY ADDITIONAL PERMISSIONS	MANAGERS	OWNERS	CREDENTIALS
FinHR Locker	Not a consumer	Locker owner	--	amy.chen and 1 more	1

3. The following message is displayed, click **Yes, delete** to delete your locker and **No, cancel** to cancel deletion:



4. Once the locker is successfully deleted, the following notification is displayed:



# Credential requests

This page allows a Control Room user to send credential requests to locker consumers i.e. when a user-provided credential is added to a locker, all the consumers of the locker receive a credential request in their name to fill in their credential values.

**Example:** Amy.chen is a user with **manage my locker** permission. Amy.chen creates a credential with credential type as **user-provided** and assigns it to a locker. Therefore, a credential request is sent to all the locker consumers. All the locker consumers will receive a request to complete the credential status by adding the credential value.

To generate credential request, follow the steps mentioned below:

1. Go to Bots → Credentials
2. Create a credential ([Learn more](#)) with credential type as **user-provided**.
3. Assign your credential to a locker.
4. All the present locker consumers will receive a credential request. You can see that the following user receives a **credential request**:

 **Note:** If locker consumers provide the credential value then the status of this credential is set to complete. However, the overall status of the credential remains incomplete until all consumers add their credential values.

**Credentials**

[Create credential...](#)

MY CREDENTIALS | MY LOCKERS | **CREDENTIAL REQUESTS**

Name	Search name				
Credential (1 of 1)					
STATUS	NAME	MY ACCESS	LOCKER NAME	CREDENTIAL OWNER	
<input checked="" type="checkbox"/>  Incomplete	Oracle credentials	Credential nonowner	FinHR Locker	amy.chen	

5. Once all the consumers input the credential value, the status of the credential changes to complete.

 **Note:** If email notification setting is enabled and credentials are added to a locker, then all the locker consumers shall receive an email to input the credential value. [Learn more](#)

**Next...**

After completing the credential request you can use these credentials in automation tasks. Refer the topic **Assigning Credential Variables** in Client User Guide 11.0 to use credentials within a task.

# Credential Vault Email-Notifications

In Control Room, if Email notification setting is enabled it ensures that users are notified via email if any important changes regarding credentials and lockers are made.

Email notifications are sent via email for the below mentioned scenarios:

1. When credential is added to a locker. [Learn more](#)
2. When a member is added to or removed from the locker. [Learn more](#)
3. When there is change in permissions for locker members. [Learn more](#)
4. When a consumer gets added or removed from a role assigned to locker, and consumer roles get added to or removed from the locker. [Learn more](#)

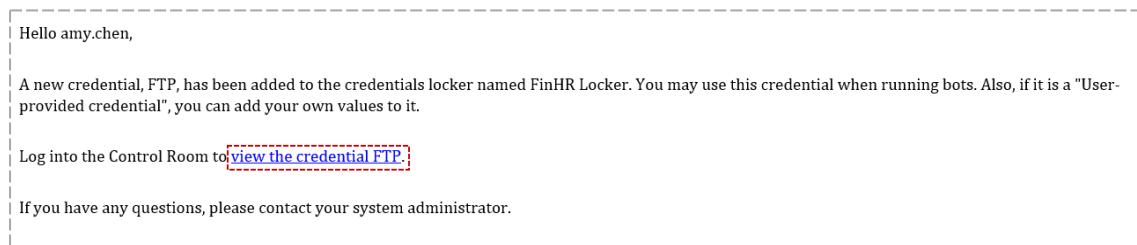
## Detailed information on Credential Vault-email notifications

- **Credential is added to a locker**

When a new credential is added to a locker an email notification is sent to all consumers of the locker at their registered email address in Control Room. The email consists of a link to the Credential that is added to the locker. The consumers are redirected to Edit credential page wherein they must input the credential value.

**For example:** Credential FTP is added to a locker Fin HR Locker. All the locker consumers will receive an email notification to add the credential value. The below screen-shot illustrates that consumer amy.chen has received an email with a link to Edit Credential page:

Click on **view the credential FTP** link. This navigates user "amy.chen" to Edit Credential page.

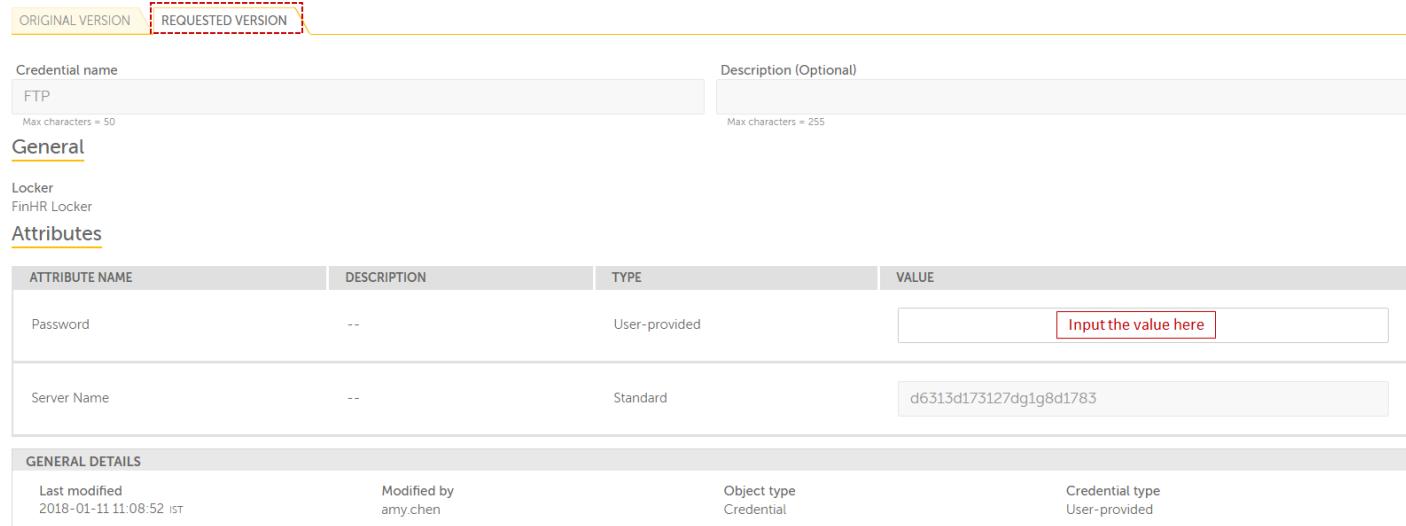


In Edit Credential page, user must click on **Requested version** and input the value. And click on **Save changes**.

### Edit credential

[Close](#)
[Save changes](#)

Only the owner of a credential can edit the attribute name and descriptions; A consumer of a credential can only edit the user-specific values of a credential.



The screenshot shows the 'Edit credential' page for a credential named 'FTP'. The 'Requested Version' tab is selected. The page includes fields for 'Credential name' (FTP), 'Description (Optional)', and a table for 'Attributes'. The 'GENERAL DETAILS' section shows last modified date, modified by user, object type, and credential type.

ATTRIBUTE NAME	DESCRIPTION	TYPE	VALUE
Password	--	User-provided	<input type="text" value="Input the value here"/>
Server Name	--	Standard	d6313d173127dg1g8d1783

GENERAL DETAILS			
Last modified 2018-01-11 11:08:52 IST	Modified by amy.chen	Object type Credential	Credential type User-provided

- **Member is added or removed from a locker**

An email notification is sent when a new member (co-owner or participant) is added to a locker. The email consists link to the Locker of which they are added as member.

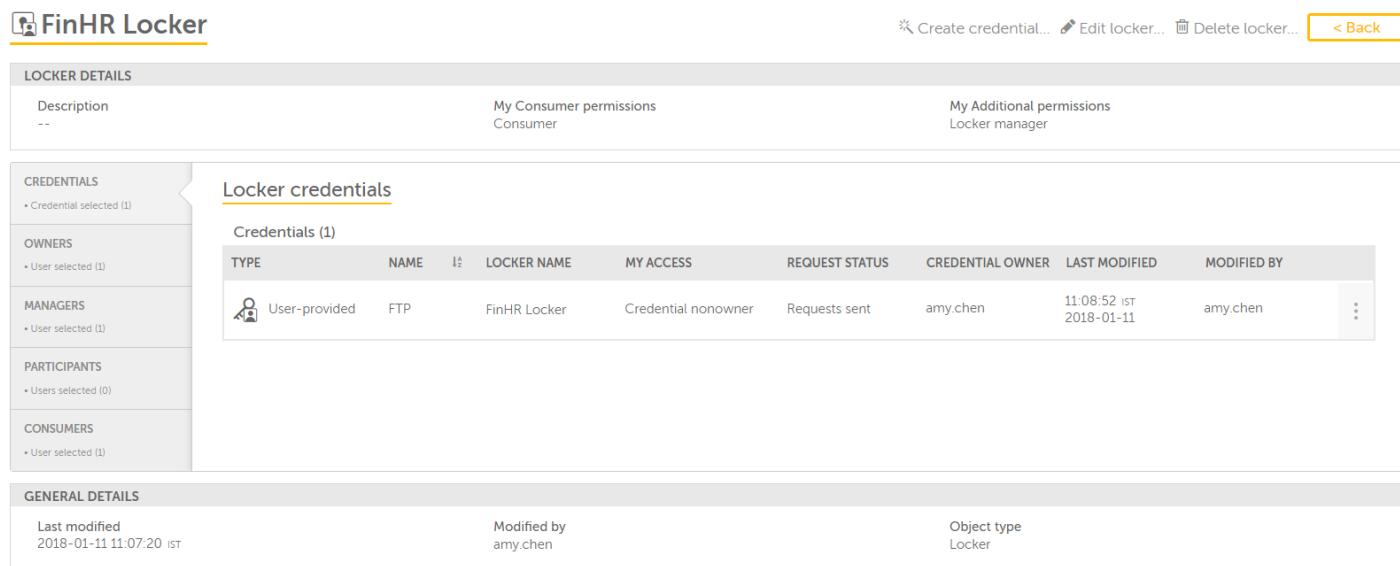
**For example:** User Ellie.brown is added as a locker participant for FinHR Locker. The following email is sent to the user wherein user must link on the link:

Hello ellie.brown,

You have been added to a credentials locker. Go to the Control Room now to [view the locker FinHR Locker](#).

If you have any questions, please contact your system administrator.

The link redirects user to View locker- FinHR Locker page as illustrated in the following screenshot:



The screenshot shows the 'FinHR Locker' interface. On the left, there's a sidebar with sections for CREDENTIALS (1 selected), OWNERS (1 selected), MANAGERS (1 selected), PARTICIPANTS (0 selected), and CONSUMERS (1 selected). The main area is titled 'Locker credentials' and shows a table with one row:

TYPE	NAME	LOCKER NAME	MY ACCESS	REQUEST STATUS	CREDENTIAL OWNER	LAST MODIFIED	MODIFIED BY
User-provided	FTP	FinHR Locker	Credential nonowner	Requests sent	amy.chen	11:08:52 IST 2018-01-11	amy.chen

The following email is sent to the user when user is removed from the locker as a member of participant:

Hello ellie.brown,

You have been [removed from a credentials locker named FinHR Locker](#). If you have any questions, please contact your system administrator.

- **Change in permission for locker members**

When a locker owner/ admin, grants or removes locker membership permissions from a locker, an email notification is sent to the locker members at their email address. This ensures that members are notified of their membership changes within the locker.

- **Locker consumer gets added or removed from a role assigned to a locker, and consumer role gets added or removed from a locker**

When a role assigned to a locker is modified by addition or removal of users, an email notification is sent to the new or existing user at their email address so that the consumers are notified that credentials are pending for their input in the locker.

Also when a new role added to a locker or an existing role is revoked from the locker, an email notification is sent to the new or existing consumers at their email address so that the consumers are made aware of the changes.

**For Example:** User amy.chen is assigned consumer role "Creator" in FinHR Locker. The role has been **revoked** from the locker, the user receives the following email:

Hello amy.chen,

Your "Consumer" permissions to the credentials [locker named FinHR Locker have been revoked](#). If you have any questions, please contact your system administrator.

If the role is assigned to the locker, then locker consumer amy.chen receives the following email:

Hello amy.chen,

You have been given "Consumer" permissions to the credentials locker named FinHR Locker. These permissions allow you to use the credentials inside the locker when running bots. Also, you can provide your own values in any user-provided credentials inside the locker.

Log into the Control Room to [view the locker FinHR Locker](#).

If you have any questions, please contact your system administrator.

S

# My bots - Overview

As a Bot Creator, when you upload files from Automation Anywhere Enterprise Client, the files are displayed on the **My bots** page. This page is divided into the following areas:

- [Folders](#)
- [Files and folders](#)

 **Note:** As a Control Room user, you must have the right privileges to access this page. Folders for which you do not have access to will not be visible to you.

The **My bots** page also allows you to perform tasks, such as exploring your documents, executable files, metabots, reports, scripts, tasks, and workflows from the Folders area. It also allows you to:

- [Import bot files](#)
- [Export bot files](#)
- [Run a Bot](#)
- [Schedule a bot](#)
- [Run bot with queue](#)

Bots > My bots

## My bots

[Import bot files...](#) [Export bot files...](#) [Run bot now...](#) [Run bot with queue...](#) [Schedule bot...](#)

To see files here, upload them from your Bot creator or your Bot runner. You will only see files that you have permission to see.  
 You can run locked files. A lock icon means that the file cannot be checked out from the client.

Folders		Search name						
		Files and folders (10 of 10)						
		Type	Name	Size	Client Last Modified	Last Modif...	Modified By	
▶	My Docs							⋮
▶	My Exes							⋮
▶	My MetaBots							⋮
▶	My Reports							⋮
▶	My Scripts							⋮
▶	My Tasks							⋮
▼	Sample Tasks							⋮
▶	Analytics-Tasks							⋮

For ease of access, you can apply search parameters to Type, Name and Version Control columns.

- You can specify the search parameters in the search bar for Name:

Name	▼	Search name	→				
Files and folders (7 of 7)							
Type	Name	Size	Last Modified	Modified By	Version Cont...	Production V...	
Task Bot	Variables.atmx	868.64 KB	15:27:55 IST 2017-12-27	admin	Unlocked	34	⋮

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Type and Version Control:



The screenshot shows a user interface for managing devices. At the top left, there is a dropdown menu labeled "Status" with a downward arrow. A dropdown menu is open, showing the following options: "Choose status" (highlighted in yellow), "Connected" (highlighted in blue), "Disconnected", and "Offline". Below this, a section titled "Devices (5 of 5)" is visible, showing a table with one row. The row contains the following columns: a checkbox icon, a "STATUS" icon (a computer monitor with a signal), the text "Disconnected", the URL "PRODUCT.COM", the name "Mike Lee", "N/A" under "Bot creator", and a three-dot menu icon. The entire interface has a light gray background.

# My bots - Overview

As a Bot Creator, when you upload files from Automation Anywhere Enterprise Client, the files are displayed on the **My bots** page. This page is divided into the following areas.

- [Folders](#)
- [Files and folders](#)

 **Note:** As a Control Room user, you must have the right privileges to access this page. Folders for which you do not have access to will not be visible to you.

The **My bots** page also allows you to perform tasks, such as exploring your documents, executable files, metabots, reports, scripts, tasks, and workflows from the Folders area. It also allows you to:

- [Import bot files](#)
- [Export bot files](#)
- [Run a Bot](#)
- [Schedule a bot](#)
- [Run bot with queue](#)

Bots > My bots

## My bots

[Import bot files...](#) [Export bot files...](#) [Run bot now...](#) [Run bot with queue...](#) [Schedule bot...](#)

To see files here, upload them from your Bot creator or your Bot runner. You will only see files that you have permission to see.  
 You can run locked files. A lock icon means that the file cannot be checked out from the client.

Folders		Search name						
		Files and folders (10 of 10)						
		Type	Name	Size	Client Last Modified	Last Modif...	Modified By	
▶	My Docs							⋮
▶	My Exes							⋮
▶	My MetaBots							⋮
▶	My Reports							⋮
▶	My Scripts							⋮
▶	My Tasks							⋮
▼	Sample Tasks							⋮
▶	Analytics-Tasks							⋮

For ease of access, you can apply search parameters to Type, Name and Version Control columns.

- You can specify the search parameters in the search bar for Name:

Name	▼	Search name	→				
Files and folders (7 of 7)							
Type	Name	Size	Last Modified	Modified By	Version Cont...	Production V...	
Task Bot	Variables.atmx	868.64 KB	15:27:55 IST 2017-12-27	admin	Unlocked	34	⋮

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Type and Version Control:

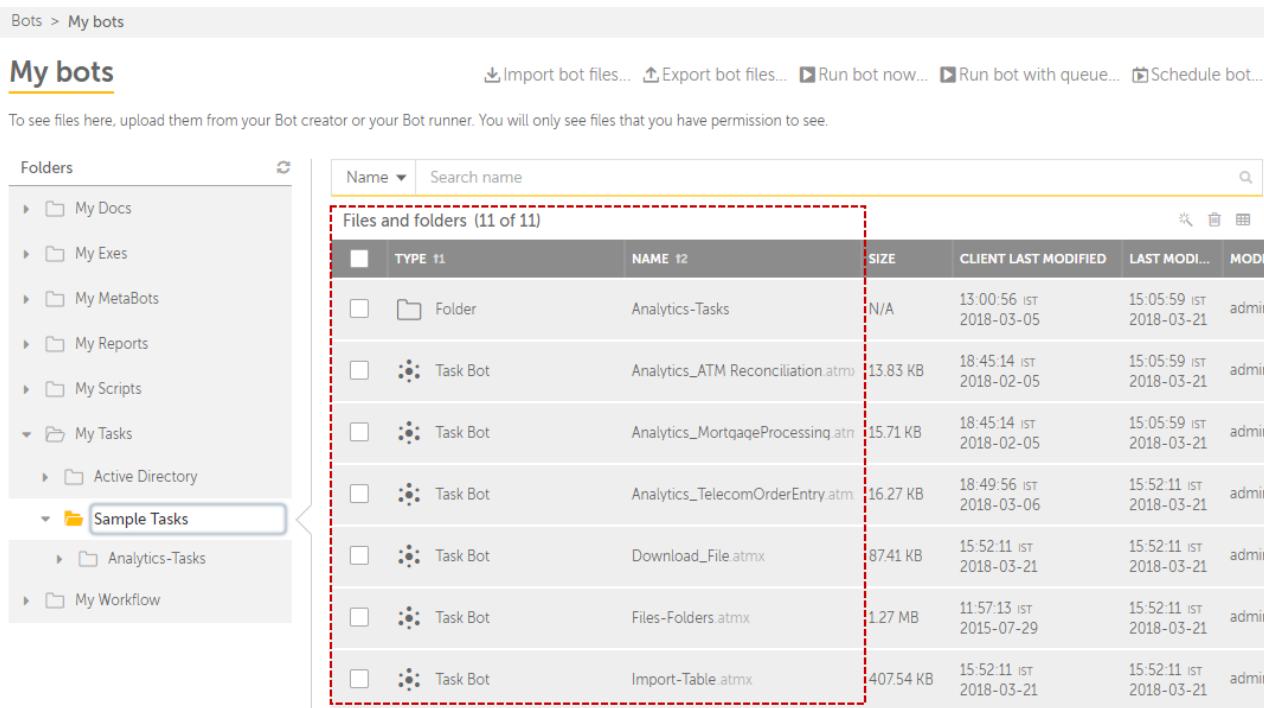


The screenshot shows a user interface for managing devices. At the top left, there's a dropdown menu labeled "Status" with a downward arrow. A dropdown menu is open, showing the following options: "Choose status" (highlighted in yellow), "Connected" (highlighted in blue), "Disconnected", and "Offline". Below this, a section titled "Devices (5 of 5)" is visible, showing a table with one row. The row contains the following columns: a checkbox, a small icon of a computer monitor, the text "Disconnected", the name "PRODUCT.COM", the creator "Mike Lee", the status "N/A", and the "Bot creator" column which is empty. There is also a three-dot menu icon at the end of the row.

STATUS	Disconnected	PRODUCT.COM	Mike Lee	N/A	Bot creator	⋮
<input type="checkbox"/>		Disconnected	PRODUCT.COM	Mike Lee	N/A	Bot creator

## Files and folder(s)

When you click a folder from the **Folders** area in the **My bots** page, the contents of the folder are displayed in the **Files and Folders** area.



To see files here, upload them from your Bot creator or your Bot runner. You will only see files that you have permission to see.

Name	Search name						
Files and folders (11 of 11)							
Type	Name	Size	Client Last Modified	Last Modified	Modified by		
Folder	Analytics-Tasks	N/A	13:00:56 IST 2018-03-05	15:05:59 IST 2018-03-21	admin		
Task Bot	Analytics_ATM Reconciliation.atm	13.83 KB	18:45:14 IST 2018-02-05	15:05:59 IST 2018-03-21	admin		
Task Bot	Analytics_MortgageProcessing.atm	15.71 KB	18:45:14 IST 2018-02-05	15:05:59 IST 2018-03-21	admin		
Task Bot	Analytics_TelecomOrderEntry.atm	16.27 KB	18:49:56 IST 2018-03-06	15:52:11 IST 2018-03-21	admin		
Task Bot	Download_File.atmx	87.41 KB	15:52:11 IST 2018-03-21	15:52:11 IST 2018-03-21	admin		
Task Bot	Files-Folders.atmx	1.27 MB	11:57:13 IST 2015-07-29	15:52:11 IST 2018-03-21	admin		
Task Bot	Import-Table.atmx	407.54 KB	15:52:11 IST 2018-03-21	15:52:11 IST 2018-03-21	admin		

When VCS is enabled, the version related columns are displayed. If production version is set for a file, the information displayed in the rest of the columns, such as size is for that version.

The columns of the **Files and folders** table are described in the following table.

Item	Description
Type	The type of file - Folder or Task Bot. This is based on the type of the file in the folder.
Name	The name of the folder or file.
Size	The size of the file.
Client last modified	<ul style="list-style-type: none"> <li>The date on which the file was last modified on the Bot Creator machine before it was uploaded to the Control Room.</li> <li>If Version Control is enabled and the Production Version is set, the date is the one when that particular production version was last modified before it was uploaded to the Control Room.</li> </ul>
Last Modified	The date and time when the file was last updated.
Modified by	Name of the user who last modified the file or folder



**Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

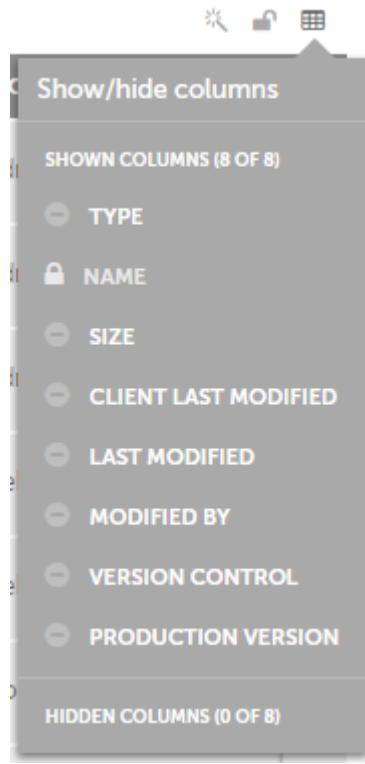
You can perform the following tasks on an individual file or folder in the **Files and folders** area.

Action	Description
 Run	Allows you to <a href="#">Run</a> the selected Bot.
 Unlock bot	Allows you to <a href="#">forcefully unlock</a> the selected Bot if locked for editing by the BotCreator in Enterprise Client.
 Schedule	<a href="#">Schedule</a> the Bot to run.
 Edit folder	Allows you to <a href="#">rename</a> a folder.
 View	Allows you to view details of the file or <a href="#">folder</a> .
 Delete Folder / Bot	Allows you to <a href="#">delete a bot, file or folder</a> .

 Note: This option is **not available** when Version Control is **enabled**.

 Note: Only Edit, View and Delete options are **available** for **folders**.

Alternatively, you can select all Bots or Folders and perform the following actions. Note that these actions can be performed only at a table level and not on individual items.

Table Item	Description
 Create folder	Allows you to <a href="#">create a folder</a> from the <b>Files and folders</b> section.
 Show / Hide columns	Allows you to show or hide specific columns. By default, all columns are displayed:
	
	 Tip: To <b>hide</b> a column, click on the column name.
	 Note: Columns <b>Version Control</b> and <b>Production Version</b> are only visible when Version Control is enabled.
 Unlock checked items	Allows you to <a href="#">forcefully unlock</a> selected Bots (multiple) if locked for editing by the BotCreator in

	Enterprise Client.
	 Note: This option is <b>available</b> only when Version Control is <b>enabled</b> .
 Delete checked items	Allows you to <b>delete</b> the selected or all Bots or Folders (multiple).
	 Note: This option is <b>not available</b> when Version Control is <b>enabled</b> .

# Create and Edit Folders

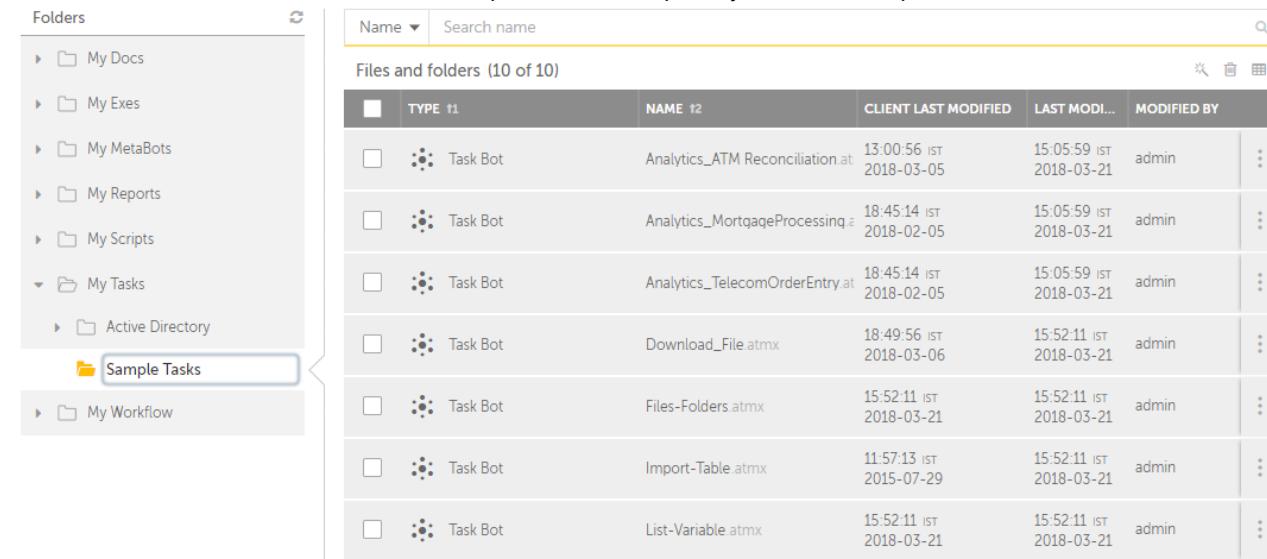
As a Control Room user with **View my bots** and **Create Folder** privileges, you can create folders in the Control Room repository. This enables you to grant access privileges to Bot Creators/Bot Runners to specific folders so that they can upload, download, delete, and/or execute (MetaBots only) their Bots to the Control Room.

If you have **Edit Folder** privileges, you can also rename the folders to which you have access.

## Create a folder

To create a folder,

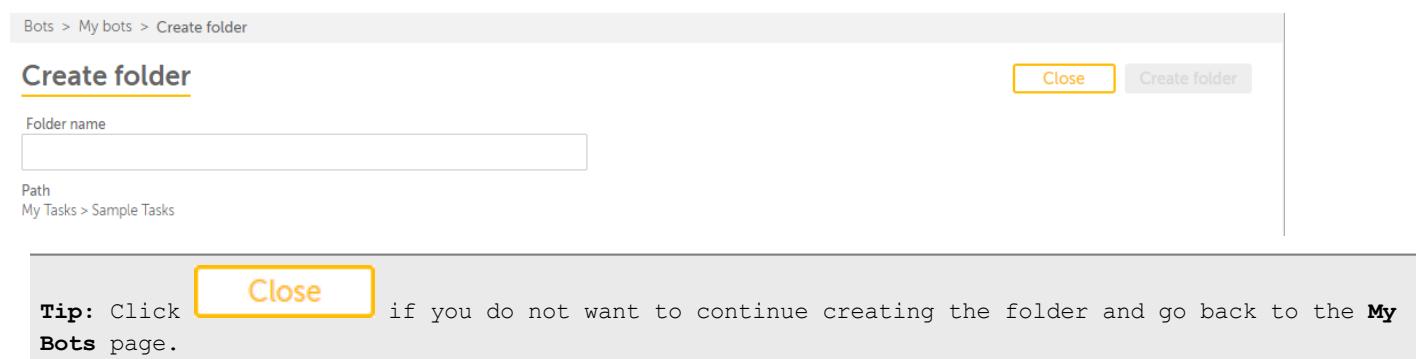
1. Go to Activity → My Bots → Folders area
2. Click on a folder in the Folders tree view to open it. For example, My Tasks → Sample Tasks:



The screenshot shows the Control Room interface. On the left, there is a tree view of folders under 'Folders': 'My Docs', 'My Exes', 'My MetaBots', 'My Reports', 'My Scripts', 'My Tasks' (which is expanded), 'Active Directory', and 'Sample Tasks'. A mouse cursor is hovering over 'Sample Tasks'. To the right, there is a table titled 'Files and folders (10 of 10)' with columns: 'Name', 'Type', 'Last Modified', 'Modified By', and three more columns with icons. The table lists seven Task Bot files and three other files.

Name	Type	Last Modified	Modified By
Analytics_ATM Reconciliation.at	Task Bot	13:00:56 IST 2018-03-05	admin
Analytics_MortgageProcessing.at	Task Bot	18:45:14 IST 2018-02-05	admin
Analytics_TelecomOrderEntry.at	Task Bot	18:45:14 IST 2018-02-05	admin
Download_File.atmx	Task Bot	18:49:56 IST 2018-03-06	admin
Files-Folders.atmx	Task Bot	15:52:11 IST 2018-03-21	admin
Import-Table.atmx	Task Bot	11:57:13 IST 2015-07-29	admin
List-Variable.atmx	Task Bot	15:52:11 IST 2018-03-21	admin

3. Click  that is given above the **Files and folders** list
4. The **Create folder** page is launched:



The screenshot shows the 'Create folder' page. At the top, there is a breadcrumb navigation: 'Bots > My bots > Create folder'. Below that is a title 'Create folder' with a 'Close' button and a 'Create folder' button. There are two input fields: 'Folder name' (empty) and 'Path' (set to 'My Tasks > Sample Tasks'). A tip message at the bottom says: 'Tip: Click **Close** if you do not want to continue creating the folder and go back to the **My Bots** page.'

5. Provide an appropriate name. For example, you might want the Bot Creator with Analytics license to store tasks to the **Analytics-Task** folder:



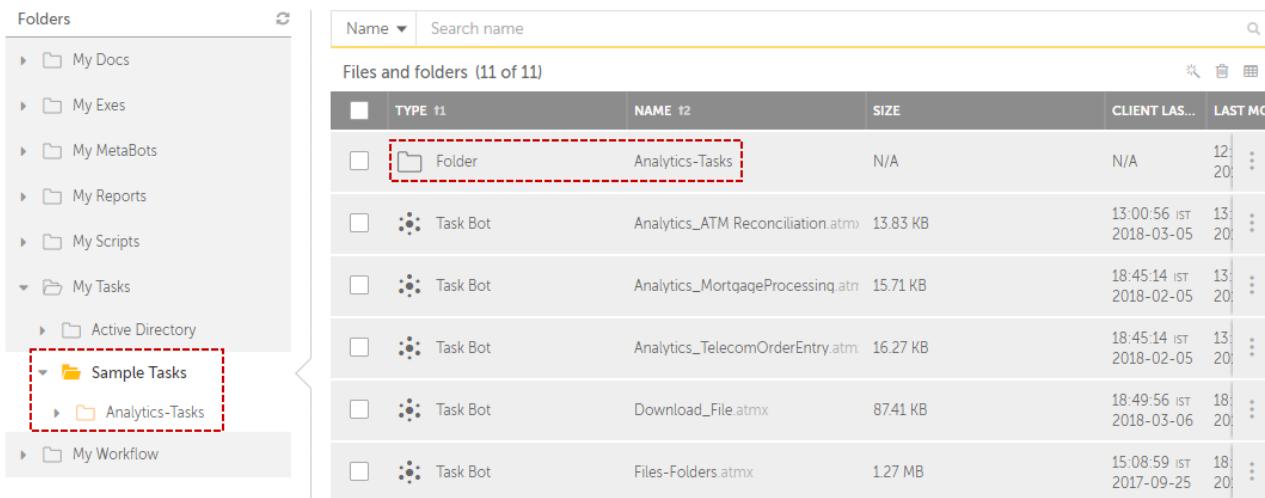
The screenshot shows the 'Create folder' page again. The 'Folder name' field now contains 'Analytics-Tasks'. The 'Path' field is still set to 'My Tasks > Sample Tasks'. At the top right are 'Cancel' and 'Create folder' buttons.

6. Click **Create folder** to save the folder.

Alternatively, click **Cancel**

if you do not want to save changes and go back to the **My Bots** page.

7. The folder is added which can be viewed in the **Folders** tree view and **Files and folders** list:



The screenshot shows the left sidebar with a tree view of folders: My Docs, My Exes, My MetaBots, My Reports, My Scripts, My Tasks (with Active Directory, Sample Tasks, and Analytics-Tasks), and My Workflow. The Sample Tasks folder is highlighted with a red box. The main area shows a table titled "Files and folders (11 of 11)". The table has columns: TYPE, NAME, SIZE, CLIENT LAST ACT., and LAST MOD. A row for "Analytics-Tasks" is selected and highlighted with a red dashed box. The rest of the rows represent Task Bots with various file names and sizes.

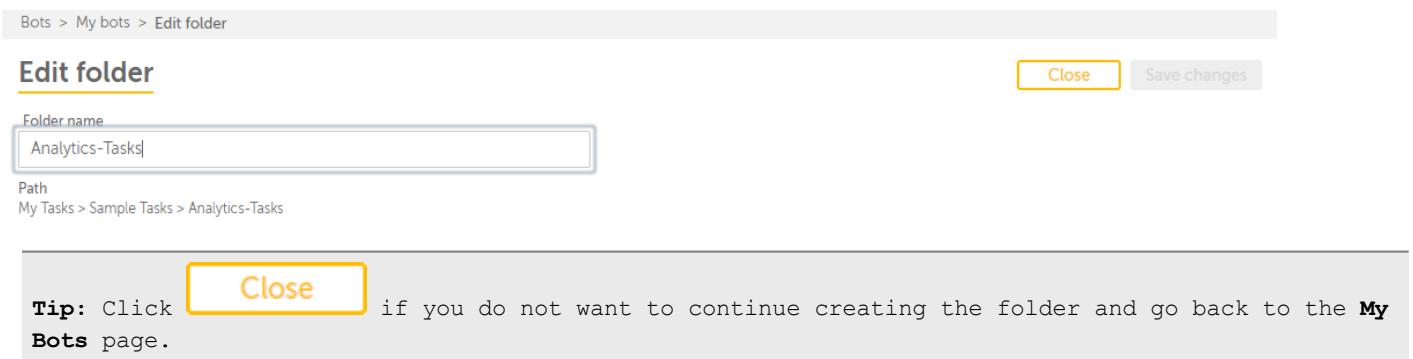
TYPE	NAME	SIZE	CLIENT LAST ACT.	LAST MOD.
Folder	Analytics-Tasks	N/A	N/A	12:20 2018-03-05
Task Bot	Analytics_ATM Reconciliation.atm	13.83 KB	13:00:56 IST	13:20 2018-03-05
Task Bot	Analytics_MortgageProcessing.atn	15.71 KB	18:45:14 IST	13:20 2018-02-05
Task Bot	Analytics_TelecomOrderEntry.atm	16.27 KB	18:45:14 IST	13:20 2018-02-05
Task Bot	Download_File.atmx	87.41 KB	18:49:56 IST	18:20 2018-03-06
Task Bot	Files-Folders.atmx	127 MB	15:08:59 IST	18:20 2017-09-25

## Rename a folder

For some reason, such as a typo or change in naming conventions, you might want to rename a folder. This section describes how to rename the folder.

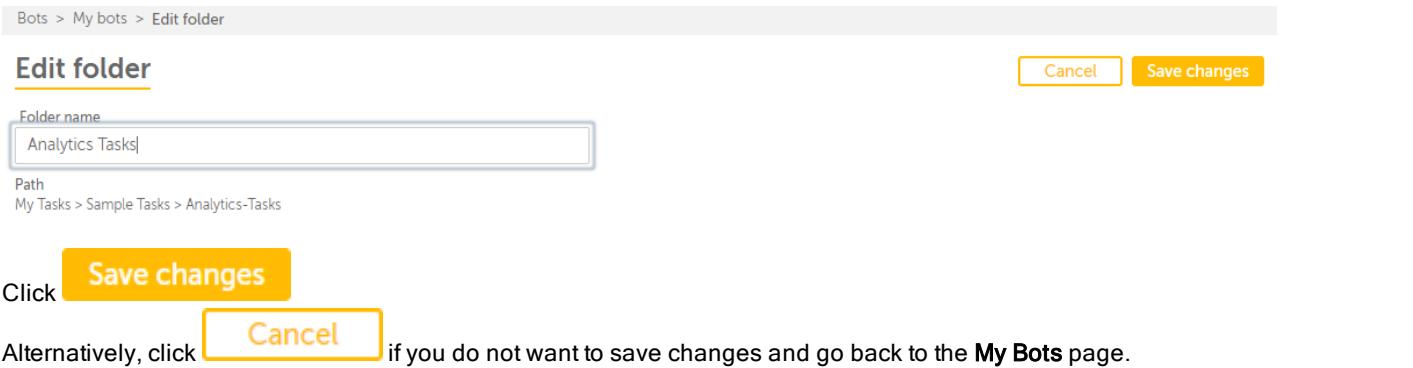
To rename a folder,

1. Go to Activity → My Bots → Folders area
2. Click on a folder in the **Folders** tree view to open it. For example, My Tasks → Sample Tasks.
3. In the **Files and folders** list, hover over the actions icon -  for the folder that you want to rename. This slides open the actions panel.
4. Click 
5. The **Edit folder** page is launched:



The screenshot shows the "Edit folder" page with a "Folder name" field containing "Analytics-Tasks". Below it is a "Path" field showing "My Tasks > Sample Tasks > Analytics-Tasks". At the bottom, there is a tip message: "Tip: Click **Close** if you do not want to continue creating the folder and go back to the **My Bots** page." There are "Close" and "Save changes" buttons.

6. Update the folder name as required:



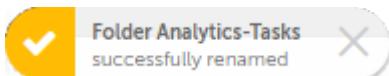
The screenshot shows the "Edit folder" page again, but now with the "Folder name" field updated to "Analytics Tasks". The "Path" field remains the same. At the bottom, there is a "Save changes" button and a tip message: "Tip: Click **Cancel** if you do not want to save changes and go back to the **My Bots** page." There are also "Cancel" and "Save changes" buttons.

7. Click **Save changes**

Alternatively, click **Cancel**

if you do not want to save changes and go back to the **My Bots** page.

8. The folder is renamed successfully:



## Audit Logs

- When you Create and/or Rename a Folder, the following audit entries are logged:

Audit log							
Time filter: Last 24 hours							
Action type	Search action type						
Action type: create folder							
Action type: rename folder							
Actions (4 of 1329)							
STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE	More
Successful	12:12:45 IST 2018-03-09	Create Folder	Analytics-Tasks	mike.lee	UNSET	Control Room	
Successful	11:27:44 IST 2018-03-09	Rename Folder	Analytics Tasks	mike.lee	UNSET	Control Room	
Successful	11:08:32 IST 2018-03-09	Rename Folder	Analytics-Tasks	mike.lee	UNSET	Control Room	
Successful	10:54:55 IST 2018-03-09	Create Folder	Analytics Tasks	mike.lee	UNSET	Control Room	

- The details page displays the following for a Create folder action:

Audit log > View action

## Create Folder

ACTION DETAILS	
Status	Item name
Successful	Analytics-Tasks
Action taken by	Time
mike.lee	12:12:45 IST 2018-03-09
Object type	Action type
Action	Create Folder
Source device	Source
UNSET	Control Room

CREATE FOLDER DETAILS	
ATTRIBUTE	VALUE
Path	My Tasks > Sample Task...
Object type	Folder
Folder Type	User-created

## View bot details

When you click the **View** icon  for a bot in the **Files and folders** area of the **My bots** page, the **View bot** page is opened. It provides information, such as the name and other details of the bot. Besides this, you can [run the bot](#) or [schedule when to run the bot](#). This page is illustrated in the following figure.

Bots > My bots > View bot

### Download\_File.atmx

[Run bot now](#) [Schedule bot](#) [Back](#)

TASK BOT DETAILS			
Size 87.41 KB	Path My Tasks > Sample Tasks	Client last modified 18:49:56 IST 2018-03-06	

#### Review dependencies for Download\_File

- ▼  Automation Anywhere\My Tasks\Sample Tasks\Download\_File.atmx
- ▼  Automation Anywhere\My Tasks\Sample Tasks\Variables.atmx
- ▼  Automation Anywhere\My MetaBots\Inventory Management>Create Vendor Logic.mbot
- ▼  Automation Anywhere\My Tasks\Active Directory\Active\_Directory.atmx

GENERAL DETAILS			
Last modified 18:51:02 IST 2018-03-06	Modified by mike.lee	Bot type Task Bot	Object type Bot

When version control is enabled and the production version is set, the **View bot** page also displays the **Production version** and **Version control** fields as shown in the following figure.

**Note:** If the **Automatically assign the latest version** option is selected in the **Settings → Bots (Version Control)** page, all the production version of the bot is set to the latest version. For more information, refer to [Bots - Configure Version Control](#).

Bots > My bots > View bot

### Prompt.atmx

[Run bot now](#) [Schedule bot](#) [Edit](#) [Back](#)

TASK BOT DETAILS			
Size 635.12 KB	Path My Tasks > Sample Tasks	Production version 351	Version control Unlocked
Client last modified 15:20:17 IST 2018-03-16			

#### Review dependencies for Prompt

- ▼  Automation Anywhere\My Tasks\Sample Tasks\Prompt.atmx

GENERAL DETAILS			
Last modified 15:20:17 IST 2018-03-16	Modified by Amy.Chen	Bot type Task Bot	Object type Bot

#### Notes:

- When version control is enabled, the dependencies that are displayed is based on whether the production version is enabled or not.

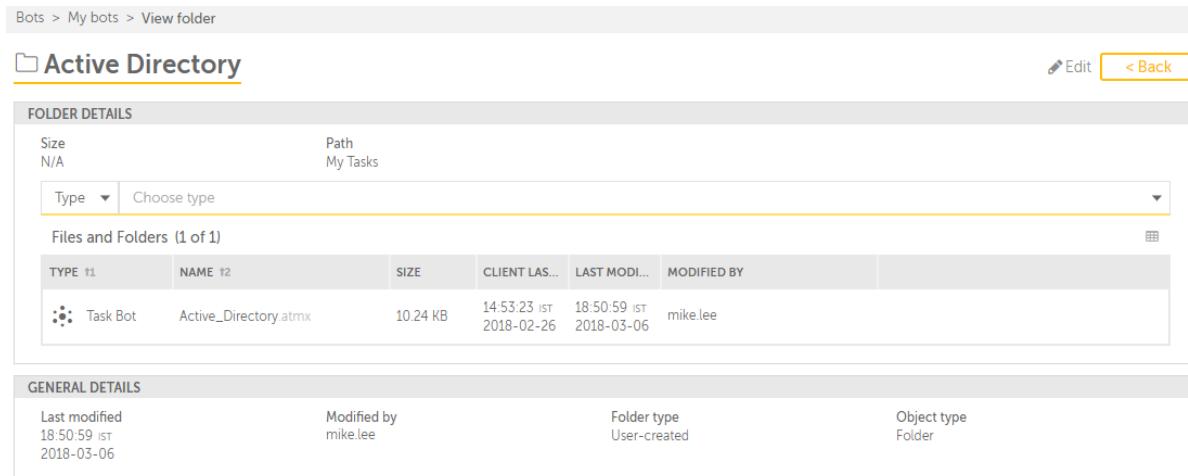
- When production version is enabled, the dependencies for that production version of the bot and its dependents are displayed.
- When production version is not enabled for any dependent file, the dependency information for that bot is not displayed

The different areas of the **View bot** page are described in the following table.

Area	Description
Task bot details	<p>Use this area to view the following details of the folder</p> <ul style="list-style-type: none"> <li><b>Size:</b> Displays the size of the bot in KB or MB</li> <li><b>Path:</b> The location of the bot</li> <li><b>Production version:</b> The production version that is set either manually or assigned automatically</li> <li><b>Version Control:</b> The status of the bot - whether locked or un-locked for editing by the Bot Creator</li> <li><b>Client Last Modified:</b> The date on which the file was last modified on the Bot Creator machine before it was uploaded to the Control Room.           <ul style="list-style-type: none"> <li>If Version Control is enabled and the Production Version is set, the date is the one when that particular production version was last set by Control Room user.</li> </ul> </li> </ul> <p><b>Note:</b> Production version and Version control details are visible only when Version Control is enabled.</p>
Review dependencies for <bot name>	<p>Displays the bot and its dependencies.</p> <p><b>Tip:</b> The dependency icon -  will display red if you do not have sufficient privileges for the dependent bot or file.</p>
General details	<p>Use this area to view the following details for the folder.</p> <ul style="list-style-type: none"> <li><b>Last Modified:</b> Displays the last time changes were made to the folder in date and time.</li> <li><b>Modified by:</b> Displays the name of the user who last made changes to the folder in date and time.</li> <li><b>Bot type:</b> Displays the type of the bot, such as Task Bot or Meta Bot.</li> <li><b>Object type:</b> Displays the object type, such as Bot.</li> </ul>

## View folder details

When you click the View icon  for a folder in the **Files and folders** area, the **View folder** page is opened. Use this page to view the details of the folder and search for items within the folder. This page is illustrated in the following figure.



The screenshot displays the 'View folder' interface for an 'Active Directory' folder. At the top, there's a breadcrumb navigation: 'Bots > My bots > View folder'. Below the title 'Active Directory', there are two main sections: 'FOLDER DETAILS' and 'GENERAL DETAILS'. In the 'FOLDER DETAILS' section, it shows 'Size: N/A' and 'Path: My Tasks'. A dropdown menu 'Type' is set to 'Choose type'. The 'GENERAL DETAILS' section lists 'Last modified: 18:50:59 IST 2018-03-06', 'Modified by: mike.lee', 'Folder type: User-created', and 'Object type: Folder'. Below these sections is a table titled 'Files and Folders (1 of 1)' with one row showing 'Task Bot' as the type, 'Active\_Directory.atmx' as the name, '10.24 KB' as the size, '14:53:23 IST 2018-02-26' as the client last modified date, '18:50:59 IST 2018-03-06' as the last modified date, and 'mike.lee' as the modified by user.

The **View folder** page is divided into the following areas.

- Folder details
- Items in folder
- General details

These are explained in the following table.

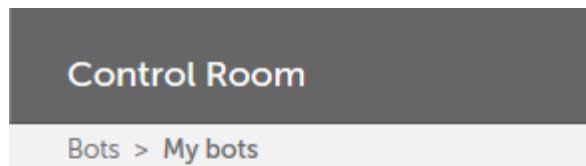
Area	Description
Folder details	Use this area to view the following details of the folder <ul style="list-style-type: none"> <li>• <b>Size:</b> Displays the size of the folder.</li> <li>• <b>Path:</b> The path of the folder.</li> </ul>
Items in folder	Use this area to search and view the following details for items in the folder. <ul style="list-style-type: none"> <li>• <b>Type:</b> The type of the item, such as Task Bot, Meta Bot, or IQ Bot.</li> <li>• <b>Name:</b> The name of the item.</li> <li>• <b>Size:</b> The size of the item in KB or MB.</li> <li>• <b>Client Last Modified:</b> The date on which the file was last modified on the Bot Creator machine before it was uploaded to the Control Room.               <ul style="list-style-type: none"> <li>• If Version Control is enabled and the Production Version is set, the date is the one when that particular production version was last set by Control Room user.</li> </ul> </li> <li>• <b>Last Modified:</b> Displays the last time changes were made to the item in time and date.</li> <li>• <b>Modified:</b> Displays the name of the user who last made changes to the item</li> </ul>
General details	Use this area to view the following details for the folder. <ul style="list-style-type: none"> <li>• <b>Last Modified:</b> Displays the last time changes were made to the folder in date and time.</li> <li>• <b>Modified by:</b> Displays the name of the user who last made changes to the folder in date and time.</li> <li>• <b>Object type:</b> Displays the type of Object, such as folder or sub-folder.</li> </ul>

## Folders area

The folders area allows you to explore and browse your documents, executable files, Metabots, Reports, Scripts, tasks, and workflows.

 **Note:** The view may differ from user to user depending on their roles and privileges.

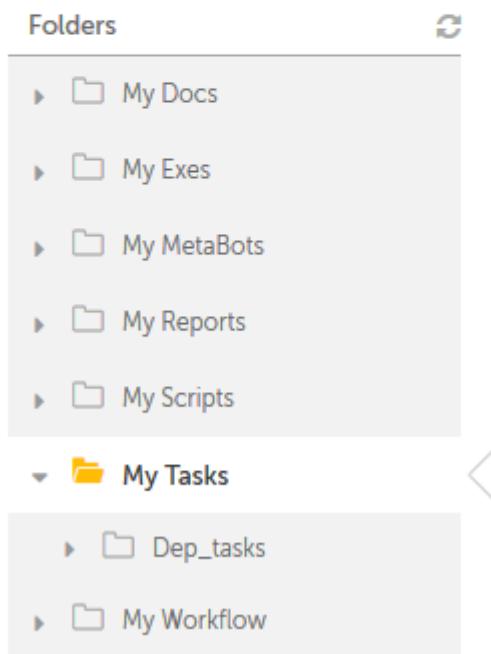
When you click a folder, the contents of the folder are displayed in the [Files and Folders area](#).



### My bots

To see files here, upload them from your Bot creator that you have permission to see.

You can run locked files. A lock icon means that the f

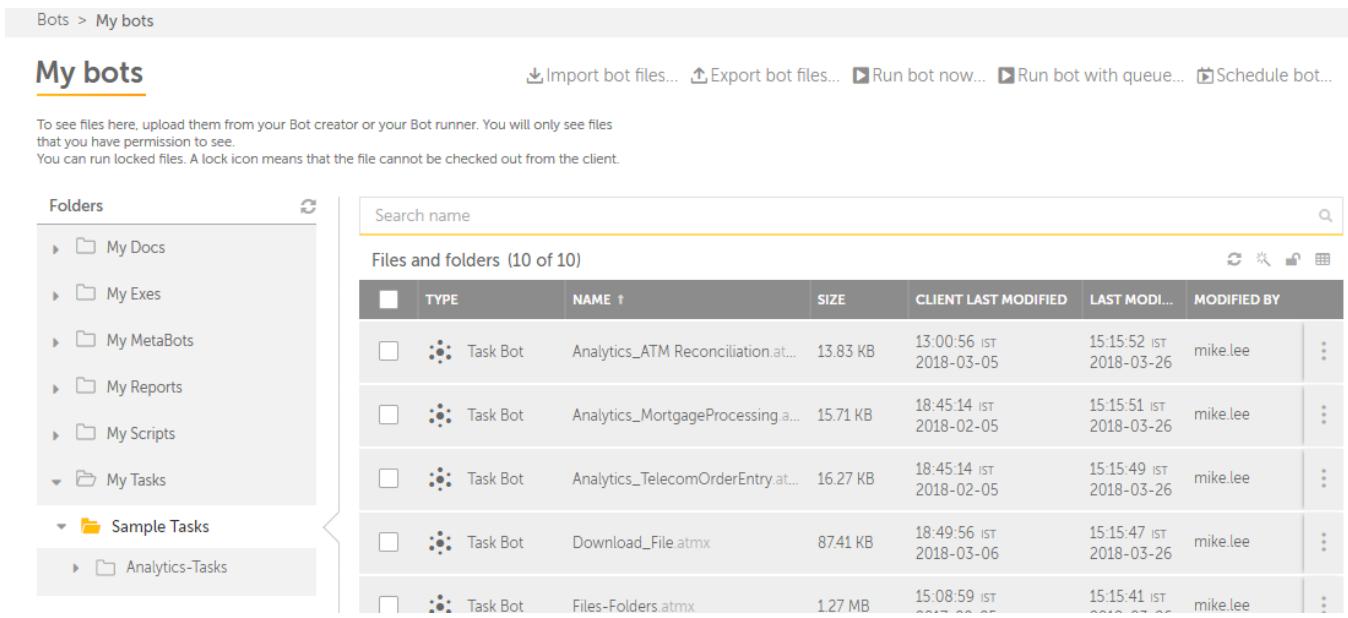


# Run a bot

You can run a bot from the **In progress**, **Scheduled**, and also from the **My Bots** page. The procedure for running a bot is the same in all these pages. In the following scenario, we will run a bot from the **My bots** page.

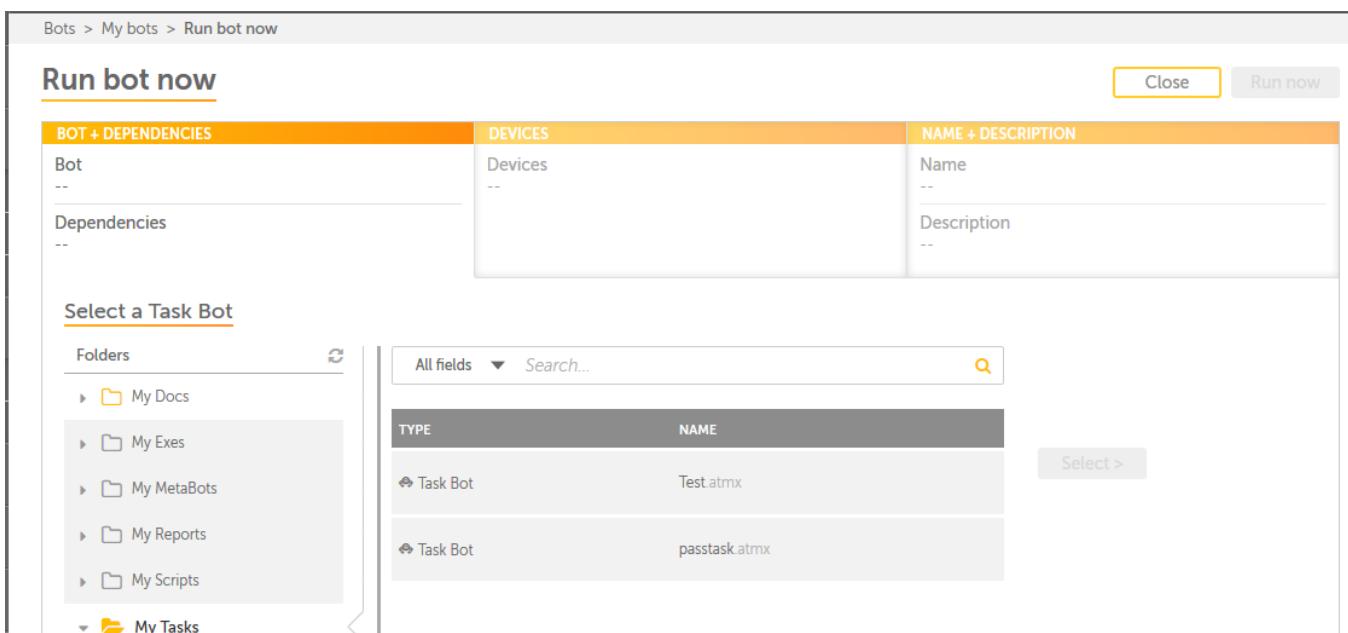
To run a bot, perform the followings tasks.

1. Log on to Control Room with Run bot privileges.
2. Navigate to **Bots** → **My bots**. The **My bots** page is displayed.



The screenshot shows the 'My bots' page with a sidebar containing a tree view of folders: My Docs, My Exes, My MetaBots, My Reports, My Scripts, My Tasks (expanded), Sample Tasks (under My Tasks), and Analytics-Tasks (under Sample Tasks). The main area displays a table titled 'Files and folders (10 of 10)' with columns: TYPE, NAME ↑, SIZE, CLIENT LAST MODIFIED, LAST MODI..., and MODIFIED BY. The table lists five Task Bot files: 'Analytics\_ATM Reconciliation.atmx', 'Analytics\_MortgageProcessing.a...', 'Analytics\_TelecomOrderEntry.a...', 'Download\_File.atmx', and 'Files-Folders.atmx'. Each row has a checkbox and three vertical dots for more options.

3. Click the **Run bot now...** link. The **Run bot now** page is displayed.



The screenshot shows the 'Run bot now' page. On the left, there's a sidebar with a tree view of folders: My Docs, My Exes, My MetaBots, My Reports, My Scripts, and My Tasks (expanded). The main area has tabs for 'BOT + DEPENDENCIES', 'DEVICES', and 'NAME + DESCRIPTION'. Under 'BOT + DEPENDENCIES', it shows 'Bot' and 'Dependencies'. Under 'DEVICES', it shows 'Devices'. Under 'NAME + DESCRIPTION', it shows 'Name' and 'Description'. Below this, there's a section titled 'Select a Task Bot' with a table showing two Task Bot entries: 'Test.atmx' and 'passtask.atmx'. A 'Select >' button is next to the table. At the bottom right of the page are 'Close' and 'Run now' buttons.

4. From the **Select a Task Bot** area, click one of the folders depending on your requirements. The Type and name of the bot are displayed on the right hand are in a tabular format.

 **Note:** You can access only those folders for which you have **Run+Schedule** permission.

## Run bot now

[Close](#)

BOT + DEPENDENCIES	DEVICES	NAME + DESCRIPTION
Bot --  Dependencies --	Devices --	Name --  Description --

When you run a bot immediately (rather than schedule it to run later), we automatically use the latest version of the bot and supporting files.

### Select a Task Bot

Folders

- ▶  My Docs
- ▶  My Exes
- ▶  My MetaBots
- ▶  My Reports
- ▶  My Scripts
- ▶  My Tasks
  - ▶  Sample Tasks
- ▶  My Workflow

All fields
▼
Search...
🔍

TYPE	NAME	LATEST VERSION	PRODUCTION VERSION
Task Bot	Prompt.atmx	7	7
Task Bot	Files-Folders.atmx	8	8

Select >

5. Select a task bot depending on your requirements by clicking a bot. The **Select** button is enabled.

All fields
▼
Search...
🔍

TYPE	NAME	LATEST VERSION	PRODUCTION VERSION
Task Bot	Prompt.atmx	7	7
Task Bot	Files-Folders.atmx	8	8

Select >

6. Click the **Select** button. The bot is added to the **Review dependencies** area where you can view the dependencies of the selected bot.

 **Note:** Although you will be able to run a bot, automation will fail in the following cases,

- If any of the bot dependencies are missing
- If you do not have folder privileges on the dependencies
- If you do not have **Run+Schedule** permission (the one that shows a red dependency icon - )

---

 **Tip:** Once you select a bot, the **Select** button is changed to **Replace**, which gives you the option to replace the selected bot with another one.

Select a Task Bot

## Folders

- ▶  My Docs
- ▶  My Exes
- ▶  My MetaBots
- ▶  My Reports
- ▶  My Scripts
- ▼  My Tasks
  - ▶  Sample Tasks
  - ▶  My Workflow

 Search name 

TYPE

NAME

 Task Bot

List-Variable.atmx

[Replace >](#)


List-Variable

Review dependencies for List-Variable

 ▶  Automation Anywhere\My Tasks\Sample Tasks\List-Variable.atmx

[Next >](#)

7. Click the **Next** link. The **Devices** tab is displayed, which displays the list of available devices connected to Control Room.

Run bot now
[Cancel](#)
[Run now](#)

BOT + DEPENDENCIES	DEVICES	NAME + DESCRIPTION
Bot List-Variable  Dependencies No dependencies	Devices --	Name List-Variable.17.10.18.11.30.03.admin  Description --

**Devices**

Run bot runner session on control room

Status  Search all rows

Available devices (1 of 1)					Selected devices (0)				
<input type="checkbox"/>	STATUS	NAME	USERNAME	UPCOMING SCHED...	<input type="checkbox"/>	STATUS	NAME	USERNAME	UPCOMING SCHED...
<input type="checkbox"/>	 Connected	PRODUCTLT08.BRD.COM	botr1	No s	<input type="checkbox"/>				

[< Back](#) [Next >](#)

8. Click a device of your choice from the **Available devices** area and click the add >> button. The device is added to the **Selected devices** area and the **Run Now** button is enabled.



**Note:** You can select only bot runner devices that are connected. If a device is not connected, it is not enabled. Also, if the device is not displayed in the list, ensure that an active bot runner session is running on the device.

## Run bot now



BOT + DEPENDENCIES	DEVICES	NAME + DESCRIPTION																																						
Bot List-Variable  Dependencies No dependencies	Devices PRODUCTLT08.AASPL.COM	Name List-Variable.17.10.18.11.30.03.admin  Description --																																						
<b>Devices</b> <p><input type="checkbox"/> Run bot runner session on control room</p> <table border="1"> <thead> <tr> <th>Status</th> <th colspan="3">Search all rows</th> </tr> </thead> <tbody> <tr> <td colspan="4">Available devices (0)</td> </tr> <tr> <td><input type="checkbox"/></td> <td>STATUS</td> <td>NAME</td> <td>USERNAME</td> </tr> <tr> <td colspan="4">UPCOMING SCHED...</td> </tr> <tr> <td colspan="4"></td> </tr> <tr> <td><input type="checkbox"/></td> <td>Connected</td> <td>PRODUCTLT08.AASPL.COM</td> <td>mike</td> </tr> <tr> <td colspan="4">No s</td> </tr> </tbody> </table> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <b>Selected devices (1)</b> <table border="1"> <thead> <tr> <th><input type="checkbox"/></th> <th>STATUS</th> <th>NAME</th> <th>USERNAME</th> <th>UPC</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td>Connected</td> <td>PRODUCTLT08.AASPL.COM</td> <td>mike</td> <td>No s</td> </tr> </tbody> </table> </div>			Status	Search all rows			Available devices (0)				<input type="checkbox"/>	STATUS	NAME	USERNAME	UPCOMING SCHED...								<input type="checkbox"/>	Connected	PRODUCTLT08.AASPL.COM	mike	No s				<input type="checkbox"/>	STATUS	NAME	USERNAME	UPC	<input type="checkbox"/>	Connected	PRODUCTLT08.AASPL.COM	mike	No s
Status	Search all rows																																							
Available devices (0)																																								
<input type="checkbox"/>	STATUS	NAME	USERNAME																																					
UPCOMING SCHED...																																								
<input type="checkbox"/>	Connected	PRODUCTLT08.AASPL.COM	mike																																					
No s																																								
<input type="checkbox"/>	STATUS	NAME	USERNAME	UPC																																				
<input type="checkbox"/>	Connected	PRODUCTLT08.AASPL.COM	mike	No s																																				

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Tip: To remove the item, click the  icon.

### 9. Click Next. The NAME+DESCRIPTION tab is displayed

## Run bot now



BOT + DEPENDENCIES	DEVICES	NAME + DESCRIPTION				
Bot Loops  Dependencies No dependencies	Devices PRODUCTLT08.AASPL-BRD.COM	Name Loops.17.11.29.11.58.04.amy.chen  Description --				
<b>General</b> <table border="1"> <tr> <td>Name</td> <td>Description</td> </tr> <tr> <td>Loops.17.11.29.11.58.04.amy.chen</td> <td>Optional</td> </tr> </table>			Name	Description	Loops.17.11.29.11.58.04.amy.chen	Optional
Name	Description					
Loops.17.11.29.11.58.04.amy.chen	Optional					

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10. Type a name and description in the General area and click the Run now button. By default, a name is provided by for the automation- this is of the format [bot name].[DD.MM.YY][HH.MM.SS].[USERNAME]. Change this depending on your preferences. For example, Loops.17.11.28.16.44.59.amy.chen.



**Note:** The **Run now** button is disabled if the device is disconnected or the required fields are not filled.

When you click the **Run now** button the activity is immediately started and its progress can be viewed from the **In Progress** activity page.

# Delete bot(s) and folder(s)

As a Control Room admin or user with Delete Bot privileges, you can delete one or more Bots and Folders that are uploaded by a Bot Creator from the Enterprise Client.

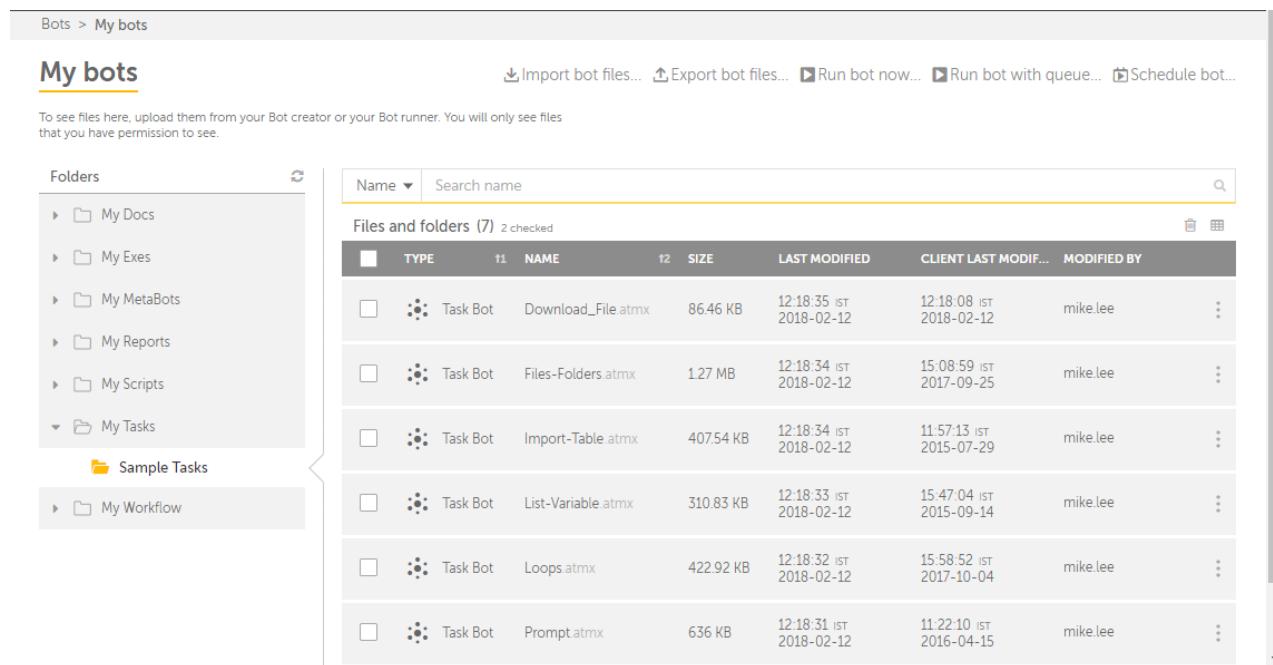
 Note: This option is **not available** when version Control is **enabled**.

## Delete a bot

You can delete a Bot (single) that is uploaded by the Bot Creator from Enterprise Client.

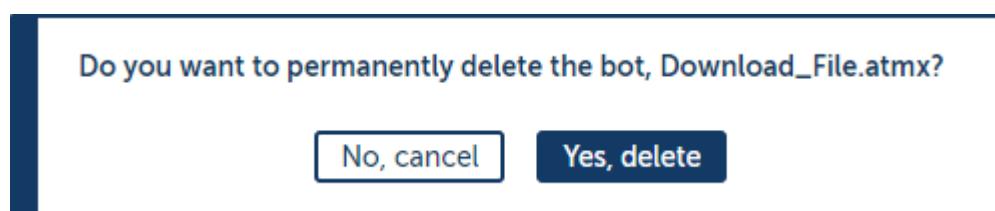
To delete a Bot from the Control Room,

1. Go to **Bots → My Bots**
2. The **My Bots** page is launched:

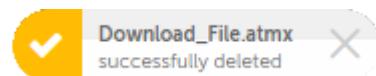


Name	Type	t1	NAME	t2	SIZE	LAST MODIFIED	CLIENT LAST MODIF...	MODIFIED BY
Download_File.atmx	Task Bot		Download_File.atmx		86.46 KB	12:18:35 IST 2018-02-12	12:18:08 IST 2018-02-12	mike.lee
Files-Folders.atmx	Task Bot		Files-Folders.atmx		1.27 MB	12:18:34 IST 2018-02-12	15:08:59 IST 2017-09-25	mike.lee
Import-Table.atmx	Task Bot		Import-Table.atmx		407.54 KB	12:18:34 IST 2018-02-12	11:57:13 IST 2015-07-29	mike.lee
List-Variable.atmx	Task Bot		List-Variable.atmx		310.83 KB	12:18:33 IST 2018-02-12	15:47:04 IST 2015-09-14	mike.lee
Loops.atmx	Task Bot		Loops.atmx		422.92 KB	12:18:32 IST 2018-02-12	15:58:52 IST 2017-10-04	mike.lee
Prompt.atmx	Task Bot		Prompt.atmx		636 KB	12:18:31 IST 2018-02-12	11:22:10 IST 2016-04-15	mike.lee

3. In the **Files and folders** list mouse over  for the Bot that you want to delete. For example, **Sample Tasks → Download\_File.atmx**
4. Click 
5. The following message box is displayed:



6. Select **Yes, delete** to confirm.
7. The Bot is deleted permanently:



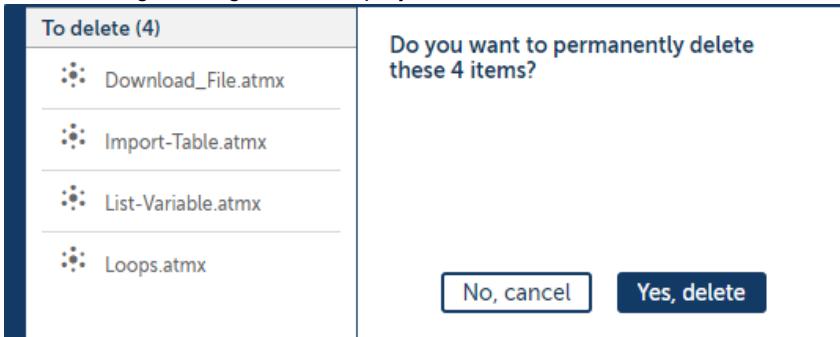
- Select **No, cancel** to go back to the **Files and folders** list without deleting the Bot.

## Delete multiple bots

You can delete selected Bots (multiple) that are uploaded by the BotCreator from Enterprise Client.

To delete Bots from the Control Room,

1. Go to **Bots → My Bots**
2. The **My Bots** page is launched.
3. In the **Files and folders** list select Bots that you want to delete by clicking required check-boxes. For example, **Sample Tasks → Download\_File.atmx, Import-Table.atmx, List-Variable.atmx, and Loops.atmx**
4. Click  given above the table.
5. The following message box is displayed:



6. Select **Yes, delete** to confirm
7. The Bots are unlocked successfully:



- Click **No, cancel** to go back to the **Files and folders** list without deleting the Bots.

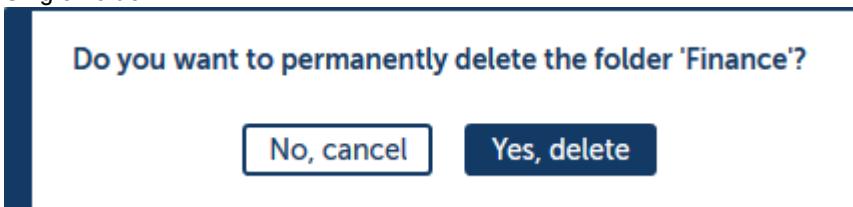
## Delete folder(s)

The method to delete Folder(s) is similar to deleting Bot(s). You can choose to delete multiple folders from table level or individually from files and folders list.

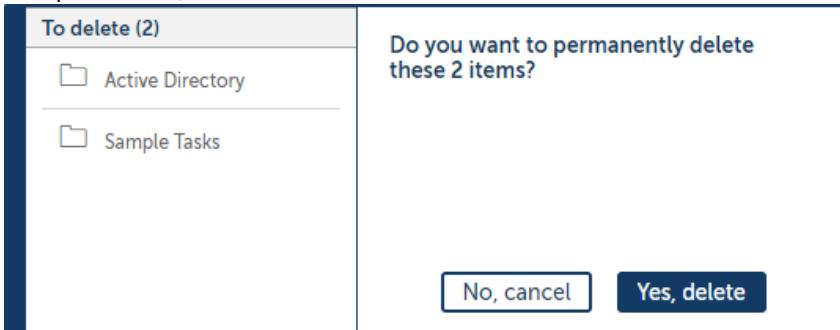
 **Note:** The folder that you want to delete should be empty.

Following messages are displayed when you delete,

- Single Folder:



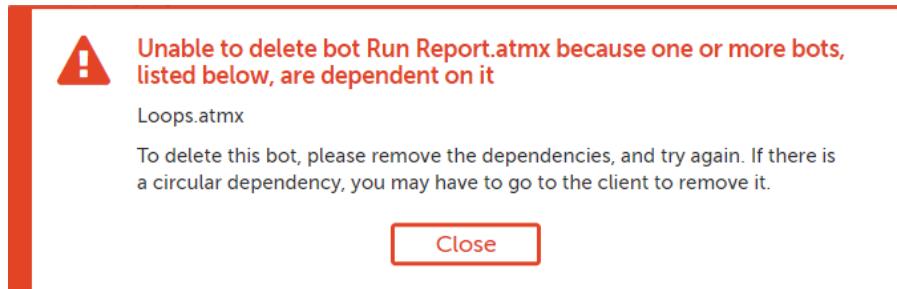
- Multiple Folders,



## Delete dependent bots and files

When you delete Bot(s), its dependent Bots and Files are not deleted automatically. If you do not require those, you will have to delete them manually from the folder where they reside.

When you try to delete a bot that is part of another bot as a dependency, you are shown:



## Audit Log

For all the Bot(s) that are deleted, audit entries are logged in the Audit Logs page:

Audit log						
Actions (9 of 349)						
STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
<span>Successful</span>	14:34:11 IST 2018-02-12	Delete folder	Active Directory	ellie.brown	UNSET	Control Room
<span>Successful</span>	14:34:04 IST 2018-02-12	Delete bot	Active_Directory.atmx	ellie.brown	UNSET	Control Room
<span>Unsuccessful</span>	14:33:49 IST 2018-02-12	Delete folder	Active Directory	ellie.brown	UNSET	Control Room
<span>Successful</span>	12:48:34 IST 2018-02-12	Delete bot	Download_File.atmx	ellie.brown	UNSET	Control Room
<span>Successful</span>	12:48:34 IST 2018-02-12	Delete bot	Import-Table.atmx	ellie.brown	UNSET	Control Room
<span>Successful</span>	12:48:34 IST 2018-02-12	Delete bot	List-Variable.atmx	ellie.brown	UNSET	Control Room

The details page is shown as:

Audit log > View action

## Delete bot

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ACTION DETAILS	
Status	Successful
Action taken by	ellie.brown
Object type	Action
Source device	UNSET
Item name	Download_File.atmx
Time	2018-02-12 12:48:34 IST
Action type	Delete bot
Source	Control Room

DELETE BOT DETAILS	
ATTRIBUTE	VALUE
Path	My Tasks > Sample Tasks > Download_File.atmx
Object type	Bot
Bot type	Taskbot

# Force unlock Bots

As a Control Room user with Unlock Bot privileges, you can forcefully unlock one or more Bots that are checked out by a Bot Creator in the Enterprise Client.

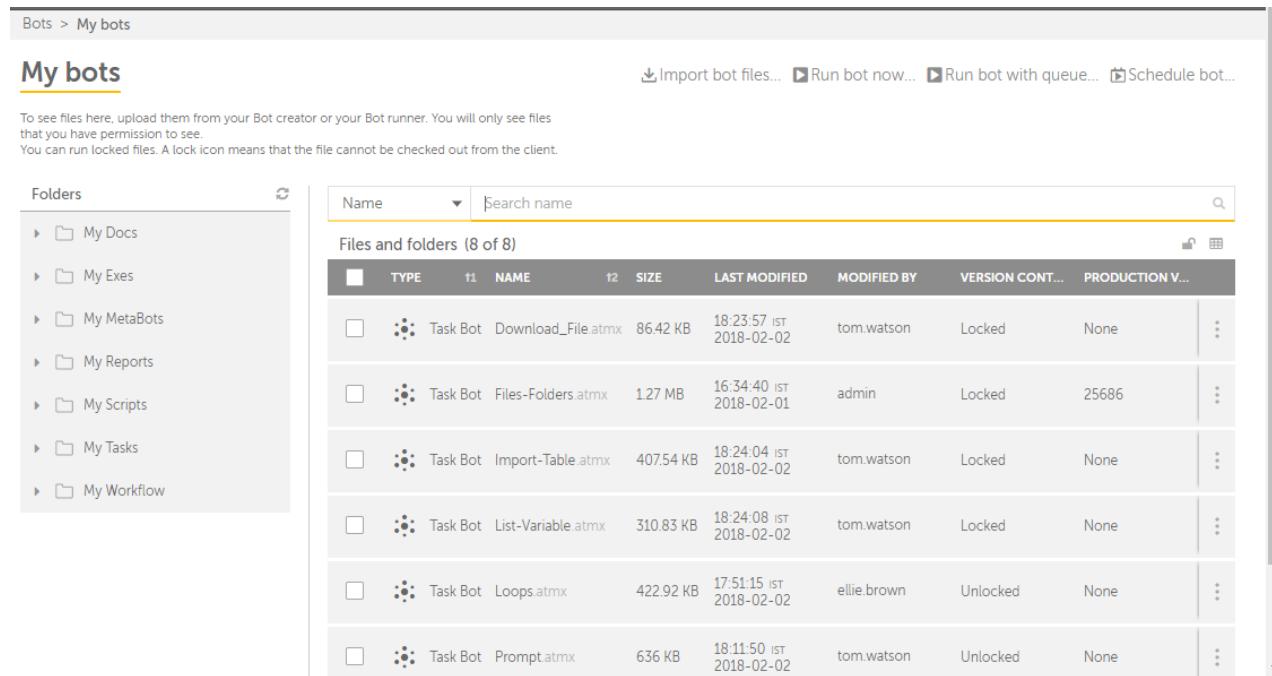
 **Note:** This option is available only when version Control is enabled.

## Unlock a Bot

You can forcefully unlock a Bot (single) if locked for editing by the Bot Creator in Enterprise Client.

To unlock a checked out Bot from the Control Room,

1. Go to **Bots → My Bots**
2. The **My Bots** page is launched:



Name	Type	Last Modified	Modified By	Status
Download_File.atmx	Task Bot	18:23:57 IST 2018-02-02	tom.watson	Locked
Files-Folders.atmx	Task Bot	16:34:40 IST 2018-02-01	admin	Locked
Import-Table.atmx	Task Bot	18:24:04 IST 2018-02-02	tom.watson	Locked
List-Variable.atmx	Task Bot	18:24:08 IST 2018-02-02	tom.watson	Locked
Loops.atmx	Task Bot	17:51:15 IST 2018-02-02	ellie.brown	Unlocked
Prompt.atmx	Task Bot	18:11:50 IST 2018-02-02	tom.watson	Unlocked

3. In the **Files and folders** list for the Bot that is locked, mouse over  . For example, **Sample Tasks → Download\_File.atmx**
4. Click 
5. The following message box is displayed:

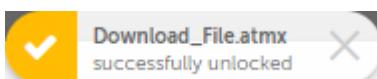
**Do you want to unlock the bot, Download\_File.atmx locked by tom.watson?**

You cannot undo this action from inside the Control Room.

**No, cancel**

**Yes, unlock**

6. Select **Yes, unlock** to confirm.
7. The Bot is unlocked successfully:



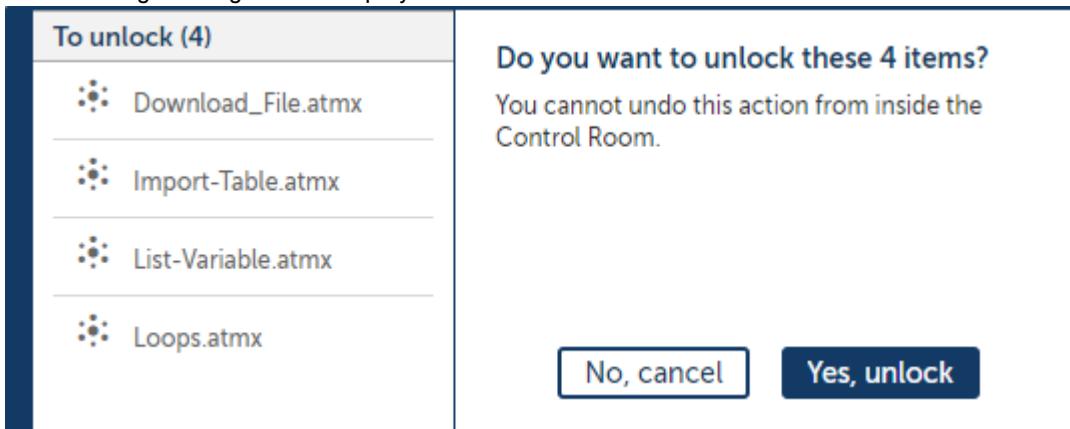
- Select **No, cancel** to go back to the **Files and folders** list without unlocking the Bot.

## Unlock multiple Bots

You can forcefully unlock selected Bots (multiple) if locked for editing by the BotCreator in Enterprise Client.

To unlock checked out Bots from the Control Room,

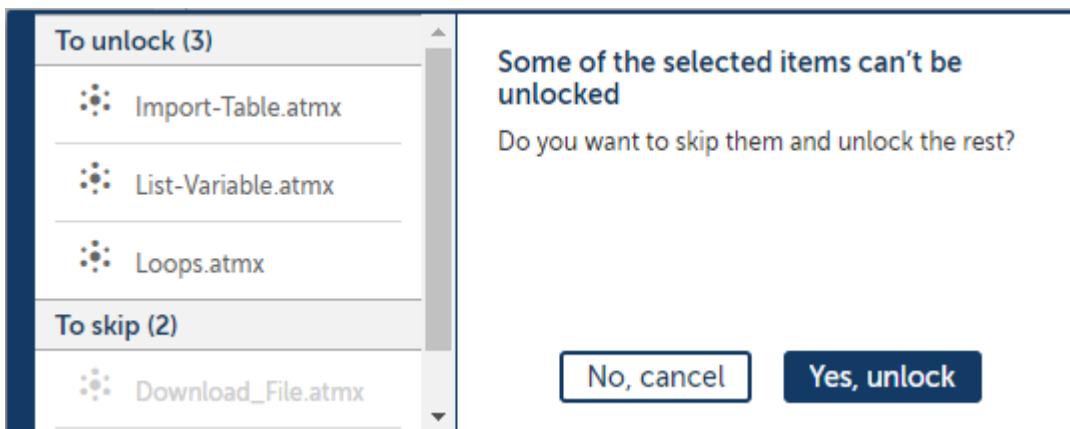
1. Go to **Bots → My Bots**
2. The **My Bots** page is launched.
3. In the **Files and folders** list select Bots that are locked by clicking required check-boxes. For example, **Sample Tasks → Download\_File.atmx, Import-Table.atmx, List-Variable.atmx, and Loops.atmx**
4. Click  given above the table.
5. The following message box is displayed



6. Select **Yes, unlock** to confirm
7. The Bots are unlocked successfully:



- Click **No, cancel** to go back to the **Files and folders** list without unlocking the Bots.
- If Bots that are already in Unlocked state are selected, the Control Room skips unlocking them:



## Audit Logs

For all the Bot(s) that are forcefully unlocked, audit entries are logged in the Audit Logs page:

Audit log

### Audit log

Time filter: Last 24 hours

Status ▾ Choose status

Action type: unlock X

Actions (47 of 779)

STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
<span style="color: green;">i</span> Successful	17:51:15 IST 2018-02-02	Unlock bot	Import-Table.atmx	ellie.brown	UNSET	Control Room
<span style="color: green;">i</span> Successful	17:51:15 IST 2018-02-02	Unlock bot	List-Variable.atmx	ellie.brown	UNSET	Control Room
<span style="color: green;">i</span> Successful	17:51:15 IST 2018-02-02	Unlock bot	Loops.atmx	ellie.brown	UNSET	Control Room
<span style="color: green;">i</span> Successful	17:46:18 IST 2018-02-02	Unlock bot	Download_File.atmx	ellie.brown	UNSET	Control Room
<span style="color: red;">!</span> Unsuccessful	15:38:55 IST 2018-02-02	Unlock file	SNMP_localExe	nn1	UNSET	Control Room
<span style="color: red;">!</span> Unsuccessful	15:36:50 IST 2018-02-02	Unlock file	SNMP_localExe	nn1	UNSET	Control Room

The details page is shown as:

Audit log > View action

### Unlock bot

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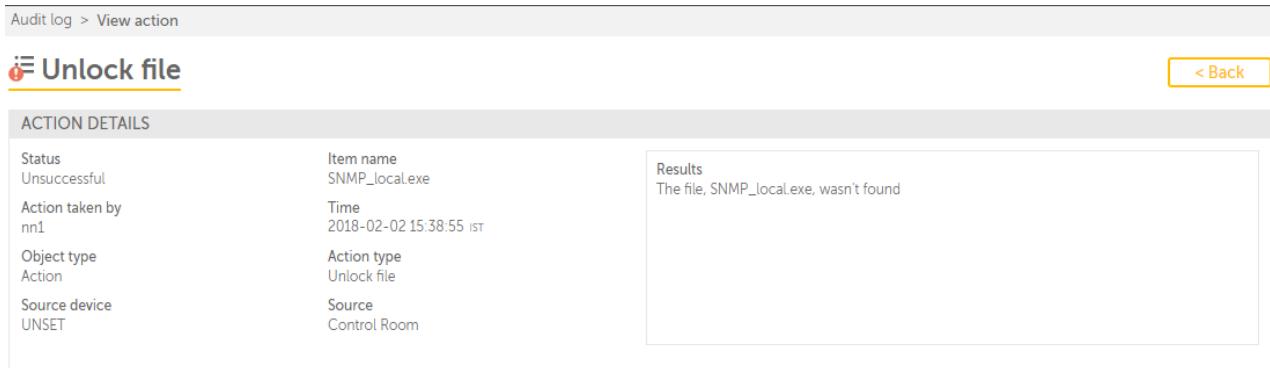
**ACTION DETAILS**

Status	Successful	Item name	Download_File.atmx
Action taken by	ellie.brown	Time	2018-02-02 17:51:15 IST
Object type	Action	Action type	Unlock bot
Source device	UNSET	Source	Control Room

**UNLOCK BOT DETAILS**

ATTRIBUTE	VALUE
Path	My Tasks > Sample Tasks > Download_File.atmx
Object type	Bot
Bot type	Taskbot

- The status of an unsuccessful unlock is shown with its reason in the **Results** column of the details page:



Audit log > View action

## Unlock file

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ACTION DETAILS		Results
Status	Item name	Unsuccessful
	SNMP_local.exe	
Action taken by	Time	nn1
	2018-02-02 15:38:55 IST	
Object type	Action type	
Action	Unlock file	
Source device	Source	UNSET
	Control Room	

The screenshot shows the 'Audit log' interface with a selected action named 'Unlock file'. The 'ACTION DETAILS' table lists various parameters: Status (Unsuccessful), Item name (SNMP\_local.exe), Action taken by (nn1), Time (2018-02-02 15:38:55 IST), Object type (Action), Action type (Unlock file), Source device (UNSET), and Source (Control Room). In the 'Results' column, it states 'The file, SNMP\_local.exe, wasn't found'.

## Bot Lifecycle Management (BLM) - an overview

As a Control Room user with Export and/or Import Bots module permission, you can move your bots (new or updated) from one environment to another using Bot Lifecycle Management (BLM) module in Control Room. For example, you can move the Bots that are verified as production ready from staging to production.

The process can be performed in two stages:

1. [Export Bots](#) from one environment of a source Control Room
2. [Import Bots](#) to another environment of a destination Control Room

You can choose to Export and Import using two methods:

1. Control Room user interface i.e. Export and Import Bots
2. [Export and Import API](#)

## Export bots

As a Control Room user with BLM Export module permission and download privileges for Tasks, Docs, Workflows, and Reports as well as execute permission for MetaBots, you can export bots and dependent files in different automation environments to help manage your organization's Bot Lifecycle Management (BLM).

The exported package can then be imported in another Control Room environment. Refer [Import bots](#) for details on importing a BLM package.

### Export bot files - version control disabled

To export bot files,

1. Go to **Bots** → **My Bots** page
2. Click  [Export bot files...](#)
3. This launches the **Export bot files wizard** → **Select Bots** page wherein you must select the bots that you want to export:

Bots > My bots > Export bots and files

**Export bots + files**

**Which bots & files do you want to export?**

Select the bots and files that you would like to export. If you select a Task Bot with dependencies, the dependencies will automatically be exported, too. They will appear on the next page for your verification.

**Folders**

- My Docs
- My Exes
- My MetaBots
- My Reports
- My Scripts
- My Tasks
  - ChangedTestRename
  - Sample Tasks
- My Workflow

**Available items (11 of 11)**

<input type="checkbox"/>	TYPE	NAME ↑	
<input type="checkbox"/>	Task Bot	Analytics_ATM Reconciliation.atmx	
<input type="checkbox"/>	Task Bot	Analytics_MortgageProcessing.atmx	
<input type="checkbox"/>	Task Bot	Analytics_TelecomOrderEntry.atmx	
<input type="checkbox"/>	Task Bot	Files-Folders.atmx	
<input type="checkbox"/>	Task Bot	List-Variable.atmx	
<input type="checkbox"/>	Task Bot	Loops.atmx	
<input type="checkbox"/>	Task Bot	Prompt.atmx	

**Selected (0)**

<input type="checkbox"/>	TYPE	NAME ↑	PATH

**Next >**

4. Select **TaskBot(s)** from the list of **Available items**. You can choose either all files by selecting the check-box in the header row or certain files by selecting the check-box beside each.
5. Click  or  to add the bots to the list of **Selected** bots given below the **Available items** list:

**Selected (4)**

<input type="checkbox"/>	TYPE	NAME ↑	PATH
<input type="checkbox"/>	Task Bot	Analytics_MortgageProcessing.atn	Automation Anywhere
<input type="checkbox"/>	Task Bot	Files-Folders.atmx	Automation Anywhere
<input type="checkbox"/>	Task Bot	Import-Table.atmx	Automation Anywhere
<input type="checkbox"/>	Task Bot	Loops.atmx	Automation Anywhere

**Next >**

**Note:** The **Selected** bots panel will be available either below the **Available items** list or on the right of the list based on your screen's resolution. If it is below, the down arrow will be available and if on the right, the right arrow will be available for bot selection.

6. Click **Next**.
7. This launches the **Export bot files wizard** → **Summary** page wherein you can provide the Export package name and/or choose to exclude a bot or dependency file from the list.
  - a. The system assigns a default **Export package name**. However, you can choose to rename the package.
  - b. You can also choose to provide a **Password** that will be used to import the package. The password should be set as per the Control Room password policy and one that can be easily remembered.

**Note:** The provided password is not stored anywhere in the Control Room. If you provide a password the package is encrypted with AES 256-Bits and cannot be accessed outside of Control Room.

Bots > My bots > Export bots and files

## Export bots + files

[Cancel](#) [Export](#)

**BOTS & FILES** (1)  
 • 9 bots + files

**PACKAGE SUMMARY** (1)  
 • BLM Package\_20180405\_180...  
 • 9 bots + files + dependencies

**Where do you want to export these files to?**

The table below shows all the files that you selected along with any dependencies that you did not select. You may unselect any bot or dependency that you do not want to export.

Export package name	Password (optional)
Finance bots package	<input type="password"/> <span style="font-size: small;">∅</span>
8-15 characters; a-z, A-Z, 0-9, ., -, _, !, #, %, &, and , allowed.	
<input style="margin-right: 5px;" type="button" value="Name"/> <input type="text" value="Search name"/> <input style="font-size: small;" type="button" value="Search"/>	

**Items to export (9 of 9) 9 selected**

TYPE	NAME	PATH
<input checked="" type="checkbox"/>	Task Bot	Loops.atmx
<input checked="" type="checkbox"/>	Task Bot	Variables.atmx
<input checked="" type="checkbox"/>	Task Bot	Prompt.atmx
<input checked="" type="checkbox"/>	Task Bot	Files-Folders.atmx

[◀ Back](#)

- c. If the Task Bot comprises dependent bots (TaskBots, MetaBots) and/or files, they are also automatically selected for export.

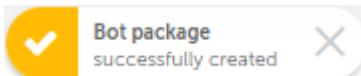
**Note:** If any dependent file appears more than once, it is included in the package only once.

8. Click **Export**

**Cancel**

- Click **Cancel** if you do not want to proceed.
- Click **Back** to go to previous page.

9. The package is successfully exported to the default folder for downloads.



For messages related to export, refer the section [Export bot files - Validations](#)

## Export bot files - version control enabled

Before you use Export bot files in a Control Room that has version control, ensure that the production version of bots and their dependencies is already set.

To export bot files,

1. Go to **Bots** → **My Bots** page
2. Click  **Export bot files...**
3. This launches the **Export bot files wizard** → **Select Bots** page wherein you must select the bots that you want to export:

Bots > My bots > Export bots and files

**Export bots + files**

**Which bots & files do you want to export?**

Select the bots and files that you would like to export. If you select a Task Bot with dependencies, the dependencies will automatically be exported, too. They will appear on the next page for your verification.

Folders			Available items (10 of 10)			Selected (0)		
	Type	Name ↑		Type	Name ↑		Type	Name ↑
<input type="checkbox"/>	Task Bot	Analytics_A	<input type="checkbox"/>	Task Bot	Analytics_N	<input type="checkbox"/>	Task Bot	Download_
<input type="checkbox"/>	Task Bot	Analytics_T	<input type="checkbox"/>	Task Bot	Files-Folder	<input type="checkbox"/>	Task Bot	File-Folder
<input type="checkbox"/>	Task Bot	Import-Table.atmx	<input type="checkbox"/>	Task Bot	Loops.atmx	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Loops.atmx	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow
<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow	<input type="checkbox"/>	Task Bot	Workflow

**Next >**

4. Select **TaskBot(s)** from the list of **Available items**. You can choose either all files by selecting the check-box in the header row or certain files by selecting the check-box beside each.
5. Click  or  to add the bots to the list of **Selected** bots given below the **Available items** list:

**Selected (4)**

	TYPE	NAME ↑	PATH
<input type="checkbox"/>	Task Bot	Analytics_MortgageProcessing.atn	Automation Anywhere
<input type="checkbox"/>	Task Bot	Files-Folders.atmx	Automation Anywhere
<input type="checkbox"/>	Task Bot	Import-Table.atmx	Automation Anywhere
<input type="checkbox"/>	Task Bot	Loops.atmx	Automation Anywhere

**Next >**

**Note:** The **Selected** bots panel will be available either below the **Available items** list or on the right of the list based on your screen's resolution. If it is below, the down arrow will be available and if on the right, the right arrow will be available for bot selection.

6. Click **Next**.

7. This launches the **Export bot files wizard** → **Summary** page wherein you can provide the Export package name and/or choose to exclude a bot or dependency file from the list.
- The system assigns a default **Export package name**. However, you can choose to rename the package.
  - You can also choose to provide a **Password** that will be used to import the package. The password should be set as per the Control Room password policy and one that can be easily remembered.

**Note:** The provided password is not stored anywhere in the Control Room. If you provide a password the package is encrypted with AES 256-Bits and cannot be accessed outside of Control Room.

Bots > My bots > Export bots and files

### Export bots + files

<b>BOTS &amp; FILES</b> <input checked="" type="checkbox"/> • 8 bots + files	<b>Where do you want to export these files to?</b> The table below shows all the files that you selected along with any dependencies that you did not select. You may unselect any bot or dependency that you do not want to export.		
Export package name <input type="text" value="Finance bots package"/> <input type="password" value="*****"/> <small>8-15 characters; a-z, A-Z, 0-9, @, -, _, !, #, \$, %, &amp;, and . allowed.</small>			
Name <input type="button" value="Search name"/> <input type="button" value="X"/>			
Items to export (8 of 8) 8 selected			
Type	Name	Path	Production Version
<input checked="" type="checkbox"/>	Task Bot Variables.atmx	Automation Anywhere\My Tasks...	7277
<input checked="" type="checkbox"/>	Task Bot List-Variable.atmx	Automation Anywhere\My Tasks...	7279
<input checked="" type="checkbox"/>	Task Bot Import-Table.atmx	Automation Anywhere\My Tasks...	7280
<input checked="" type="checkbox"/>	Task Bot Files-Folders.atmx	Automation Anywhere\My Tasks...	7281

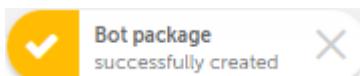
- Only those TaskBots and MetaBots are available for selection for which Production Version is set. Hence, if the production version is not set for TaskBots and MetaBots, they cannot be exported. For other types - Docs, Workflows, and Reports, the files with latest version are allowed for export.
- If the Task Bot comprises dependent bots (TaskBots, MetaBots) and/or files, they will also be selected for export.

**Note:** If any dependent file appears more than once, it is included in the package only once.

### 8. Click **Export**

- Click **Cancel** if you do not want to proceed.
- Click **Back** to go to previous page.

### 9. The package is successfully exported to the default folder for downloads.



For messages related to export, refer the section [Export bot files - Validations](#)

**Note:** If the **Email settings** are enabled for Export and Import operations of a BLM package, an email notification is sent to the user who performs the export whether the action succeeded or failed.

## Export bots - Validations

When you export bot files, the system checks for following validations during export:

- Whether bot or dependent file is available in Control Room
- Whether you have download permission (Execute permission for MetaBot) on one or more bot or dependent files of selected bot(s)
- Whether the production version is set for all selected bot(s) or dependent file(s)

If any of the validation fails for one or more bots, those are automatically excluded from the package and shown in the **Items not allowed to export** section. You can choose to either fix those error messages and come back to export or you can export rest of the bots as shown in the **Items to export** section.

Bots > My bots > Export bots and files

### Export bots + files

<b>BOTS &amp; FILES</b> <input checked="" type="checkbox"/> • 10 bots + files	<b>Where do you want to export these files to?</b> The table below shows all the files that you selected along with any dependencies that you did not select. You may unselect any bot or dependency that you do not want to export.  <small>Some bots can not be exported, you may proceed to export rest of the bots.</small>												
<b>PACKAGE SUMMARY</b> <input checked="" type="checkbox"/> • BLM Package_20180326_1528... • 8 bots + files + dependencies	Export package name <input type="text" value="Finance bots package"/> Password (optional) <input type="password"/> <small>8-15 characters; a-z, A-Z, 0-9, @, -, _, !, #, \$, %, &amp;, and . allowed.</small>												
<b>Items not allowed to export (2 of 2)</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>TYPE</th> <th>NAME</th> <th>PATH ↗</th> <th>REASON</th> </tr> </thead> <tbody> <tr> <td>Task Bot</td> <td>Download_File.atmx</td> <td>Automation Anywhere\My Tasks\...</td> <td>One or more of the following rea...</td> </tr> <tr> <td>Task Bot</td> <td>Loops.atmx</td> <td>Automation Anywhere\My Tasks\...</td> <td>Bot or dependency is not present ...</td> </tr> </tbody> </table> Name <input type="button" value="Search name"/>		TYPE	NAME	PATH ↗	REASON	Task Bot	Download_File.atmx	Automation Anywhere\My Tasks\...	One or more of the following rea...	Task Bot	Loops.atmx	Automation Anywhere\My Tasks\...	Bot or dependency is not present ...
TYPE	NAME	PATH ↗	REASON										
Task Bot	Download_File.atmx	Automation Anywhere\My Tasks\...	One or more of the following rea...										
Task Bot	Loops.atmx	Automation Anywhere\My Tasks\...	Bot or dependency is not present ...										
<b>Items to export (8 of 8) 8 selected</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th><input checked="" type="checkbox"/></th> <th>TYPE</th> <th>NAME</th> <th>PATH ↗</th> <th>PRODUCTION VERSION</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		<input checked="" type="checkbox"/>	TYPE	NAME	PATH ↗	PRODUCTION VERSION							
<input checked="" type="checkbox"/>	TYPE	NAME	PATH ↗	PRODUCTION VERSION									

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## Audit Logs

An audit entry is logged in the Control Room **Audit Log** page when you export bots. The illustration below shows the detailed audit entries for Export Bots.

### Export bots

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ACTION DETAILS	
Status	Item name
Successful	Finance bots package
Action taken by	Time
mike.lee	11:56:42 IST 2018-04-06
Object type	Action type
Action	Export bots
Source device	Source
172.16.16.58	Control Room
Request ID	
3a36d9f0-b353-47be-a6e0-d6dbcd6be9cf	
EXPORT BOTS DETAILS	
ATTRIBUTE	VALUE
Package Name	Finance bots package
Package Encryption	Yes
Exported Bot(1)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(2)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(3)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(4)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(5)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(6)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(7)	Automation Anywhere\My Tasks\Sample Ta...
Exported Bot(8)	Automation Anywhere\My Tasks\Sample Ta...

The audit details are divided in two parts - **Action Details** and **Export Bot Details**,

- The Export Bot Files Details include the Package Name, Package Encryption if password has been set while exporting the bot, Exported Bot name with filepath, and Exported Dependency name with file path.
- The list number of the Bot and dependency is appended inside a bracket beside each bot. All user selected items are listed, followed by list of dependencies of the bots which are added by the system and exported.

## Import bots

As a Control Room user with BLM Import module permission, and Upload privileges for Tasks, MetaBots, Docs, Workflows, and Reports, you can import bots and dependent files that were exported by another Control Room user in different automation environments to help manage your organization's Bot Lifecycle Management (BLM).

Refer [Export bots](#) for details on exporting a BLM package.

### Import bot files - version control disabled

To import bot files,

1. Go to **Bots → My Bots** page
2. Click  [Import bot files...](#)
3. This launches the **Import bot wizard** page wherein you must select the package file that was exported by another Control Room user:

Bots > My bots > Import bot files...

#### Import bot files

[Close](#)

[Import](#)

To import bots and files, please select a file that you have exported from the Control Room in the past. The extension is AAPKG.  
You need to provide the password only when the package is encrypted.

Where is the file you want to import?	<input type="text"/>	<a href="#">Browse...</a>	Password	<input type="password"/>	<a href="#">Close</a>	<a href="#">Import</a>
---------------------------------------	----------------------	---------------------------	----------	--------------------------	-----------------------	------------------------

During import, if a file already exists

- Skip the file (don't import it)
- Overwrite the file with the imported one
- Cancel the import

4. To select the file, click [Browse...](#)
5. Go to the source folder where the exported package was stored and/or shared by the Control Room user with **Export Bots** privileges.
6. Select the required package - it has an **AAPKG** extension.
7. If encrypted, provide the same password that was used for export from source Control Room.
8. If some of the files that are being imported from the package are already available in the Control Room, you can choose to,
  - **Skip the file(s)** and not import the duplicate files
  - **Overwrite the existing files** with the imported ones
  - **Cancel the import** action.

**Note:** When you use this option, the entire import operation is canceled and if at least one file already exists in Control Room. In this case, no bots will be imported into Control Room.

- When you select **Skip...** or **Overwrite...** options, and click [Import](#) the files are successfully imported:



[Import](#)

the files are successfully imported:

- However, when you select **Cancel...** and click [Import](#), you are prompted to select either of the above options:

Bots > My bots > Import bot files

**⚠️ Unable to import the bots. Package is not imported because following bots already existed in Control Room.**

This is due to the following reasons:

- Automation Anywhere\My Tasks\Sample Tasks\Variables.atmx
- Automation Anywhere\My Tasks\Sample Tasks\Prompt.atmx

Please select Skip or Overwrite option and try again.

### Import bot files

To import bots and files, please select a file that you have exported from the Control Room in the past. The extension is AAPKG. You need to provide the password only when the package is encrypted.

Where is the file you want to import?	<input type="text" value="Finance bots package"/>	<input type="button" value="Browse..."/>	Password	<input type="password" value="*****"/>	<input type="button" value="Import"/>
---------------------------------------	---	--	----------	--	---------------------------------------

During import, if a file already exists

Skip the file (don't import it)  
 Overwrite the file with the imported one  
 Cancel the import

9. Once the bots are imported successfully, you return to the **My Bots** page.

#### Import bot files - version control enabled

To import bot files,

1. Go to **Bots** → **My Bots** page
2. Click  **Import bot files...**
3. This launches the **Import bot files wizard** page wherein you must select the file that was exported by another Control Room user:

Bots > My bots > Import bot files

### Import bot files

To import bots and files, please select a file that you have exported from the Control Room in the past. The extension is AAPKG. You need to provide the password only when the package is encrypted.

Where is the file you want to import?	<input type="text" value="Finance bots package"/>	<input type="button" value="Browse..."/>	Password	<input type="password" value="*****"/>	<input type="button" value="Import"/>
---------------------------------------	---	--	----------	--	---------------------------------------

During import, if a file already exists

Create a new version  
 Skip the file (don't import it)  
 Cancel the import

Version control of imported files

Keep production version as is currently set  
 Set production version to imported version of file

4. To select the file, click **Browse...**
5. Go to the source folder where the package was exported and/or shared by the Control Room user with **Export Bots** privileges.
6. Select the required package - it has an **AAPKG** extension.
7. If encrypted, provide the same password that was used for export from source Control Room.
8. If some of the files that are being imported from the package are already available in the Control Room, you can choose to,
  - **Create a new version** of files. A new version is created in the destination Control Room irrespective of version control - whether enabled or not in the source Control Room.

**Note:** If the bot being imported is already present in the destination Control Room and does not have any updates, a new version of the bot will not be created.

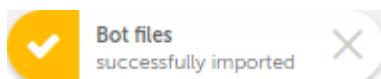
- **Skip the file** and do not import the file. This means that there will be no change in the file of the destination Control Room
- **Cancel the import** action.

**Note:** When you use this option, the entire import operation is canceled and if at least one file already exists in Control Room. In this case, no bots will be imported into Control Room.

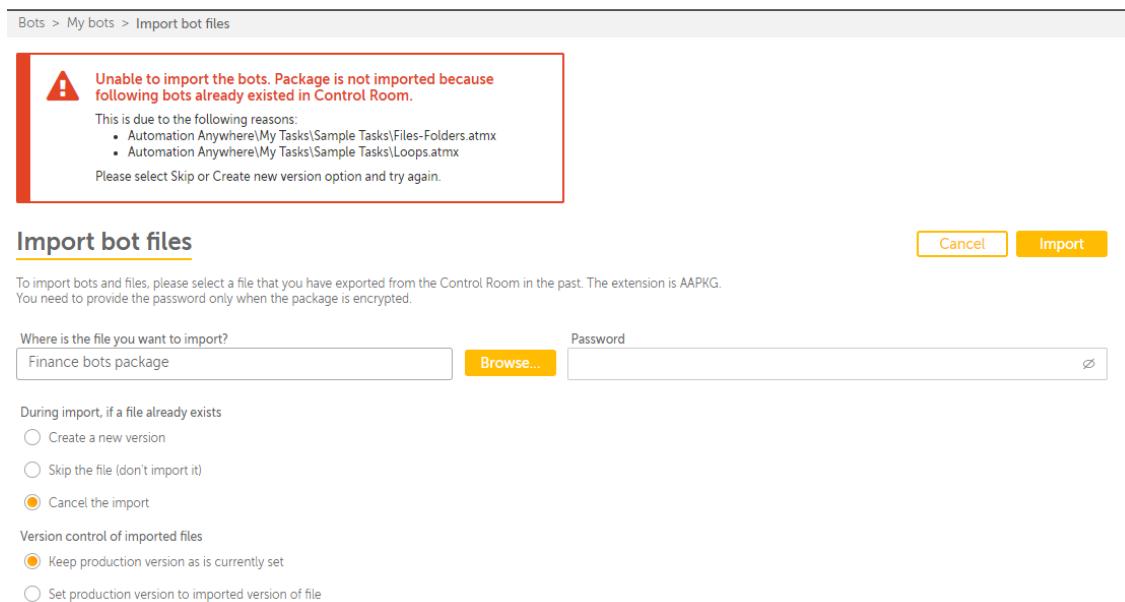
#### 9. You must choose the production version type,

- Keep production version as is currently set - The system will not make any change in the production versions of the imported bots and dependencies.
- Set production version to imported version of file - The latest (imported) versions are set as production versions for all the imported bots and dependencies.

- When you select **Skip...** or **Create...** options, and click **Import** the files are successfully imported:



- However, when you select **Cancel...** and click **Import**, you are prompted to select either of the above options:



Bots > My bots > Import bot files

**A** Unable to import the bots. Package is not imported because following bots already existed in Control Room.

This is due to the following reasons:

- Automation Anywhere\My Tasks\Sample Tasks\Files-Folders.atmx
- Automation Anywhere\My Tasks\Sample Tasks\Loops.atmx

Please select Skip or Create new version option and try again.

**Import bot files**

To import bots and files, please select a file that you have exported from the Control Room in the past. The extension is AAPKG.  
You need to provide the password only when the package is encrypted.

Where is the file you want to import?   Password

During import, if a file already exists:

Create a new version  
 Skip the file (don't import it)  
 Cancel the import

Version control of imported files:

Keep production version as is currently set  
 Set production version to imported version of file

**Cancel** **Import**

#### 10. Once the bots are imported successfully, you return to the **My Bots** page.

**Cancel**

**Tip:** You can also click **Cancel**, if you do not wish to continue with the file import at any stage of the import process.

**Note:** If the **Email settings** are enabled for Export and Import operations of a BLM package, an email notification is sent to the user who performs import whether the action succeeded or failed.

## Import bots - Validations

When you import bot files, the system checks for following validations during import:

- Whether bot or dependent file already exists in Control Room
- Whether a file is locked if version control is enabled. If this validation fails, you are shown:



### Unable to import the bots.

Automation Anywhere\My Tasks\Sample Tasks\Variables.atmx.

Please ensure these bots/files are checked in or force unlocked and try again.

You can fix this issue from the Control Room using **Unlock bot** or from the Client using **Checkin** option.

## Audit Logs

An audit entry is logged in the Control Room **Audit Log** page when you import bots. The illustration below shows the detailed audit entries for Import Bots.

[Audit log](#) > [View action](#)

### Import bots

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#### ACTION DETAILS

Status	Item name
Successful	Finance bots package
Action taken by	Time
ellie.brown	11:24:00 IST
	2018-04-12
Object type	Action type
Action	Import bots
Source device	Source
	Control Room
Request ID	
Ode6b276-84f6-4d5e-8450-9f1fd9a07e8d	

#### IMPORT BOTS DETAILS

ATTRIBUTE	VALUE
Source Control Room	<a href="http://productlt:82/">http://productlt:82/</a>
Package Encryption	Yes
If a file already exists	Create a new version
Version Control of imported files	Set production version to imported version ...
Imported Bot(1)	Automation Anywhere\My Tasks\Sample Ta...

The audit details are divided in two parts - **Action Details** and **Import Bot Details** :

- The Import Bot Details include the Package Name, Package Encryption if password has been set while exporting the bot, Imported Bot name with filepath, and Imported Dependency name with file path.
- The list number of the Bot and dependency is appended inside a bracket beside each bot. All user selected items are listed, followed by list of dependencies of the bots which are added by the system and imported.
- When Version Control is enabled, the source Control Room version of each item in the list are displayed and the version number is appended towards the end of the file.
  - If you want to know from which Control Room a bot was imported with its version number, you can track it through version history in the **Edit bot** page

## Edit bot

[Close](#)
[Save changes](#)

TASK BOT DETAILS			
Name Analytics_MortgageProcessing.atmx	Size 15.71 KB	Path My Tasks > Sample Tasks	Client last modified 18:45:14 IST 2018-02-05



Production version (4 of 4)

VERSION	DESCRIPTION	LAST MODIFIED	MODIFIED BY
28	Imported from 'http://product07.aaspl-brd.com:82/' Control Room. Bot version in Source CR : '23'	18:47:36 IST 2018-04-11	ellie.brown
27	Updated mortgage data to reflect mortgage rate for financial year 2018-2019	16:29:40 IST 2018-04-11	mike.lee
23	Uploaded Base version	18:09:43 IST 2018-04-09	ellie.brown
None	N/A	N/A	N/A

- Alternatively, if you want to know from which Control Room a bot was imported with its version number, you can also track it through the **Version History** in the Automation Anywhere Enterprise Client:

Version History

?

Automation Anywhere\My Tasks\Sample Tasks\Analytics\_MortgageProcessing.atmx

Revision ...	Action	Username	Date	Comments
28	Edit	ellie.brown	11-04-2...	Imported from 'http://product07.aaspl-brd.com:82/' Control Room. Bot version in Source CR : '23'
27	Edit	mike.lee	11-04-2...	Updated mortgage data to reflect mortgage rate for financial year 2018-2019
23	Add	ellie.brown	09-04-2...	Uploaded Base version

Press 'Ctrl' key to select two different revisions for comparison

[Compare](#) [Rollback](#)

## Activity - Overview

If you have **View everyone's In progress activity**, **View my scheduled bots**, and **View my bots** privileges, the Activity page of Control Room allows you to perform tasks, such as viewing activities that are scheduled and are in progress. At the same time, it allows you to view a historical chronology of activities performed on a bot using the Historical Activity page. You can perform the following tasks using this page.

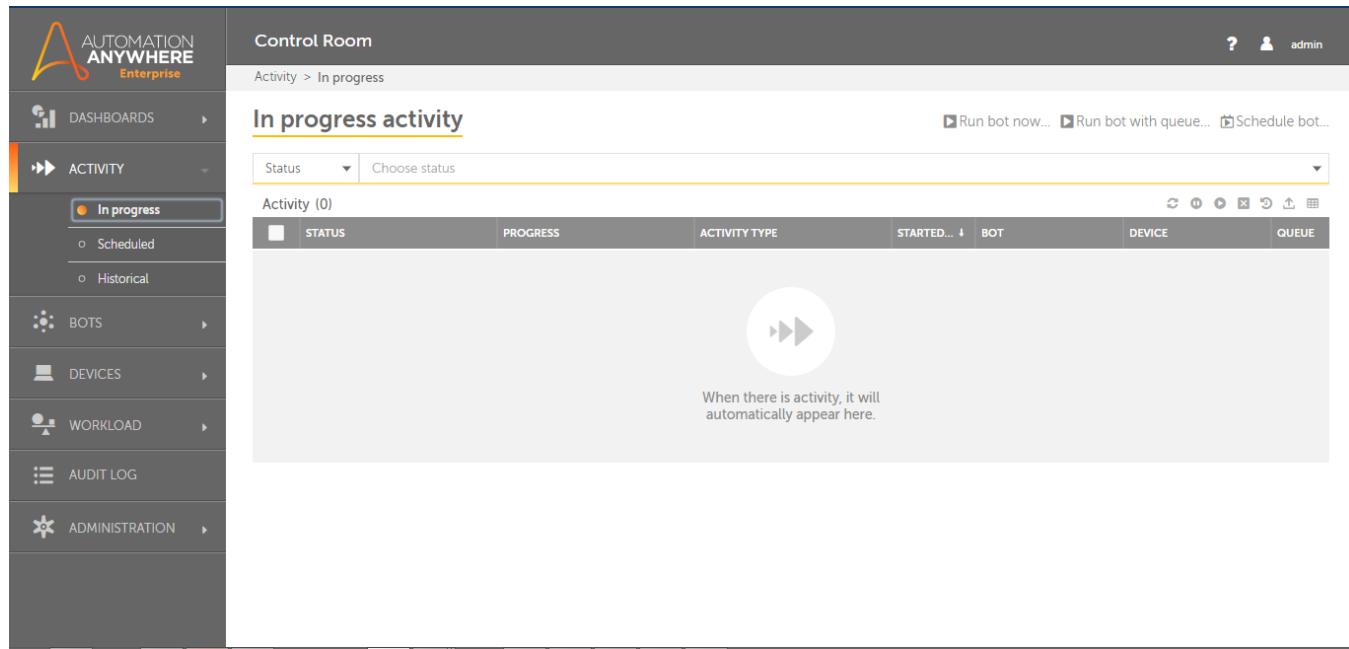
- [Run a bot](#)
- [Schedule a bot](#)
- [Run a bot with queue](#)
- [Edit a scheduled bot](#)
- [Delete a schedule](#)
- [Activate or Deactivate a schedule](#)
- [View scheduled activities](#)
- [View in-progress activities](#)

# In progress activity page

The **In progress** activity page displays a live status of all the on-going activities for Control Room. Depending on your privileges, you can manage one or more automation activities using a pause, stop, or resume operation.

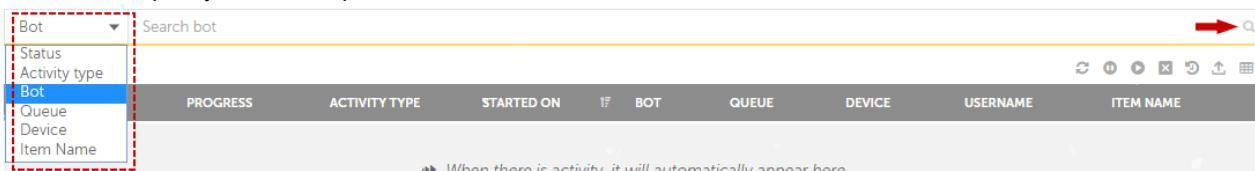
By default, you will be able to monitor and manage all the ongoing automation which has been triggered or scheduled by you. If you have “View my in-progress activity” permission, you can also manage and monitor all the ongoing automations on the bots where you have either of Upload, Download or Delete permission.

The default page is illustrated in the following figure.



For ease of access, you can apply search parameters to Status, Activity Type, Bot, Queue, Device, and Item Name columns.

- You can use specify the search parameters in the search bar for Bot, Queue, Device, and Item Name:



 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Status and Activity Type:



The items of the **Activity** table are described in the following table.



**Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click two or more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

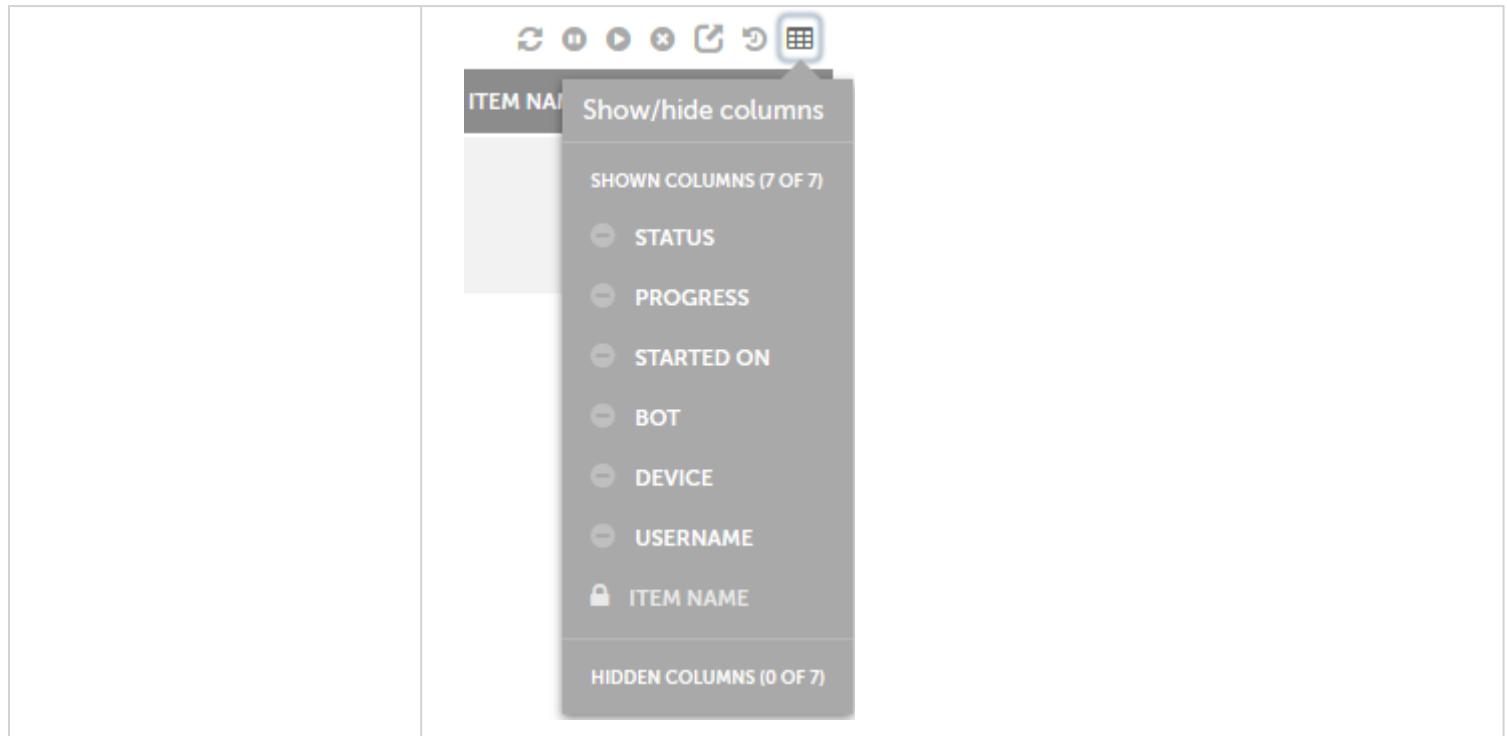
Table Item	Description
Status	Whether the status of the activity is: <ul style="list-style-type: none"> <li>• <b>Active (In progress)</b> - This is shown when the bot is being run on Bot machine</li> <li>• <b>Paused</b> - This is shown when the bot is paused either from Control Room or Device.</li> <li>• <b>Unknown</b> - This is shown when the bot fails to run reasons that are not known.</li> <li>• <b>Waiting for user input</b> - This is shown when the bot is paused and requires an input from the Device user.</li> </ul>
Progress	The progress of the activity in percentage.
Started on	The time at which the activity was started. This is of the format HH:MM:SS YYYY-MM-DD.
Bot	The name of the bot.
Device	The device on which the activity is running.
UserName	The Control Room user account used for running the automation on a remote Bot runner.
Item Name	The name of the automation.

You can also perform the following table-level actions for a set of multiple activities.



**Note:** These actions can be performed only at a table-level and not on individual items.

Table Item	Description
	Refreshes the activities listed in the table
	Pauses any activity being performed on the bot
	Resumes any paused activity being performed on the bot
	This stops all activities of the bot regardless of the stage it is in.
	Exports the list of items in the Activity table in CSV format
	Moves the selected activity to history
	When you click this icon, the list of available columns is displayed, as shown in the following figure. Select or deselect an item to add or remove a column.



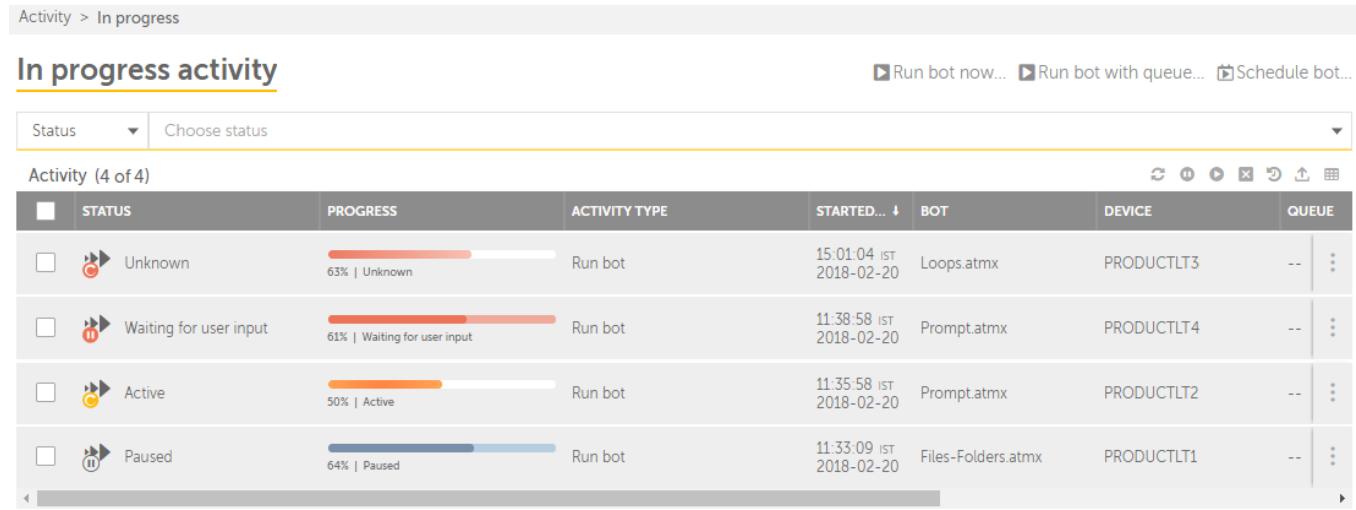
You can perform the following tasks on an individual activity.

Table Item	Description
 View in progress activity	Select this to <a href="#">view details</a> of the activity
 Pause in progress activity	Select this to pause the activity
 Resume in progress activity	Select this to resume the activity that was paused. This is visible only when you pause the activity
 Stop in progress activity	Select this to stop the activity
 Move in progress activity	Select this to move the activity to <a href="#">Historical Activity</a> page

# View in progress activity details

As a Control Room admin or a user with **View everyone's In progress activity** privilege, you can view the progress details of activities that are currently being executed in real time.

You can access the **In progress activity** page by logging on to Control Room and click **Activity → In Progress**. The in progress activities with different status is illustrated in the following figure.

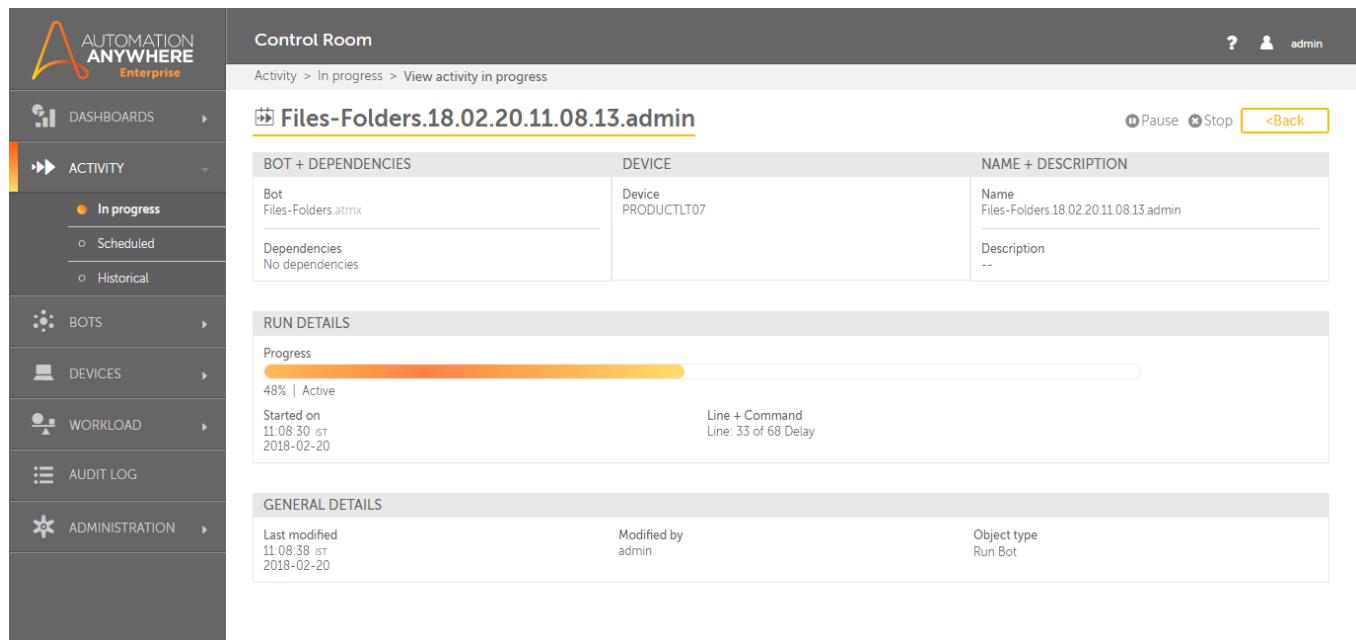


Activity (4 of 4)							
	Status	Progress	Activity Type	Started...	Bot	Device	Queue
<input type="checkbox"/>	Unknown	<div style="width: 63%;">63%   Unknown</div>	Run bot	15:01:04 IST 2018-02-20	Loops.atmx	PRODUCTLT3	--
<input type="checkbox"/>	Waiting for user input	<div style="width: 61%;">61%   Waiting for user input</div>	Run bot	11:38:58 IST 2018-02-20	Prompt.atmx	PRODUCTLT4	--
<input type="checkbox"/>	Active	<div style="width: 50%;">50%   Active</div>	Run bot	11:35:58 IST 2018-02-20	Prompt.atmx	PRODUCTLT2	--
<input type="checkbox"/>	Paused	<div style="width: 64%;">64%   Paused</div>	Run bot	11:33:09 IST 2018-02-20	Files-Folders.atmx	PRODUCTLT1	--

## In progress details

To view in progress activity details,

1. Go to **Activity → In Progress**
2. Mouse over an activity
3. Click
4. The following page is launched:



BOT + DEPENDENCIES			DEVICE	NAME + DESCRIPTION	
Bot Files-Folders.atmx	Device PRODUCTLT07	Name Files-Folders.18.02.20.11.08.13.admin  Description --			
Dependencies No dependencies					

RUN DETAILS		
Progress <div style="width: 48%;">48%   Active</div>		Line + Command Line: 33 of 68 Delay
Started on 11:08:30 IST 2018-02-20		

GENERAL DETAILS		
Last modified 11:08:38 IST 2018-02-20	Modified by admin	Object type Run Bot

Here, you can choose to Pause, Play, Stop or Move the activity to historical activity page.

1. Click  **Play** to run a bot that is **Paused**:

Activity > In progress > View activity in progress

### Files-Folders.18.02.20.11.08.13.admin

 Play  Stop 

BOT + DEPENDENCIES		DEVICE	NAME + DESCRIPTION
Bot Files-Folders.atmx		Device PRODUCTLT07	Name Files-Folders.18.02.20.11.08.13.admin
Dependencies No dependencies			Description --

**RUN DETAILS**

Progress  
55% | Paused  
Started on 11:08:30 IST 2018-02-20

Line + Command  
Line: 38 of 68 Keystrokes

**GENERAL DETAILS**

Last modified 11:08:50 IST 2018-02-20	Modified by admin	Object type Run Bot
---------------------------------------	-------------------	---------------------

2. Click  **Pause** to interrupt a bot that is **Active (In progress)**:

**Control Room**

Activity > In progress > View activity in progress

### Files-Folders.18.02.20.11.08.13.admin

 Pause  Stop 

BOT + DEPENDENCIES		DEVICE	NAME + DESCRIPTION
Bot Files-Folders.atmx		Device PRODUCTLT07	Name Files-Folders.18.02.20.11.08.13.admin
Dependencies No dependencies			Description --

**RUN DETAILS**

Progress  
48% | Active  
Started on 11:08:30 IST 2018-02-20

Line + Command  
Line: 33 of 68 Delay

**GENERAL DETAILS**

Last modified 11:08:38 IST 2018-02-20	Modified by admin	Object type Run Bot
---------------------------------------	-------------------	---------------------

3. Stop the in progress bot by clicking  **Stop** in which case you are shown a message for confirmation:

**Do you want to stop the activity running on 'PRODUCTLT07'?**

You can find a record of it in the Audit log.

**No, cancel**

**Yes, stop**

1. Click Yes, stop to return to the **In progress** page.
2. Click No, Cancel to return to the **View activity in progress** details page.

4. Click  **Move to history** to remove the activity that is in Unknown status from the **In progress** activity page to **Historical activity** page

Activity > In progress > View activity in progress

**Prompt.18.02.20.14.59.13.admin**

 **Move to history** 

BOT + DEPENDENCIES	DEVICE	NAME + DESCRIPTION
Bot Prompt.atmx	Device PRODUCTLT07	Name Prompt.18.02.20.14.59.13.admin
Dependencies No dependencies		Description --

RUN DETAILS		
Progress	 50%   Unknown	
Started on 14:59:30 IST 2018-02-20	Line + Command Line: 13 of 26 Delay	

GENERAL DETAILS		
Last modified 15:01:24 IST 2018-02-20	Modified by N/A	Object type Run Bot

**Note:** You cannot **Pause/Resume** or **Stop** an automation that has queues from the **View activity in progress** page. You can do that from the **Workload** → **Queues** page by using the **View Automation** option. Refer [Manage work items](#) for details.

The different areas of the **View in progress** activity page are described in the following table.

Area	Description
BOT + DEPENDENCIES	The name of the bot and dependencies for the scheduled bot.
DEVICES	The name of the device connected to the bot.
NAME + DESCRIPTION	The name and description for the activity. By default, this displays the Bot name, date, time, and name of the person who ran the bot.
RUN DETAILS	The run details for the bot which include: <ul style="list-style-type: none"> <li><b>Progress</b> - The bot progress in percentage</li> <li><b>Status</b> - Active, Paused, Unknown or Waiting for user input</li> <li><b>Started on</b> - The date and time when the bot was executed</li> <li><b>Line + Command</b> - The current line number and command name of that line</li> </ul>
GENERAL DETAILS	The details for the bot execution which include: <ul style="list-style-type: none"> <li><b>Last modified</b> - The last date and time the bot was modified.</li> <li><b>Modified by</b> - The name of the user who last made changes to the bot.</li> <li><b>Object type</b> - The type of object of the bot, such as Run Bot.</li> </ul>

## Audit Details

- The Audit Log page shows the In progress activities when you use the Run bot now... option:

[Audit log](#)

### Audit log

Time filter: Last 24 hours

Status ▾ Choose status

Action type: Run Bot X

Actions (30 of 135)

STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE
N/A	15:01:24 IST 2018-02-20	Run bot disconnected	Loops.18.02.20.15.00.3...	N/A	PRODUCTLT07	Control Room
N/A	15:01:24 IST 2018-02-20	Run bot disconnected	Prompt.18.02.20.14.59....	N/A	automationanywhere	Control Room
Successful	15:01:02 IST 2018-02-20	Run bot Deployed	Loops.18.02.20.15.00.3...	System	automationanywhere	Control Room
Successful	14:59:37 IST 2018-02-20	Run bot paused	Prompt.18.02.20.14.59....	amy.chen	PRODUCTLT07	Control Room
Successful	14:59:27 IST 2018-02-20	Run bot Deployed	Prompt.18.02.20.14.59....	System	automationanywhere	Control Room
Unsuccessful	14:54:47 IST 2018-02-20	Run bot Deployed	Prompt.18.02.20.14.51....	System	automationanywhere	Control Room
N/A	14:54:00 IST 2018-02-20	Run bot disconnected	Prompt.18.02.20.14.53....	N/A	PRODUCTLT07	Control Room

- The audit details are shown as:

[Audit log](#) > [View action](#)

### Run bot finished

[< Back](#)

**ACTION DETAILS**

Status	Successful	Item name	Prompt.18.02.20.12.04.46.admin
Action taken by	System	Time	12:08:11 IST 2018-02-20
Object type	Action	Action type	Run bot finished
Source device	PRODUCTLT07	Source	Control Room

**RUN BOT FINISHED DETAILS**

ATTRIBUTE	VALUE
Automation status	Completed
Automation name	Prompt.18.02.20.12.04....
Automation description	--
Bot	Prompt.atmx
Device	PRODUCTLT07
Username	amy.chen
Started on	2018-02-20 12:08:11 IST
Line number	26
Schedule Type	N/A

# Historical activity page

The **Historical activity** page chronologically displays a list of all activities that have occurred. This page lists all the activities, which have finished running - successfully or unsuccessfully completed. For example, there may be scenarios where an activity failed to run and you can use this page to come back and check the status of the activity.

To view this page, you should have **View my in-progress activity** or **View everyone's in-progress activity** permission.

- If you have **View my in-progress activity** permission, you should be able to see all the completed automations that you deployed or scheduled.
- If you have **View everyone's in-progress activity**, you should be able to see all the automations run or scheduled by other users.

 **Note:** You must have **Run/Schedule** permission on the corresponding bot to be able to see the activity here.

Refer [Create a role](#) for details on role description.

You can use this page to run the activity again and perform other tasks, such as export the data in the table in CSV format, show/hide columns, or refresh the list in the table. The page is illustrated in the following figure.

Activity > Historical

**Historical activity**

Status	Device Name	Automation Name	Bot Name	User	Started On	Ended On
COMPLETED	PRODUCTLT08.BRD.COM	List-Variable.1710.18.11.30.03.admin	List-Variable.atmx	botr1	11:35:23 IST 2017-10-18	11:35:36 IST 2017-10-18
COMPLETED	PRODUCTLT08.BRD.COM	List-Variable.1710.13.16.11.56.admin	List-Variable.atmx	botr1	16:12:12 IST 2017-10-13	16:13:08 IST 2017-10-13
COMPLETED	PRODUCTLT08.BRD.COM	List-Variable.1710.13.16.32.51.admin	List-Variable.atmx	botr1	17:00:06 IST 2017-10-13	17:00:19 IST 2017-10-13

For ease of access, you can apply search parameters to Status, Device Name, Automation Name, and Bot Name columns in the search bar.

Status	Device name	Automation name	Bot name	DEVICE NAME	AUTOMATION NAME	BOT NAME	USER	STARTED ON	ENDED ON
--------	-------------	-----------------	----------	-------------	-----------------	----------	------	------------	----------

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

The items of the **Activity** table are described in the following table.

 **Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to re-size.

Item	Description
Status	The status of the activity. This may be Unknown, Completed, Failed, Stopped, or Time Out.
Device name	The name of the Bot runner machine on which automation was running.
Automation name	The name of the automation.
Bot name	The name of the bot.
User	The name of the user under whose account that particular activity/automation was running on the device.
Started on	The date and time on which the activity was started.
Ended on	The date and time on which the activity was completed.

You can perform the following tasks on an individual item in the **Historical activity** page.

Action	Description
 View	Allows you to <a href="#">view details</a> of the activity.
 Run bot	Allows you to <a href="#">Run</a> the selected Bot.  <span style="border: 1px solid #ccc; padding: 5px;">  <b>Tip:</b> Move your mouse over the Actions icon  and click the Run icon to run the activity again. Clicking the Run icon opens the <b>Run bot now</b> page with all the values of the bot populated. You can then make changes to the bot and run the bot again.         </span>

You can also perform the following table-level actions for a set of multiple activities.

 **Note:** These actions can be performed only at a table-level and not on individual items.

Table Item	Description
 Refresh	Refreshes the table
 Export to CSV	Export the selected items in the table in CSV format
 Show/Hide columns	Select the columns to show in the table.

## View details of selected activity from history

As a user with access privileges to the Historical activity, when you click the **View** icon  for an activity, the **View historical activity** page is opened. It provides information in three sections - Details of activity such as Bot + Dependencies, Device, Name + Description of activity, Run details, and General details. Besides this, you can also [run the bot](#) again from this page.

The page shows details based on the activity type,

- The **Run bot** activity page is illustrated below:

Activity > Historical > View historical activity

**# Task\_dependency.18.04.03.18.40.52.admin**

BOT + DEPENDENCIES	DEVICE	NAME + DESCRIPTION
Bot Task_dependency.atmx	Device WIN2012R2STDERR.Harmony.AASPL-BRD.COM	Name Task_dependency.18.04.03.18.40.52.admin
Dependencies Loops.atmx		Description --

**RUN DETAILS**

Progress  
100% | Completed

Started on  
18:40:57 IST  
2018-04-03

Line + Command  
Line: 9 of 9 Delay

**GENERAL DETAILS**

Last modified  
11:29:18 IST  
2018-04-04

Modified by  
ellie.brown

Object type  
Run Bot

- The **Schedule a bot** activity page is illustrated below:

Activity > Historical > View historical activity

**# Prompt.18.04.12.18.25.32.ellie.brown**

BOT + DEPENDENCIES	SCHEDULE + DEVICES	NAME + DESCRIPTION
Bot Prompt.atmx	Schedule On 2018-04-12 at 6:30 PM IST	Name Prompt.18.04.12.18.25.32.ellie.brown
Dependencies --	Device PRODUCTLT07.AASPL-BRD.COM	Description --

**RUN DETAILS**

Progress  
100% | Completed

Started on  
18:30:05 IST  
2018-04-12

Line + Command  
Line: 26 of 26 Keystrokes

**SCHEDULE DETAILS**

Schedule type  
One time

Next occurrence  
18:30:00 IST  
2018-04-12

Start date  
18:30:00 IST  
2018-04-12

End date  
--

**GENERAL DETAILS**

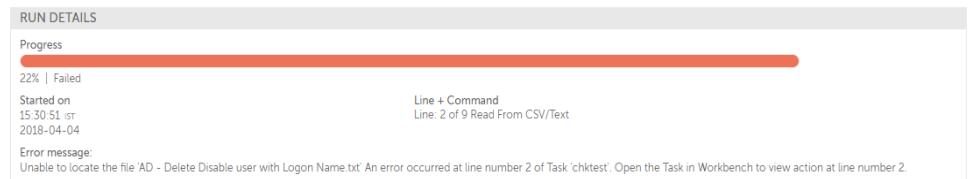
Last modified  
18:30:33 IST  
2018-04-12

Modified by  
ellie.brown

Object type  
Schedule Bot

The different sections of the **Historical activity view details** page are described in the following table.

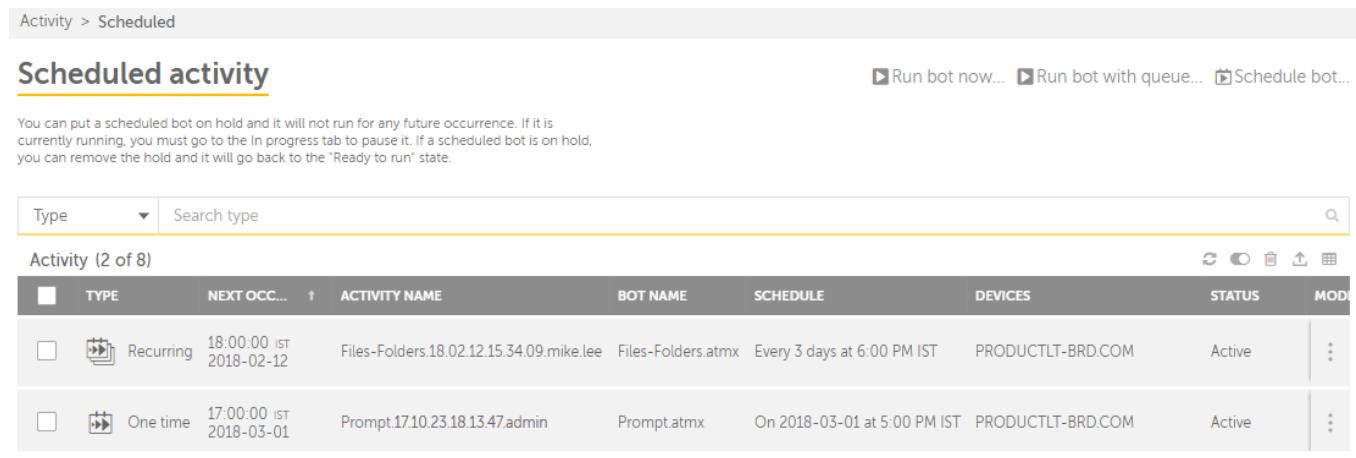
Area	Description
Bot + Dependencies	Displays the Bot name as well as name of its dependent bots or files.
Device	Displays the device name of the source Control Room from which the Bot was deployed
Run Details	<ul style="list-style-type: none"> <li>• <b>Progress:</b> Displays color coded progress in automation,</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Red</b> - when automation fails or is stopped with error message</li> </ul> 
	<ul style="list-style-type: none"> <li>• <b>Green</b> - when automation is completed</li> </ul> 
	<ul style="list-style-type: none"> <li>• <b>Percentage</b> of automation completed, stopped or failed</li> </ul>
Schedule Details	<p>This tab is visible only if the bot is deployed using <b>Schedule a bot</b> operation.</p> <ul style="list-style-type: none"> <li>• <b>Schedule type:</b> Displays the type of schedule used to deploy the bot. For example, Run once.</li> <li>• <b>Next occurrence:</b> Displays the next schedule run date + time</li> <li>• <b>Start/End date:</b> Displays the schedule start and end date + time</li> </ul>
General details	<p>Displays following details,</p> <ul style="list-style-type: none"> <li>• <b>Last Modified:</b> Displays the last time changes were made to the folder in date and time.</li> <li>• <b>Modified by:</b> Displays the name of the user who last made changes to the folder in date and time.</li> <li>• <b>Object type:</b> Displays the activity type - Run Bot or Schedule Bot</li> </ul>

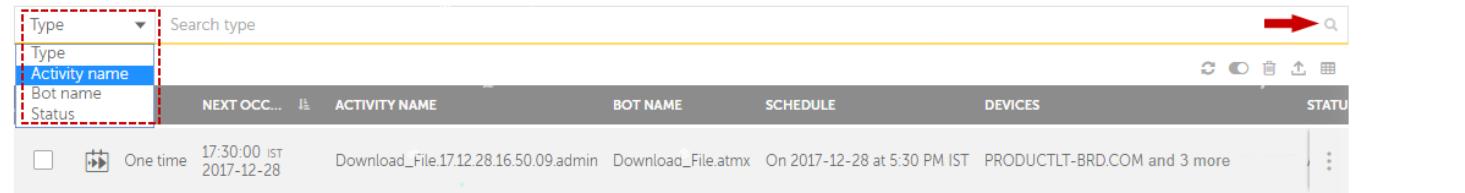
# Scheduled activity page

The **Scheduled Activity** page displays a list of activities that have been scheduled for a later time (future) in an **Activity** table. If you have **View my scheduled bots**, and **View my bots** privileges, you can perform tasks, such as edit, view, activate, deactivate, or delete the schedule.

You can access the **Scheduled activity** page by logging on to Control Room and click **Activity** → **Scheduled**. The page is illustrated in the following figure.



For ease of access, you can apply search parameters to Type, Activity Name, Bot Name, and Status columns in the search bar.



 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

The items of the **Activity** table are described in the following table.

 **Tip:** You can perform the following actions on a column to help you work efficiently.

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session..
- Use a drag-and-drop operation to move the column left or right.
- Move your mouse cursor at the end of the column and drag to resize.

Table Item	Description
Type	The type of schedule. For example, One time or recurring.
Next occurrence	The next time the scheduled bot will run.
Activity name	The name of the activity. For example, List files in a folder, loops.
Bot Name	The name of the bot. For example, monthly-payroll.atmx
Schedule	The description of when the activity will run. For example, every Monday at 3 PM
Devices	The devices on which the bot will run at the scheduled time.
Status	The Status of the scheduled activity. For example, active or inactive.

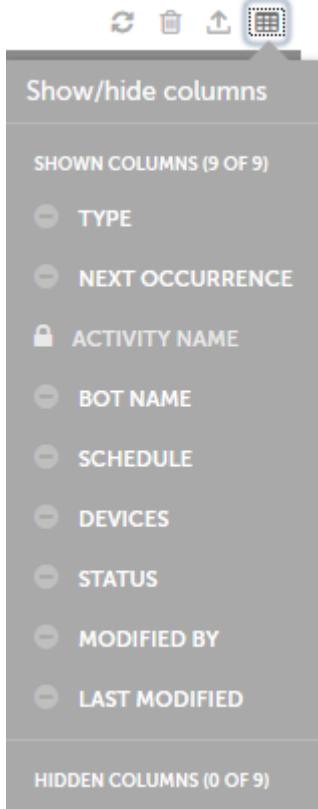
Modified by	The name of the user who last modified the activity.
Last modified	The date and time when the activity was last modified.

You can perform the following tasks on an individual Schedule by moving your mouse over the Actions  icon.

Item	Description
 Edit	Click this icon to <a href="#">Edit the scheduled bot</a> .
 View	Click this icon to <a href="#">View details about the scheduled bot</a> .
 Activate /  Deactivate	Click this icon to <a href="#">activate or deactivate the scheduled bot</a> .
 Delete	Click this icon to delete the scheduled bot.

You can also perform the following table-level actions for a set of multiple activities.

 <b>Note:</b>	These actions can be performed only at a table-level and not on individual items.
---	---

Table Item	Description
 Refresh	Refreshes the schedules page
 Activate /  Deactivate Activities	Activates or deactivates the schedules. <a href="#">Learn More</a>
 Delete	Deletes the schedules. <a href="#">Learn More</a>
 Export	Export the selected schedules in CSV format.
 Show/Hide column	Select the columns to show or hide in the <b>Activity</b> table.
	 <b>Tip:</b> Click the  or  icons to add or remove items in the table. 

## Schedule a bot

There may be times when you want to run a bot at a later point in time (future) or when you want the bot to run on a periodic basis or at a specific point in time. In such cases, use the **Schedule bot** page to perform such tasks.

 **Note:** You can schedule a bot from any of the following pages of Control Room if you have **View everyone's In progress activity**, **View my scheduled bots**, and **View my bots** privileges:

- Activity → In progress
- Activity → Scheduled
- Bots → My bots
- Devices → Bot runners and bot creators

To schedule a bot, perform the following steps.

1. Click the  **Schedule bot...** link on the appropriate page, such as **In progress**, **Scheduled**, **My bots**, or **Bot runners and bot creators** page. The **Schedule bot** page is displayed.

### Schedule bot

BOT + DEPENDENCIES	SCHEDULE + DEVICES	NAME + DESCRIPTION
Bot --	Schedule On 2017-09-12 at 16:00	Name --
Dependencies --	Devices --	Description --

When you schedule a bot to run later, we automatically use the production version of the bot and supporting files. Bots and supporting files without a production version are disabled.

**Select a Task Bot**

Folders

- ▶ *My Docs*
- ▶ *My Exes*

All fields ▼ Search...

TYPE	NAME	LATEST VERSION	PRODUCTION VERSION
Task Bot	List-Variable.atmx		
Task Bot	Loops.atmx		

2. From the **Select a Task Bot** area, click one of the folders depending on your requirements. The Type and name of the available bots are displayed on the right hand side in a tabular format.

Bots > My bots > Schedule bot

BOT + DEPENDENCIES	SCHEDULE + DEVICES	NAME + DESCRIPTION
Bot --	Schedule On 2017-10-17 at 12:30 PM	Name --
Dependencies --	Devices --	Description --

**Select a Task Bot**

Folders

- ▶ *My Docs*
- ▶ *My Exes*
- ▶ *My MetaBots*
- ▶ *My Reports*
- ▶ *My Scripts*
- ▶ *My Tasks*
  - ▶ *Sample Tasks*
- ▶ *My Workflow*

Search name

TYPE	NAME
Task Bot	List-Variable.atmx
Task Bot	Loops.atmx

**Note:** You can access only those folders for which you have **Run+Schedule** permission.

3. Select a task bot depending on your requirements by clicking a bot. The **Select** button is enabled.

**Select a Task Bot**

**Folders**

- ▶ [My Docs](#)
- ▶ [My Exes](#)
- ▶ [My MetaBots](#)
- ▶ [My Reports](#)
- ▶ [My Scripts](#)
- ▶ **My Tasks**
- ▶ [My Workflow](#)

All fields ▾	Search...	🔍
TYPE	NAME	
Task Bot	Task2.atmx	
Task Bot	Test.atmx	<b>Select &gt;</b>
Task Bot	test3.atmx	

When you click the **Select** button the bot is ready to be scheduled and you can view the dependencies of the selected in the **Review dependencies for <bot name>** section.

 **Note:** When you click the **Select** button, the label of the button is changed to **Replace**. This gives you an option of selecting another bot and replace the selected bot.

4. Click the **Select** button. The bot and all its dependencies are added to the **Review dependencies for <bot name>** section. In the following figure, the <bot name> or name of the bot is **List-Variable**.

## Schedule bot

[Cancel](#)
[Schedule bot](#)

BOT + DEPENDENCIES	SCHEDULE + DEVICES	NAME + DESCRIPTION
<p>Bot List-Variable</p> <p>Dependencies No dependencies</p>	<p>Schedule On 2017-10-17 at 12:30 PM</p> <p>Devices --</p>	<p>Name List-Variable.17.10.17.12.11.19.admin</p> <p>Description --</p>

**Select a Task Bot**

Folders

- > My Docs
- > My Exes
- > My MetaBots
- > My Reports
- > My Scripts
- > My Tasks
  - > Sample Tasks
  - > My Workflow

Search name

TYPE	NAME
	List-Variable.atmx
	Loops.atmx

[Replace >](#)



List-Variable

[Next >](#)

**Review dependencies for List-Variable**

Automation Anywhere\My Tasks\Sample Tasks\List-Variable.atmx



**Note:** Although you will be able to schedule a bot, automation will fail in the following cases,

- If any of the bot dependencies are missing
- If you do not have folder privileges on the dependencies
- If you do not have **Run+Schedule** permission (the one that shows a red dependency icon - )

5. Click the **Next** link. The **SCHEDULE + DEVICES** tab is displayed.

## Schedule bot

BOT + DEPENDENCIES	SCHEDULE + DEVICES
<p>Bot --</p> <p>Dependencies --</p>	<p>Schedule On 2017-09-12 at 16:00</p> <p>Devices --</p>

**Schedule**

Run once  
 Run repeatedly

Start date  
2017-09-12

Start time  
16:00

You have two options of scheduling a bot - **Run once** and **Run repeatedly**.

- **Run once:** Use this option to run the bot once on a given day at X hour. When you select this option, you must enter the Start date and Start time. The default value of the **Start date** field is set to the current day while the default value of the **Start Time** field is a roundup of the closest half-hour that is 15 minutes away. As an example, if the current time is 13:43 hours, a value of 14:00 hours is displayed.

### Schedule

<input checked="" type="radio"/> Run once  <input type="radio"/> Run repeatedly	<b>Start date</b>  2017-10-17	<b>Start time</b>  12:30 PM
---	---	---

 **Note:** The value of the Start date box is always later than or equal to the current date. If the Start date is the current date, the scheduled time cannot be less than the current time.

- **Run repeatedly:** Use this option when you want to schedule your bot to run every X minutes/hours on a given day. When you select this option, you must select the Start date, end date, and Start time. The default value of the **Start date** field is set to the current day while the default of the **Start Time** field is a roundup of the closest half-hour that is 15 minutes away. As an example, if the current time is 13:43 hours, a value of 14:00 hours is displayed. The default value of the **End date** field is blank.

### Schedule

<input type="radio"/> Run once  <input checked="" type="radio"/> Run repeatedly	<b>Repeats</b> <input checked="" type="radio"/> Daily <input type="radio"/> Weekly <input type="radio"/> Monthly	<b>Every</b> <input type="text" value="1"/> day(s)	<b>Start date</b>  2017-10-17
			<b>End date</b>  YYYY-MM-DD
			<b>Start time</b>  12:30 PM
			<input type="checkbox"/> Repeat every <input type="button" value="Up"/> <input type="button" value="Down"/> hour
			<b>End time</b>  11:59 PM

 **Note:** If the value selected in the Start date box is the current day, the scheduled time must be greater than the current time. Also, the value of the End date box must be later than or equal to the value in the **Start date** box.

6. After selecting the **Run once** or **Run repeatedly** options, click a device of your choice from the **Available devices** area and click the **>>** button. The device is added to the **Selected devices** area, which displays the list of connected and disconnected devices to Control Room.

 **Note:** You can select only bot runner devices that are connected. If a device is not connected, it is not enabled. Also, if the device is not displayed in the list, ensure that an active bot runner session is running on the device

7. Click the **Next** link. The **NAME+DESCRIPTION** tab is displayed.

Bots > My bots > Schedule bot

### Schedule bot

BOT + DEPENDENCIES	SCHEDULE + DEVICES	NAME + DESCRIPTION
Bot Sample	Schedule On 2017-10-23 at 3:30 PM IST	Name Sample.17.10.23.14.59.47.mike
Dependencies Dep6.atmx and 1 more	Devices ENGGLT88.AASPL.COM	Description --

General

Name Sample.17.10.23.14.59.47.mike	Description Optional
---------------------------------------	-------------------------

[« Back](#)

8. Type a name and description in the General area and click the Schedule bot button. The bot is added to the **Activity** table of the **Scheduled activity** page.

 **Note:** The **Schedule bot** button remains disabled until all the required items, such as bots, schedule details, and devices are not selected.

Activity > Scheduled

### Scheduled activity

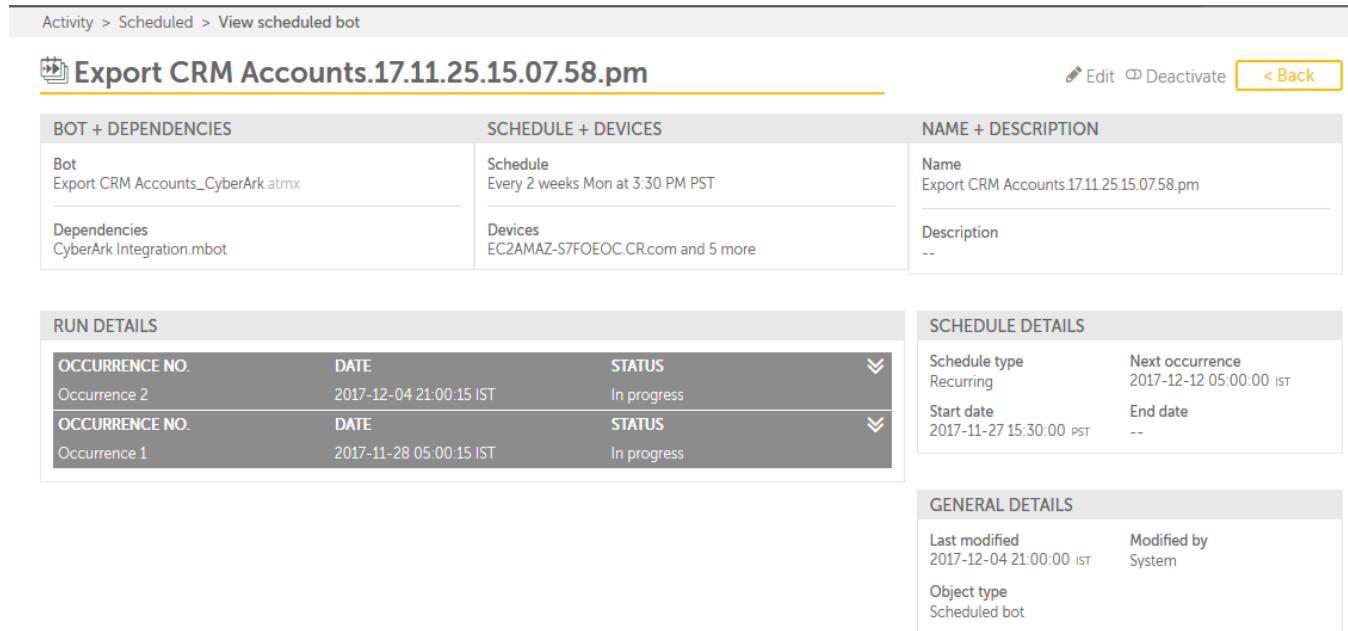
You can put a scheduled bot on hold and it will not run for any future occurrence. If it is currently running, you must go to the In progress tab to pause it. If a scheduled bot is on hold, you can remove the hold and it will go back to the 'Ready to run' state.

Type	Activity Name	Bot Name	Schedule	Devices	Status	Mod
<input type="checkbox"/> Recurring  18:00:00 IST 2018-02-12	Files-Folders.18.02.12.15.34.09.mike.lee	Files-Folders.atmx	Every 3 days at 6:00 PM IST	PRODUCTLT-BRD.COM	Active	
<input type="checkbox"/> One time  17:00:00 IST 2018-03-01	Prompt.17.10.23.18.13.47.admin	Prompt.atmx	On 2018-03-01 at 5:00 PM IST	PRODUCTLT-BRD.COM	Active	

## View scheduled bot details

Once you have scheduled a bot, you can view details for the bot from the **View scheduled bot** page. This page allows you to make changes to the bot using the **Edit** button  and activate or deactivate it depending on your requirements by using the activate/deactivate toggle button .

This page illustrated in the following figure.



BOT + DEPENDENCIES			SCHEDULE + DEVICES		NAME + DESCRIPTION	
Bot Export CRM Accounts_CyberArk.atmx	Schedule Every 2 weeks Mon at 3:30 PM PST		Devices EC2AMAZ-S7FOEOC.CR.com and 5 more		Name Export CRM Accounts.17.11.25.15.07.58.pm	Description --
Dependencies CyberArk Integration.mbot						

RUN DETAILS			SCHEDULE DETAILS	
OCCURRENCE NO. Occurrence 2	DATE 2017-12-04 21:00:15 IST	STATUS In progress	Schedule type Recurring	Next occurrence 2017-12-12 05:00:00 IST
OCCURRENCE NO. Occurrence 1	DATE 2017-11-28 05:00:15 IST	STATUS In progress	Start date 2017-11-27 15:30:00 PST	End date --

GENERAL DETAILS		
Last modified 2017-12-04 21:00:00 IST	Modified by System	Object type Scheduled bot

The different areas of the View scheduled bot page are described in the following table.

Area	Description
BOT + DEPENDENCIES	The name of the bot and dependencies for the scheduled bot.
SCHEDULE + DEVICES	The date and time at which the bot has been scheduled along with the name of the device connected to the bot.
NAME + DESCRIPTION	The name and description for the bot.
RUN DETAILS	The run details for the bot. For example, when did the bot last run?
SCHEDULED DETAILS	<p>The following details for the schedule are displayed here.</p> <ul style="list-style-type: none"> <li>• <b>Schedule type:</b> Whether the schedule will run once or repeatedly?</li> <li>• <b>Next occurrence:</b> When the schedule will run again</li> <li>• <b>Start date:</b> The date when the schedule will run for the first time.</li> <li>• <b>End date:</b> The date when the schedule will stop running.</li> </ul>
GENERAL DETAILS	<p>The following details for the schedule are displayed here.</p> <ul style="list-style-type: none"> <li>• <b>Last modified:</b> The last date and time the bot was modified.</li> <li>• <b>Object type:</b> The type of object of the bot, such as scheduled bot.</li> <li>• <b>Modified by:</b> The name of the user who last made changes to the scheduled bot.</li> </ul>

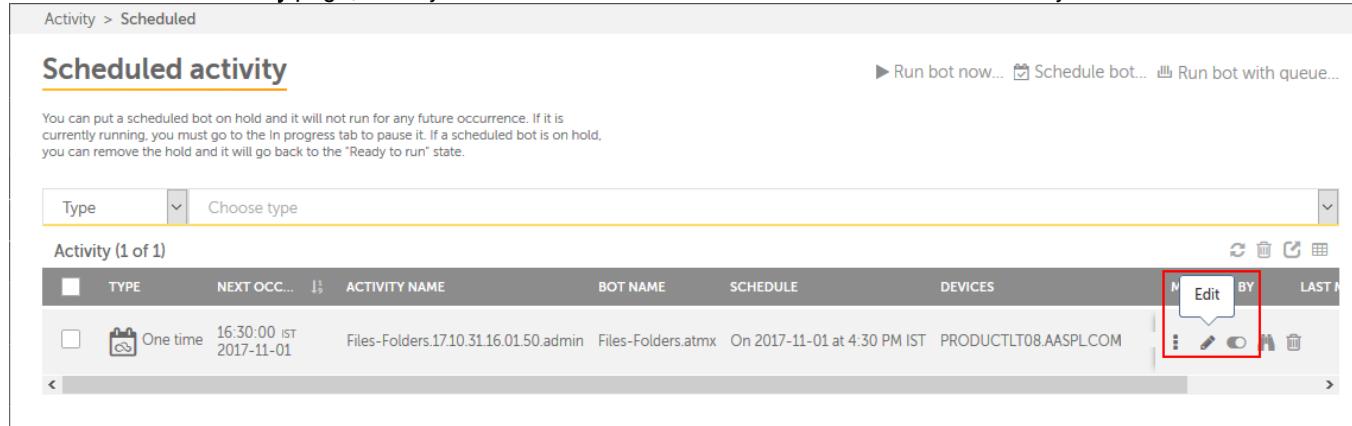
## Edit scheduled activity

There may be times when you want to change the number of retries or the retry interval so that the automation is not skipped. Besides this, you may also want to edit the scheduled activity to:

- Change the schedule type, date, or time.
- Add or remove Bot runners from the schedule.
- Change the retry settings.

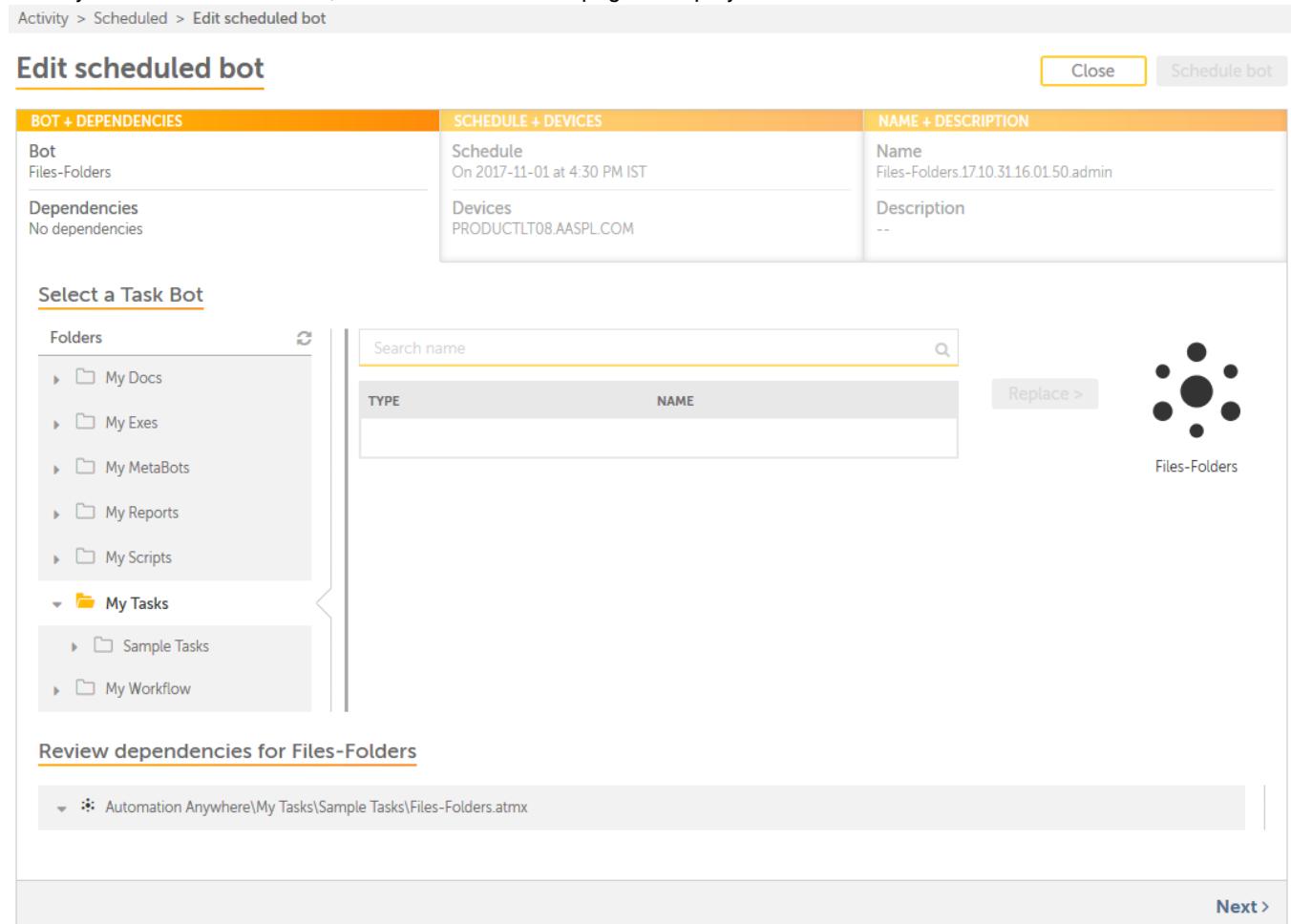
To edit a scheduled activity, perform the following steps.

1. On the **Scheduled activity** page, move your mouse over the **Actions** icon  of an item in the Activity table and click the **Edit** icon .



The screenshot shows the 'Scheduled activity' page with a table of scheduled bots. The first row in the table is highlighted. The 'Edit' icon (a pencil icon) in the 'Actions' column of this row is highlighted with a red box.

When you click the **Edit** icon , the **Edit scheduled bot** page is displayed.



The screenshot shows the 'Edit scheduled bot' page. It includes sections for 'BOT + DEPENDENCIES', 'SCHEDULE + DEVICES', and 'NAME + DESCRIPTION'. The 'BOT + DEPENDENCIES' section contains a tree view of folder structures. The 'SCHEDULE + DEVICES' section contains a table with 'Schedule' and 'Devices' rows. The 'NAME + DESCRIPTION' section shows the bot's name and description. Below these are sections for selecting a task bot and reviewing dependencies.

2. Make changes to the bot depending on your requirements. Once done, click the **Schedule bot** button.



**Note:** You must select the fields, such as Bots and devices. These are required to save your changes.

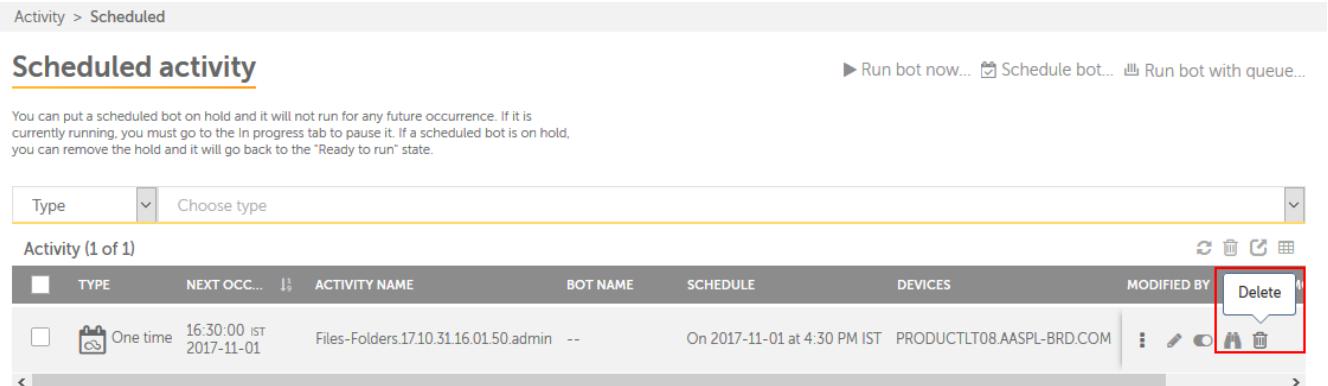


**Tip:** As you start typing and make changes to the fields of the **Edit scheduled bot** page, the text of the **Close** button changes to **Cancel** to visually indicate that you have made changes. Clicking **Cancel** closes the **Edit Schedule bot** form.

## Delete a schedule

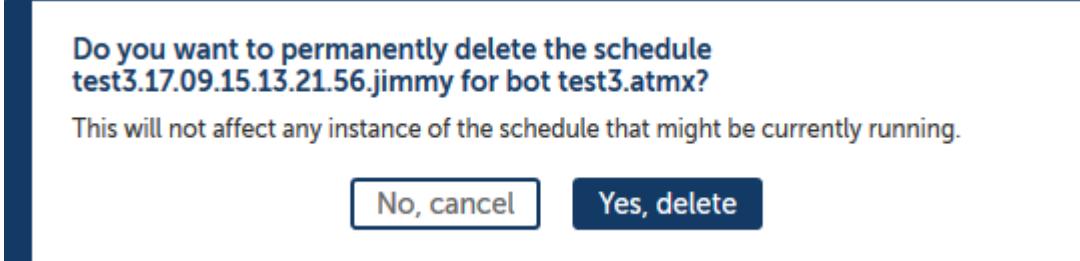
If you have Delete my bots privileges, you can delete a scheduled activity. To delete a scheduled activity, perform the following steps.

1. On the **Scheduled activity** page, move your mouse over the **Actions** icon  of an item in the Activity table and click the **Delete** icon 



The screenshot shows the 'Scheduled activity' page. At the top, there are buttons for 'Run bot now...', 'Schedule bot...', and 'Run bot with queue...'. Below this is a search bar with 'Type' and 'Choose type' dropdowns. The main area displays a table titled 'Activity (1 of 1)'. The table has columns: TYPE, NEXT OCC..., ACTIVITY NAME, BOT NAME, SCHEDULE, DEVICES, and MODIFIED BY. A single row is shown: 'One time' scheduled for '16:30:00 IST 2017-11-01' by 'Files-Folders.17.10.31.16.01.50.admin' on 'On 2017-11-01 at 4:30 PM IST' with 'PRODUCTLT08.AASPL-BRD.COM' as the device. The 'MODIFIED BY' column shows 'PRODUCTLT08.AASPL-BRD.COM'. The 'Actions' column contains icons for edit, copy, and delete, with the delete icon being highlighted with a red box.

When you click the Delete icon , a delete confirmation message is displayed.



**Do you want to permanently delete the schedule test3.17.09.15.13.21.56.jimmy for bot test3.atmx?**  
This will not affect any instance of the schedule that might be currently running.

**No, cancel**      **Yes, delete**

2. Click **Yes, delete** to delete the scheduled activity.

# Activate or deactivate a scheduled activity

As a Control Room user with Manage and Update all schedules privileges, you can activate or deactivate scheduled activities individually or in bulk.

For example, you can choose to activate schedules that are inactive when you want to run the automation in bulk. Or you can deactivate multiple schedules during down time.

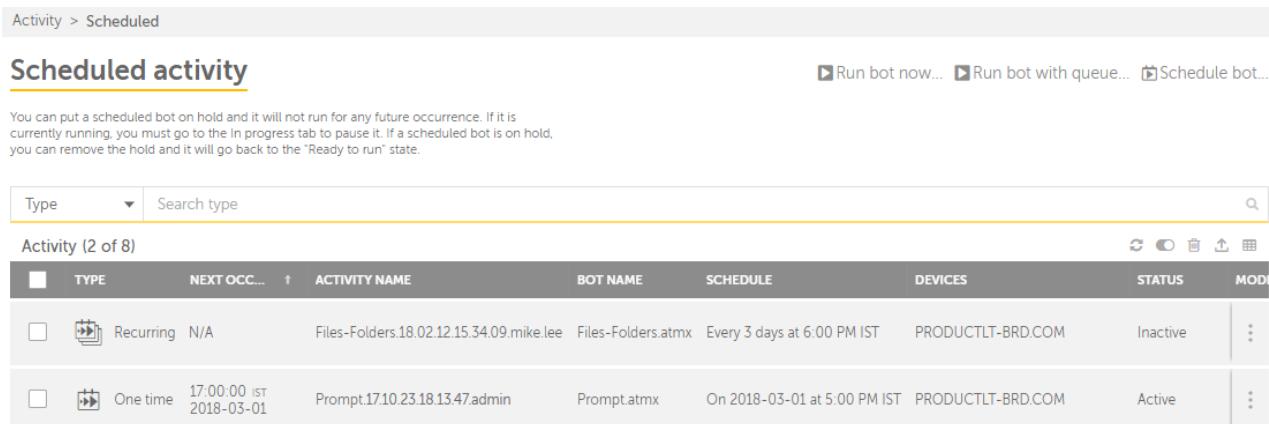
By default, all schedules on this page are in activated state.

## Deactivate Schedule(s)

You can deactivate a single or multiple schedules based on your requirement.

To deactivate a schedule,

1. Go to **Activity → Scheduled**
2. The **Scheduled activity** page is launched.
3. In the **Activity** area mouse over  for the Schedule that you want to deactivate. For example, the **Recurring** type schedule for **Files-Folders.atmx**
4. Click 
5. The schedule is deactivated. The status in the **Next Occurrence** column is displayed as **NA** and **Status** changes to **Inactive**:



The screenshot shows the 'Scheduled activity' page with two deactivated schedules listed:

Type	Activity Name	Bot Name	Schedule	Devices	Status	More	
 Recurring	N/A	Files-Folders.18.02.12.15.34.09.mike.lee	Files-Folders.atmx	Every 3 days at 6:00 PM IST	PRODUCTLT-BRD.COM	Inactive	
 One time	17:00:00 IST 2018-03-01	Prompt.17.10.23.18.13.47.admin	Prompt.atmx	On 2018-03-01 at 5:00 PM IST	PRODUCTLT-BRD.COM	Active	

Similarly, you can deactivate multiple schedules by clicking  that is given above the **Activity** table.

## Activate Schedule(s)

You can activate a single or multiple schedules based on your requirement.

To activate a schedule,

1. Go to **Activity → Scheduled**
2. The **Scheduled activity** page is launched.
3. In the **Activity** area mouse over  for the Schedule that you want to activate. For example, the **Recurring** type schedule for **Files-Folders.atmx**
4. Click 
5. The schedule is activated. The status in the **Next Occurrence** column is displayed in **date & time format** and **Status** changes to **Active**.

## Scheduled activity

[Run bot now...](#) [Run bot with queue...](#) [Schedule bot...](#)

You can put a scheduled bot on hold and it will not run for any future occurrence. If it is currently running, you must go to the In progress tab to pause it. If a scheduled bot is on hold, you can remove the hold and it will go back to the "Ready to run" state.

Type	Activity Name	Bot Name	Schedule	Devices	Status	More
<input type="checkbox"/>  Recurring	18:00:00 IST 2018-02-12	Files-Folders.18.02.12.15.34.09.mike.lee	Files-Folders.atmx	Every 3 days at 6:00 PM IST	PRODUCTLT-BRD.COM	Active
<input type="checkbox"/>  One time	17:00:00 IST 2018-03-01	Prompt.17.10.23.18.13.47.admin	Prompt.atmx	On 2018-03-01 at 5:00 PM IST	PRODUCTLT-BRD.COM	Active

Similarly, you can activate multiple schedules by clicking  that is given above the **Activity** table.

 **Note:** The **Deactivate** -  or **Activate** -  button above the table appears based on the **greater** number of schedule status.

- When the number of schedules with **Active status are more** than the Inactive ones,  is shown.
- When the number of schedules with **Inactive status are more** than the Active ones,  is shown.

## Bot runners and bot creators - overview

As a Control Room user with Bot creator, Bot runner and Device pools privileges, use the Control Room **Bot runners and bot creators**, to:

- View a list of Devices registered and connected to the current instance of the Control Room in [My Devices](#)
- Create and view a list of Device pool available from the current instance of the Control Room in [My Device Pools](#)
- Run Bots immediately on selected Bot runners using [Run bot now](#)
- Schedule Bots to run on selected Bot runners using [Schedule bot](#)
- Run Bots on selected Device pools using [Run bot with queue](#)

 **Note:** Only an admin user has access to see all the devices in the Control Room. A non-admin user will not have access to view Bot creators.

The **Bot runners and bot creators** page is illustrated in the following figure:

Status	Name	Username	Type
Connected	PRODUCT.AACOM	mike.lee	Bot creator
Disconnected	PRODUCT.AACOM	amy.chen	Bot runner

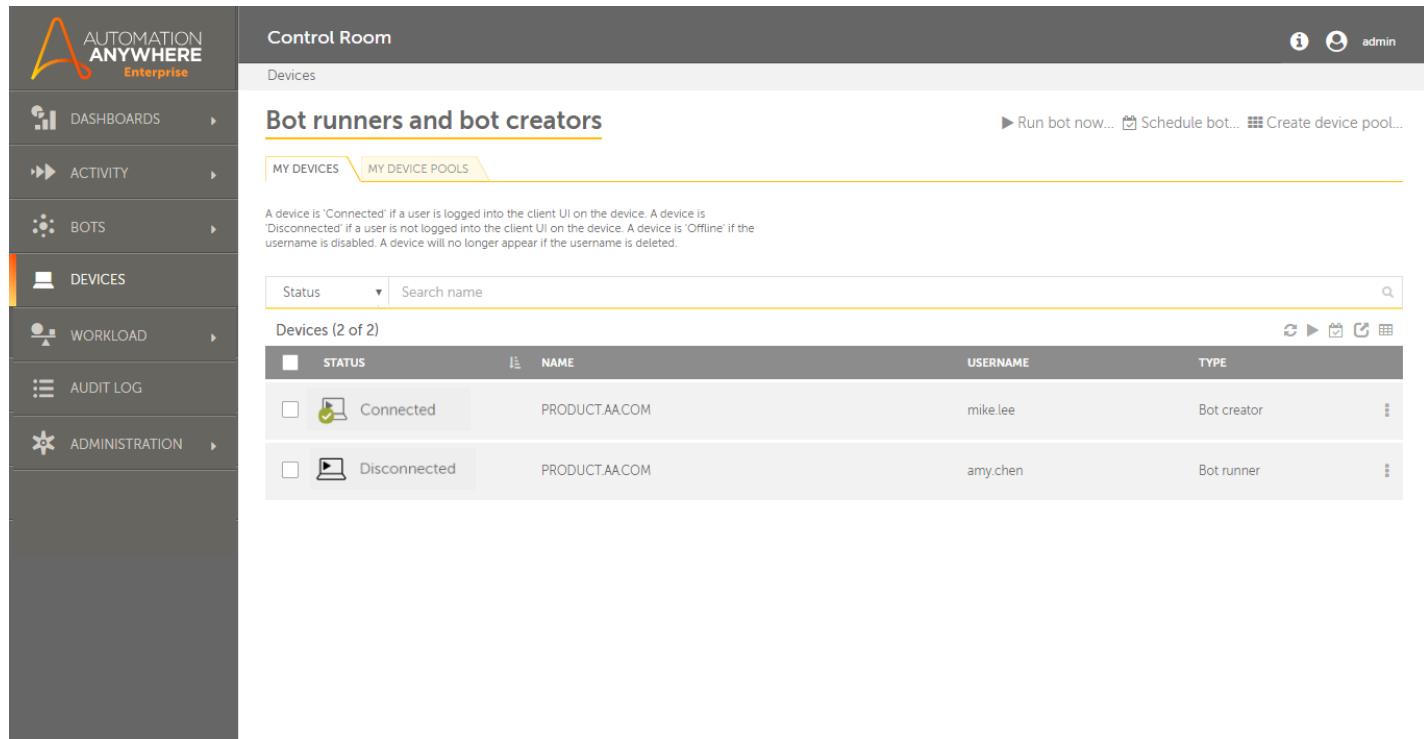
# My Devices

As a Control Room admin or a user with manage devices privileges, you can view the devices that are registered to your Control Room instance.

Devices privileges include View and Manage Bot runners, Bot creators, as well as Create and Manage Device Pools. Learn More about privileges in [Roles - Overview](#)

 **Note:** Only an admin user has access to see all the devices(Bot runners and Bot creators) in the Control Room. A non - admin user will not have access to view Bot creators.

The My Devices page is illustrated in the following figure:



Status	Name	Username	Type
Connected	PRODUCT.AACOM	mike.lee	Bot creator
Disconnected	PRODUCTAACOM	amy.chen	Bot runner

For ease of access, you can apply search parameters to Status, Name, Username, Device pool, and Type columns.

- You can use specify the search parameters in the search bar for Name, Username, and Device Pool:



NAME	USERNAME	DEVICE POOL	TYPE
PRODUCT.COM	Mike Lee	N/A	Bot creator

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Status and Type:



NAME	USERNAME	DEVICE POOL	TYPE
PRODUCT.COM	Mike Lee	N/A	Bot creator

The following describes the list of items that can be viewed in the table:

Table Item	Description								
Status	<p>Shows device's status, which is the combined status of the user and the device used by that user.</p> <p>For example Mike Lee and Amy Chen might be using the same device 123.456.7.89. However, Mike Lee - a Bot Creator could be shown connected while Amy Chen could be shown disconnected.</p> <p>Following statuses are visible:</p> <ul style="list-style-type: none"> <li>• <b>Connected</b> when the Bot is logged on to the Control Room</li> <li>• <b>Disconnected</b> when the Bot is not logged on to the Control Room</li> <li>• <b>Offline</b> when the device user has been unregistered/disabled by the Control Room admin</li> </ul> <p>Note that the icon indicates the user type.</p> <table style="width: 100%; text-align: center;"> <tr> <td><b>Bot Creator</b></td> <td><b>Bot Runner</b></td> </tr> <tr> <td> Connected</td> <td> Connected</td> </tr> <tr> <td> Disconnected</td> <td> Disconnected</td> </tr> <tr> <td> Offline</td> <td> Offline</td> </tr> </table>	<b>Bot Creator</b>	<b>Bot Runner</b>	 Connected	 Connected	 Disconnected	 Disconnected	 Offline	 Offline
<b>Bot Creator</b>	<b>Bot Runner</b>								
 Connected	 Connected								
 Disconnected	 Disconnected								
 Offline	 Offline								
Name	Shows the machine's fully qualified server name								
Username	Shows name of the user connected with the device								
Device Pool	Shows the name of the device pool that the device is part of, if any. Note that "--" indicates the device is not part of any device pool and N/A indicates that it cannot be included in any device pools. <a href="#">Learn More</a>								
Type	Shows the type of <a href="#">license</a> that is assigned by the Control Room admin.								



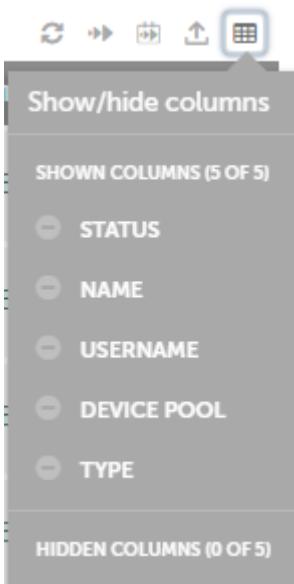
Tip: You can perform the following actions on a table column:

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

The following describes the tasks that you can perform on an individual device:

Table Item	Description
 Run	Allows you to <a href="#">run a Bot</a> on the device immediately.
 Schedule	Allows you to <a href="#">schedule a Bot</a> to run on the device.

Alternatively, you can select all devices and perform the following actions. Note that these actions can be performed only at a table level and not on individual items.

Table Item	Description
 Refresh	Allows you to refresh the table contents so that you can view the latest device status
 Run	Allows you to <a href="#">run a Bot</a> on selected devices immediately.
 Schedule	Allows you to <a href="#">schedule a Bot</a> to run on selected devices.
 Export to CSV	Allows you to export the data to a csv file. You can export data based on: <ul style="list-style-type: none"> <li>• Filters</li> <li>• Selection</li> </ul>
 Show / Hide columns	Allows you to show or hide specific columns. By default, all columns are displayed:  <p>The dialog box shows the following interface:</p> <ul style="list-style-type: none"> <li>Header: Show/hide columns</li> <li>Buttons: Back, Forward, Refresh, Save, Cancel, Close.</li> <li>Section: SHOWN COLUMNS (5 OF 5)</li> <li>Items: STATUS, NAME, USERNAME, DEVICE POOL, TYPE (each with a minus sign next to it).</li> <li>Section: HIDDEN COLUMNS (0 OF 5)</li> </ul>
	 Tip: To <b>hide</b> a column, click on the column name.

When you want to perform actions such as **Run**, **Schedule** or **Create a device pool** quickly without switching your current location, you can use the following options:

Table Item	Description
 Run bot now...	Allows you to <a href="#">run a Bot</a> on the device immediately.
 Schedule bot...	Allows you to <a href="#">schedule a Bot</a> to run on the device.
 Create device pool...	Allows you to <a href="#">create a device pool</a> for workload management.

# My device pools

As a Device Pool admin you can view all devices pools that can be used for work items in workload management. You can also create device pools comprising Bot Runners.

If you are a Device Pool Owner / Consumer you can view only those Device pools of which you are the owner or consumer.

Device pools provide a logical grouping of similar Bot Runners on which you want to run bot(s) with the work item from a queue. For example, you can group devices of a particular department/unit and create a device pool for it.

The **My device pools** page is illustrated in the following figure:

STATUS	DEVICE POOL NAME	DETAILED STATUS	# OF AUTOMATIONS	# OF DEVICES	OWNERS
<input type="checkbox"/> Disconnected	Finance	All disconnected	0	1	Mike Lee
<input type="checkbox"/> Connected	Payroll Automations	All connected	0	1	Amy Chen and 1 more

**Note:** You need to create device pools to view those in the list. To get started, click on the [create a device pool here](#) link.

For ease of access, you can apply search parameters to Status, My Access and Queue Name columns.

- You can use specify the search parameters in the search bar for Detailed Status and Device Pool Name:

DEVICE POOL NAME	DETAILED STATUS	# OF AUTOMATIONS	# OF DEVICES	OWNERS
Connected	All connected	N/A	2	amarks
Disconnected	All disconnected	N/A	12	Jason Goodman

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Status

Status	Choose status
Device pools (3 of 3)	
<input checked="" type="checkbox"/> STATUS	
<input type="checkbox"/>	Connected
Allisons	All connected
N/A	1
amarks	⋮
<input type="checkbox"/>	Disconnected
Payroll	All disconnected
N/A	1
Jason Goodman	⋮

The following describes the list of items that can be viewed in the table:

Table Item	Description
 Status	Shows device's status. Here, status refers to the status of both User and Device from which the user is connects. <ul style="list-style-type: none"> <li>Connected when the user and device are connected to the Control Room from selected Bot Runner</li> <li>Disconnected when the user and device are not connected to the Control Room from selected Bot Runner</li> <li>Offline when the user is deactivated by the Control Room admin</li> </ul>
Device Pool Name	Shows name of the device pool
Detailed Status	Shows status of the devices that are part of that particular device pool <ul style="list-style-type: none"> <li>All Connected when all users and devices are connected to the Control Room</li> <li>All Disconnected when one or more user and device are disconnected from the Control Room</li> </ul>
# of Automations	Shows the number of automation that are currently deployed on that particular device pool
# of Devices	Shows the number of devices that are included in the device pool
Owners	Shows the owner name(s) of the device pool



**Tip:** You can perform the following actions on a table column:

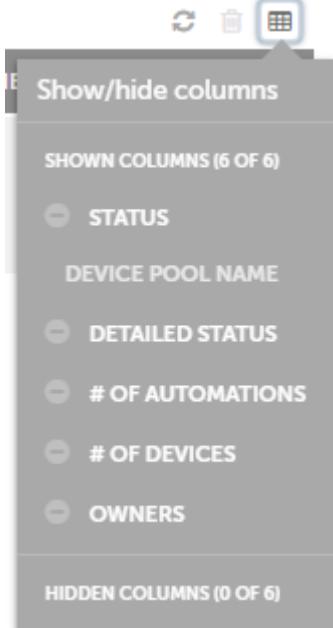
- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

The following describes the tasks that you can perform on an individual device pool:

Table Item	Description
 Run	Allows you to run a Bot on the device pool immediately
 View	Allows you to <a href="#">view device pool details</a>
 Edit	Allows you to <a href="#">edit device pool details</a>
 Delete	Allows you to <a href="#">delete the device pool</a>

Alternatively, you can select all device pools and perform the following actions. Note that these actions can be performed only at a table level and not on individual items.

Table Item	Description
 Delete	Allows you to delete one or more device pools
 Show / Hide column	Allows you to show or hide columns other than <b>Device Pool Name</b> :



**Tip:** To **show** or **hide** a column, click on the column name.

When you want to perform actions such as **Run bot with queue** or **Create a device pool** quickly without switching your current location, you can use the following options:

Table Item	Description
 Run bot with queue...	Allows you to <a href="#">run bot with a queue</a> for workload management
 Create device pool...	Allows you to <a href="#">create a device pool</a> for workload management

## Audit Log

All the Create, Update, Delete actions are tracked in audit log for record keeping and future use. You can refer those entries in the Audit Log page:

### Audit log

Actions (12 of 110)							
	STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	DEVICE	SOURCE
<input type="checkbox"/>	 Successful	14:41:07 IST 2017-11-15	Device pool deletion failed	MetaBot Command Automation	Mike.Lee	127.0.0.1	Control Room
<input type="checkbox"/>	 Successful	12:40:43 IST 2017-11-15	Device pool created	Payroll Automation	Mike.Lee	127.0.0.1	Control Room
<input type="checkbox"/>	 Successful	12:40:07 IST 2017-11-15	Device pool updated	MetaBot Command Automation	Mike.Lee	127.0.0.1	Control Room
<input type="checkbox"/>	 Successful	12:23:34 IST 2017-11-15	Device pool created	Finance Automation	Mike.Lee	127.0.0.1	Control Room

To view details of the audit entry, click  which is visible when you mouse over  . For example, the device pool creation details are shown as:

 Device pool created	
ACTION DETAILS	
Status	Item name
Successful	Payroll Automation
Action taken by	Time
Mike.Lee	2017-11-15 12:40:43 IST
Object type	Action type
Action	Device pool created
Device	Source
127.0.0.0	Control Room
DEVICE POOL CREATED DETAILS	
ATTRIBUTE	VALUE
Pool Name	Payroll Automation
Priority Scheme	ROUND_ROBIN
Status	ACTIVE
Time Slice	5
Description	--
Time Slice Unit	MINUTES
Devices	3

# Create and delete device pools

As a Device Pool admin, you can create a Device pool comprising Bot Runners to optimize your automation workload and thereby achieve your entity's SLA.

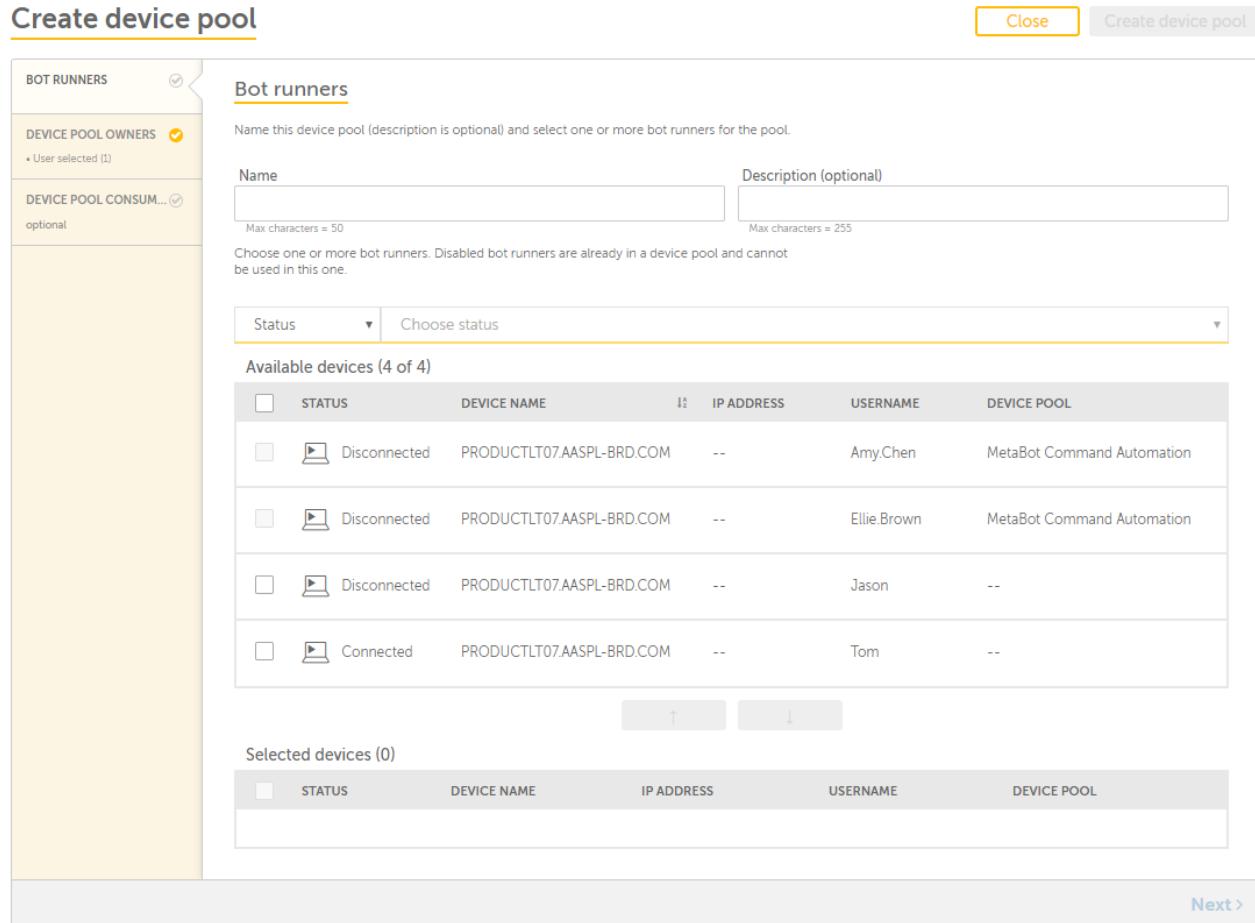
## Create device pool

A Device pool is created to group similar type of devices and run bots on those devices with work items from their respective queues.

To create a device pool, you must give a unique name to the pool and add Bot Runners to it. You can add only those Bot Runners that are not part of any pool and are not associated with any role. Optionally, you can add other users as owners so that they can manage the pool. You can also add Control Room user roles as consumers. Only users with these roles can use the pool for any automation.

### A. Create a device pool and select Bot Runners

1. Go to **Devices → My Device Pools**
  2. Click  [Create device pool...](#) at the top right of the Devices page.
- Tip:** Click the **create a device pool here** link, which is shown if no device pools are present.
3. The Create device pool page is launched:



<input type="checkbox"/>	STATUS	DEVICE NAME	IP ADDRESS	USERNAME	DEVICE POOL
<input type="checkbox"/>	Disconnected	PRODUCTLT07.AASPL-BRD.COM	--	Amy.Chen	MetaBot Command Automation
<input type="checkbox"/>	Disconnected	PRODUCTLT07.AASPL-BRD.COM	--	Elie.Brown	MetaBot Command Automation
<input type="checkbox"/>	Disconnected	PRODUCTLT07.AASPL-BRD.COM	--	Jason	--
<input type="checkbox"/>	Connected	PRODUCTLT07.AASPL-BRD.COM	--	Tom	--

4. Select the Bot Runners for which the automation will be relevant. For example, you can create a Finance Automation pool that can run all finance relevant automations on Bot Runners from the finance department.

**Note:** You can add only those Bot Runners that are not part of another device pool. Such Bot Runners are disabled for selection.

5. Click  to add the Bot Runner(s) to the list of **Selected devices**

#### Selected devices (2)

<input type="checkbox"/> STATUS	DEVICE NAME	IP ADDRESS	USERNAME	DEVICE POOL
<input type="checkbox"/>  Disconnected	PRODUCTLT07.AASPL-BRD.COM	--	Jason	--
<input checked="" type="checkbox"/>  Connected	PRODUCTLT07.AASPL-BRD.COM	--	Tom	--

**Tip:** Click  to remove the Bot Runner from the list of **Selected devices**.

6. Click **Next** to select Device Pool Owners

#### B. Select Device Pool Owners

You can choose to grant other Control Room users permissions to view, edit, and delete the device pool.

#### Create device pool

[Cancel](#)
[Create device pool](#)

**BOT RUNNERS** 

- Name
  - Finance Automation
- Devices selected (2)

**DEVICE POOL OWNERS** 

- User selected (1)

**DEVICE POOL CONSUMERS** 

- optional

#### Device pool owners

In addition to yourself, you can give other users permission to view, edit, and delete this device pool.

Username

USERNAME	FIRST NAME	LAST NAME
<input checked="" type="checkbox"/> Amy.Chen	--	--
<input type="checkbox"/> Ellie.Brown	--	--
<input type="checkbox"/> Jason	--	--
<input type="checkbox"/> Tom	--	--

→
←

**Selected users (1)**

USERNAME	FIRST NAME	LAST NAME
<input type="checkbox"/> Mike.Lee	--	--

[< Back](#) [Next >](#)

1. Select user(s) from the list of **Available users**

**Tip:** You can search the list of users based on their Username, First name, or Last name.

Username 

USERNAME	FIRST NAME	LAST NAME
Username	(19 of 20)	
First name		
Last name		

**Selected users (1)**

USERNAME	FIRST NAME	LAST NAME
<input type="checkbox"/> Mike.Lee	--	--

2. Click 

3. The user is shown in the list of **Selected users**.

**Note:** The Device pool creator is listed as the default owner of the pool.

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## Selected users (2)

	USERNAME	FIRST NAME	LAST NAME
<input checked="" type="checkbox"/>	Amy.Chen	--	--
<input type="checkbox"/>	Mike.Lee	--	--

**Tip:** Click  to remove the user from the list of **Selected users**. You cannot remove the user who created the device pool though.

4. You can choose to create the device pool at this instance or select **Device Pool Consumers**.

- Click **CREATE DEVICE POOL** to complete device pool creation process
- Click **Next** to select **Device Pool Consumers**

### C. Select Device Pool Consumers

You can select the device pool consumers so that they can view the device pool when they want to run automation/bot with a queue. Refer [Run bot with queue](#) for details.

**Note:** This step is optional.

1. Select a Role from the list of **Available roles**.

#### Create device pool

[CANCEL](#)
[CREATE DEVICE POOL](#)

**BOT RUNNERS**

Name  
• Payroll Automations  
• Devices selected (1)

---

**DEVICE POOL OWNERS**

• Users selected (2)

---

**DEVICE POOL CONSUMERS**   
optional

Device pool consumers (optional)

Device-pool consumers will see this device pool as an option when they run a bot with a queue.

Search role name 

ROLE NAME
AutoLicenseManager
Bot creator
Bot runner
role1
role2

ROLE NAME

**Available roles (5 of 5)**

**Selected roles (0)**

»  

[< Back](#)



**Tip:** You can search for a role name:

Search role name 

ROLE NAME

**Available roles (5 of 5)**

**Selected roles (0)**

2. Click 

3. The user is shown in the list of **Selected roles**.

#### Selected roles (1)

<input checked="" type="checkbox"/>	ROLE NAME
<input checked="" type="checkbox"/>	Bot creator

**Tip:** Click  to remove the user from the list of **Selected roles**.

4. Click 

Your device pools for which you have consumer privileges are listed in the **My Device Pools** page:

#### Bot runners and bot creators

MY DEVICES		MY DEVICE POOLS				
Device pool name		Search device pool name				
Device pools (3 of 3)						
STATUS	DEVICE POOL NAME	DETAILED STATUS	# OF AUTOMATIONS	# OF DEVICES	OWNERS	⋮
<input type="checkbox"/> Connected	Finance Automation	All connected	0	2	Mike.Lee	⋮
<input checked="" type="checkbox"/> Connected	MetaBot Command Automation	All connected	1	1	Mike.Lee and 1 more	⋮
<input type="checkbox"/> Connected	Payroll Automation	All connected	0	1	Amy.Chen and 1 more	⋮

#### Delete device pool

You can choose to delete your device pools in either of two ways:

- Delete one device pool -

1. To delete one device pool, mouse over the actions icon - 

2. Click 

- If the device pool is being used for workload automation, you will not be allowed to delete it:



Could not delete pool as it has one or more WLM Automations associated with it

If the problem persists, please contact your system administrator.

3. Confirm or cancel as required:



Do you want to permanently delete pool "MetaBot Command Automation"?

No, cancel

Yes, delete

- Delete multiple or all device pools -

1. Select the device pools that you wish to delete:

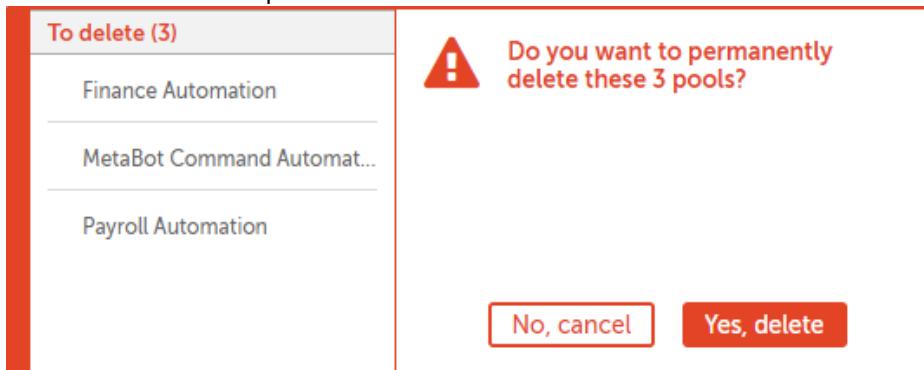
### Device pools (3 of 3)

STATUS	DEVICE POOL NAME
<input type="checkbox"/>	Connected Finance Automation
<input checked="" type="checkbox"/>	Connected MetaBot Command Automation
<input checked="" type="checkbox"/>	Connected Payroll Automation

Or select all device pools by selecting the **Select All** check-box in the header:

Device pool name	Search device pool name
Select All	
<b>Device pools (3 of 3)</b>	
<input checked="" type="checkbox"/>	STATUS
<input checked="" type="checkbox"/>	Connected Finance Automation
<input checked="" type="checkbox"/>	Connected MetaBot Command Automation
<input checked="" type="checkbox"/>	Connected Payroll Automation

2. Click  given at the top of the device pools table
3. Confirm or cancel as required:



- Based on your selection, the devices are deleted. The following shows one device pool deleted:

### Bot runners and bot creators

 Run bot with queue...  Create device pool...

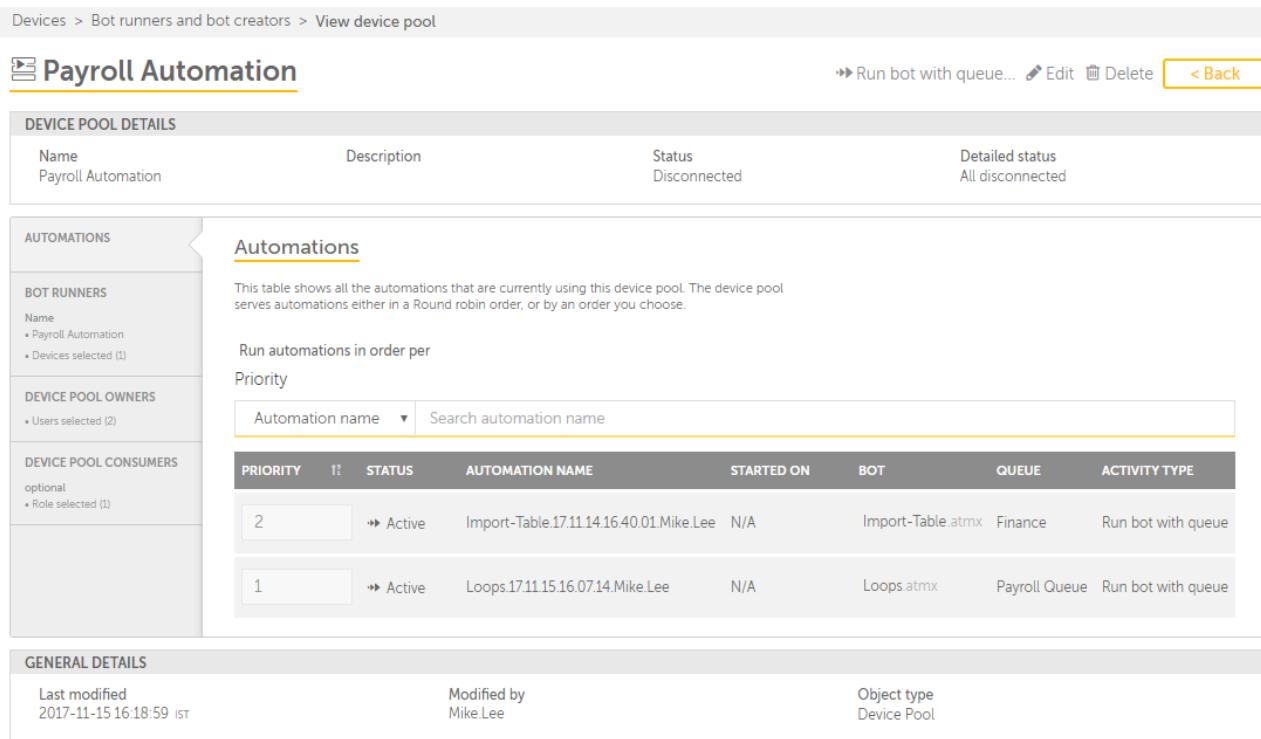
MY DEVICES	MY DEVICE POOLS				
Device pool name ▾ Search device pool name					
Device pools (2 of 2)					
STATUS	DEVICE POOL NAME	DETAILED STATUS	# OF AUTOMATIONS	# OF DEVICES	OWNERS
<input type="checkbox"/>	Connected Finance Automation	All connected	0	2	Mike.Lee
<input type="checkbox"/>	Connected MetaBot Command Automation	All connected	1	2	Mike.Lee and 1 more

# View device pool

As a Control Room user with device pool management privileges or as a device pool owner, you can view device pool details to ensure the information provided is correct and if required customize as per your workload requirement.

To view device pool details,

1. Go to **Devices** → **My Device Pools**
2. For the device pool that you need to view, mouse over the actions icon - 
3. Click 
4. The **Device Pool Details** page is launched in view mode



The screenshot shows the 'Payroll Automation' device pool details. The top navigation bar includes 'Devices > Bot runners and bot creators > View device pool'. The main header is 'Payroll Automation' with actions: 'Run bot with queue...', 'Edit', 'Delete', and '< Back'. The page is divided into sections:

- DEVICE POOL DETAILS:** Shows Name (Payroll Automation), Description, Status (Disconnected), and Detailed status (All disconnected).
- AUTOMATIONS:** Sub-section 'Automations' displays a table of automations using the device pool. It includes a search bar for automation names and columns for Priority, Status, Automation Name, Started On, Bot, Queue, and Activity Type. Two entries are listed: one at Priority 2 and one at Priority 1.
- BOT RUNNERS:** Shows 1 selected device.
- DEVICE POOL OWNERS:** Shows 2 selected users.
- DEVICE POOL CONSUMERS:** Shows 1 selected role.
- GENERAL DETAILS:** Shows Last modified (2017-11-15 16:18:59 IST), Modified by (Mike Lee), and Object type (Device Pool).

The page provides details of the device pool in two sections:

- Device Pool Details such as the Name, Description, Status, and Detailed Status
- Device Pool contents in tabs such as Automations, Bot Runners, Device Pool Owners, and Device Pool Consumers.



**Tip:** Select each tab to view its details.

The following provides details for each of the following tabs:

- **Automations** - Shows the automations that are using the device pool and the order that is chosen to run those. This is shown as the default view. To find an automation quickly, use the search option using Status, Automation name, Queue, or Activity type.



**Tip:** You can perform the following actions on a table column:

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size
- **Bot Runners** - Shows list of Bot Runners that are part of the device pool.

- **Device Pool Owners** - Shows list of Device Pool Owners that are granted permission to view, edit, and delete the device pool. Refer the article [Create and delete device pool](#) for details.
- **Device Pool Consumers** - Shows the list of Device Pool Consumers who are granted permission to view the device pool as an option while running automations. Refer the article [Create and delete device pool](#) for details.
- **General Details** - Shows the Last modified date and time, name of the user who modified device pool details, and the Object Type which is the component on which modification was done.

When you view a device pool, apart from updating the Bot Runner, Device Pool Owner, and Consumer details, you can additionally choose to

- Run Bot with [queue](#)
- [Edit](#) the device pool
- [Delete](#) the device pool

# Edit device pool

As a Control Room user with device pool management privileges or as a device pool owner, you can edit device pool details to customize as per your workload requirement.

When you open the device pool in edit mode, you have to first define the priority or the order in which the automations will run in the Automations tab. This is visible only when you edit a device pool and is not available when you create a device pool. Apart from this you can update the Bot Runner, Device Pool Owner, and Consumer details.

To edit a device pool,

1. Go to **Devices → My Device Pools**



**Tip:** You can also edit device pool details when in view mode. Refer article [View device pool](#) to learn more.

2. For the device pool that needs to be updated, mouse over the actions icon -
3. Click
4. The **Device Pool Details** page is launched in edit mode

The screenshot shows the 'Edit device pool' page for a device pool named 'Payroll Automation'. The 'DEVICE POOL DETAILS' section includes fields for Name (Payroll Automation), Description (optional), Status (Disconnected), and Detailed status (All disconnected). The 'AUTOMATIONS' section lists the automation 'Import-Table.atmx' under 'Automations'. It includes settings for 'Run automations in order per' (Round robin selected), 'Time slice' (5), and 'Time slice unit' (minutes). The 'GENERAL DETAILS' section shows last modified (2017-11-15 15:24:42 IST), modified by (admin), and object type (Device Pool).

5. You can choose the order in which your automations will run. Select either **Round robin** or **Priority as shown in table**.

- **Round robin** - Use this when you want to run your automations at equal time intervals termed as **Time slice**. A **Time slice unit** can be defined in seconds, minutes, and hours. You can calculate or estimate the time for each automation and then provide this number.  
This means that the automations are executed for only 5 minutes first, then system checks for other automations in queue for execution. If yes, that automation is paused and next automation is executed. This will continue till all automations in the queue are executed.



**Note:** The default Time Slice is set to **5 minutes**.

Run automations in order per

- Round robin

Time slice

5

Time slice unit

minutes

seconds

minutes

hours

The Time slice should be more than zero:

Run automations in order per

- Round robin

Time slice must be greater than zero.

⚠️ Time slice

-1

Time slice unit

minutes

- Priority as shown in table** - Use this when you want to run your automations on priority defined in the Priority table. This method allows you to run automations in order of priority. Automations are processed till all are consumed from the specified automation queue.

Run automations in order per

- Round robin

- Priority as shown in table

Time slice

0

Time slice unit

seconds

Automation name ▾

Search automation name

PRIORITY	STATUS	AUTOMATION NAME	STARTED ON	BOT	QUEUE	ACTIVITY TYPE
2	» Active	Import-Table.17.11.14.16.40.01.Mike.Lee	N/A	Import-Table.atmx	Finance	Run bot with queue
1	» Active	Loops.17.11.15.16.07.14.Mike.Lee	N/A	Loops.atmx	Payroll Queue	Run bot with queue

The following details are shown in the priority table:

Table Item	Description
Priority	Shows the priority number allotted to that queue
Status	Shows the automation status - Active or Inactive
Automation Name	Shows the automation that is selected to run on the device pool
Started On	Shows the run date and time of the automation
Bot	Shows the Bot name that will run using this device pool
Queue	Shows the Queue name that will be used to run automation using this device pool
Activity Type	Shows the Activity type used to run the automation using this device pool - Run bot

with queue.



**Tip:** You can perform the following actions on a table column:

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
  - Use a drag-and-drop operation to move the column left or right
  - Move your mouse cursor at the end of the column and drag to resize
  - Search on Status, Automation Name, Queue, and Activity Type headers in the table if the data available is large.
- The **Priority** column is editable. You can set/re-set automation implementation priority. Ensure that you provide unique priority value to two different work items as same values will not be allowed:



Priority value should be unique

1	▼	» Active
1		» Active

- You can also view the Priority list in ascending or descending order by clicking the ordering arrows in the **Priority** header
6. You can update the list of Bot Runners that will be included in the device pool. Refer the article [Create and delete device pool](#) for details.
  7. You can update the list of Device Pool Owners who are granted permission to view, edit, and delete the device pool. Refer the article [Create and delete device pool](#) for details.
  8. You can update the list of Device Pool Consumers who are granted permission to view the device pool as an option while running automations. Refer the article [Create and delete device pool](#) for details.

9. Click **Save changes**



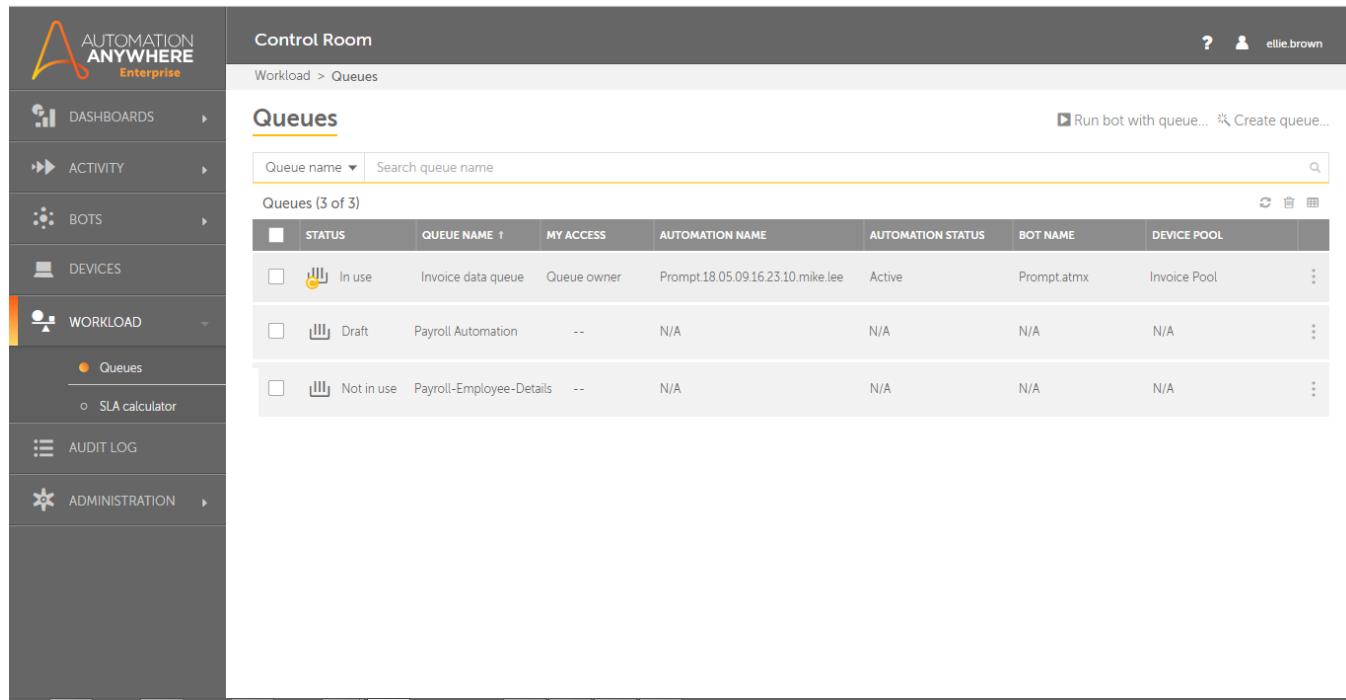
**Note:** If at any point you do not want to save the changes, click Cancel.

# Workload - an overview

Workload Management allows you to manage your work items by dividing them into small yet logical modules and processing those simultaneously to ensure your time based SLAs are met and resource utilization is optimized.

As a Control Room admin user, you can manage the work items in your Control Room instance with help of **Queues**. You can create, update and control the way work items are included in Queues and distributed to Bot Runners that are part of Device Pools.

The **Workload - Queues** page is illustrated below:

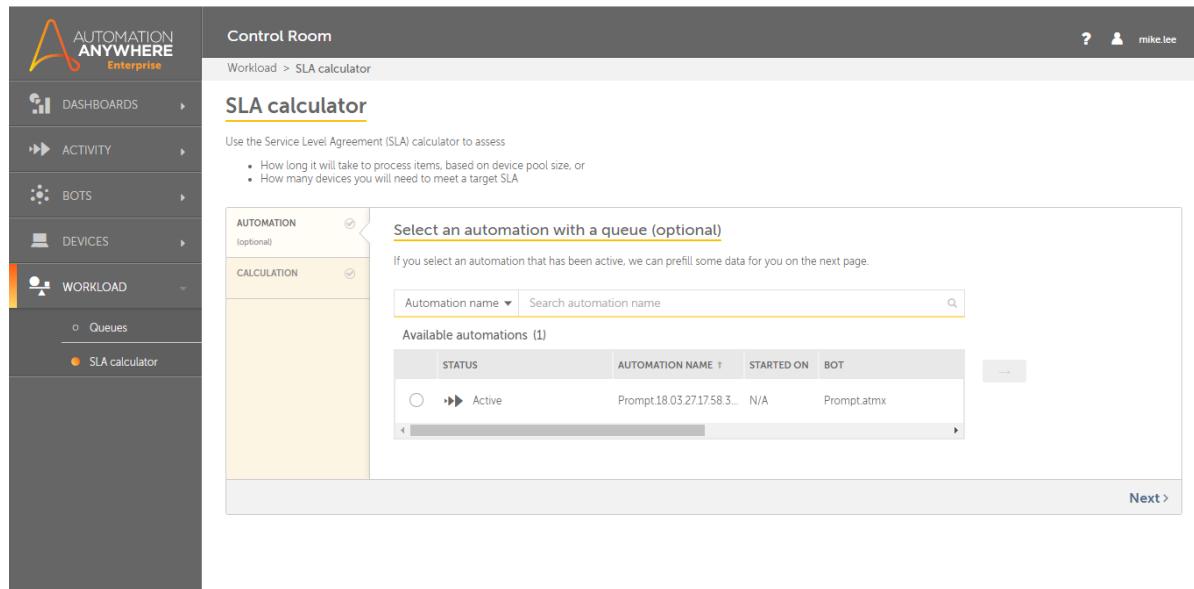


QUEUE NAME	MY ACCESS	AUTOMATION NAME	AUTOMATION STATUS	BOT NAME	DEVICE POOL
Invoice data queue	Queue owner	Prompt.18.05.09.16.23.10.mike.lee	Active	Prompt.atmx	Invoice Pool
Payroll Automation	--	N/A	N/A	N/A	N/A
Payroll-Employee-Details	--	N/A	N/A	N/A	N/A

Refer [Workload - Queues](#) for details

As a Control Room admin user or a user with SLA Calculator privilege, you can access the **Service Level Agreement (SLA) calculator** page. It allows you to assess how long would it take to process items based on device pool size or how many devices are required to meet your target SLA.

The **Workload - SLA calculator** page is illustrated below:



STATUS	AUTOMATION NAME	STARTED ON	BOT
Active	Prompt.18.03.27.1758.3...	N/A	Prompt.atmx

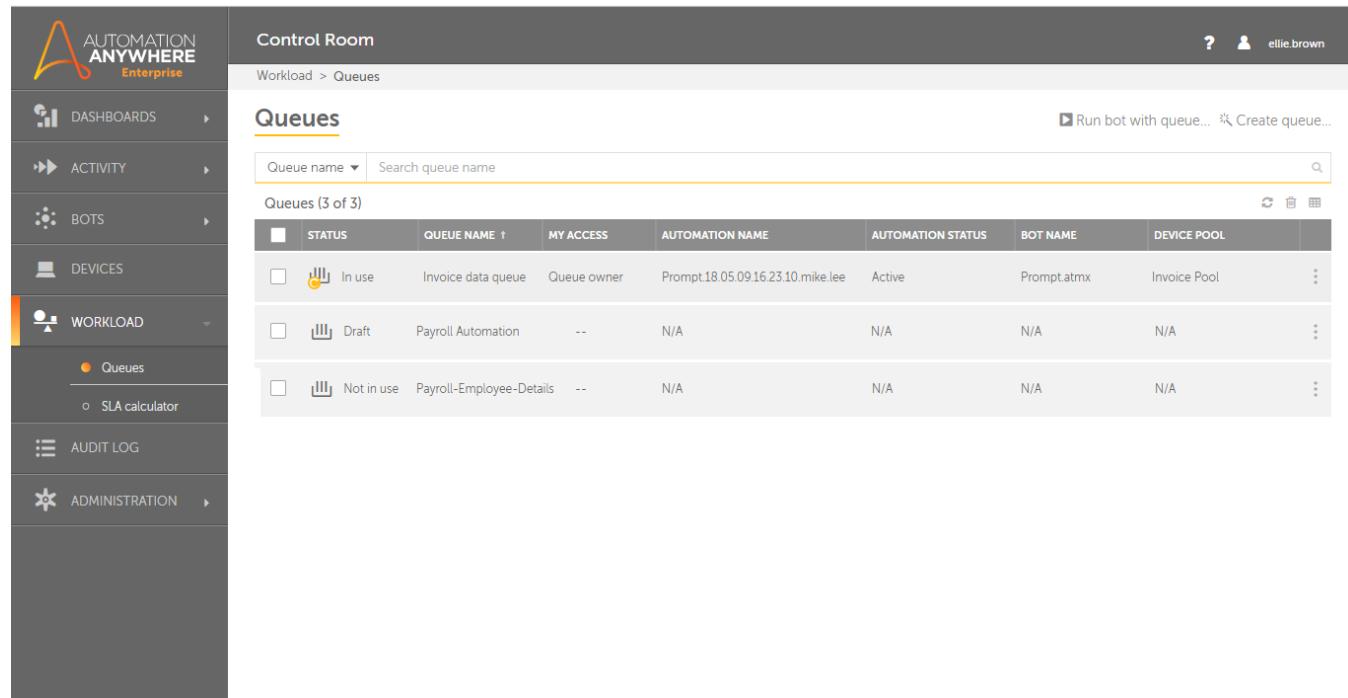
Refer [Workload - SLA calculator](#) for details.

# Workload - Queues

As a Control Room admin user, you can manage the work items in your Control Room instance with help of **Queues**. You can create, update and control the way work items are included in Queues and distributed to Bot Runners that are part of Device Pools.

Workload Management allows you to manage your work items by dividing them into small yet logical modules and processing those simultaneously to ensure your time based SLAs are met and resource utilization is optimized.

The **Workload - Queues** page is illustrated below:



QUEUE NAME	MY ACCESS	AUTOMATION NAME	AUTOMATION STA...	BOT NAME	DEVICE POOL
Invoice data queue	Queue owner	Prompt.18.05.09.16.23.10.mike.lee	Active	Prompt.atmx	Invoice Pool
Payroll Automation	--	N/A	N/A	N/A	N/A
Payroll-Employee-Details	--	N/A	N/A	N/A	N/A

 Note: You can see only those queues for which you are either the owner /participant /consumer. However, the **Queue Admin** can see all the queues in the system.

For ease of access, you can apply search parameters to Status, My Access and Queue Name columns.

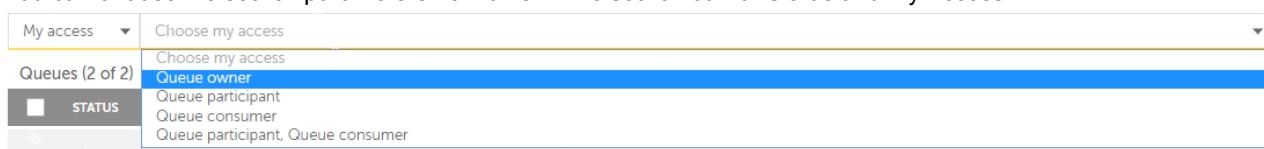
- You can use specify the search parameters in the search bar for Queue Name:



In use	Finance	Queue owner	Import-Table.17.11.14.16.40.01.Mike.Lee	Active	Import-Table.atmx	Payroll Automation
--------	---------	-------------	---	--------	-------------------	--------------------

When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Status and My Access



The following describes the list of items that can be viewed in the table:

Table Item	Description
Status	<p>Shows Queue's status:</p> <ul style="list-style-type: none"> <li><b>Draft</b> when the Queue is created but saved as a draft. This option is generally selected by the Queue admin when some information needs to be updated or when the queue is not meant for running automations yet.</li> <li><b>In use</b> when the Queue is created, saved and used to Run a bot with queue. This shows that an existing automation is using this queue.</li> <li><b>Not in use</b> when the Queue is created and saved but not used to Run a bot with queue.</li> </ul>
Queue Name	Shows the name of the Queue
My Access	<p>Shows the currently logged on user's access status to the queue.</p> <ul style="list-style-type: none"> <li><b>Queue Owner</b> - is the user who can create, edit and view the queue.</li> <li><b>Queue Participant</b> - is the user who can add new work items and view the queue</li> <li><b>Queue Consumer</b> - is the user who can view the queue and all the work items in the queue.</li> </ul>
Automation Name	Shows the name of the Automation. If the queue is not being used or is in draft state, this will show <b>N/A</b> and the automation name if in use.
Automation Status	Shows the status of the Automation created for this queue. If the queue is not being used or is in draft state, this will show <b>N/A</b> and <b>Active</b> if in use.
Bot Name	Shows the name of the Task Bot selected for this queue's automation.
Device Pool	Shows the name of the Device Pool that is used for the automation of this queue.



**Tip:** You can perform the following actions on a table column:

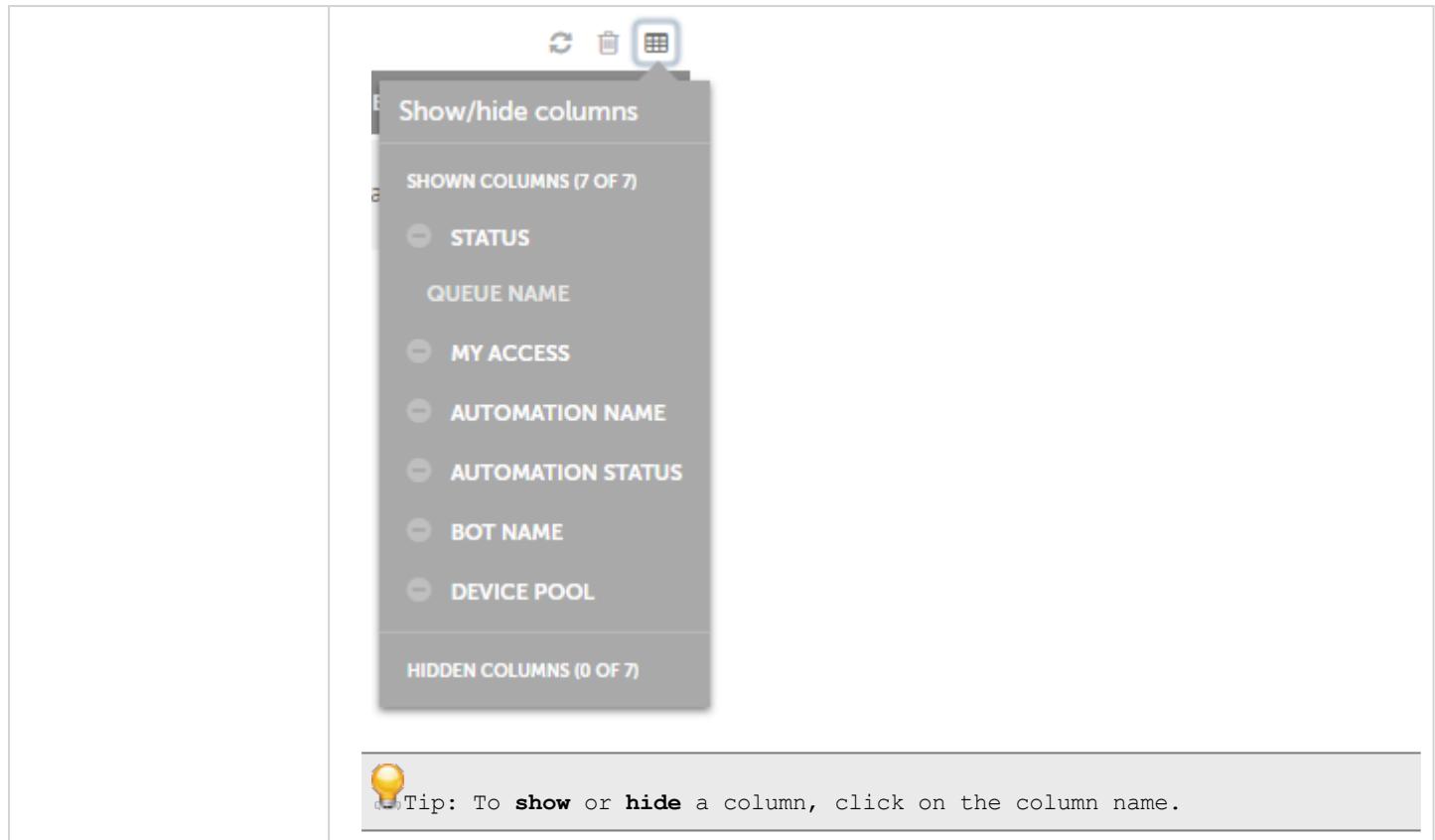
- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

The following describes the tasks that you can perform on an individual queue:

Table Item	Description
	Allows you to <a href="#">view details</a> of selected queue
	Allows you to <a href="#">edit details</a> of selected queue. You can see this icon only if you are the <b>Queue Owner</b> or <b>Participant</b> .
	Allows you to delete the selected queues. Note that if a queue is in use, you are not allowed to delete the queue.
	Allows you to <a href="#">view the automation in progress</a> . When you click this option, you are navigated to the <b>Activity → In progress</b> page for the selected automation.
	Allows you to <a href="#">estimate device pool size or time required to process a given queue size</a> for the selected automation.

Alternatively, you can select all devices and perform the following action. Note that these actions can be performed only at a table level and not on individual items.

Table Item	Description
	Allows you to refresh the table contents so that you can view the latest queue status
	Allows you to delete all or multiple queues.
	Allows you to show or hide specific columns. By default, all columns are displayed:



**Show/hide columns**

**SHOWN COLUMNS (7 OF 7)**

- STATUS
- QUEUE NAME
- MY ACCESS
- AUTOMATION NAME
- AUTOMATION STATUS
- BOT NAME
- DEVICE POOL

**HIDDEN COLUMNS (0 OF 7)**

 Tip: To **show** or **hide** a column, click on the column name.

When you want to perform actions such as **Run bot with queue** or **Create queue** quickly without switching your current location, you can use the following options:

Table Item	Description
 Run bot with queue...	Allows you to <a href="#">run bot with a queue</a>
 Create queue...	Allows you to <a href="#">create queues</a>

## Create queues

As a Control Room user with create queue privilege, you can create queues. Queue is one of main building blocks for Work Load Management. Queue holds data (Work Items) that will be processed. System distributes these work items to individual Bot Runners in a Device pool for processing.

You can define a queue to hold a specific set of data that your bot is expecting. For example, you can create Payroll Data Queue with payroll related information for a Payroll Processing bot. Work items can be added to the queue by uploading a CVS/Excel file or from an API.

The following illustration shows the **Create queue** page when it is launched:

Workload > Queues > Create queue

**Create queue**

**General settings**

In this wizard, you will be able to create a queue of work items and assign permissions. You can save a draft at any time and come back later to complete the queue.

<b>GENERAL</b>	<input checked="" type="checkbox"/>
Threshold	* 1 work item(s)
Time it takes	* --
<b>OWNERS</b>	<input checked="" type="checkbox"/>
* 1 user selected	
<b>PARTICIPANTS</b>	<input checked="" type="checkbox"/>
(optional)	
<b>CONSUMERS</b>	<input checked="" type="checkbox"/>
(optional)	
<b>DEFINE WORK ITEM STR...</b>	<input checked="" type="checkbox"/>
Get column headers from:	
* Excel file	
<b>WORK ITEM STRUCTURE</b>	<input checked="" type="checkbox"/>
* 0 columns	
<b>ADD WORK ITEMS</b>	<input checked="" type="checkbox"/>
(optional)	

**Queue Name**: | Max characters = 50

**Description (optional)**: Max characters = 255

**Reactivation Threshold**: 1 work item(s)  
Minimum number in queue to resume processing.

**Time it takes for a person to complete 1 work item (optional)**:  seconds

< Back Next >

### Create queues

You can **Create queue** by providing details such as Queue name, Queue owners, participants, consumers and work item structure.

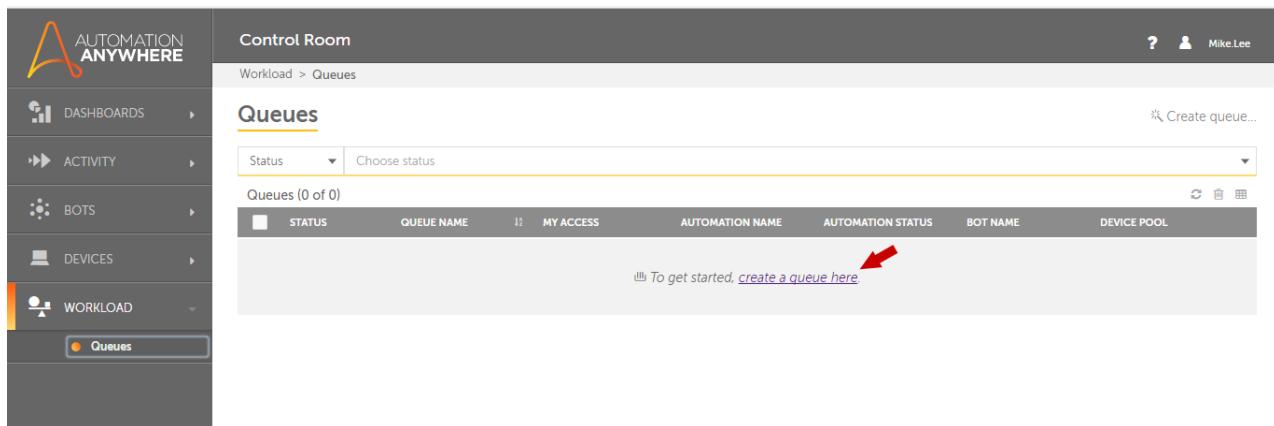
These details are summarized in the tab on the left side. You can refer this summary while editing the queue and open the tab that you want to update. Refer the article [Edit Queue](#).

To Create a queue:

1. Go to **Workload → Queues**

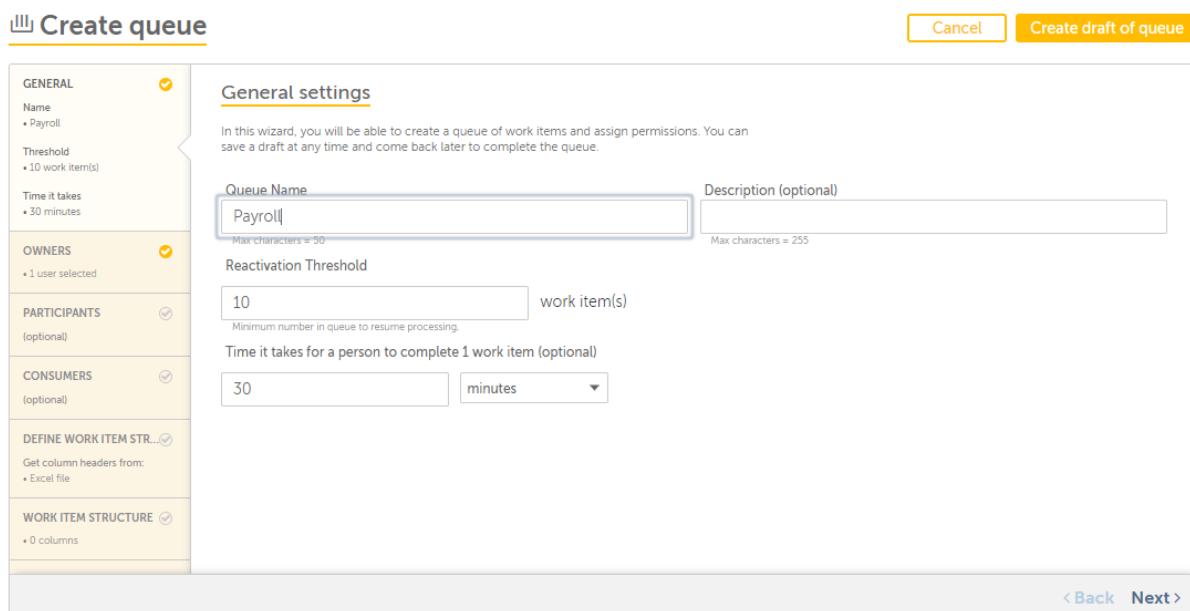
2. Click  [Create queue...](#)

or if you are creating a queue for the first time, click on the Create a queue here link, which is available when you launch the Queues page as shown:



3. The Create queue page is launched wherein you can first configure **General Settings**

- General settings** - Here, you can specify general settings for the queue such as Queue Name, Description, Reactivation Threshold, and Time required for a person to complete one work item.

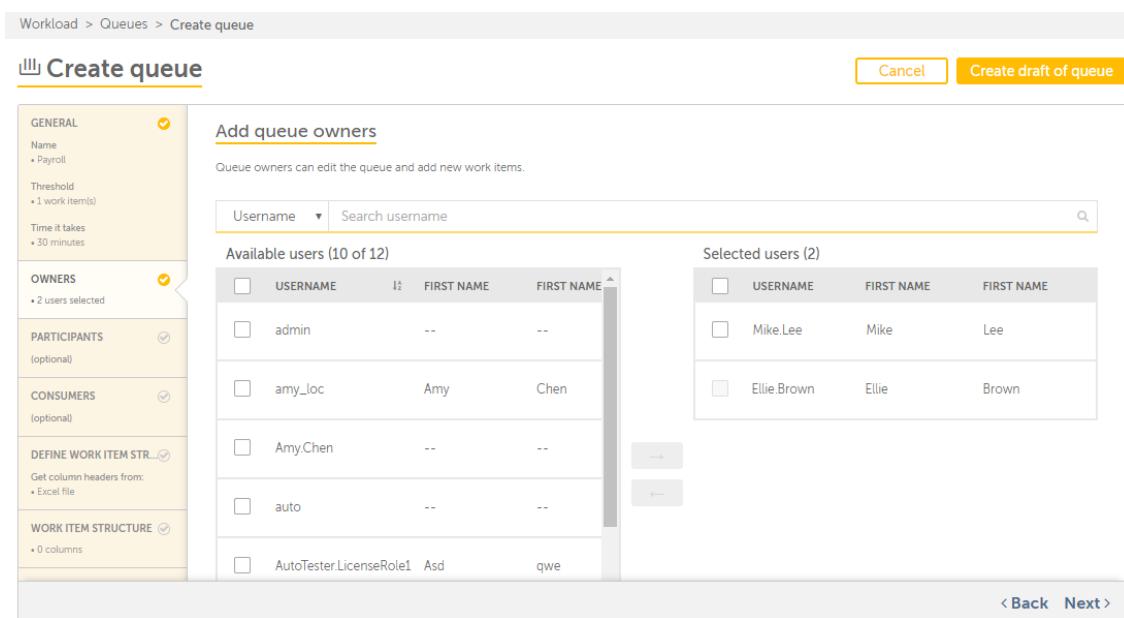


- Type a name for the queue that reflects its purpose in **Queue Name**. For example, you can specify Payroll Queue for work items that are designed to manage the payroll system.
- Optionally type in the **Description** that reflects what the queue will achieve. For example, the Payroll Queue will process those automations that are designed to manage the payroll system.
- Specify the minimum number of new work items (i.e. in 'Ready to Run' status) that should be present in the queue in order to resume the queue processing after all the work items in the queue are processed in **Reactivation Threshold**. By default this is set to 1.
- Optionally, specify the average time that a person would need to complete one work item in **seconds, minutes, hours or days**.
- Click **Next** to assign queue owners.

**Tip:** You can choose to save a draft of the queue by clicking **Create draft of queue** and add rest of the information later.

- Add name(s) of Queue Owner(s) to **Selected Users** from the list of **Available Users**. Queue owners can edit the queue and also add new work items to the queue. The Queue creator is the default **Queue Owner**. You can choose to add other users as Queue Owners only if required.
  - To add Queue Owners, select user(s) from list of **Available Users**
  - Click 

- iii. The users are added as **Queue Owners** in the list of **Selected Users**:



**Add queue owners**

Queue owners can edit the queue and add new work items.

Username	Search username
admin	--
amy_loc	Amy Chen
Amy.Chen	--
auto	--
AutoTester.LicenseRole1	Asd qwe

USERNAME	FIRST NAME	FIRST NAME
Mike.Lee	Mike	Lee
Ellie.Brown	Ellie	Brown

< Back **Next >**

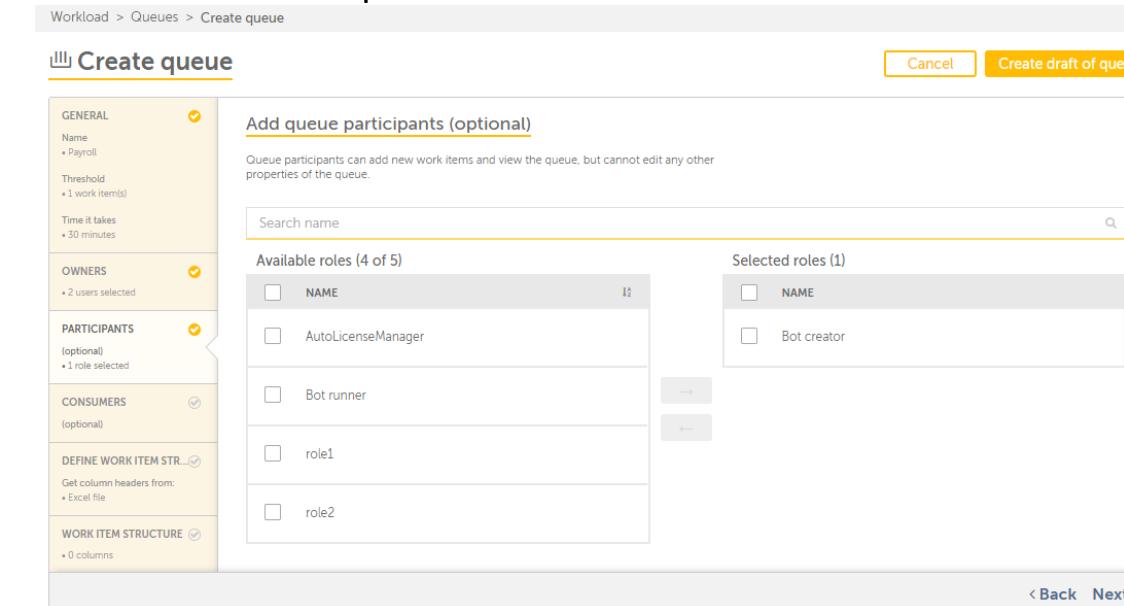
- iv. Click **Next** to add roles as queue participants

- c. **Participants** - Optionally add Roles as Participants from the list **Available Roles**. Participant roles can add new work items and view the queue. however, they are not allowed to edit other queue properties.

- i. To add **Participants**, select role(s) from list of **Available Roles**

ii. Click 

- iii. The roles are added as **Participants** in the list of **Selected Roles**:



**Add queue participants (optional)**

Queue participants can add new work items and view the queue, but cannot edit any other properties of the queue.

NAME
AutoLicenseManager
Bot runner
role1
role2

NAME
Bot creator

< Back **Next >**

- iv. Click **Next** to add queue consumers

- d. **Consumers** - Optionally add Queue **Consumers** from the list of **Available Roles**. Queue consumers can view the queue and all the work items in the queue. In addition, they can use this queue when running bots.

- i. To add **Consumers**, select role(s) from list of **Available Roles**

ii. Click 

iii. The roles are added as **Consumers** in the list of **Selected Roles**:

Workload > Queues > Create queue

### Create queue

Cancel
Create draft of queue

**GENERAL**

- Name: Payroll
- Threshold: 10 work item(s)
- Time it takes: 30 minutes

**OWNERS**

- 1 user selected

**PARTICIPANTS (optional)**

- 2 roles selected

**CONSUMERS (optional)**

- 2 roles selected

**DEFINE WORK ITEM STR...**

Get column headers from:  
Excel file

**WORK ITEM STRUCTURE**

0 columns

**Add queue consumers (optional)**

Queue consumers can view this queue and all the work items in the queue. In addition, they can use this queue when running bots.

Search name  🔍

NAME
<input type="checkbox"/> AutoLicenseManager
<input type="checkbox"/> Bot creator
<input type="checkbox"/> Bot runner

**Selected roles (2)**

NAME
<input type="checkbox"/> role1
<input type="checkbox"/> role2

< Back Next >

iv. Click **Next** to define the work item structure.

e. **Define Work Item Structure** - You can define the work item structure when you do not have the ready data in a file and directly want to load the work items manually from the system. Define the structure of the work items that will be processed in the queue. For this you must add column names to the structure. This can be done in either of **three** ways:

- i. Selecting a csv or excel file that automatically populates the headers to the structure by clicking Browse...:

Workload > Queues > Create queue

### Create queue

Cancel
Create draft of queue

**GENERAL**

- Name: Employee
- Threshold: 10 work item(s)
- Time it takes: 3 minutes

**OWNERS**

- 1 user selected

**PARTICIPANTS (optional)**

- 1 role selected

**CONSUMERS (optional)**

- 1 role selected

**DEFINE WORK ITEM STR...**

Get column headers from:  
Excel file

**WORK ITEM STRUCTURE**

0 columns

**ADD WORK ITEMS (optional)**

**How do you want to define your columns?**

Tell us the structure of the work items that will be coming into the queue. First we need to know what the column names will be. Do you want to give us this information via an Excel/CSV file, use an existing queue category, or provide it manually?

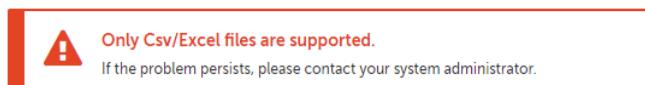
Use an Excel/CSV file  Browse

Use queue category

Manually

< Back Next >

- Only excel or csv files are allowed. For any other file, the following error is shown:



Get column headers from an Excel/CSV file  Browse

- If the header column name is empty in the excel/csv file, the following error is shown:

**Header column name cannot be Empty**

If the problem persists, please contact your system administrator.

Get column headers from an Excel/CSV file

Browse

- If the header column name has special characters, following error is shown:

**Header column name cannot contain: ()"/"\[]:<>+=;?,  
\*@\$%^&!~**

If the problem persists, please contact your system administrator.

Get column headers from an Excel/CSV file

Browse

- If the header column name contains characters other than alpha numeric spaces, the following error is shown:

**Header column name can have only alpha-numeric-space  
characters**

If the problem persists, please contact your system administrator.

Get column headers from an Excel/CSV file

Browse

## ii. Selecting from an existing Queue Category:

Workload > Queues > Create queue

Cancel Create draft of queue

**Create queue**

<b>GENERAL</b> <input checked="" type="checkbox"/> Name <input type="checkbox"/> Employee  Threshold <input type="checkbox"/> 10 work items  Time it takes <input type="checkbox"/> 3 minutes	<b>OWNERS</b> <input checked="" type="checkbox"/> <input type="checkbox"/> 1 user selected	<b>PARTICIPANTS</b> <small>(optional)</small> <input type="checkbox"/> 1 role selected	<b>CONSUMERS</b> <small>(optional)</small> <input type="checkbox"/> 1 role selected	<b>DEFINE WORK ITEM STR...</b> <input type="checkbox"/>  <b>WORK ITEM STRUCTURE</b> <input type="checkbox"/> 0 columns	<b>ADD WORK ITEMS</b> <small>(optional)</small>
--	--	--	---	--	--

**How do you want to define your columns?**

Tell us the structure of the work items that will be coming into the queue. First we need to know what the column names will be. Do you want to give us this information via an Excel/CSV file, use an existing queue category, or provide it manually?

Use an Excel/CSV file

Use queue category

Manually

Select an existing queue category

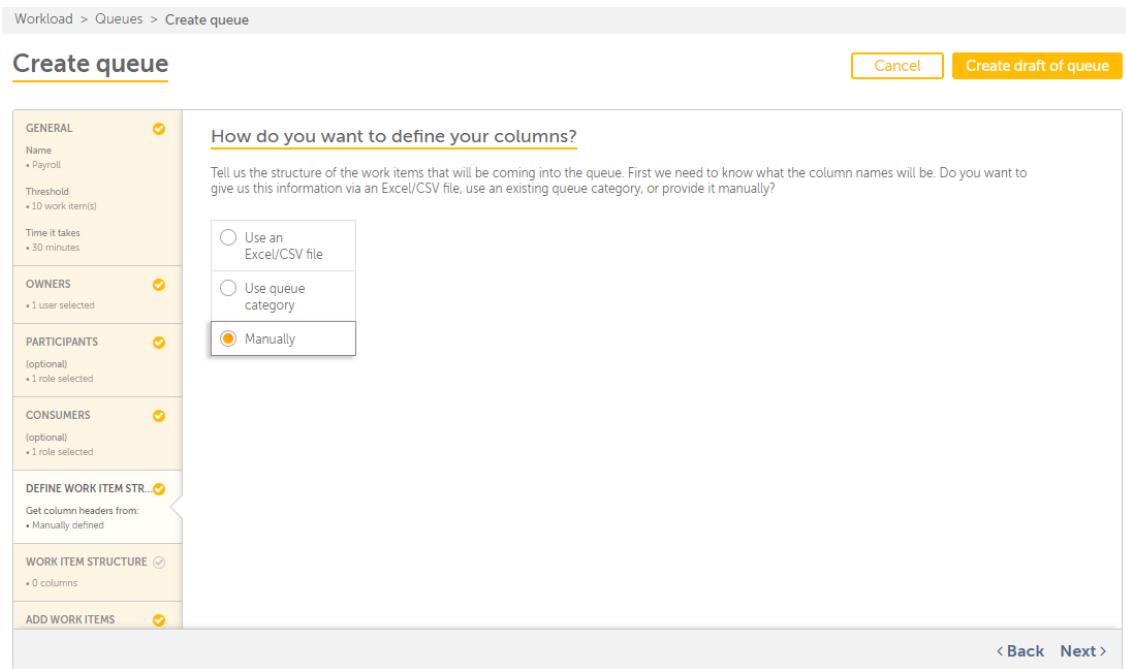
Search name

Available queue categories (3 of 3)

NAME ↑	LAST MODIFIED	MODIFIED BY
Customers	18:18:58 IST 2018-05-10	mike.lee
Invoice Id	11:30:46 IST 2018-05-14	mike.lee
Employee data	15:22:21 IST 2018-05-14	mike.lee

[← Back](#) [Next →](#)

iii. Adding column headers **manually** to the structure.



The screenshot shows the 'Create queue' wizard with the 'Define Work Item Structure' step selected. On the left, there's a sidebar with sections like 'GENERAL', 'OWNERS', 'PARTICIPANTS', 'CONSUMERS', 'DEFINE WORK ITEM STR...', 'WORK ITEM STRUCTURE', and 'ADD WORK ITEMS'. The 'DEFINE WORK ITEM STR...' section has a note: 'Get column headers from: Manually defined'. On the right, under 'How do you want to define your columns?', there are three options: 'Use an Excel/CSV file', 'Use queue category', and 'Manually'. The 'Manually' option is selected and highlighted with a border. At the bottom right of the main area, there are '< Back' and 'Next >' buttons.

iv. Click **Next** to select the data category and column headers that will be processed.

f. **Work Item Structure** - Based on the option that you choose in **Define Work Item Structure** panel, your workflow to process work items in this queue differs.

a. Adding header columns using an **Excel/CSV file** - When you select this option, you can define the work structure in steps:

- In **Step 1**, you must provide a name to the work item structure in Queue Category. For example, if the queue contains employee information, you can specify Queue Category as 'Employee Data'. Queue category should be unique.
- In **Step 2**, you are shown all the column names from the header row. You can choose only those columns that you want to include in the work item structure. You can select up to five columns to view in the Control Room. While viewing work item data in Control Room, system allows you to filter/sort work items only on these selected five columns.

For example, you can select column headers **Employee Name**, **Employee ID** and **Designation**. You can then select the **Data Type** for that column. In our example selected columns belong to the **Text** data type. You can also choose to view those columns being processed in the Control Room Activity page.

- In **Step 3**, you can choose to sort the selected column data in **Ascending** or **Descending** order. Out of the five "Show in control room" selected columns, you can select up to three columns to specify the sort criteria. When the system is processing work items from this queue, it will use the sort criteria specified to fetch the work items in that order.

For example, if you want to process payslips with first Employee Id followed by Employee Name from **1 to n** and **A to Z**, you can specify Employee Id and Employee Name in **Ascending** order.

Workload > Queues > Create queue

### Create queue

<input checked="" type="checkbox"/> <b>GENERAL</b> Name • Payroll Threshold • 10 work item(s)  Time it takes • 30 minutes  <input checked="" type="checkbox"/> <b>OWNERS</b> • 1 user selected  <input checked="" type="checkbox"/> <b>PARTICIPANTS</b> (optional) • 1 role selected  <input checked="" type="checkbox"/> <b>CONSUMERS</b> (optional) • 1 role selected  <b>DEFINE WORK ITEM STR.</b> Get column headers from: • Excel file  Test file name • us-500.csv  <b>WORK ITEM STRUCTURE</b> Queue category • Employee data • 15 columns  <b>ADD WORK ITEMS</b> (optional)	<p><b>Column names and sorting</b></p> <p>Your data-format settings will be saved as a category. In Step 1, give a name to this category. In Step 2, select the data that you want the queue to process. In Step 3, choose the sort order for the columns that will appear in Control Room.</p> <p><b>Step 1: Queue category</b></p> <p>Employee data Max characters = 50</p> <p><b>Step 2: Which columns should we include in each work item?</b></p> <table border="1"> <thead> <tr> <th>COLUMN NAME</th> <th>DATA TYPE</th> <th>CHOOSE A MAXIMUM OF 5 COLUMNS TO SHOW IN CONTROL ROOM</th> </tr> </thead> <tbody> <tr> <td><input checked="" type="checkbox"/> Select All</td> <td></td> <td></td> </tr> <tr> <td><input checked="" type="checkbox"/> id</td> <td>Text</td> <td><input checked="" type="checkbox"/> Show in Control Room</td> </tr> <tr> <td><input checked="" type="checkbox"/> first_name</td> <td>Text</td> <td><input checked="" type="checkbox"/> Show in Control Room</td> </tr> <tr> <td><input checked="" type="checkbox"/> last_name</td> <td>Text</td> <td><input checked="" type="checkbox"/> Show in Control Room</td> </tr> <tr> <td><input checked="" type="checkbox"/> company_name</td> <td>Text</td> <td><input type="checkbox"/> Show in Control Room</td> </tr> <tr> <td><input checked="" type="checkbox"/> address</td> <td>Text</td> <td><input type="checkbox"/> Show in Control Room</td> </tr> </tbody> </table>	COLUMN NAME	DATA TYPE	CHOOSE A MAXIMUM OF 5 COLUMNS TO SHOW IN CONTROL ROOM	<input checked="" type="checkbox"/> Select All			<input checked="" type="checkbox"/> id	Text	<input checked="" type="checkbox"/> Show in Control Room	<input checked="" type="checkbox"/> first_name	Text	<input checked="" type="checkbox"/> Show in Control Room	<input checked="" type="checkbox"/> last_name	Text	<input checked="" type="checkbox"/> Show in Control Room	<input checked="" type="checkbox"/> company_name	Text	<input type="checkbox"/> Show in Control Room	<input checked="" type="checkbox"/> address	Text	<input type="checkbox"/> Show in Control Room
COLUMN NAME	DATA TYPE	CHOOSE A MAXIMUM OF 5 COLUMNS TO SHOW IN CONTROL ROOM																				
<input checked="" type="checkbox"/> Select All																						
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<input checked="" type="checkbox"/> last_name	Text	<input checked="" type="checkbox"/> Show in Control Room																				
<input checked="" type="checkbox"/> company_name	Text	<input type="checkbox"/> Show in Control Room																				
<input checked="" type="checkbox"/> address	Text	<input type="checkbox"/> Show in Control Room																				

< Back [Next](#) >

- iv. Click **Next** to add the data to work items.
- b. Adding header columns using **existing queue category** - When you select this option, you can select from a list of Available queue categories:
- Either search for an existing queue category when there are a large number of categories available for selection or select one from the list:

Workload > Queues > Create queue

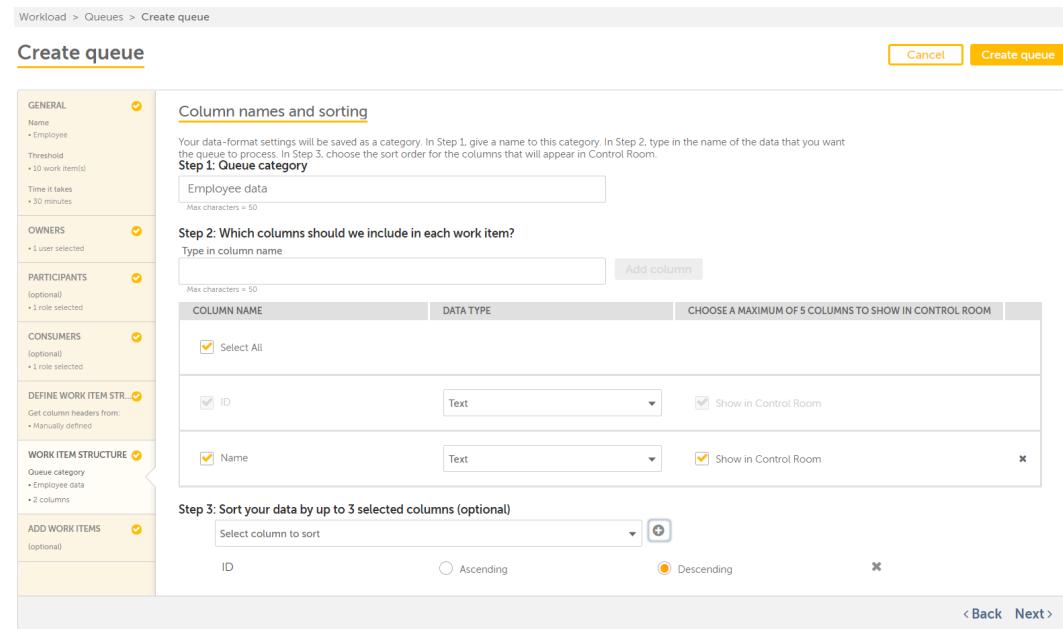
### Create queue

<input checked="" type="checkbox"/> <b>GENERAL</b> Name • Employee Threshold • 10 work item(s)  Time it takes • 3 minutes  <input checked="" type="checkbox"/> <b>OWNERS</b> • 1 user selected  <input checked="" type="checkbox"/> <b>PARTICIPANTS</b> (optional) • 1 role selected  <input checked="" type="checkbox"/> <b>CONSUMERS</b> (optional) • 1 role selected  <b>DEFINE WORK ITEM STR.</b> Get column headers from: • Employee data  <b>WORK ITEM STRUCTURE</b> Queue category • Employee data • 15 columns  <b>ADD WORK ITEMS</b> (optional)	<p><b>How do you want to define your columns?</b></p> <p>Tell us the structure of the work items that will be coming into the queue. First we need to know what the column names will be. Do you want to give us this information via an Excel/CSV file, use an existing queue category, or provide it manually?</p> <p><input type="radio"/> Use an Excel/CSV file</p> <p><input checked="" type="radio"/> Use queue category</p> <p><input type="radio"/> Manually</p> <p>Select an existing queue category</p> <p>Search name</p> <p>Available queue categories (2 of 3)</p> <table border="1"> <thead> <tr> <th>NAME</th> <th>LAST MODIFIED</th> <th>MODIFIED BY</th> </tr> </thead> <tbody> <tr> <td>Customers</td> <td>18:18:58 IST 2018-05-10</td> <td>mike.lee</td> </tr> <tr> <td>Invoice Id</td> <td>11:30:46 IST 2018-05-14</td> <td>mike.lee</td> </tr> </tbody> </table> <p> Employee data</p>	NAME	LAST MODIFIED	MODIFIED BY	Customers	18:18:58 IST 2018-05-10	mike.lee	Invoice Id	11:30:46 IST 2018-05-14	mike.lee
NAME	LAST MODIFIED	MODIFIED BY								
Customers	18:18:58 IST 2018-05-10	mike.lee								
Invoice Id	11:30:46 IST 2018-05-14	mike.lee								

< Back [Next](#) >

- ii. Click **Next** to add the data to work items.
- c. Adding header columns **Manually** - When you select this option, you can define the work item structure manually. You do not have to select from an existing structure.
- In **Step 1**, provide a name to the work item structure in **Queue Category** field. For example, if the queue contains employee information, you can specify Queue Category as 'Employee Data'. Queue category should be unique.
  - In **Step 2**, add column header names that should be included in the work item. Also define the data type for each column - Text, Number, or Date.

- c. In **Step 3**, optionally provide the order in which the columns should be displayed and sorted in the Control Room.

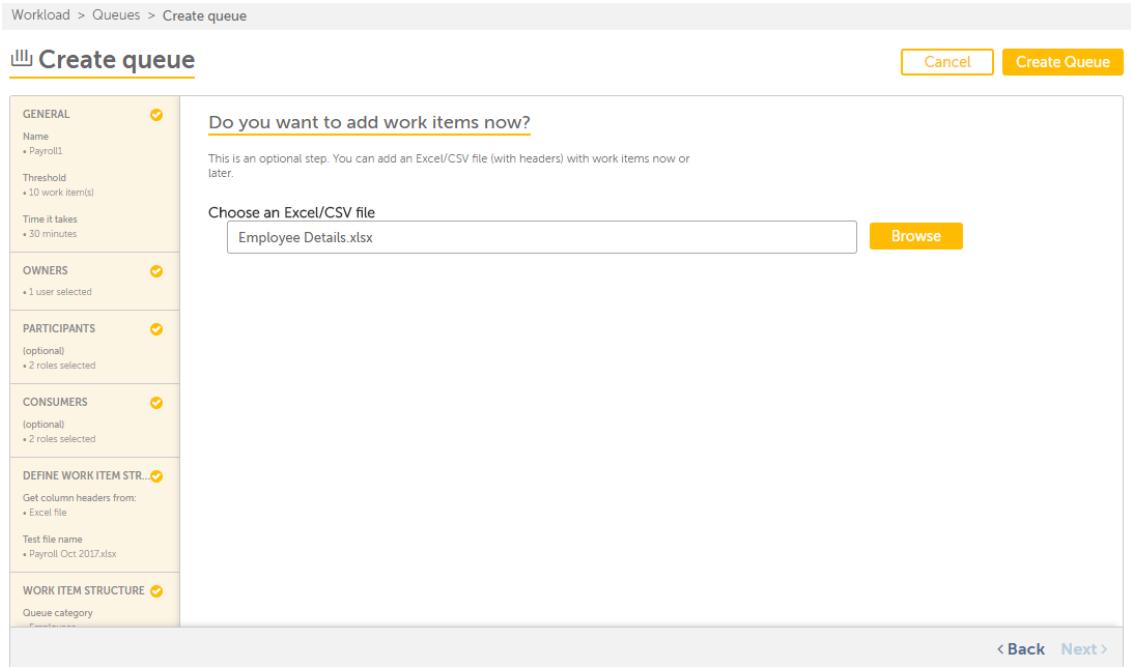


- d. Click **Next** to add data to the work items.

- g. **Add Work Items** - Optionally choose an excel or csv file if you want to add work items to this queue. You can add work items later by editing the queue.

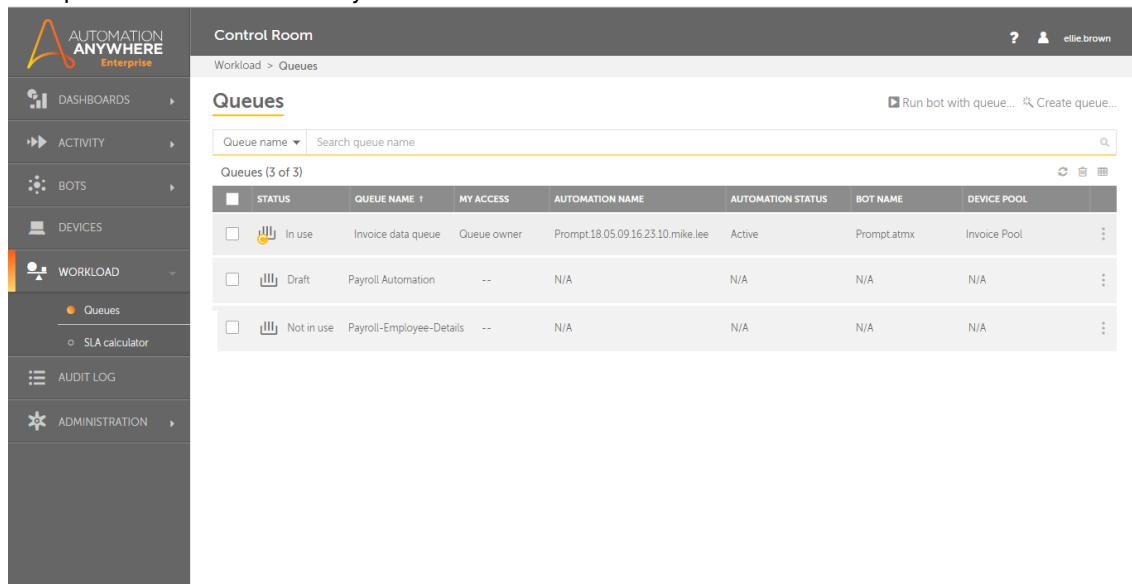
- i. To add an excel or csv file, click **Browse...**

ii. The file is added as a work item.



- iii. Click **Create Queue**

- iv. The queue is added successfully added to the list :



STATUS	QUEUE NAME	MY ACCESS	AUTOMATION NAME	AUTOMATION STATUS	BOT NAME	DEVICE POOL
	Invoice data queue	Queue owner	Prompt.180509162310.mike.lee	Active	Prompt.atmx	Invoice Pool
	Payroll Automation	--	N/A	N/A	N/A	N/A
	Payroll-Employee-Details	--	N/A	N/A	N/A	N/A

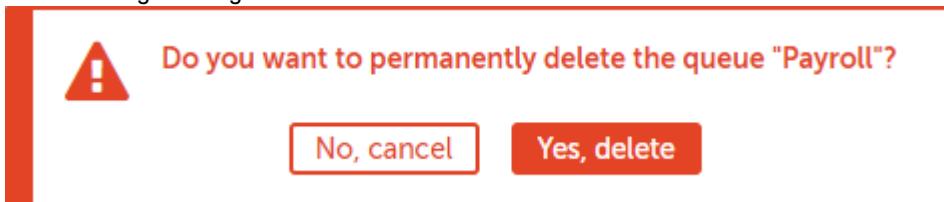
**Tip:** The new queue is added at the top of the list. You can choose to apply column sorting to view as required.

## Delete Queues

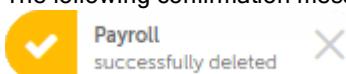
You can delete the queues if you have **Queue Admin or Owner** access rights. You can delete an individual queue, selected or all queues.

To delete an individual queue,

1. Go to **Workload → Queues**
2. For the queue that needs to be deleted, mouse-over the actions icon -
3. Click
4. The following message is shown:



5. Click **Yes, delete** to confirm or **No, cancel** to discard the action.
6. The following confirmation message appears once you delete the queue:



To delete selected or all queues:

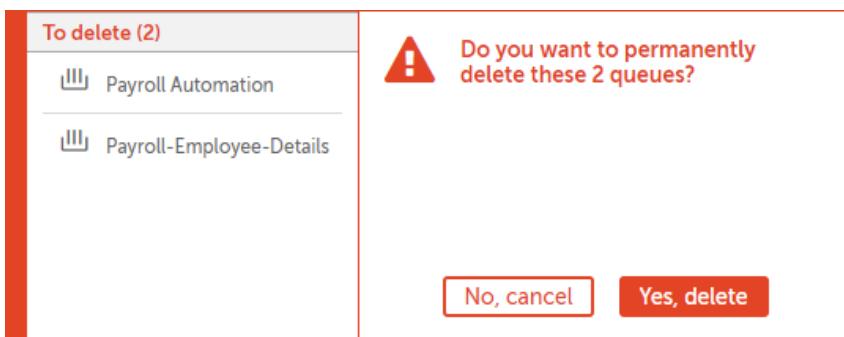
1. Go to **Workload → Queues**
2. Select the check-box of required queues or select the check-box given in the header to select all queues:

Workload > Queues

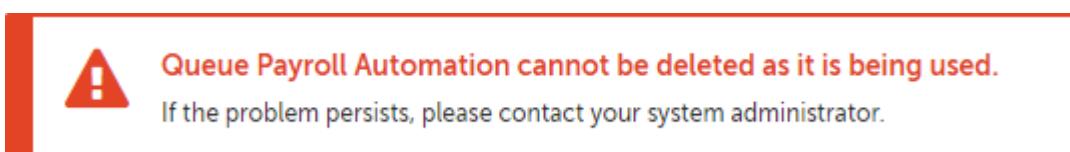
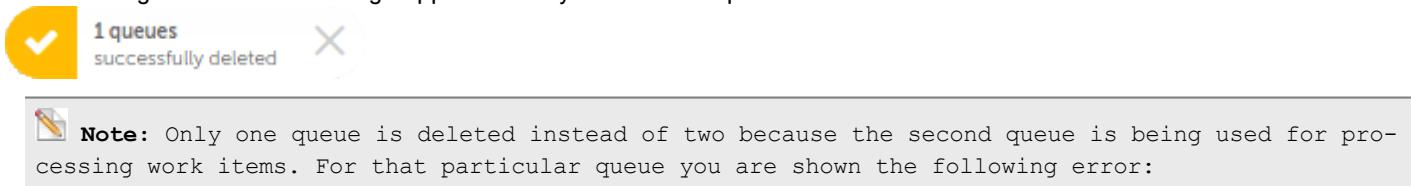
**Queues**

Status	Choose status		
<input checked="" type="checkbox"/> Select All	(2 of 2)		
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> STATUS	QUEUE NAME	⋮
<input checked="" type="checkbox"/>		In use	Payroll Automation
<input checked="" type="checkbox"/>		Not in use	Payroll-Employee-Details

3. Click  above the table header.
4. The following message is shown:



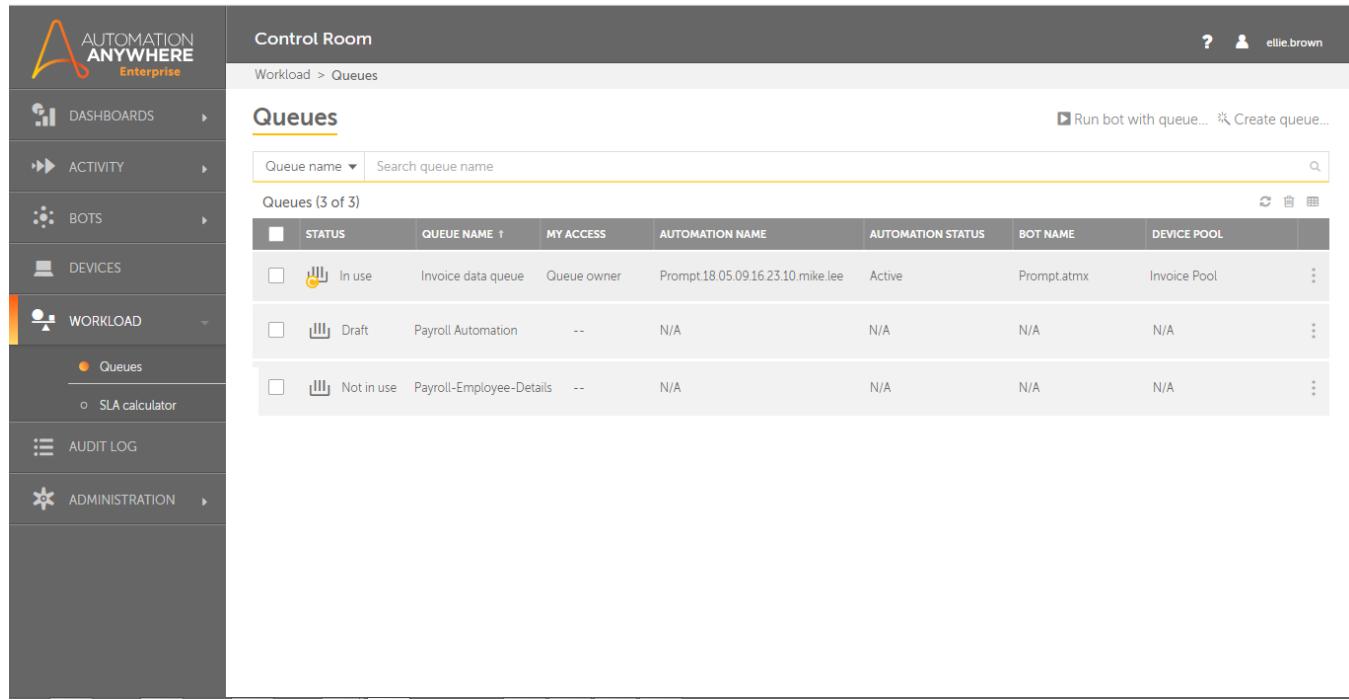
5. Click **Yes, delete** to confirm or **No, cancel** to discard the action.
6. The following confirmation message appears once you delete the queues:



# Edit queues

As a Control Room user with owner privileges you can edit the queues that you created and as a user with participant privileges you can edit queues that are created by other queue owners.

Refer [Queue Owners](#) section in Create Queues article.



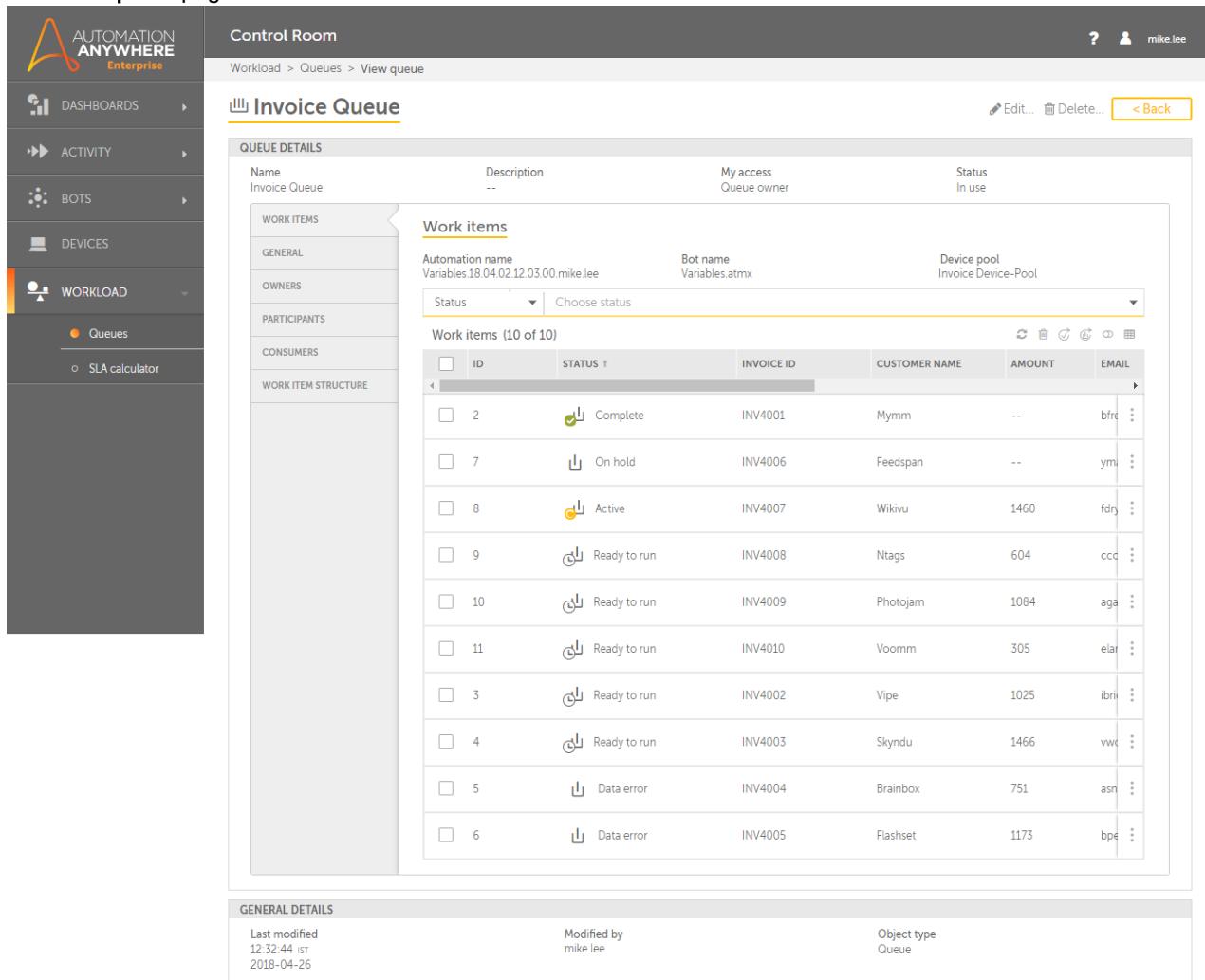
The screenshot shows the Control Room interface with the 'Queues' page selected. The left sidebar includes links for Dashboards, Activity, Bots, Devices, Workload (Queues selected), Audit Log, and Administration. The main area displays a table of three queues:

	Status	QUEUE NAME ↑	MY ACCESS	AUTOMATION NAME	AUTOMATION STATUS	BOT NAME	DEVICE POOL
<input type="checkbox"/>		Invoice data queue	Queue owner	Prompt.18.05.09.16.23.10.mike.lee	Active	Prompt.atmx	Invoice Pool
<input type="checkbox"/>		Payroll Automation	--	N/A	N/A	N/A	N/A
<input type="checkbox"/>		Payroll-Employee-Details	--	N/A	N/A	N/A	N/A

You can edit a queue using two methods - from **Queues** list and from **View queue** page

- To Edit a queue from **Queues** list,
  1. Go to **Workload → Queues**
  2. For the queue that needs to be updated, mouse over the actions icon -
  3. Click
- To Edit a queue from View queue page,
  1. Go to **Workload → Queues**
  2. For the queue that needs to be updated, mouse over the actions icon -
  3. Click

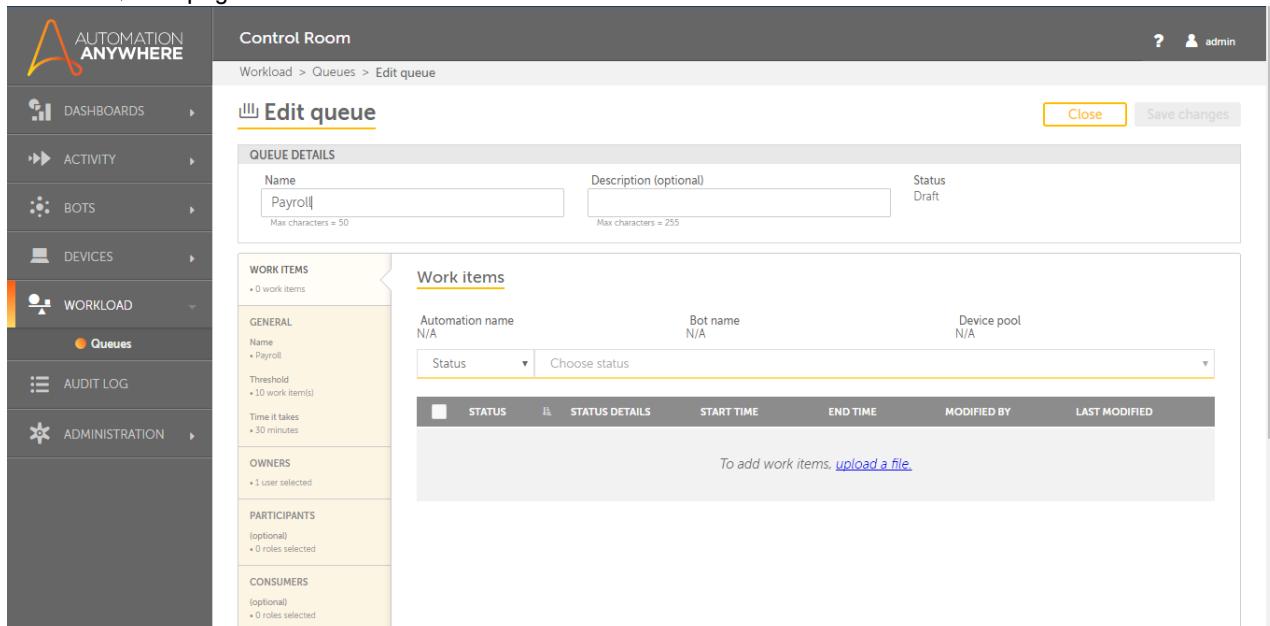
4. The **View queue** page is launched:



The screenshot shows the 'Invoice Queue' view in the Control Room. The left sidebar has 'WORKLOAD' selected with 'Queues' highlighted. The main area shows 'QUEUE DETAILS' for the 'Invoice Queue'. It includes sections for 'GENERAL', 'OWNERS', 'PARTICIPANTS', 'CONSUMERS', and 'WORK ITEM STRUCTURE'. The 'Work items' section displays 10 work items with columns: ID, STATUS, INVOICE ID, CUSTOMER NAME, AMOUNT, and EMAIL. The work items are numbered 2 through 11, with statuses like Complete, On hold, Active, Ready to run, and Data error. Below this is a 'GENERAL DETAILS' section with fields for Last modified (12:32 44 IST 2018-04-26), Modified by (mike.lee), and Object type (Queue).

5. Either click on **edit this queue** link or  **Edit...**

6. The **Edit Queue** page is launched:



The screenshot shows the 'Edit queue' page for a 'Payroll' queue. The left sidebar has 'WORKLOAD' selected with 'Queues' highlighted. The main area shows 'QUEUE DETAILS' with a 'Name' field set to 'Payroll'. The 'Work items' section is empty, showing a table header for STATUS, STATUS DETAILS, START TIME, END TIME, MODIFIED BY, and LAST MODIFIED. A note at the bottom says 'To add work items, [upload a file](#)'.

 **Note:** You can choose to **Close** or **Cancel** your updates. The **Close** option is available when you do not make any updates. It changes to **Cancel** when you update the page.

7. You can choose to edit the entire queue details such as the queue name (applicable only if in draft), description, work items, threshold and time values, owners, participants, and consumers. The Work Item structure cannot be edited once it is defined. Refer article [Create Queues](#) to know more about adding details in each tab.
8. By default, you are shown the **Work Items** tab wherein you must first upload a file for the work item that will be used for processing in this queue.



**Tip:** You can search for a work item quickly based either on **Status** or **Status details** using the search option.

9. Click **Browse...** and select the file that you want to upload.

Workload > Queues > Edit queue

### Edit queue

Cancel
Save changes

**QUEUE DETAILS**

Name	Description (optional)	Status
Payroll		Not in use
Max characters = 50		Max characters = 255

**WORK ITEMS**  
• 0 work items

**GENERAL**  
Name • Payroll  
Threshold • 10 work item(s)  
Time it takes • 30 minutes

**OWNERS**  
• 1 user selected

**PARTICIPANTS**  
(optional) • 2 roles selected

**CONSUMERS**  
(optional) • 2 roles selected

**Do you want to add work items now?**  
This is an optional step. You can add an Excel/CSV file (with headers) with work items now or later.

**Choose an Excel/CSV file**  
Employee Details.xlsx **Browse**

**Tip:** You can upload only an excel or csv file.

10. Click **Save changes** when you finish updating details as required.

- If you provide a duplicate name, the following error is shown:



**Queue cannot be added with duplicate name. The duplicate key value is (Payroll)**

If the problem persists, please contact your system administrator.

- Edit the name and save the changes made to the queue.

11. The following message is shown:

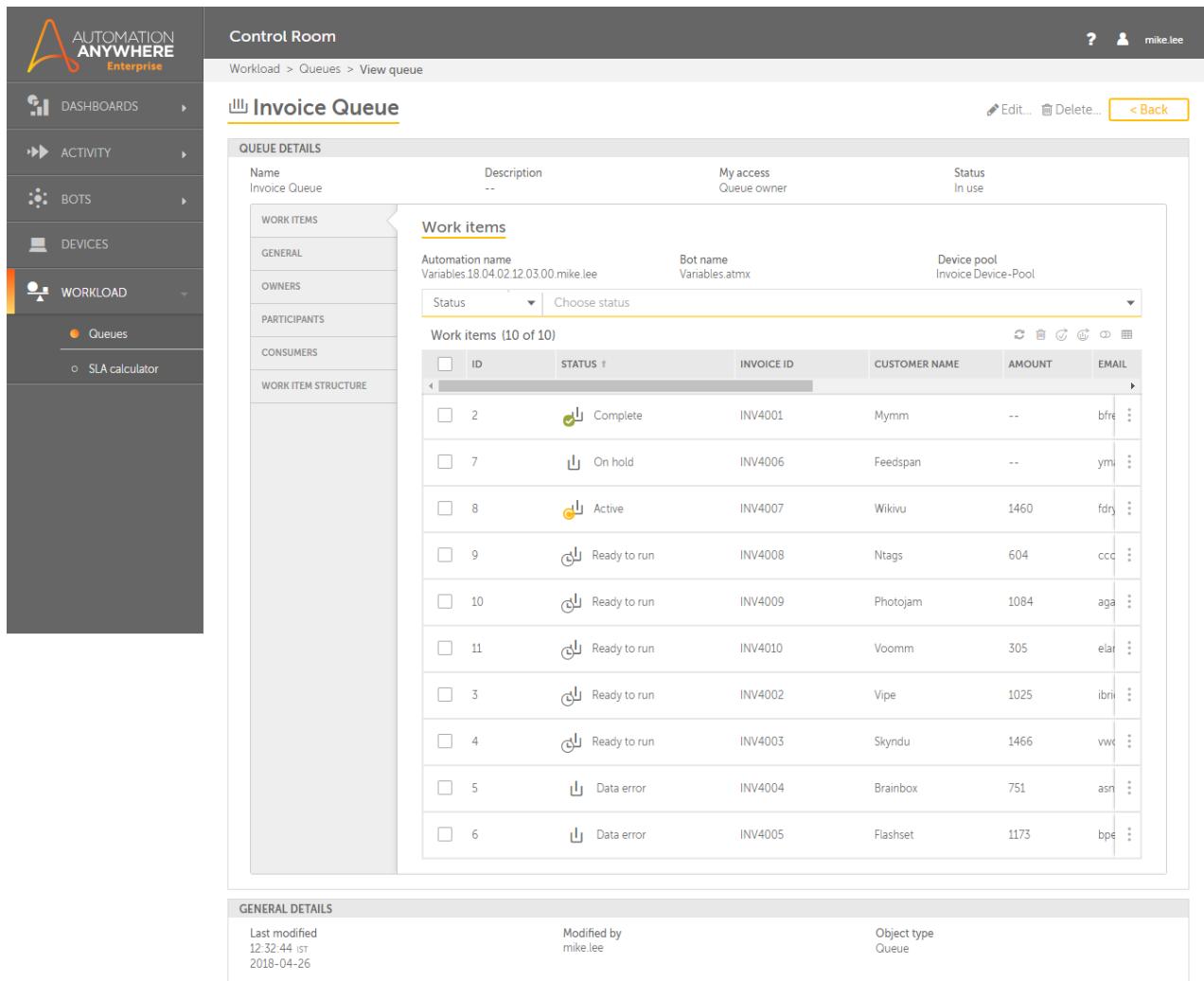


## View queue details

As a Control Room user with queue management privileges you might want to view the details of a Queue that either you created or are granted participant rights.

To view details of a particular queue,

1. Go to **Workload → Queues**
2. Mouse over the queue that you want to view and click 
3. Click 
4. The **View queues** page is launched:



The screenshot shows the 'Invoice Queue' page in the Control Room. The left sidebar has 'WORKLOAD' selected with 'Queues' highlighted. The main area shows 'QUEUE DETAILS' with fields: Name (Invoice Queue), Description (--), My access (Queue owner), and Status (In use). Below this is the 'Work items' section, which includes tabs for GENERAL, OWNERS, PARTICIPANTS, CONSUMERS, and WORK ITEM STRUCTURE. The 'GENERAL' tab is selected, showing 'Work items (10 of 10)' with columns: ID, STATUS, INVOICE ID, CUSTOMER NAME, AMOUNT, and EMAIL. The table lists 10 work items with various statuses like Complete, On hold, Active, Ready to run, and Data error. At the bottom, there's a 'GENERAL DETAILS' section with fields: Last modified (12:32:44 IST 2018-04-26), Modified by (mike.lee), and Object type (Queue).

5. The page provides details of the queue in two sections:

- a. Queue Details such as the **Name**, **Description**, **My access** status, and queue **Status**
- b. Queue contents in different tabs such as,
  - i. **Work Items** - This is the default view. This allows you to view all work items in a list form. You can perform actions such as edit and delete as well as modify the column view, and change the status of all or selected work items.
  - ii. **General** - This displays the **Reactivation Threshold** and **Time** required to complete one work item,
  - iii. **Owners** - This displays Queue owners who can edit the queue and add new work items.
  - iv. **Participants** - This displays Queue Participants who can add new work items and view the queue.
  - v. **Consumers** - This displays Consumers who can view the queue and all the work items in the queue. In addition,

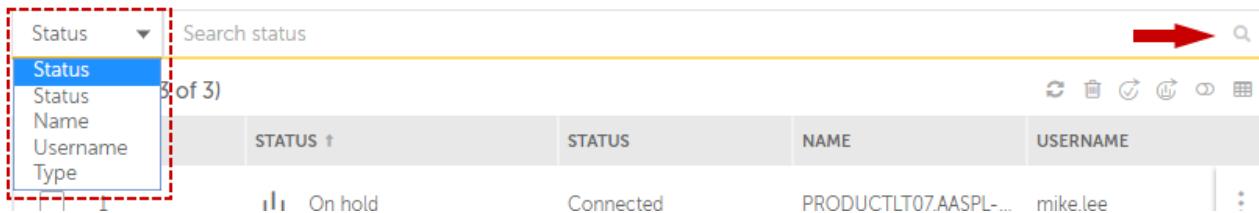
they can use this queue when running bots.

- vi. **Work Item Structure** - This displays the work item structure that you defined when creating the queue.

**Tip:** You can choose to edit any of these details by either clicking the **edit this queue** link or  **Edit...**. You can also delete the queue by clicking  **Delete...**. Refer the articles [Edit queues](#) and [Create and delete queues](#) for details.

For ease of access, you can apply search parameters to Status, My Access and Queue Name columns.

- You can use specify the search parameters in the search bar for Queue Name:



The screenshot shows a search interface with a dropdown menu for 'Status' containing 'Status', 'Name', 'Username', and 'Type'. A red dashed box highlights this dropdown. To its right is a search bar with the placeholder 'Search status' and a red arrow pointing towards it. Below the search bar is a table header with columns: STATUS ↑, STATUS, NAME, and USERNAME. Underneath is a table row showing data: On hold, Connected, PRODUCTLT07.AASPL..., mike.lee. At the bottom left of the search interface is a small preview of the table data.

When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

- You can choose the search parameters from a list in the search bar for Work item Status



The screenshot shows a search interface with a dropdown menu for 'Choose status' containing 'Active', 'Data error', 'On hold', 'Ready to run', 'Complete', and 'Unsuccessful'. A red dashed box highlights this dropdown. To its left is a table header with columns: ID and NAME. Below is a table row showing data: 1, PRODUCTLT07.AASPL... The interface includes a 'Work items (3)' label and a 'Choose status' dropdown at the top.

The following describes the list of items that can be viewed in the table:

Table Item	Description
ID	Shows the system generated id for a work item. When a work item is added to a queue, system generates an id for that work item.
Status	Shows Work item status: <ul style="list-style-type: none"> <li>• <b>Active</b> when work item is currently being processed or staged for processing</li> <li>• <b>Complete</b> when work item successfully processed by a Bot Runner or marked Complete</li> <li>• <b>Unsuccessful</b> when work item processing failed on Bot Runner</li> <li>• <b>Ready to run</b> when work item is successfully processed for execution does not have any data errors and can be staged for processing</li> <li>• <b>On hold</b> when work item is deferred from processing by a Bot Runner</li> <li>• <b>Data error</b> when there is an error in loading data from the file</li> </ul>
Start Time and End Time	Shows the work items processing start/end time and date
Modified by	Shows the name of the user who had modified the work item last
Last Modified	Shows the time and date when the work item was modified last

**Note:** Apart from the above system generated columns, the fields that you define in your work item are also displayed as columns:

## Work items

Automation name	Bot name	Device pool							
N/A	N/A	N/A							
Status	Choose status								
<b>Work items (10 of 10)</b>									
ID	STATUS								
INVOICE ID	CUSTOMER NAME	AMOUNT	EMAIL	INVOICE DATE	START TIME	END TIME			
2	Data error	INV4001	Mymm	--	bfreshw... 2018-04-17	08:03:32 IST 2018-04-17	N/A	N/A	⋮
7	Data error	INV4006	Feedspan	--	ymanua... 2018-04-16	22:02:41 IST 2018-04-16	N/A	N/A	⋮
8	Ready to run	INV4007	Wikivu	1460	fdrynan... 2018-04-18	12:12:22 IST 2018-04-18	N/A	N/A	⋮



**Tip:** You can perform the following actions on a table column:

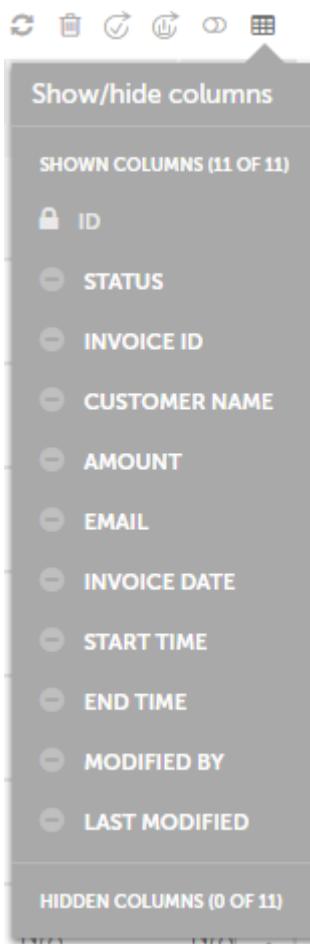
- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

The following describes the tasks that you can perform on an individual work item:

Table Item	Description
	Allows you to view details of selected work item
	Allows you to <a href="#">edit details</a> of selected work item. You can see this icon only if you are the <b>Queue Owner</b> or <b>Participant</b> or <b>Consumer</b> and the status of the work item is <b>Unsuccessful</b> , <b>On hold</b> , or <b>Data error</b>
	Allows you to delete the selected work item. Note that if a work item is in <b>Active</b> state, you are not allowed to delete it.

Alternatively, you can select all devices and perform the following action. Note that these actions can be performed only at a table level and not on individual items.

Table Item	Description
	Allows you to refresh the table contents so that you can view the latest work item status
	Allows you to delete one or multiple work items.
	Allows you to mark one or more work items as <b>Complete</b> whose status is <b>On hold</b> , <b>Data Error</b> , or <b>Ready to run</b> .
	Allows you to mark one or more work items as <b>Ready to run</b> whose status is <b>On hold</b> , or <b>Data Error</b>
	Allows you to mark one or more work items as <b>On hold</b> whose status is <b>Ready to run</b>
	Allows you to show or hide specific columns. By default, all columns are displayed including the ones defined in the work item:



The dialog box shows a list of 11 columns under the heading "SHOWN COLUMNS (11 OF 11)". Each column name is preceded by a small icon: a lock for ID, a minus sign for STATUS, INVOICE ID, CUSTOMER NAME, AMOUNT, EMAIL, INVOICE DATE, START TIME, END TIME, MODIFIED BY, and LAST MODIFIED. Below this section is a header for "HIDDEN COLUMNS (0 OF 11)".

SHOWN COLUMNS (11 OF 11)

- 🔒 ID
- ⊖ STATUS
- ⊖ INVOICE ID
- ⊖ CUSTOMER NAME
- ⊖ AMOUNT
- ⊖ EMAIL
- ⊖ INVOICE DATE
- ⊖ START TIME
- ⊖ END TIME
- ⊖ MODIFIED BY
- ⊖ LAST MODIFIED

HIDDEN COLUMNS (0 OF 11)



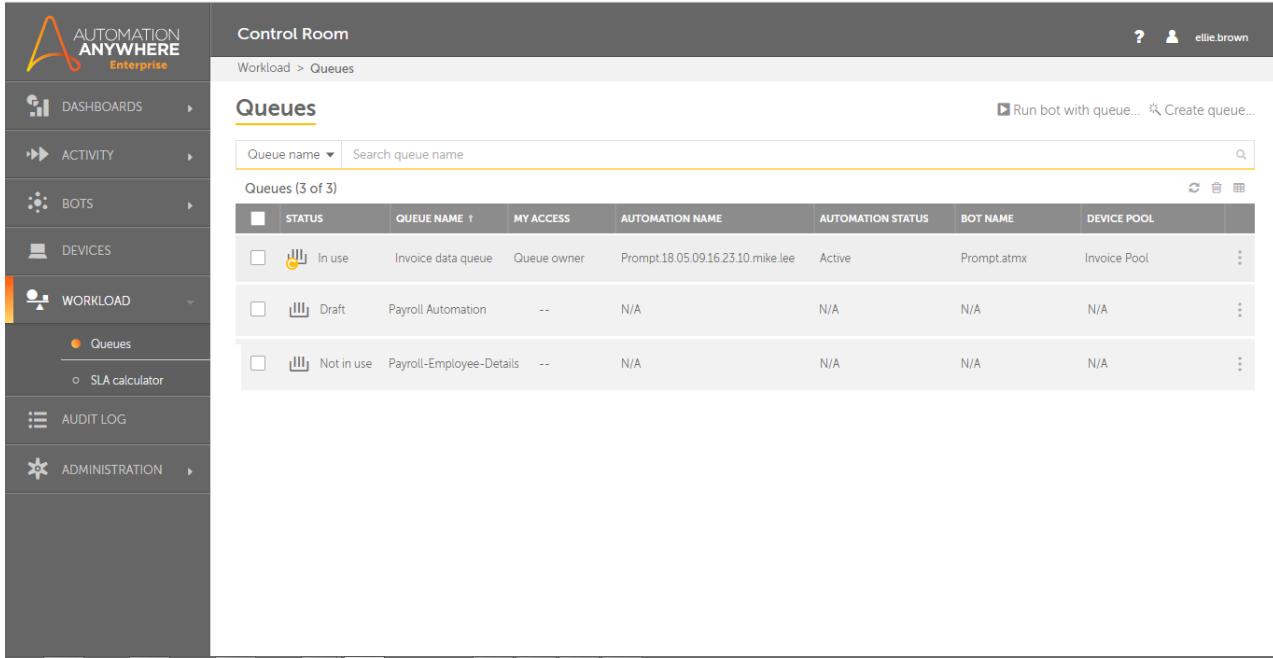
Tip: To **show** or **hide** a column, click on the column name.

# View automation of a queue

You can choose to **Pause/Resume** or **Stop** an in progress automation when you have the **Manage my in progress activity** permission.

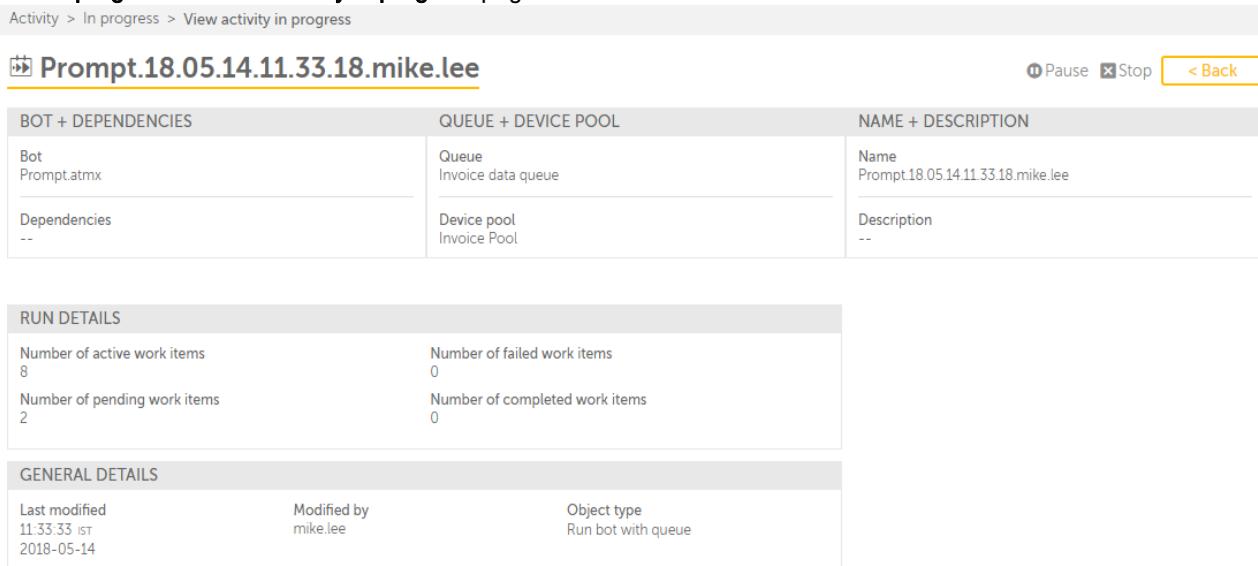
To view in progress activity details of an active automation,

1. Go to **Workload → Queues**
2. Mouse over the action icon -  of a queue with status **In use**:



3. Click 

4. The **In progress → View activity in progress** page is launched:



BOT + DEPENDENCIES		QUEUE + DEVICE POOL		NAME + DESCRIPTION	
Bot Prompt.atmx	Dependencies --	Queue Invoice data queue	Device pool Invoice Pool	Name Prompt.18.05.14.11.33.18.mike.lee	Description --

RUN DETAILS		
Number of active work items 8	Number of failed work items 0	Number of completed work items 0
Number of pending work items 2		

GENERAL DETAILS		
Last modified 11:33:33 IST 2018-05-14	Modified by mike.lee	Object type Run bot with queue

Here, you can choose to **Pause/Resume** or **Stop** the automation.

**Note:** Although this page is accessible from the **Workload** module, the page is launched from **Activity** module. However, you cannot perform the **Pause/Resume** or **Stop** actions directly from the **Activity → In progress** page. For these actions, the **Workload → Queues → View automation** () action is used.

1. Click  **Pause** to pause an active automation. System will pause distributing work items from this queue to available bot runners in the device pool.

Activity > In progress > View activity in progress

### Prompt.18.05.14.11.33.18.mike.lee

 Pause  Stop 

BOT + DEPENDENCIES	QUEUE + DEVICE POOL	NAME + DESCRIPTION
Bot Prompt.atmx	Queue Invoice data queue	Name Prompt.18.05.14.11.33.18.mike.lee
Dependencies --	Device pool Invoice Pool	Description --

#### RUN DETAILS

Number of active work items 8	Number of failed work items 0
Number of pending work items 2	Number of completed work items 0

#### GENERAL DETAILS

Last modified 11:33:33 IST 2018-05-14	Modified by mike.lee	Object type Run bot with queue
---	-------------------------	-----------------------------------

**Note:** Until you resume this automation, any work items with **Ready to Run** status from this queue are not sent for processing.

2. Click  **Resume** to activate the automation. Once resumed, system will start distributing the work items from this queue:

Activity > In progress > View activity in progress

### Prompt.18.05.14.11.33.18.mike.lee

 Resume  Stop 

BOT + DEPENDENCIES	QUEUE + DEVICE POOL	NAME + DESCRIPTION
Bot Prompt.atmx	Queue Invoice data queue	Name Prompt.18.05.14.11.33.18.mike.lee
Dependencies --	Device pool Invoice Pool	Description --

#### RUN DETAILS

Number of active work items 8	Number of failed work items 0
Number of pending work items 2	Number of completed work items 0

#### GENERAL DETAILS

Last modified 12:23:46 IST 2018-05-14	Modified by mike.lee	Object type Run bot with queue
---	-------------------------	-----------------------------------

3. Click  **Stop** to stop the automation. System stops distributing the work items from the queue associated with this automation. You are shown a message for confirmation:

Are you sure you want to stop this automation?

**Cancel**

**Accept**

1. Click **Accept**, to return to the **Queues** page.
2. Click **Cancel**, to return to the **In progress** page.

# Manage Work Items

As a Control Room user with queue management privileges, based on the work item status you can View, Edit, and Delete one or more work items in a Queue of which you are an owner, consumer, and/or participant. For actions allowed on work item based on its status, refer section on [Work item - status and actions allowed](#) given in this article.

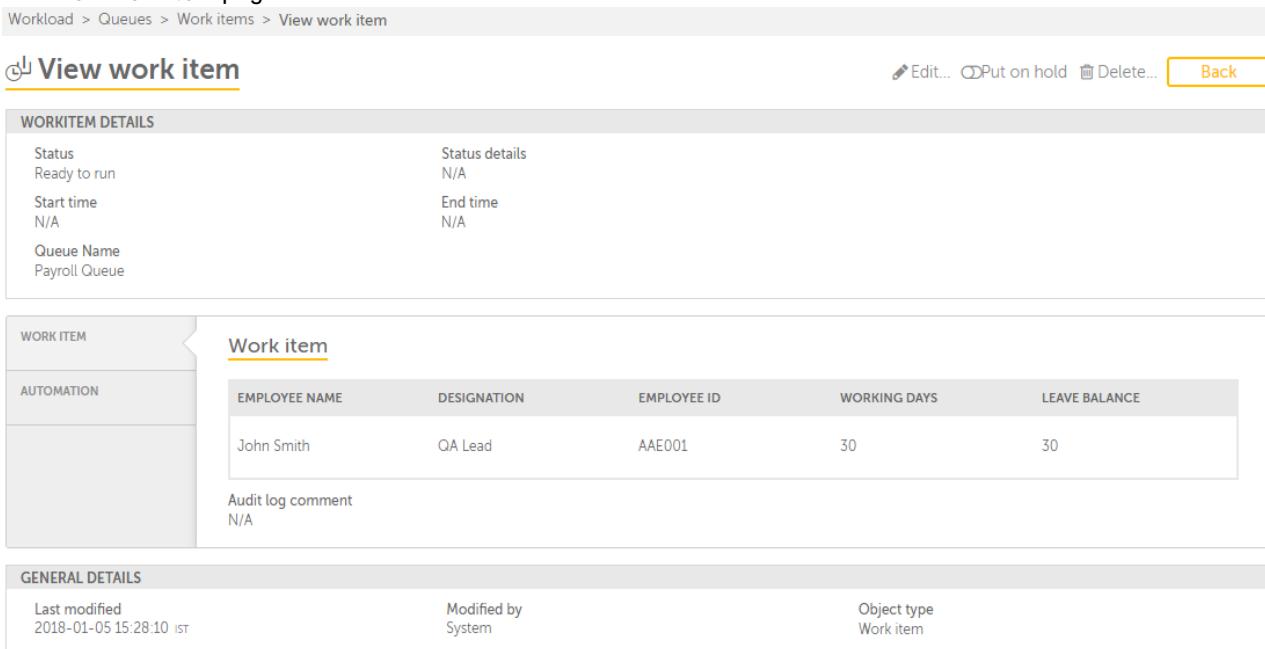
This allows you to fix discrepancies prior to queue processing and reduce your automation related errors and failures.

## View work item

You can view a work item when its status is **Successful**, **Unsuccessful**, **On hold**, **Active**, or **Data Error**.

To view a work item,

1. Go to **Workload → Queues**
2. Select and open the Queue in view or edit mode whose work items you want to view
3. Mouse over the work item that you want to view and click 
4. Click 
5. The **View work item** page is launched:



The screenshot shows the 'View work item' page with the following details:

- WORKITEM DETAILS** section:
 

Status	Ready to run	Status details	N/A
Start time	N/A	End time	N/A
Queue Name	Payroll Queue		
- WORK ITEM** section:
 

WORK ITEM	Work item				
AUTOMATION	EMPLOYEE NAME	DESIGNATION	EMPLOYEE ID	WORKING DAYS	LEAVE BALANCE
	John Smith	QA Lead	AAE001	30	30
	Audit log comment N/A				
- GENERAL DETAILS** section:
 

Last modified 2018-01-05 15:28:10 IST	Modified by System	Object type Work item
--	-----------------------	--------------------------

6. The page provides details of the work item in three sections:

- a. **Work Item Details** such as the **Status**, **Status Details**, **Start Time**, **End Time**, and **Queue Name**

- **Status** - Whether **Successful** or **Unsuccessful** for work items that have Failed, are in Unknown state or Stopped, **Pending** for work items that are Deferred, New or Paused, **Active** for work items that are processed in queue, **Data error** for work items that are being uploaded from the file.
- **Status Details** - **Successful** for work item with status NA, **Unsuccessful** for work items with one or more errors, has **Unknown** status or is Stopped, **Active** for work item with status NA and **Pending** for a work item that is New, Deferred, or Paused, and **Data Error** for work item with one or more errors.
- **Start time and End time** - This is shown when the work item is being processed.
- **Queue Name** - This displays the name of the queue of this work item.

- b. Tabs for **Work Item** and **Automation**

- **Work Item** - Displays the attributes of the selected work item and Audit log comments that were added while editing the work item, if any.
- **Automation** - Displays the name of the automation, Bot name, and the Device pool under which this work item was processed.

WORK ITEM	<u>Automation</u>		
AUTOMATION	Automation name WLM-Payroll-Queue.18.01.05.14.32.16.Jason.Goodman	Bot name WLM-Payroll-Queue.atmx	Device pool name Payroll Pool

- c. **General Details** such as the Last modified date and time, Modified by and Object type.

**Tip:** You can choose to edit any of these details by clicking  **Edit...**. You can also delete the work item by clicking  **Delete...** provided its status is other than **Active**.

## Edit work item

You can edit a work item only if its status is **Unsuccessful**, **on hold**, or **Data error**.

You can edit a work item in one of two ways depending upon where you are in the Workload page:

- If you are on the **Queues** page,
  - a. Mouse over a work item from the list of work items
  - b. Click 
- If you are on the **Work Item** page, click  **Edit...**
- The work item page is launched in edit mode:

Workload > Queues > Work items > Edit work item

**Edit work item**
**Close**
**Save changes**

WORK ITEM	<u>Work item</u> Queue Name Payroll Queue	Start time N/A	End time N/A
AUTOMATION	Audit log comment <small>This is required and will appear in the audit log</small>		
	Status <input checked="" type="radio"/> Data Error <input type="radio"/> Mark completed <input type="radio"/> Defer <input type="radio"/> Re-process		
	Employee Name <input type="text"/>		
	Designation <input type="text"/>		
	Employee ID <input type="text"/>		
	Working Days <input type="text"/>		
	Leave Balance <input type="text"/>		
<b>GENERAL DETAILS</b>			
	Last modified 2018-01-05 15:28:10 IST	Modified by Jason.Goodman	Object type Work item

- The page provides details of the work item in two sections:
  - a. Tabs for Work item attributes and automation details
  - **Work Item** - Displays the Name of the Queue, Start and End time if it is processed, text box for adding comments that will appear in the Audit log, Option to change the work item status to Mark complete, Defer or Re-process, and work item attributes.  
 Note that the system will set the status to **Data Error** during the data load if there is any issue with the data. For example, if user gives a text value for a number field or invalid date string for an attribute of date type, the status will

be displayed Data Error.

- **Automation** - Displays the name of the automation that is deployed by the pool admin, Bot name, and the Device pool on which the Bot will execute if processed or is being processed.
- b. **General Details** such as the Last modified date and time, Modified by and Object type.

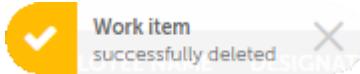
- Click 

### Delete work item

You can delete a work item when only if its status is not **Active**.

To delete a work item,

1. Go to **Workload → Queues**
2. Select and open the Queue in view or edit mode whose work items you want to delete
3. Mouse over the work item that you want to view and click 
4. Click 
5. The selected work item is deleted and you are shown:



**Note:** You can also delete a work item one at a time or **in bulk** by using the delete option above the table. Refer [View queue](#) for details.

### Work item - status and actions allowed

The following table provides description of each status and action allowed for that status:

Work Item Status	Description	Actions Allowed
Active	Work item is currently being processed	View
Successful	Work item successfully processed by a Bot Runner	View and Delete
Unsuccessful	Work item processing failed on Bot Runner	View, Edit, and Delete
Ready to run	Work item is successfully processed for execution	View, Edit, and Delete
On hold	Work item is deferred for use by the Queue admin	View, Edit, and Delete
Data Error	Error in loading data from the file	View, Edit, and Delete
Paused	Work item processing was paused by the Queue admin	View, Edit, and Delete

# Run bot with queue

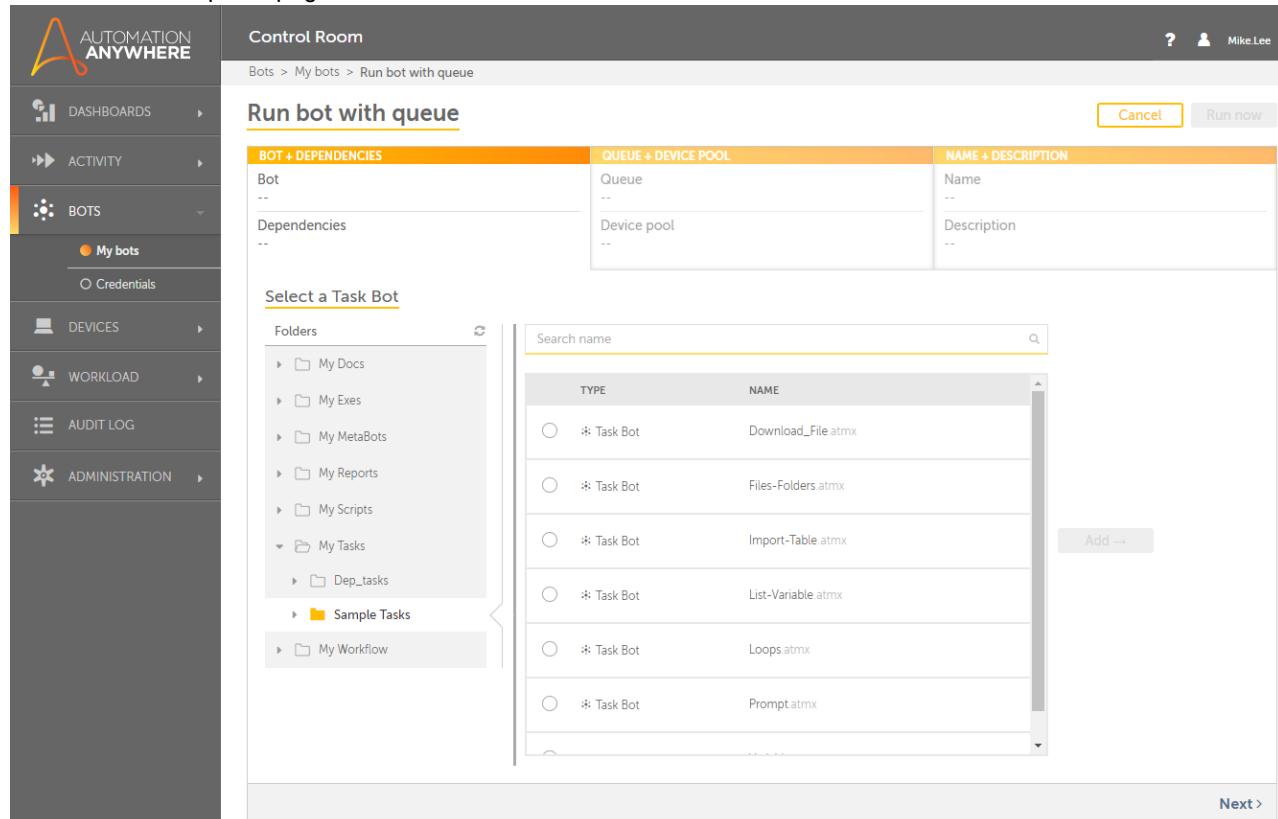
As a Control Room user with **Run my bots** or **Schedule my bots to run** privilege, you can choose to run a TaskBot with the work items present in queues. These work items will be collectively processed across all the Bot Runners present in one or more device pools.

You can **Run a bot with queue** from the **Activity → Scheduled Bots → My Bots**, and **Workload → Queues** page. The procedure for running a bot with queue is the same in all these pages,

Here, you will choose the bot, queue and device pool(s).

To run a bot with queue:

1. Go to **Activity → Scheduled Bots → My Bots** or **Workload → Queues** page
2. Click  **Run bot with queue...**
3. The Run bot with queue page is shown:



BOT + DEPENDENCIES		QUEUE + DEVICE POOL	NAME + DESCRIPTION
Bot	Queue	Name	
--	--	--	
Dependencies	Device pool	Description	
--	--	--	

**Select a Task Bot**

Folders		Search name	
Type	Name		
Task Bot	Download_File.atmx		
Task Bot	Files-Folders.atmx		
Task Bot	Import-Table.atmx		
Task Bot	List-Variable.atmx		
Task Bot	Loops.atmx		
Task Bot	Prompt.atmx		

**Note:** Even if you select the run bot with queue option from **Activity → Scheduled** or **Workload → Queues** page, you are navigated to **Bots → My bots** page. If version control is enabled, you can choose either the latest version or the production version of the Bots as shown:

## Run bot with queue

[Close](#)
[Run now](#)

BOT + DEPENDENCIES	QUEUE + DEVICE POOL	NAME + DESCRIPTION
Bot --  Dependencies --	Queue --  Device pool --	Name --  Description --

Production version  
 Latest version

Choose whether you want us to automatically use the Production or latest version of the bot and supporting files. If you choose "Production version", bots and supporting files without a production version will be disabled.

Select a Task Bot

Folders

- ▶ [My Docs](#)
- ▶ [My Exes](#)
- ▶ [My MetaBots](#)
- ▶ [My Reports](#)
- ▶ [My Scripts](#)
- ▼ [My Tasks](#)

Search name

TYPE	NAME	LATEST VERSION	PRO
	Task Bot Variables.atmx	13	--

Add →

4. You must select a Task Bot to process in the queue. By default, the **My Tasks** folder is selected. Navigate to the folder which contains the required Tasks.
5. Select the Task Bot and click **Add →**

6. The following illustration shows **Download\_File.atmx** selected from **Sample Tasks** folder.

### Run bot with queue

[Cancel](#)
[Run now](#)

BOT + DEPENDENCIES	QUEUE + DEVICE POOL	NAME + DESCRIPTION
Bot <b>Download_File</b> Dependencies Variables.atmx	Queue --  Device pool --	Name <b>Download_File.17.11.21.14.25.28.Mike.Lee</b> Description --

**Select a Task Bot**

Folders

- ▶ **My Docs**
- ▶ **My Exes**
- ▶ **My MetaBots**
- ▶ **My Reports**
- ▶ **My Scripts**
- ▶ **My Tasks**
  - ▶ **Dep\_tasks**
  - Sample Tasks**
- ▶ **My Workflow**
- ▶ **My Workflow**

Search name

TYPE	NAME
<input type="radio"/>	Task Bot Files-Folders.atmx
<input type="radio"/>	Task Bot Import-Table.atmx
<input type="radio"/>	Task Bot List-Variable.atmx
<input type="radio"/>	Task Bot Loops.atmx
<input type="radio"/>	Task Bot Prompt.atmx
<input type="radio"/>	Task Bot Variables.atmx

[Replace →](#)

**Review dependencies for Download\_File**

- ▼ **Automation Anywhere\My Tasks\Sample Tasks\Download\_File.atmx**
- ▼ **Automation Anywhere\My Tasks\Sample Tasks\Variables.atmx**

[Next >](#)

**Tip:** Use Search to find the required file quickly.

- If the task has any dependent files, they are shown in the **Bot + Dependencies** tab above the file selection.
- You can review the list of dependent files at the bottom of the page, if available.
- You can also opt to replace the bot with another by clicking **Replace →**

Search name

TYPE	NAME
<input checked="" type="radio"/>	Task Bot Files-Folders.atmx
<input type="radio"/>	Task Bot Import-Table.atmx
<input type="radio"/>	Task Bot List-Variable.atmx

[Replace →](#)

  
**Download\_File**

7. Click **Next** to select appropriate queue and device pool.

8. You must select a queue and device pool that will be used to run the selected bot. Only the queues that are not in use are available for selection and for which you have consumer access privileges. The In use queues are shown disabled.

**Control Room**

Bots > My bots > Run bot with queue

**Run bot with queue**

**BOT + DEPENDENCIES**

Bot Download_File	QUEUE + DEVICE POOL	NAME + DESCRIPTION
Dependencies Variables.atmx	Queue -- Device pool --	Name Download_File.17.11.21.14.25.28.Mike.Lee Description --

**Queue**

Select a queue

Queue name ▾ Search queue name

Available queues (1 of 1)

STATUS	QUEUE NAME	MY ACCESS	AUTOMATION N...	AUTOMATION ST...	BOT NAME	DEVICE POOL
	Not in use Payroll Automation	--	N/A	N/A	N/A	N/A

**Add →**

**Device pool**

Select a device pool

Device pool name ▾ Search device pool name

Available device pools (1 of 1)

STATUS	DEVICE POOL ...	MY ACCESS	DETAILED STATUS	# OF AUTOMATIO...	# OF DEVICES	OWNERS
	Connected Payroll Automations	All connected	0	1	Amy.Chen and 1 more	

**Add →**

< Back Next >

**Tip:** Use **Search** to quickly find the required queue and device pool.

9. To select a **Queue** from the list of **Available queues**, click **Add →**

**Note:** If the Queue is In use, it will not be available for selection.

10. To select a **Device Pool** from the list of **Available device pools**, click **Add →**.

11. The queue and device pool are added to the run bot with queue list.

### Queue

Select a queue

Queue name ▾ Search queue name

Available queues (0 of 1)

STATUS	QUEUE NAME	MY ACCESS	AUTOMATION NA...	AUTOMATION ST...	BOT NAME	DEVICE POOL

**← Remove**



Payroll Automati...

### Device pool

Select a device pool

Device pool name ▾ Search device pool name

Available device pools (0 of 1)

STATUS	DEVICE POOL ...	MY ACCESS	DETAILED STATUS	# OF AUTOMATIONS	# OF DEVICES	OWNERS

**← Remove**



Payroll Automati...

**← Remove**

**Tip:** You can click **← Remove** if you want to replace the queue and/or device.

12. Click **Next** to provide Name and Description.

13. In the Name + Description tab, the **Name** field shows the **filename+date+time+username** as the default name. This is automatically generated and can be changed per requirement.

14. Optionally add the description. This could describe the purpose of running the bot with a queue.

15. Click **Run now** to run the bot with queue. The status of the queue changes to **In use** in the list of **Queues**:

Workload > Queues

### Queues

Status ▾ Choose status

Queues (3 of 3)

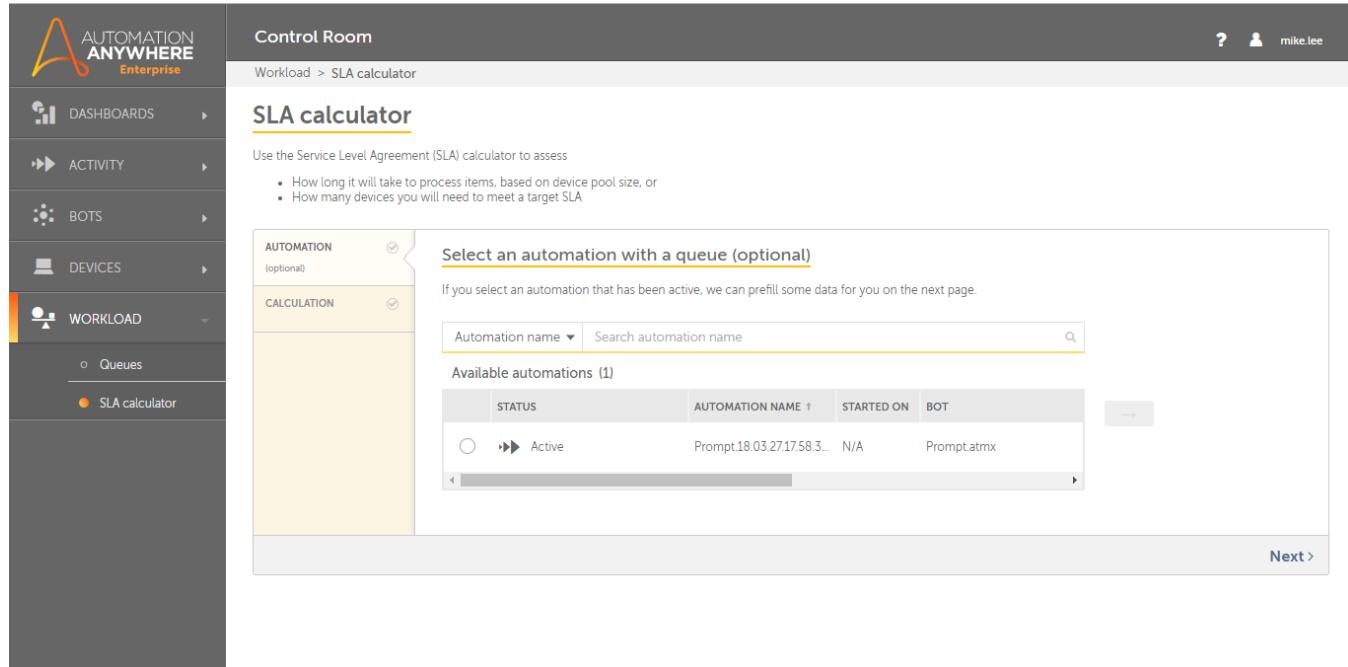
STATUS	QUEUE NAME	MY ACCESS	AUTOMATION NAME	AUTOMATION ST...	BOT NAME	DEVICE POOL
<input type="checkbox"/> Draft	Payroll	--	N/A	N/A	N/A	N/A
<input checked="" type="checkbox"/> In use	Payroll Automation	Queue owner	Download_File.17.11.21.16.37.13.Mike.Lee	Active	Download_File.atmx	Payroll Automations
<input type="checkbox"/> Not in use	Payroll-Employee-Details	--	N/A	N/A	N/A	N/A

**Note:** This queue will not be available for any other automation. This means that only one queue can be used by one bot.

# Workload - SLA calculator

As a Control Room admin or a user with SLA Calculator privilege, you can access the **Service Level Agreement (SLA) calculator** page. It allows you to estimate device pool size or time required to process a given queue size. You can use this information while orchestrating work load management to meet your organizations' target SLA.

The **Workload - SLA calculator** page is illustrated below:

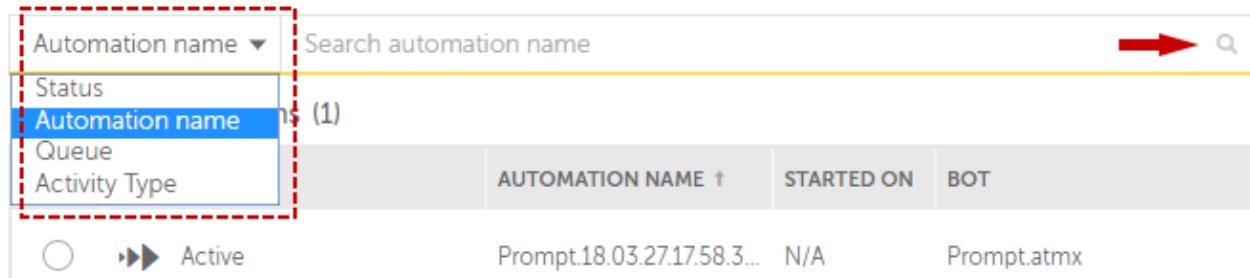


The screenshot shows the SLA calculator page within the Control Room. The left sidebar includes links for Dashboards, Activity, Bots, Devices, Workload (Queues and SLA calculator), and Help. The main content area has a header "Control Room" and "Workload > SLA calculator". Below this is a section titled "SLA calculator" with the sub-instruction: "Use the Service Level Agreement (SLA) calculator to assess". It lists two bullet points: "How long it will take to process items, based on device pool size, or" and "How many devices you will need to meet a target SLA". A callout box highlights the "Select an automation with a queue (optional)" section. This section contains a search bar for "Automation name" and a table titled "Available automations (1)". The table columns are STATUS, AUTOMATION NAME, STARTED ON, and BOT. One row is shown: "Active", "Prompt.18.03.27.17.58.3...", "N/A", "Prompt.atmx". A "Next >" button is at the bottom right of this section.

 Note: You can see only those automations with queues for which you are either the owner /participant /consumer. However, the **Queue Admin** can see all the queues in the system.

For ease of access, you can apply search parameters to Status, Automation, Queue, and Activity Type columns.

- You can use specify the search parameters in the search bar for Automation:



This screenshot shows a dropdown menu for "Automation name" with options: Status, Automation name (1), Queue, and Activity Type. The "Automation name" option is highlighted and selected. To the right is a search bar labeled "Search automation name" with a magnifying glass icon and a red arrow pointing to it. Below the search bar is a table with columns: AUTOMATION NAME ↑, STARTED ON, and BOT. The table shows one row: "Prompt.18.03.27.17.58.3..." under AUTOMATION NAME, "N/A" under STARTED ON, and "Prompt.atmx" under BOT. The status is indicated by a circle icon followed by an arrow icon and the word "Active".

When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

The following describes the list of items that can be viewed in the table:

Table Item	Description
Status	<p>Shows automation status:</p> <ul style="list-style-type: none"> <li><b>Active</b> when work item is currently being processed</li> <li><b>Paused</b> when work item processing was paused by the Queue admin</li> <li>Active with error when work item is currently being processed. However, there are some errors while processing.</li> </ul>

Automation Name	Shows name of the Automation
Started On	Shows the time and date when the automation was started
Bot	Shows name of the Bot that is selected for automation
Queue	Shows name of the Queue selected for this automation.
Device Pool	Shows name of the Device Pool that is used for the automation of this queue.
Activity Type	Shows type of activity performed on this automation - Run bot with queue



**Tip:** You can perform the following actions on a table column:

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

## Select Automation

To arrive at the targeted SLA, you can choose to select an automation that is active. You can also directly fill in the parameters for calculation if you do not have an existing automation.

If specified the data from this is used to calculate the SLA in next tab - **Calculation**.

To add automation data,

1. Select an automation from the list:

Select an automation with a queue (optional)

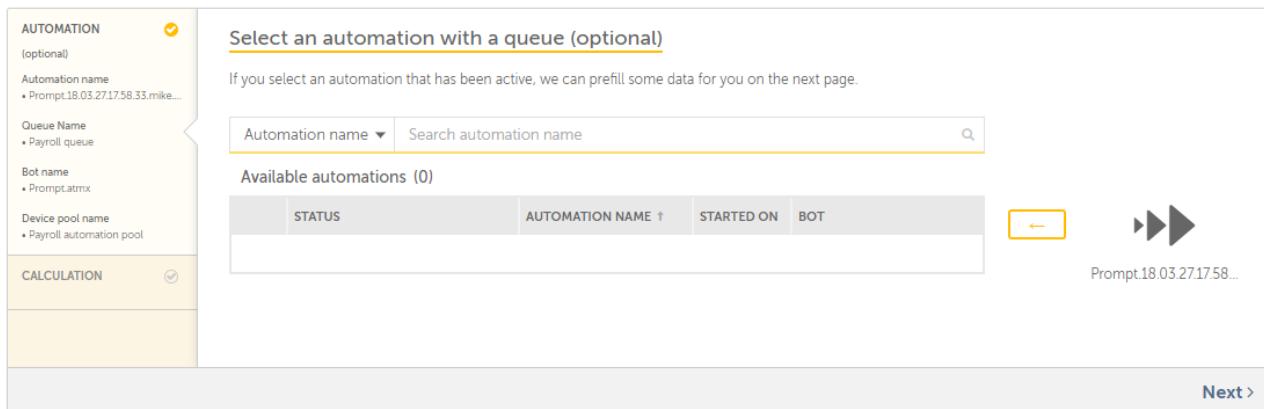
If you select an automation that has been active, we can prefill some data for you on the next page.

STATUS	AUTOMATION NAME ↑	STARTED ON	BOT
Active	Prompt.18.03.27.17.58.3...	N/A	Prompt.atmx

Next >

2. Click

3. The automation is selected for SLA calculation



Select an automation with a queue (optional)

If you select an automation that has been active, we can prefill some data for you on the next page.

Automation name ▾ Search automation name

Available automations (0)

STATUS	AUTOMATION NAME ↑	STARTED ON	BOT

Prompt.18.03.27.17.58...

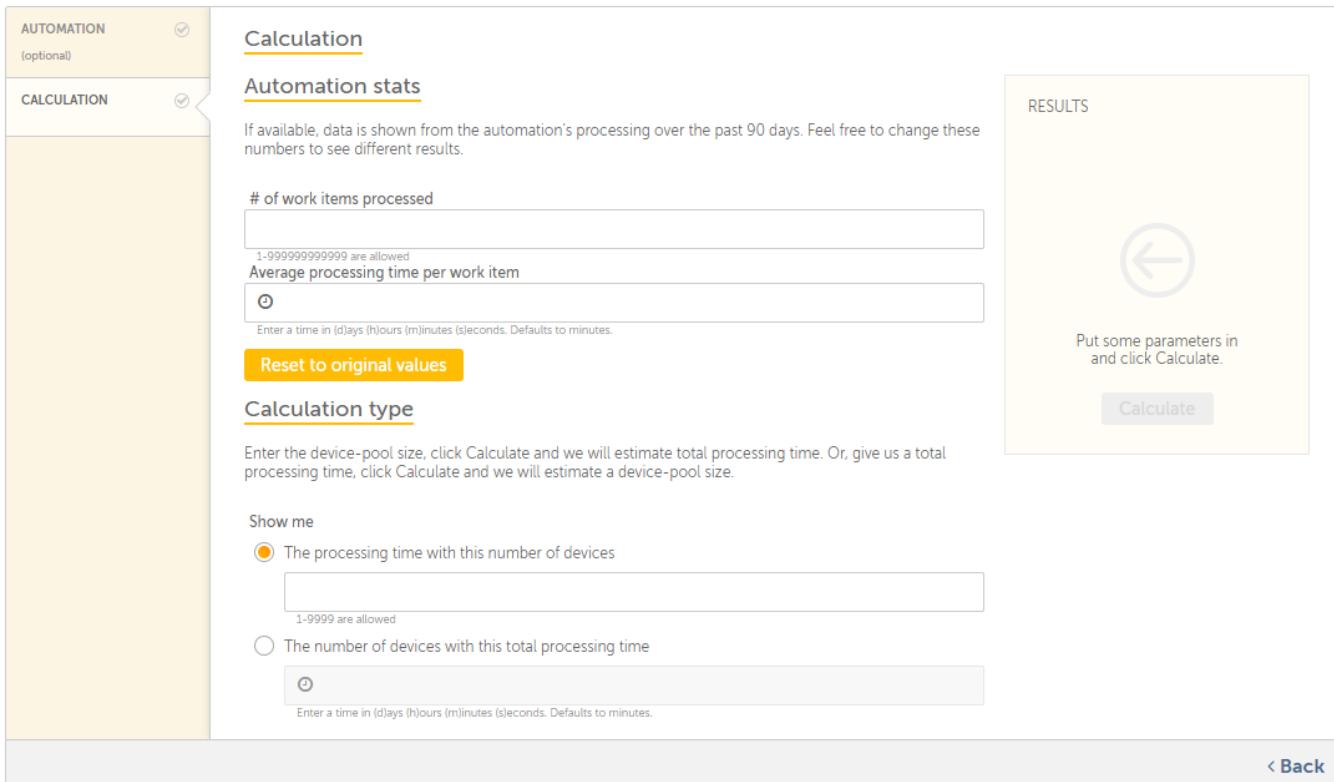
Next >

4. Click **Next >**

5. The **Calculation** tab is launched

### Calculation

If you have selected an existing automation, system populates the the number of work items processed and average processing time of a work item for that automation.



**Calculation**

**Automation stats**

If available, data is shown from the automation's processing over the past 90 days. Feel free to change these numbers to see different results.

# of work items processed

1-999999999999 are allowed

Average processing time per work item

0 minutes

Enter a time in (d)ays (h)ours (m)inutes (s)econds. Defaults to minutes.

Reset to original values

**Calculation type**

Enter the device-pool size, click Calculate and we will estimate total processing time. Or, give us a total processing time, click Calculate and we will estimate a device-pool size.

Show me

The processing time with this number of devices

1-9999 are allowed

The number of devices with this total processing time

Enter a time in (d)ays (h)ours (m)inutes (s)econds. Defaults to minutes.

RESULTS

Put some parameters in and click Calculate.

Calculate

< Back

Specify,

- Number of work items processed. You can add up to 999999999999 (ninety-nine billion, nine hundred ninety-nine million, nine hundred ninety-nine thousand, nine hundred ninety-nine) work items. For example, 67890
- Average processing time per work item. You can add the time in days, hours, minutes, and seconds. For example, 2000s or 33 minutes and 20 seconds
- If you want to calculate the time it takes to process the number of work items specified with the given average processing time of each work item, enter the number of devices in your device pool in **The processing time with this number of devices** text box. For example, the number of devices for processing time is 120.

4. Click **Calculate**

5. The system shows the result based on specified parameters:

**AUTOMATION**  
(optional)

**CALCULATION**

### Calculation

**Automation stats**

If available, data is shown from the automation's processing over the past 90 days. Feel free to change these numbers to see different results.

# of work items processed	10000
1-99999999999 are allowed	
Average processing time per work item	10m
Enter a time in (d)ays (h)ours (m)inutes (s)econds. Defaults to minutes.	

**Reset to original values**

**Calculation type**

Enter the device-pool size, click Calculate and we will estimate total processing time. Or, give us a total processing time, click Calculate and we will estimate a device-pool size.

Show me

The processing time with this number of devices

200
1-9999 are allowed

The number of devices with this total processing time

8 hours, and 20 minutes
Enter a time in (d)ays (h)ours (m)inutes (s)econds. Defaults to minutes.

**RESULTS**

To meet your SLA of processing 10000 items, at 10 minutes per item with 200 devices, you will need.

**8 hours, and 20 minutes**

**Calculate**

[< Back](#)

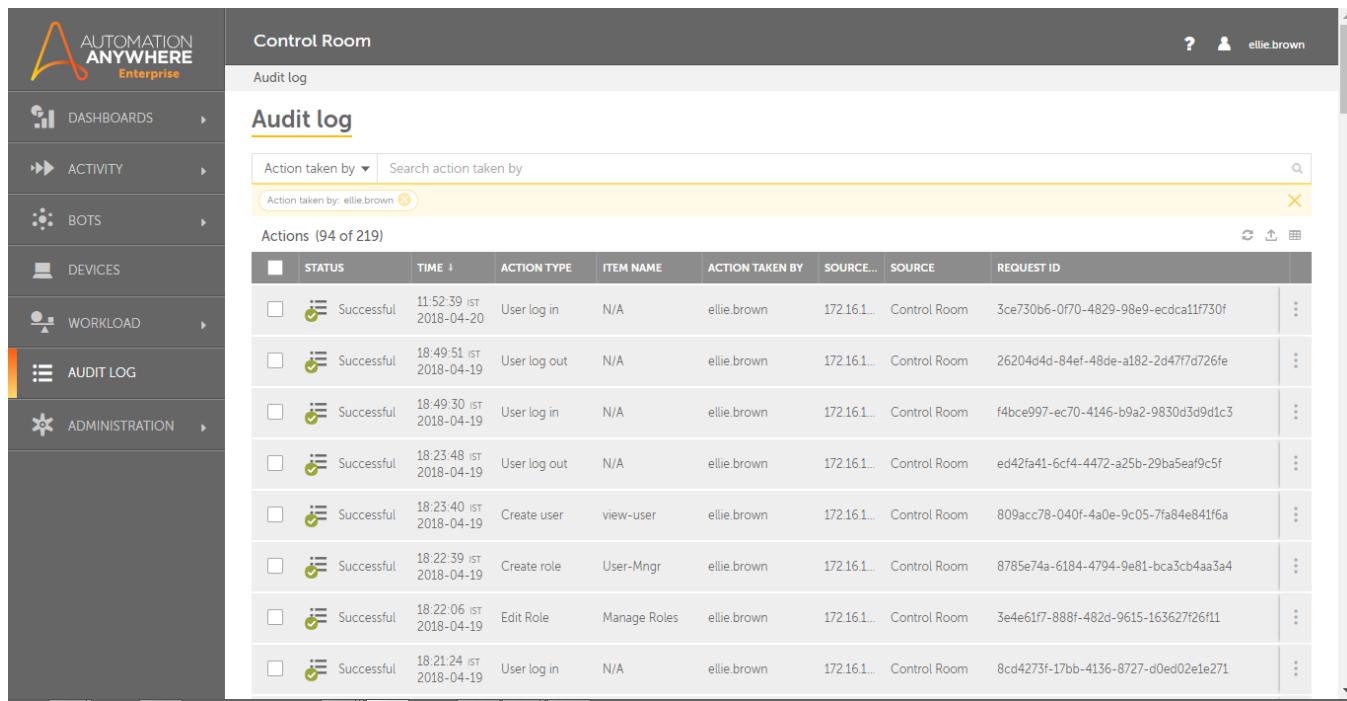
Based on the parameters provided in the example, your SLA will be 8 hours and 20 minutes.

- If you want to calculate the device pool size to meet your business SLA, specify your SLA in **The number of devices with this total processing time** text box
- Click **< Back** to return to the previous tab if required.

# Audit log - overview

**Audit Log** captures and provides read-only records of all the important actions performed by users for Control Room and Client.

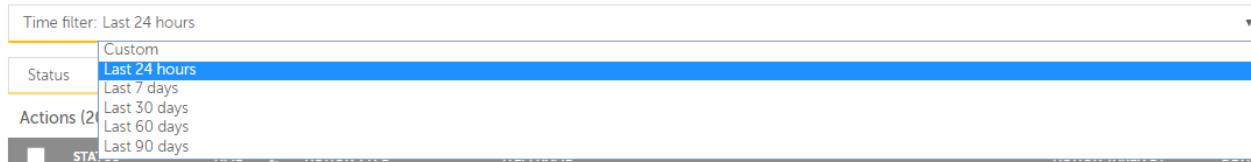
As a Control Room admin or a user with Audit Log privileges, you can view logs and details of various activities performed by Control Room users in **Audit Log** as shown in the following illustration:



	Status	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE...	SOURCE	REQUEST ID
1	Successful	11:52:39 IST 2018-04-20	User log in	N/A	ellie.brown	172.16.1...	Control Room	3ce730b6-0f70-4829-98e9-ecdc11f730f
2	Successful	18:49:51 IST 2018-04-19	User log out	N/A	ellie.brown	172.16.1...	Control Room	26204d4d-84ef-48de-a182-2d47f7d726fe
3	Successful	18:49:30 IST 2018-04-19	User log in	N/A	ellie.brown	172.16.1...	Control Room	f4bce997-ec70-4146-b9a2-9830d5d9d1c3
4	Successful	18:23:48 IST 2018-04-19	User log out	N/A	ellie.brown	172.16.1...	Control Room	ed42fa41-6cf4-4472-a25b-29ba5eaf9c5f
5	Successful	18:23:40 IST 2018-04-19	Create user	view-user	ellie.brown	172.16.1...	Control Room	809acc78-040f-4a0e-9c05-7fa84e841f6a
6	Successful	18:22:39 IST 2018-04-19	Create role	User-Mngr	ellie.brown	172.16.1...	Control Room	8785e74a-6184-4794-9e81-bca3cb4aa3a4
7	Successful	18:22:06 IST 2018-04-19	Edit Role	Manage Roles	ellie.brown	172.16.1...	Control Room	3e4e61f7-888f-482d-9615-163627f26f11
8	Successful	18:21:24 IST 2018-04-19	User log in	N/A	ellie.brown	172.16.1...	Control Room	8cd4273f-17bb-4136-8727-d0ed02e1e271

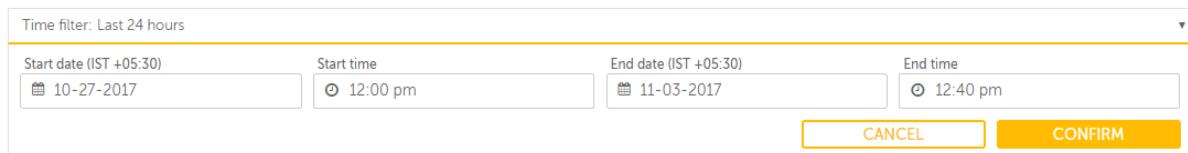
In Audit Log, you can:

- Apply **Time filters** to view activities for specific time period :



**Note:** By default the time filter **Last 24 hours** is selected.

- Also apply **Custom** filters wherein you can specify **Start date** and **time** as well as **End date** and **time**.

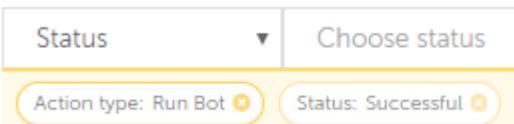


- Apply search filters based on the header types in the table that lists the audit logs.



Item name	Search item name							
Status	Action type	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE...	SOURCE	REQUEST ID
Item name	Action taken by Source device	12:16:18 IST 2018-04-20	Delete bot	Metabot3.mbot	ellie.brown	SSS-LT2...	Client	79a20e63-4fbe-48f6-b628-ba22a154d173

- Your search parameter(s) are displayed below the search bar. For example, the illustration below shows search filters applied on **Action Type = Run Bot** and **Status = Successful**



Status ▾ Choose status

Action type: Run Bot Status: Successful

 **Note:** When you specify search parameters for the same column, the system searches using **OR** operator. When you specify search parameters for different columns, the system searches using **AND** operator.

 **Known Behavior:** When you use special keys "-" or "\_", the system lists all **Item Names**, **Source Devices**, and **Request ID** instead of these columns having these parameters.

- Combine **Time** and **Search** filters to refine your search parameters. For example, you can filter the audit log to search for **Status = Successful** for **Last 7 days**.
- View the following audit details in the table:

Table Item	Description
Status	Shows action status - whether  <b>Successful</b> or  <b>Unsuccessful</b>
Time	Shows the date and time of the action performed. You can sort this data in ascending or descending order
Action Type	Shows the type of action performed. Some action types captured in Audit logs are: <ul style="list-style-type: none"> <li>• Connect Credential Vault</li> <li>• Create / Edit / Delete Role / User</li> <li>• User / Client Login / Logout</li> <li>• Allocate License</li> <li>• Create / Activate / Deactivate Automation</li> <li>• Run / Schedule Bot Stopped / Resumed / Paused / Ended</li> <li>• Unlock bot</li> </ul>
Item Name	Shows the entity on which action was performed. For example, user name, automation name, role name etc.
Action Taken By	Shows the user that performed the action
Device	Shows the device or machine name / IP that was used to perform the action
Source	Shows the component - Control Room, Client or API, from where the action was originated or performed
Request ID	Shows the unique identity number assigned to a specific set of user actions.



**Tip:** You can perform the following actions on a column to help you work efficiently:

- Click a column to sort it in ascending and descending order. You can sort up to three columns by holding the Shift key when you click on two more columns. This gives you the option of sorting two additional columns. This way the sorting is done on the entire table and not just the data that is currently visible to you. The last sorting is stored in memory applied by a user per session.
- Use a drag-and-drop operation to move the column left or right
- Move your mouse cursor at the end of the column and drag to re-size

- View [details of selected audit log](#) using  which is seen once you mouse over the actions icon - 
- Alternatively, select all audit logs and perform the following actions:

Table Item	Description
 Refresh	Allows you to refresh the table contents so that you can view the latest audit logs
 Export to checked item to.csv	Allows you to export the data to a csv file. You can export data based on: <ul style="list-style-type: none"> <li>• Month</li> <li>• Filters</li> <li>• Selection</li> </ul>
 Show / Hide columns	Allows you to show or hide specific columns. By default, all columns are displayed: <div style="text-align: center; margin-top: 10px;"> <p><b>Show/hide columns</b></p> <p>SHOWN COLUMNS (8 OF 8)</p> <ul style="list-style-type: none"> <li>- STATUS</li> <li>- TIME</li> <li>- ACTION TYPE</li> <li>- ITEM NAME</li> <li>- ACTION TAKEN BY</li> <li>- SOURCE DEVICE</li> <li>- SOURCE</li> <li>- REQUEST ID</li> </ul> <p>HIDDEN COLUMNS (0 OF 8)</p> </div> <p><b>Tip:</b> To <b>hide</b> a column, click on the column name.</p>

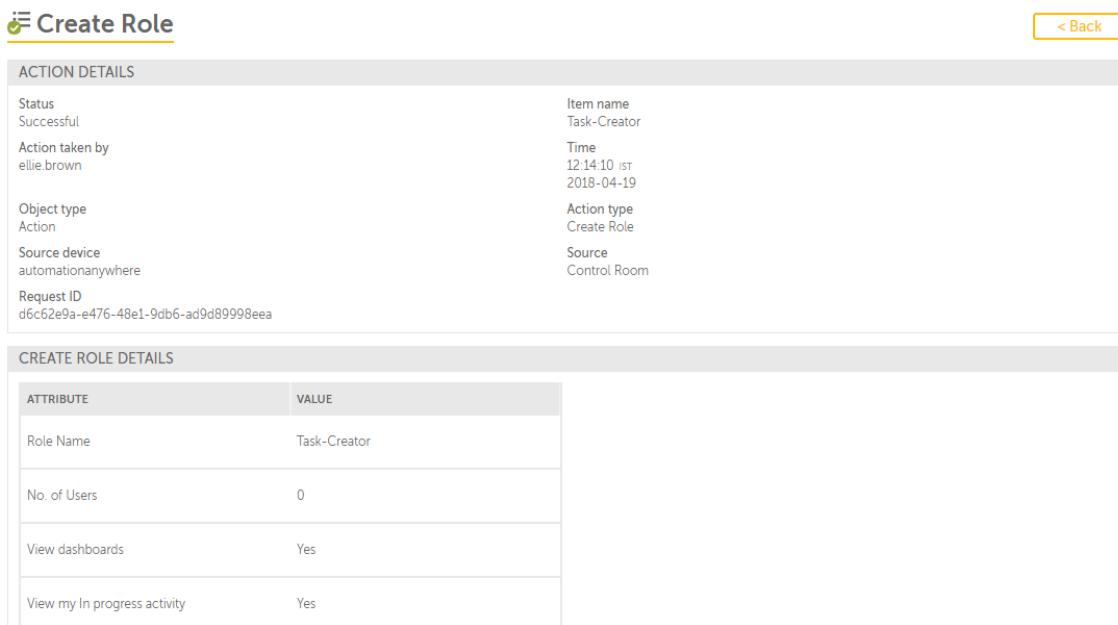
## View audit details

As a Control Room admin or a user with Audit Log privileges, you can select an activity from the Audit Logs to view its details. Viewing details of an action ensures that you can track all the changes that are being made in Control Room as well as Client.

To view Audit details,

1. Go to **Audit Log** page
2. Mouse over actions icon -  in the audit entry for which you want to view details
3. Click 
4. The Audit Log details page is launched. The following illustration shows the details of successful modification of User details:

[Audit log > View action](#)



**ACTION DETAILS**

Status	Successful	Item name	Task-Creator
Action taken by	ellie.brown	Time	12:14:10 IST 2018-04-19
Object type	Action	Action type	Create Role
Source device	automationanywhere	Source	Control Room
Request ID	d6c62e9a-e476-48e1-9db6-ad9d89998eea		

**CREATE ROLE DETAILS**

ATTRIBUTE	VALUE
Role Name	Task-Creator
No. of Users	0
View dashboards	Yes
View my In progress activity	Yes

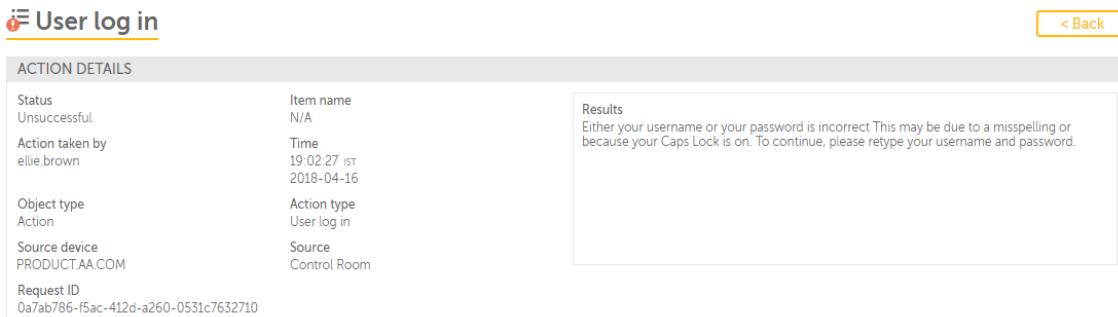
- An audit details page is divided in two sections:

Details of the action performed

Details of action type that comprises **Attribute** and **Values** of the action performed.

- Action details** - This forms the upper half of the Audit details page and shows all details that are shown on the landing page. Note that for an unsuccessful action, the error is also shown in this section. The illustration shows an unsuccessful attempt at login:

[Audit log > View action](#)



**ACTION DETAILS**

Status	Unsuccessful	Item name	N/A
Action taken by	ellie.brown	Time	19:02:27 IST 2018-04-16
Object type	Action	Action type	User log in
Source device	PRODUCT.AA.COM	Source	Control Room
Request ID	0a7ab786-f5ac-412d-a260-0531c7632710		

**Results**

Either your username or your password is incorrect. This may be due to a misspelling or because your Caps Lock is on. To continue, please retype your username and password.

- Action type details** - This section, which forms the bottom half will show the details of the **Action** performed. You can view details of the type of action performed. You can see **What Changed?** in the **New Value** from the **Old Value**. You can see only those fields that were updated. Also, the information that is stored in the **Credential Vault** is shown (Encrypted). Based on our illustration of **Edit User** details, you compare the old and new values and understand what changes were made.

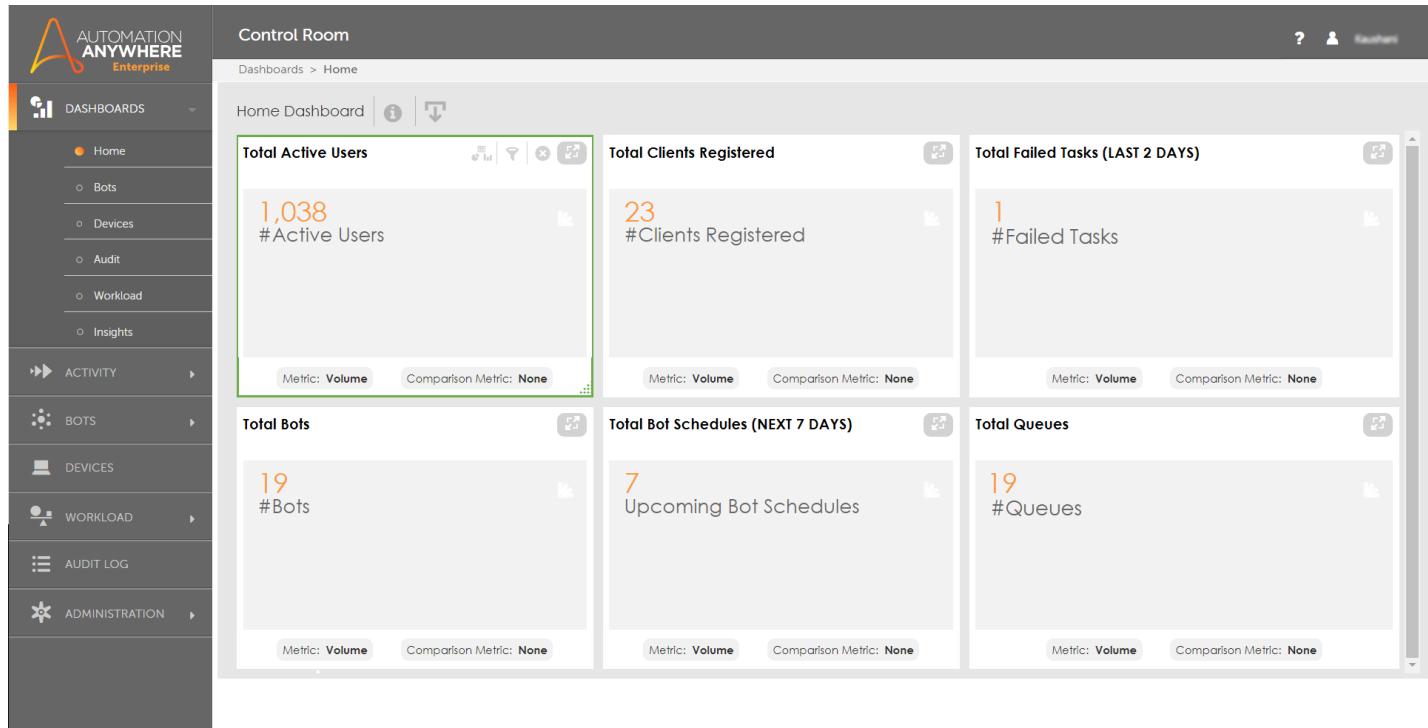
## Dashboards overview

Control Room Dashboard provides exclusive graphical insight so that you can make informed decisions for your Bots. It represents your RPA infrastructure in the form of meaningful visuals and charts so that you can analyze it, interpret it, and take action on updates important to you. It dynamically updates information related to active users, registered clients, failed tasks, apps, bots, bot schedules, workflows, queues, and the overall status of devices - their memory, CPU, and HDD utilization.

The primary purpose is to help you take business decisions, and take corrective actions to fix any errors instead of going to each module and page of Control Room. For example, using the information provided to you about the disk usage, CPU status or the total number of active users, you can determine at what hour and day is Control Room the most busy or what caused a problem at 1:00 PM on Thursday.

It also has rich features that let you work with your data by using features like filtering, sorting, applying visually appealing colors to charts, and setting the time bar for each widget on the dashboard.

The following figure illustrates the **Dashboards Home** page.



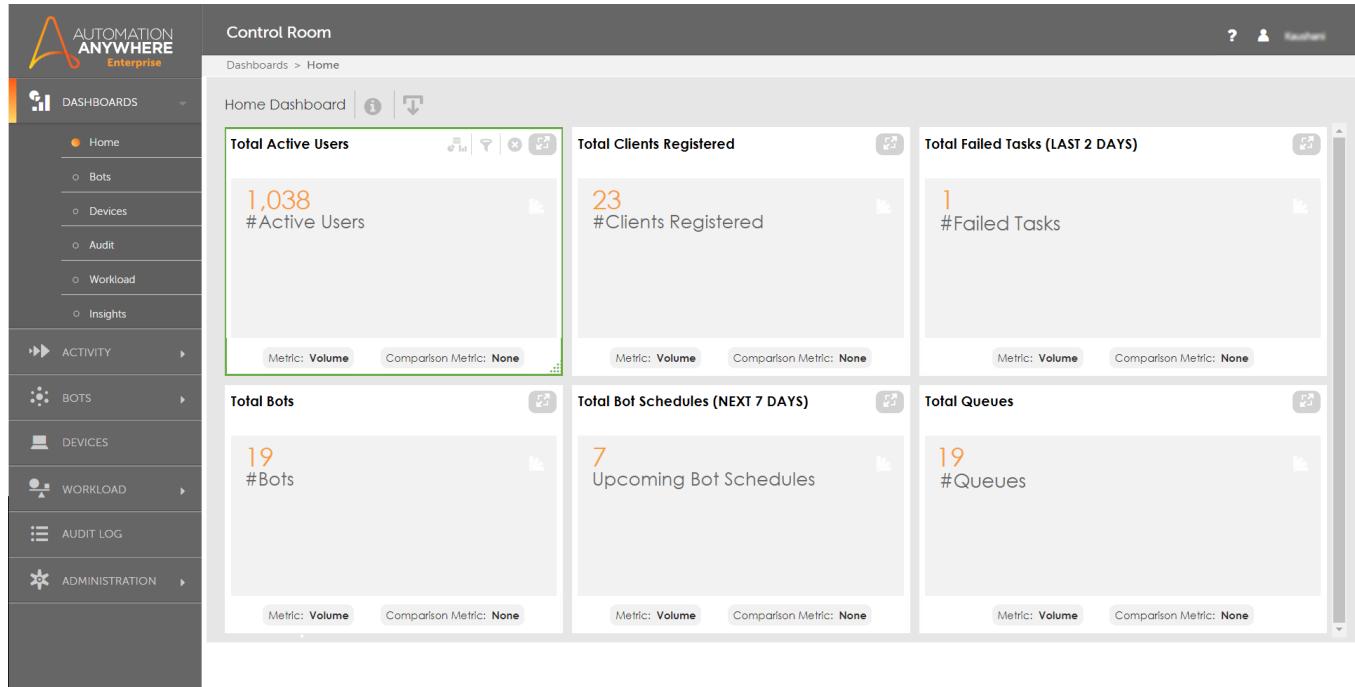
Refer to the following sections to learn more about the different pages of the Dashboards module.

- [Dashboards Home](#)
- [Dashboards Bots](#)
- [Dashboards Devices](#)

## Dashboards-home

As a Control Room user with Dashboard view privileges, you can view data presented in the form of widgets which provide information about the following:

- Number of active users
- Number of registered clients
- Number of failed tasks
- Number of existing Bots
- Number of upcoming Bots that have been scheduled
- Number of queues available



The screenshot shows the 'Control Room' interface with the 'Home' dashboard selected. The left sidebar contains navigation links for DASHBOARDS, ACTIVITY, BOTS, DEVICES, WORKLOAD, AUDIT LOG, and ADMINISTRATION. The main area displays six data widgets:

- Total Active Users:** 1,038 #Active Users (Metric: Volume, Comparison Metric: None)
- Total Clients Registered:** 23 #Clients Registered (Metric: Volume, Comparison Metric: None)
- Total Failed Tasks (LAST 2 DAYS):** 1 #Failed Tasks (Metric: Volume, Comparison Metric: None)
- Total Bots:** 19 #Bots (Metric: Volume, Comparison Metric: None)
- Total Bot Schedules (NEXT 7 DAYS):** 7 Upcoming Bot Schedules (Metric: Volume, Comparison Metric: None)
- Total Queues:** 19 #Queues (Metric: Volume, Comparison Metric: None)

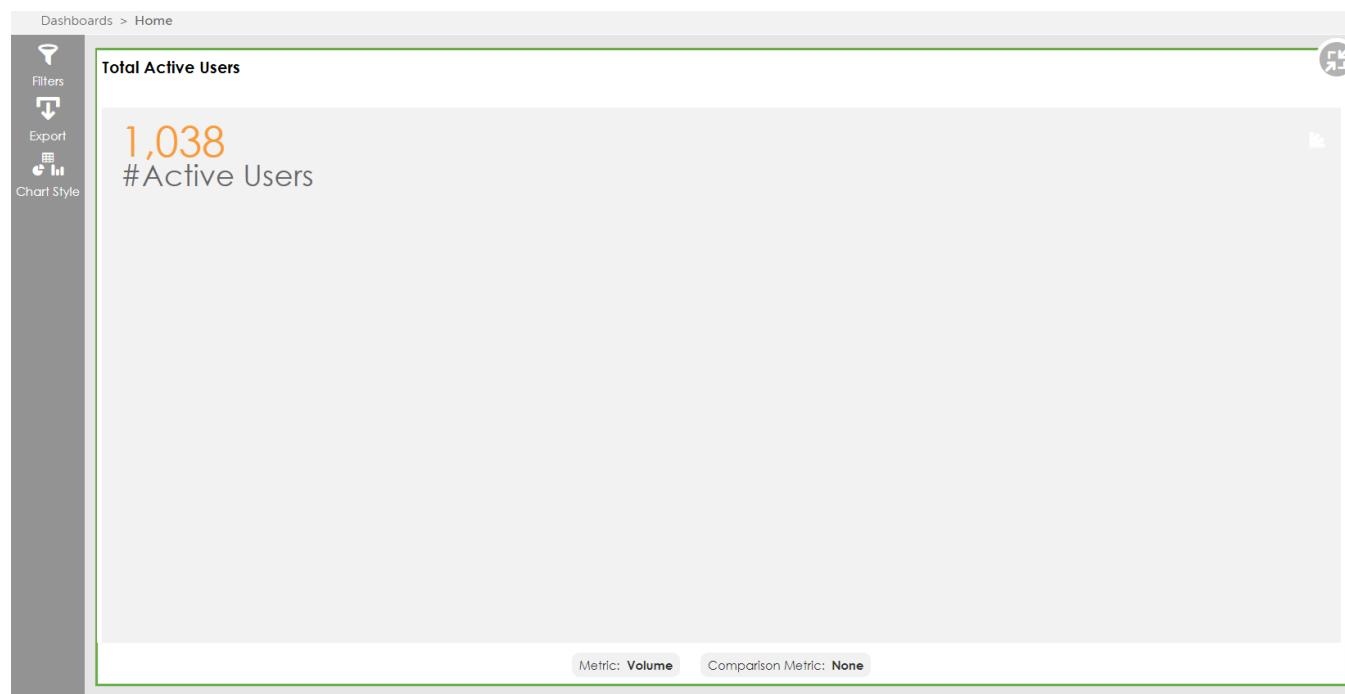
**Tip:** To expand to a detailed view, click the Full Screen icon for a given widget:

Full Screen



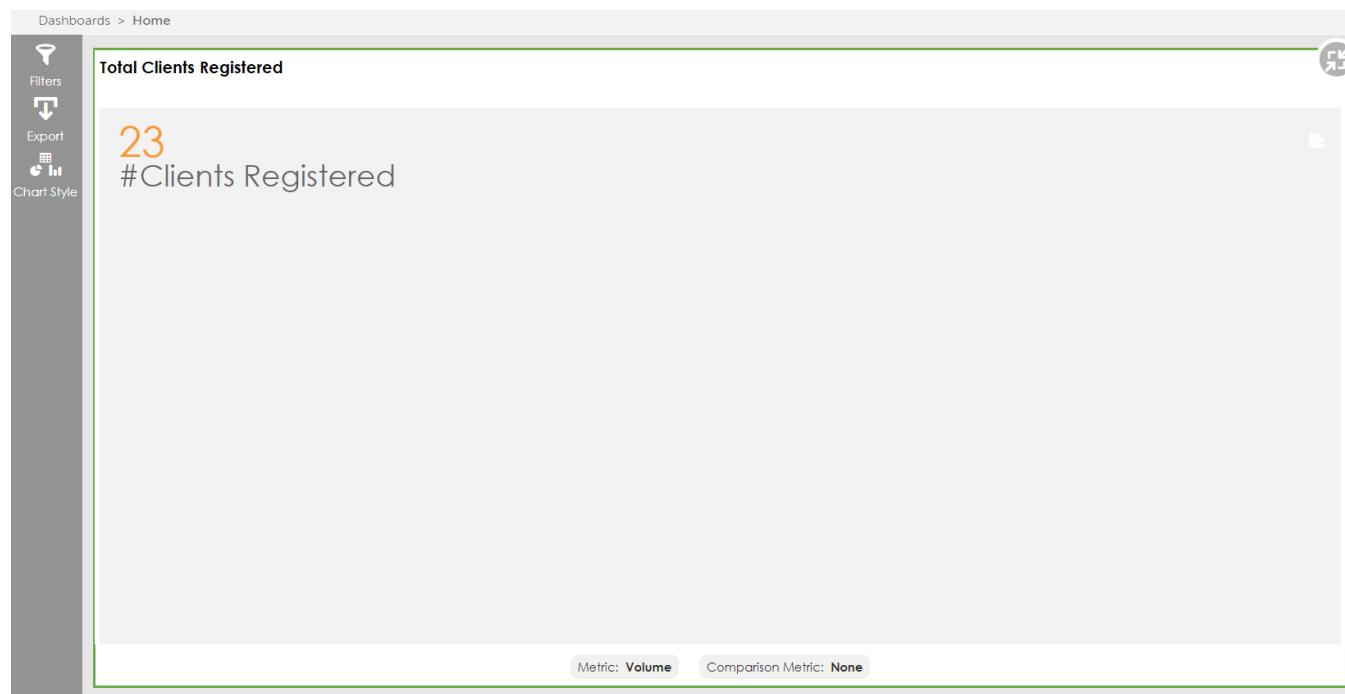
## Total active users widget

This widget displays the total number of active users in Control Room



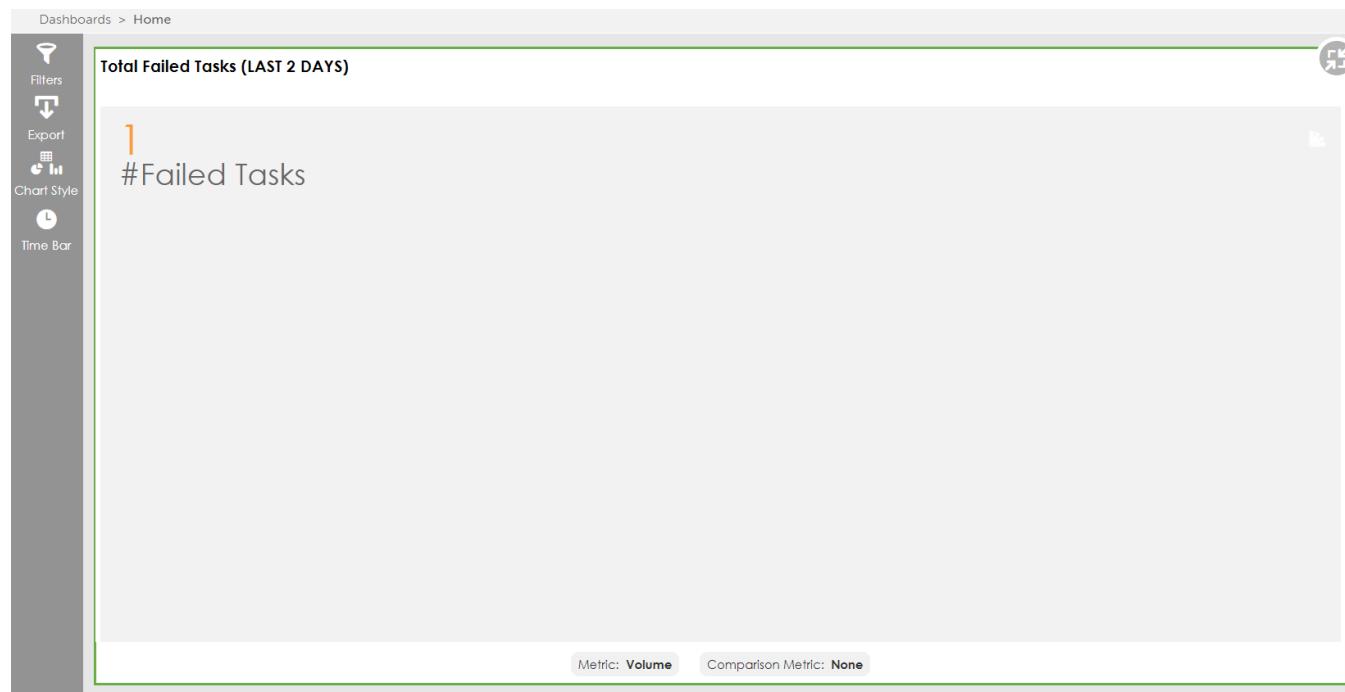
## Total clients registered widget

This widget displays the total number of registered clients connected to Control Room



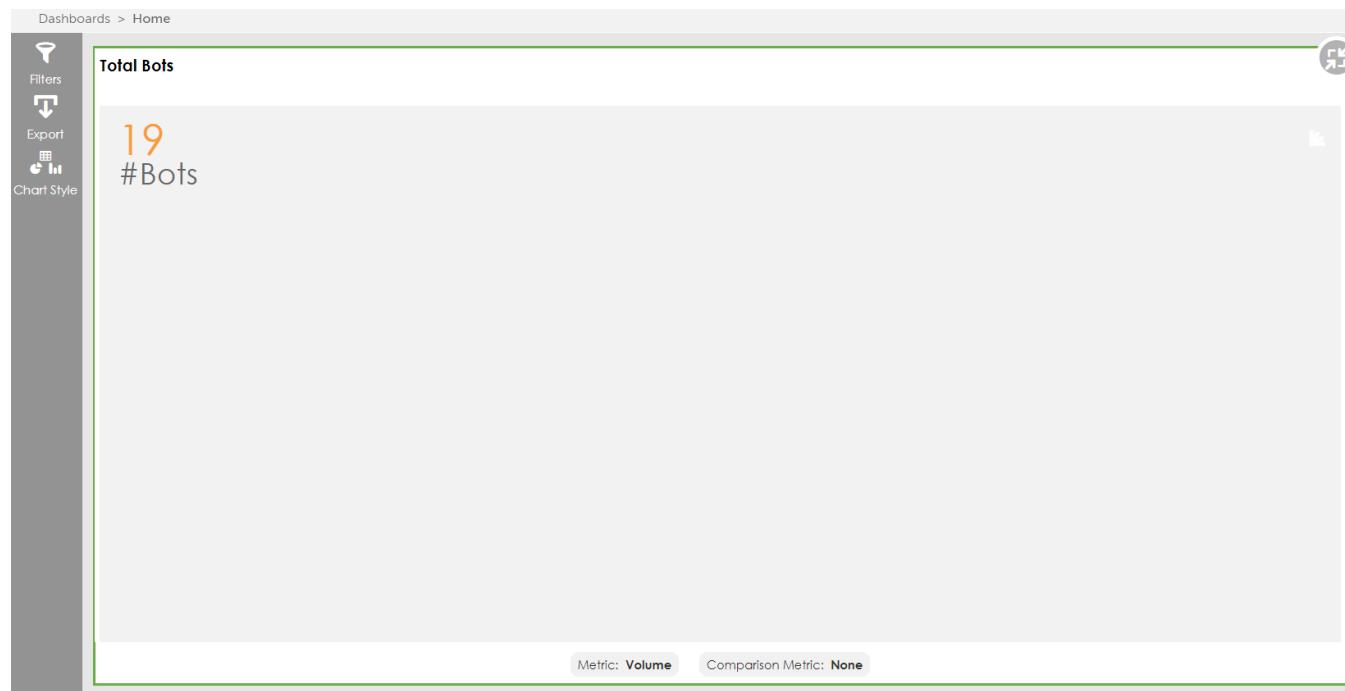
## Total failed tasks widget

This widget displays the total number of task execution failure. **Last 2 days**



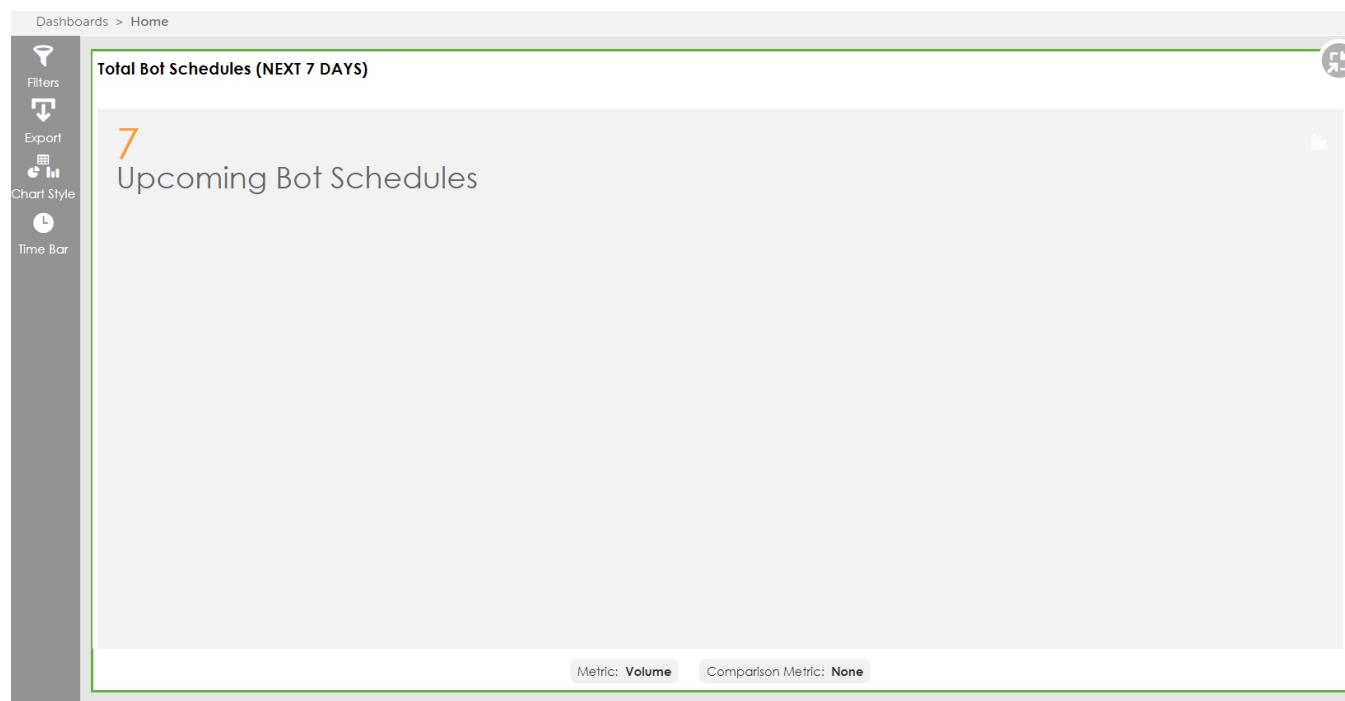
## Total Bots widget

This widget displays the total number of Bots



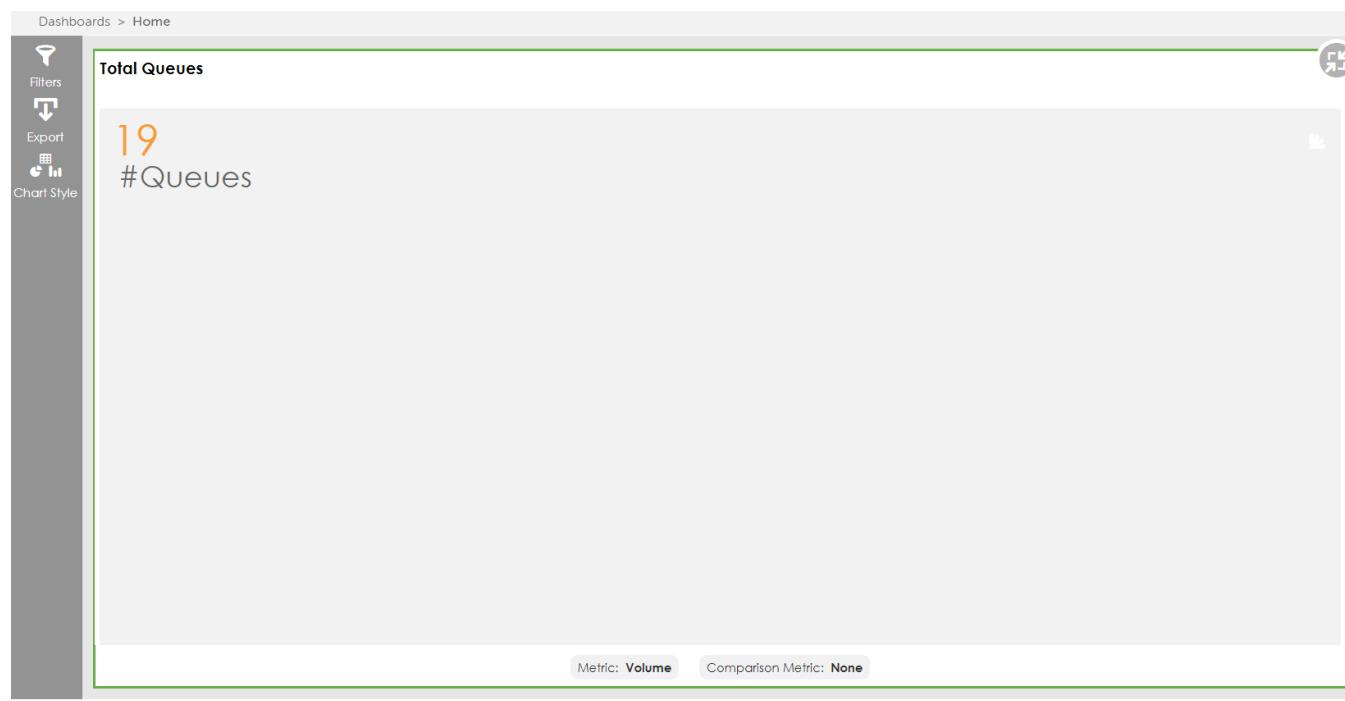
## Total Bot Scheduled widget

This widget displays the total number of Bots that have been scheduled in Control Room. **Next 7 days**



## Total queues

This widget displays the total number of active queues



## Dashboards - Bots

As a user with appropriate permissions, the **Bots** page of the **Dashboards** module provides you with a graphically summarized view of all the deployed bots in Control Room. This dashboard gives you answers to the following questions.

- Which of my bots use the most system resources?
- Which bots are scheduled to run? Which of these bots failed to run?
- What percentage of bots are in progress, paused, unknown, failed, and completed?

### Bot Heartbeat Widget

The Heartbeat widget provides a statistical representation of the relationship between the failure score of a bot and the respective bot. A failure score is a calculation of the resources utilized by the CPU, memory, and hard disk (HDD) when you run a bot. By default, the formula for calculating the failure score is:

- Failure Score =  $0.5*M + 0.3*C + 0.2*H$

where,

- M = Memory usage
- C = CPU usage
- H = HDD usage

Once the failure score is calculated, it is plotted against the respective bot and is displayed in the heartbeat widget. While the failure score is plotted in the Y-axis, the respective bot is plotted in the X-axis.

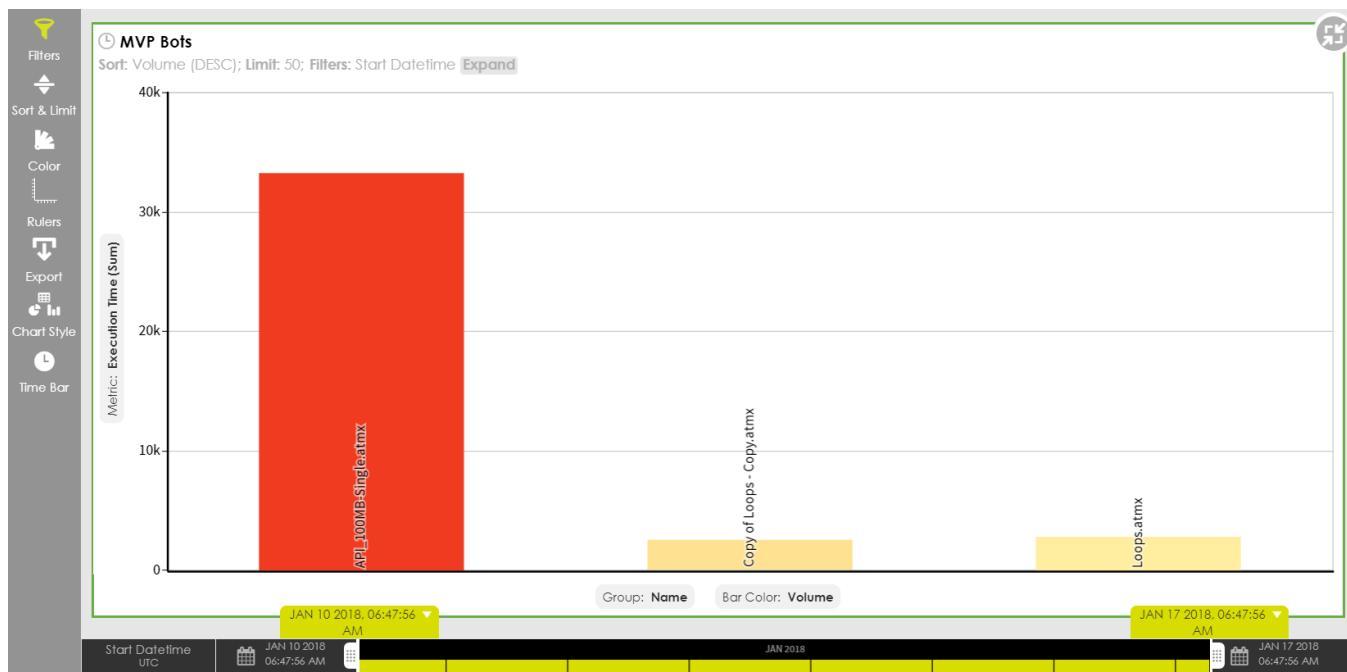
**Tip:** The heartbeat widget also displays the most busy bot (MVP) and is represented with a different color.

Use this widget to identify, which bot is using the most resources and take decisions on whether you need to upgrade your system configuration. A sample figure of the heartbeat widget is displayed in the following figure.

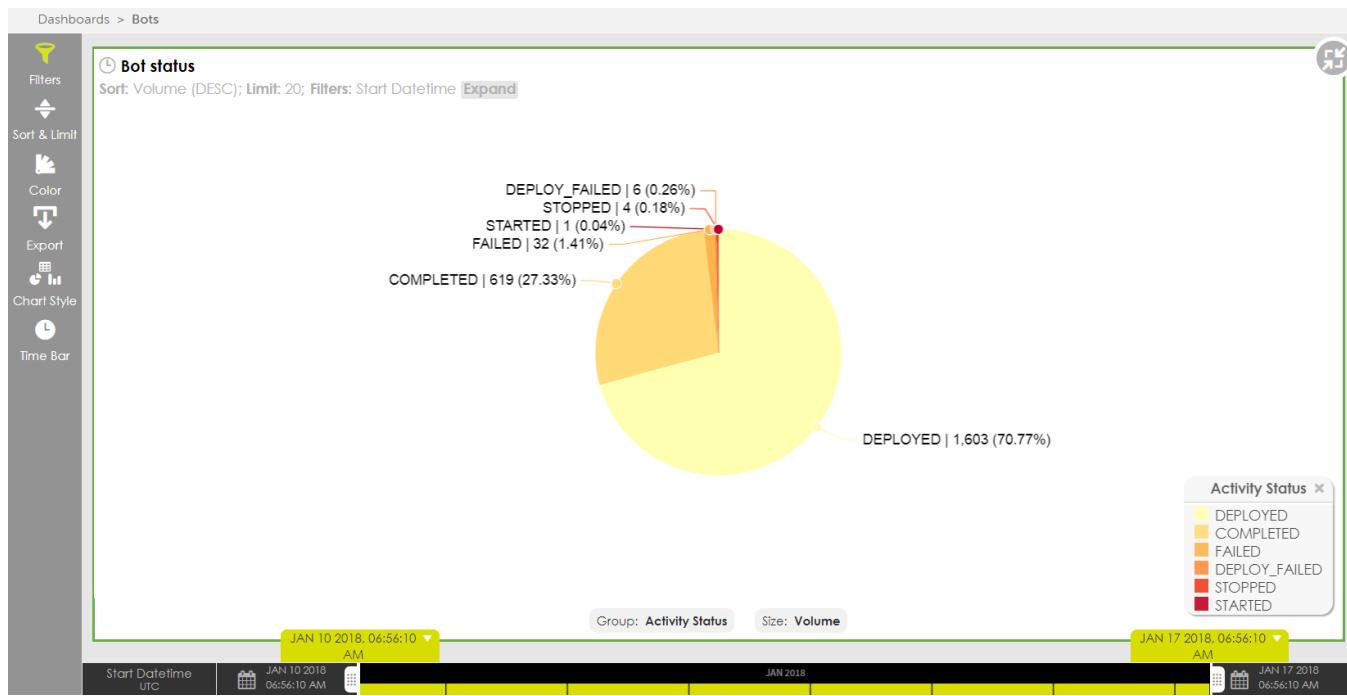


## MVP Bots Widget

This widget displays bots based on their maximum processing time and the number of times they are run.

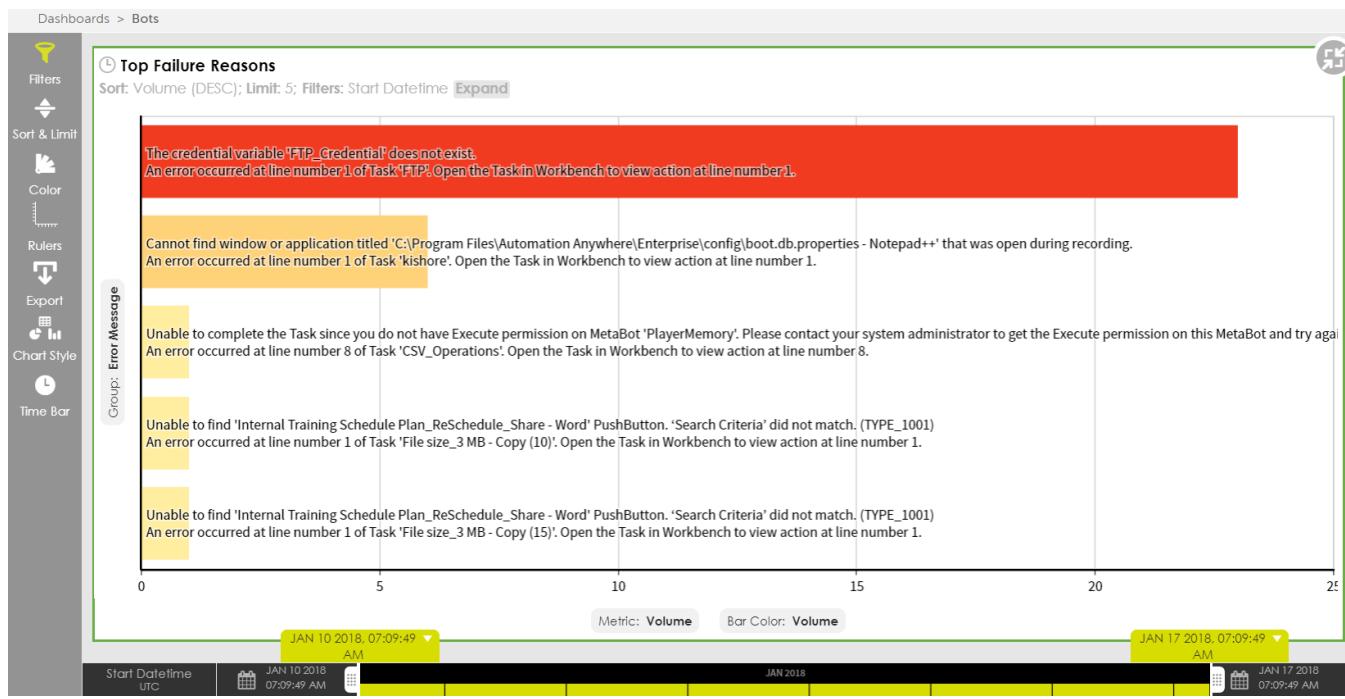


## Bot status Widget



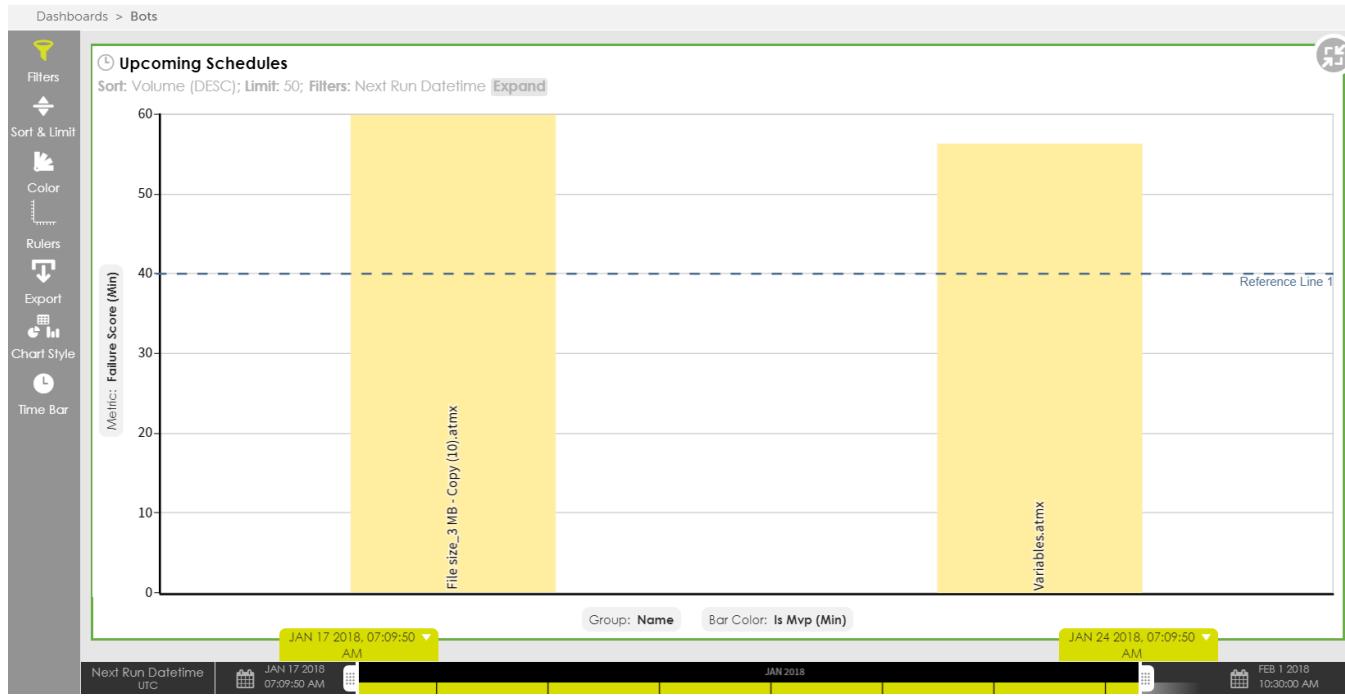
## Top Failure Reasons Widget

This widget categorizes the errors that your bots may encounter into various groups and shows the count of each group



## Upcoming Schedules Widget

This widget shows all bots that are scheduled to run, which are sorted by the number with which they are run.

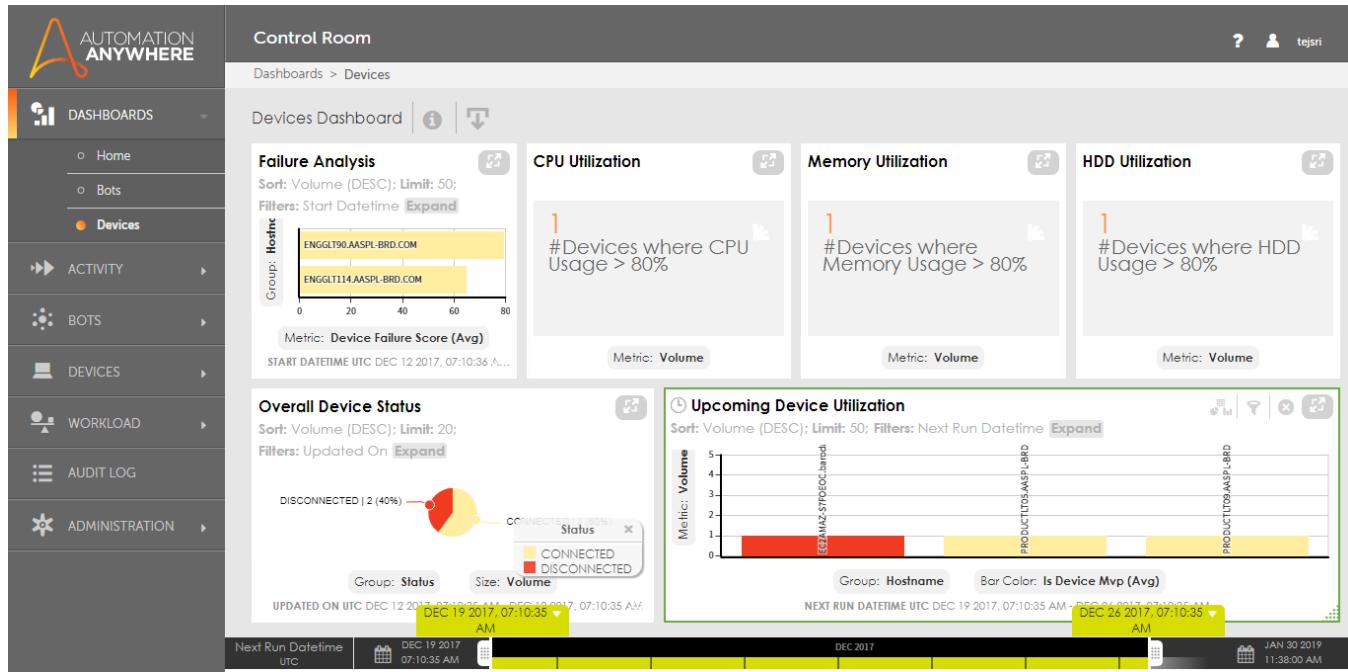


Mark the bots that failed a lot before (e.g. failed more than 50% etc.)

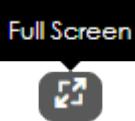
# Dashboards - Devices page

As a Control Room user with Dashboard view privileges, you can view and analyze Devices (Bot Runner machine) relevant data when Bots are deployed on those Devices. This data is presented in the form of widgets which provide information about:

1. The number of bots that failed to execute on devices for a given time
2. The number of devices that either crossed, did not achieve or are equal to the threshold for CPU, Memory, and HDD utilization for a given time frame
3. The overall device status for given time frame
4. The number of devices on which automations are scheduled for given time frame



**Tip:** To expand to a detailed view, click the Full Screen icon for a given widget:



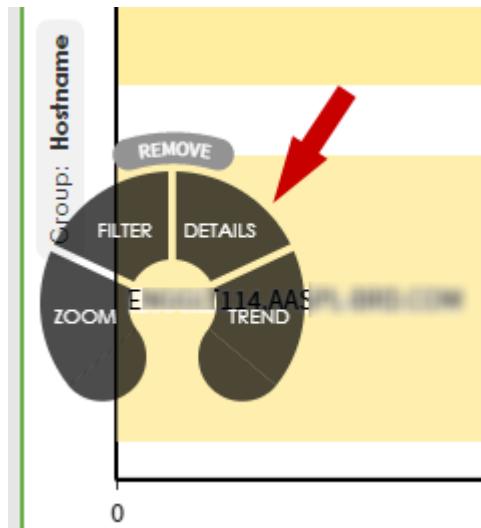
## Failure Analysis Widget

This widget displays the top **n** number of devices with most failures for a given time period. You can expand the widget to see a detailed view of the devices that failed:



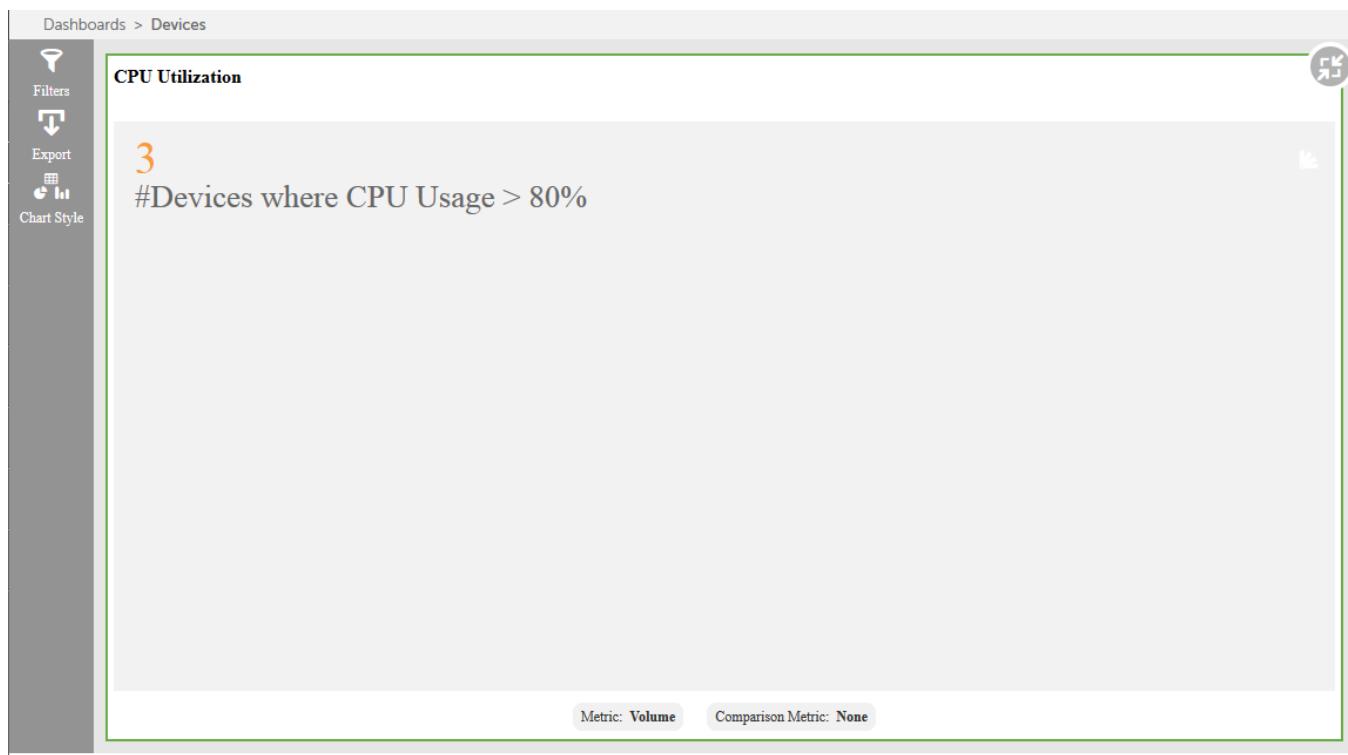
In expanded mode, the widget shows the list of bots that failed ordered by the number of times it failed on that device during that time.

You can also click on the graph to perform tasks such as Zoom, Filter, Details and Trends.



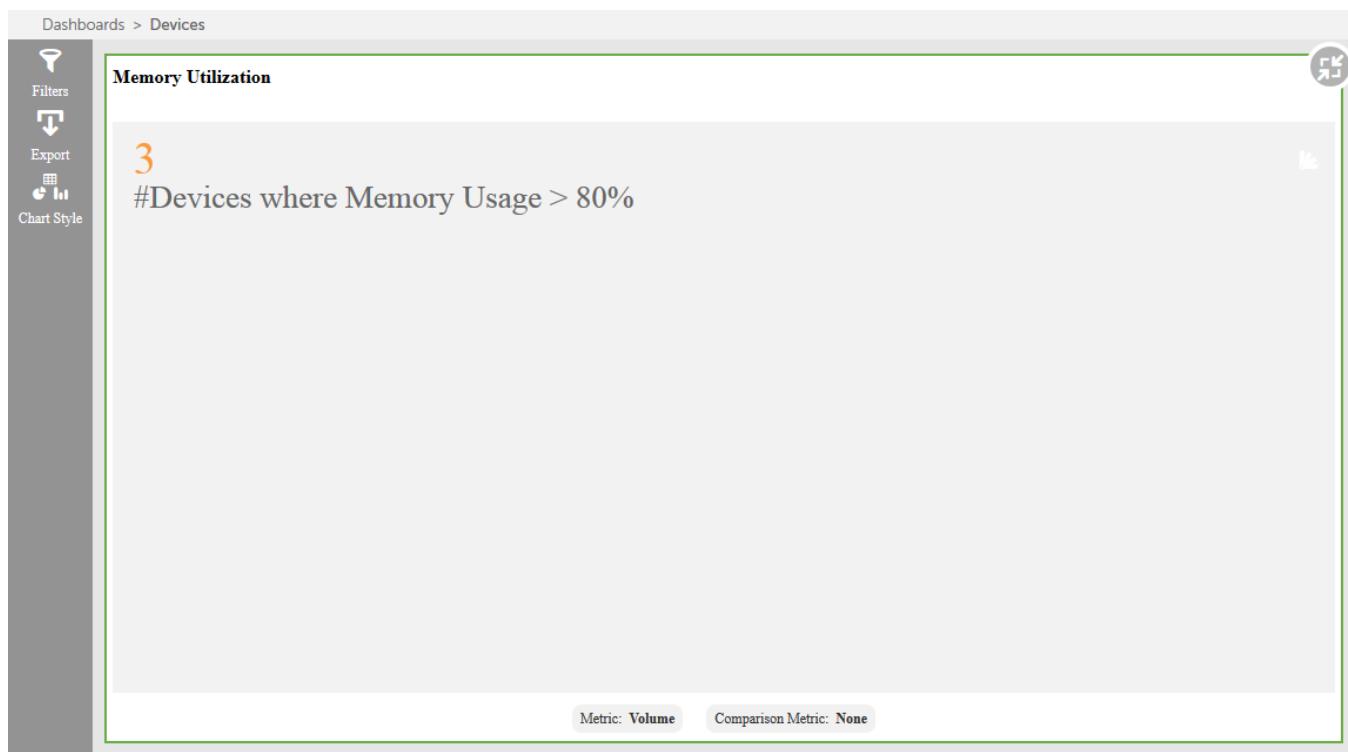
## CPU Utilization Widget

This widget displays the number of devices that crossed the threshold for CPU usage for a given time period. You can expand the widget to see detailed view of the CPU usage of devices:



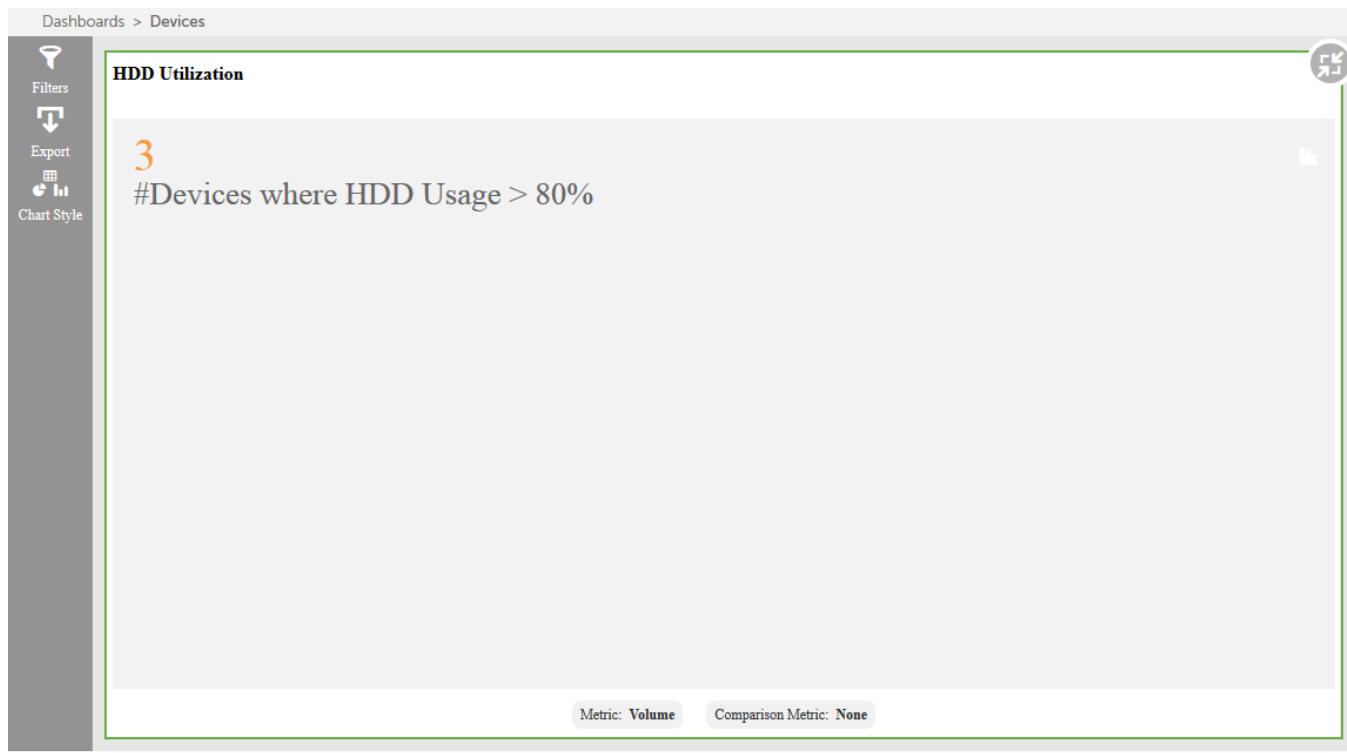
## Memory Utilization Widget

This widget displays the number of devices that crossed the threshold for Memory usage for a given time range. You can expand the widget to see detailed view of the Memory usage of devices:



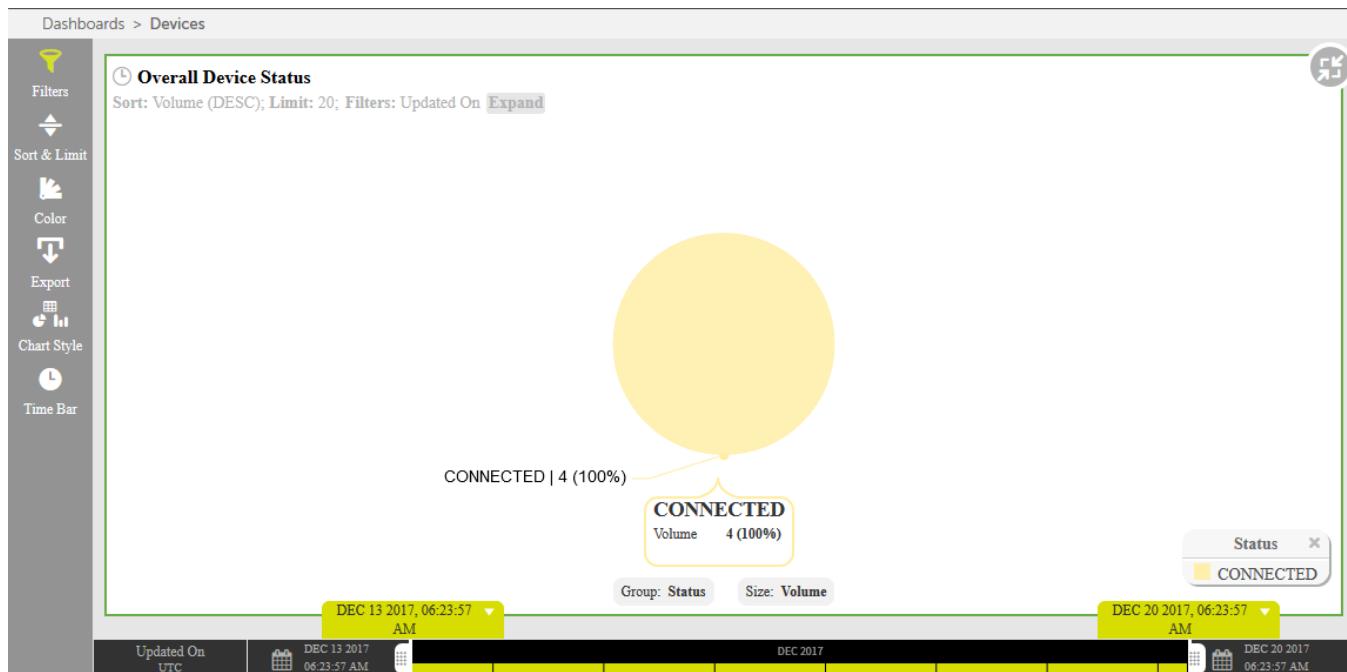
## HDD Utilization Widget

This widget displays the number of devices that crossed the threshold for HDD usage for a given time range. You can expand the widget to see detailed view of the HDD usage of devices:

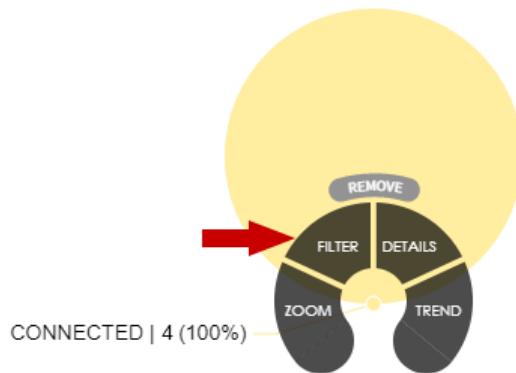


## Overall Device Status Widget

This widget displays the number of Devices that are Connecte or Disconnected for a given time range. You can expand the widget to see a detailed view of the device statuses.



You can also click on the graph to perform tasks such as Zoom, Filter, Details and Trends.



### Upcoming Device Utilization Widget

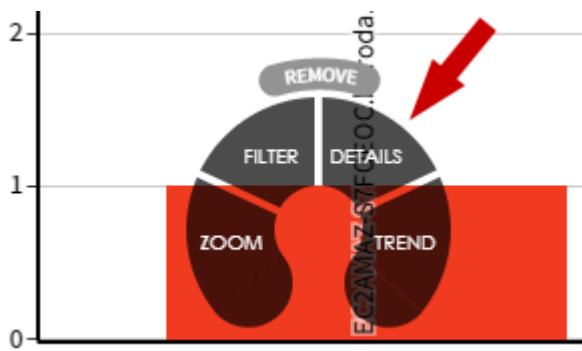
This widget displays the number of devices on which automations are scheduled to run, offline devices and MvP (most used) devices for a given time range. You can expand the widget to see a detailed view of the device utilization status:



In expanded mode, it shows the number of devices that are filtered on **Limit** for a specific time period and sorted either on Device failure score, Hostname, Device Mvp, and Volume.

The default time period is set to next 7 days i.e. the data is shown from January 7 - 13 when viewed on January 6.

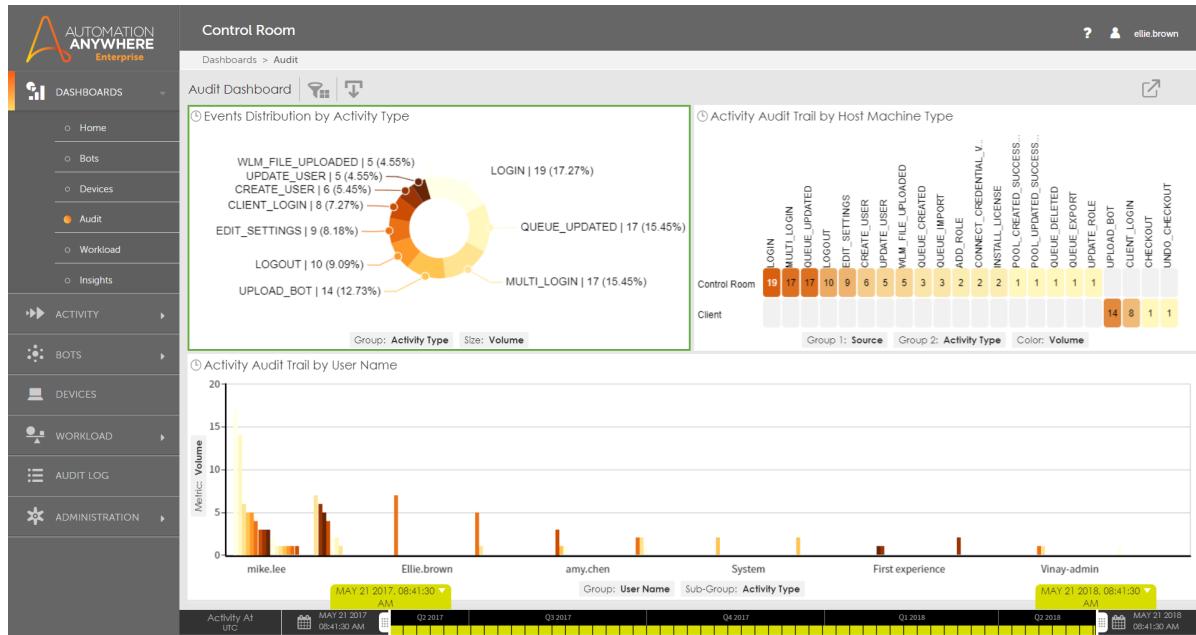
You can also click on the graph to perform tasks such as Zoom, Filter, Details and Trends.



**Note:** CPU, Memory, and HDD utilization data collectively provide the inputs for Heartbeat widget in Dashboards → Home.

# Dashboards - Audit page

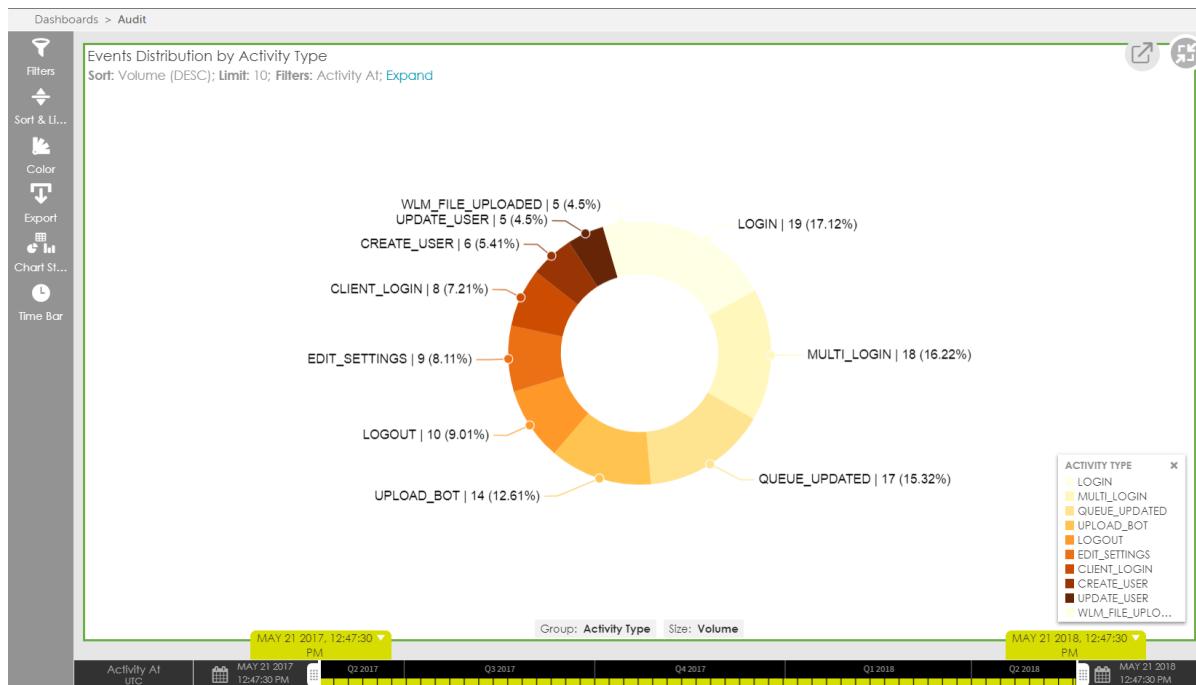
As a Control Room user with **View Dashboards** permission, you can view a snapshot of audit information as processed in the Control Room. It allows you to monitor various events such as the highest percentage of a particular activity being performed based on either user name or host machine type, and a visual representation of the failure log.



**Tip:** You can opt to customize the chart settings and parameters. The illustrations used in this article are for reference.

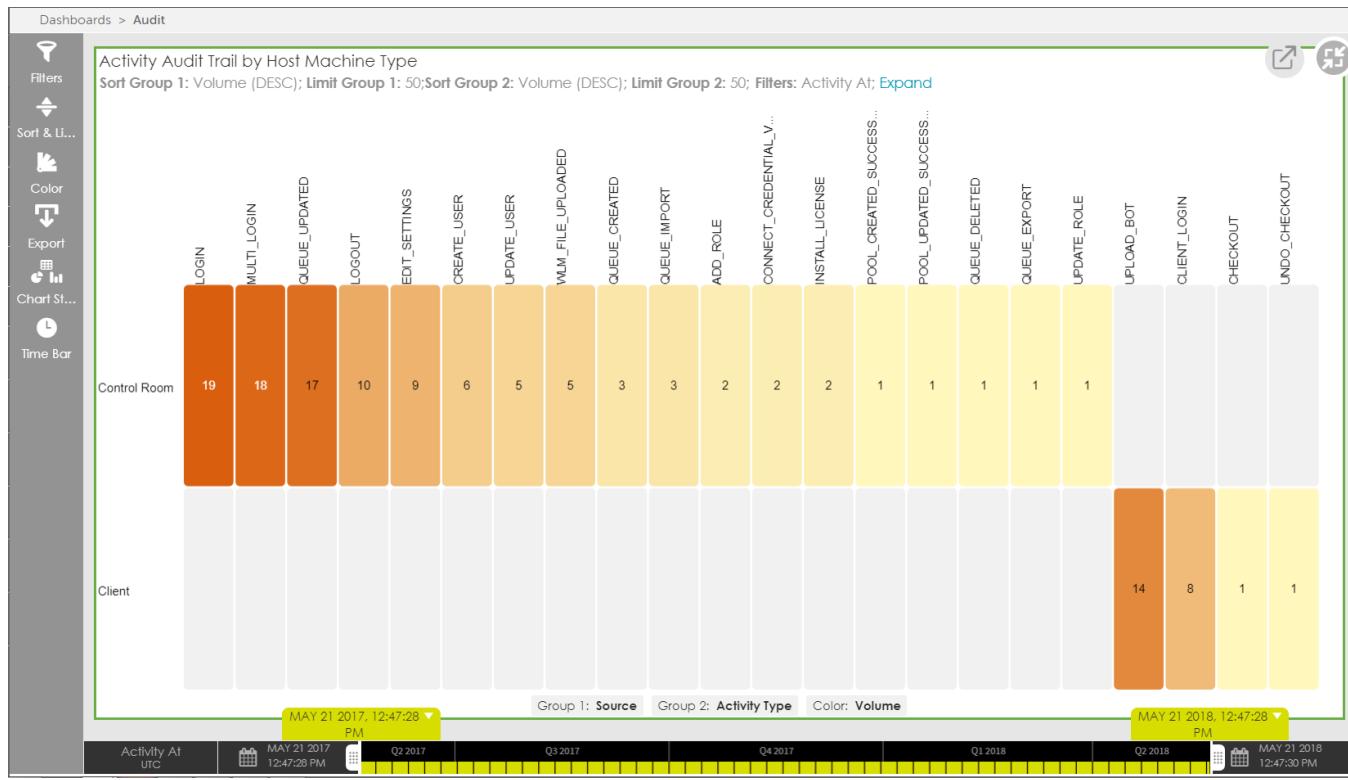
## Events Distribution by Activity Type

This widget provides a chart based view of activities filtered on the **Action Type** column in the [Audit Log](#) page for a specific time period.



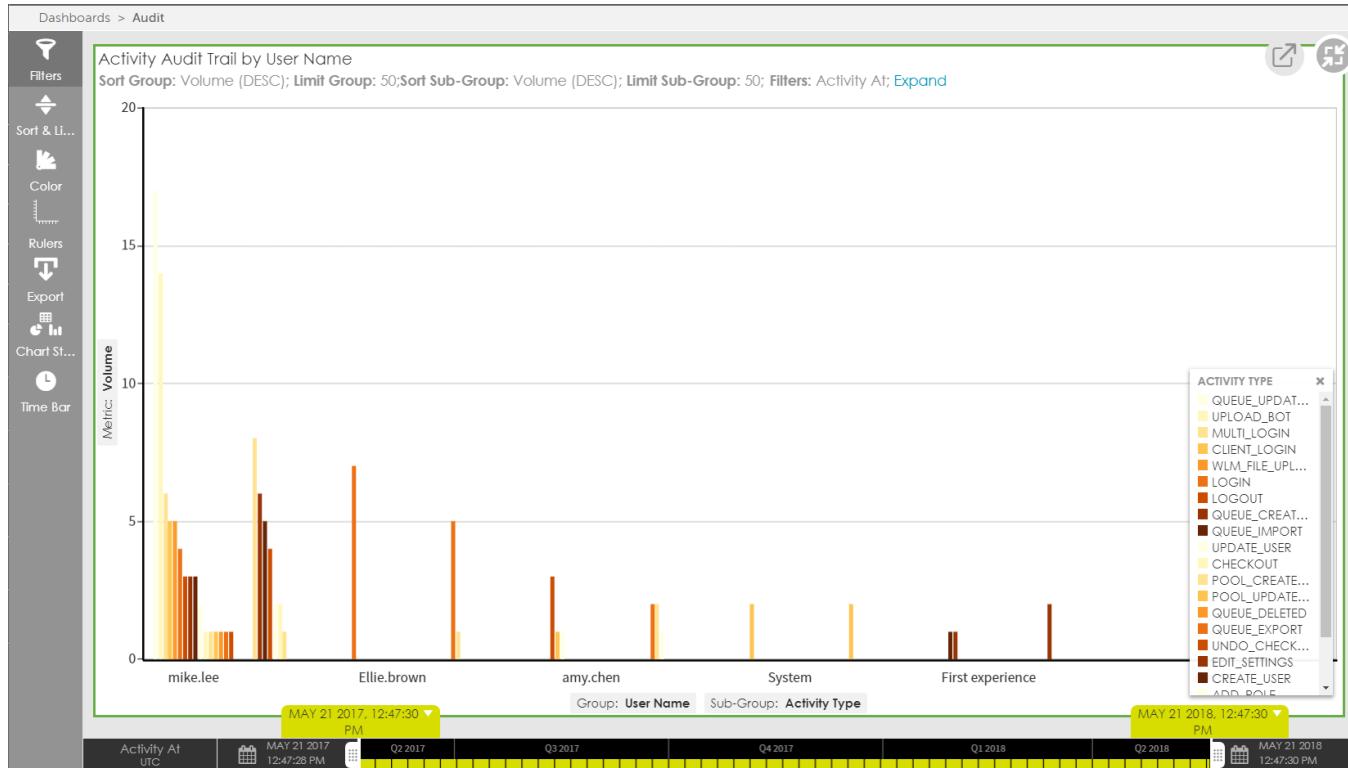
## Activity Audit Trail by Host Machine Type

This widget provides a chart based view of activities filtered on the **Source** column in the [Audit Log](#) page for as specific time period.



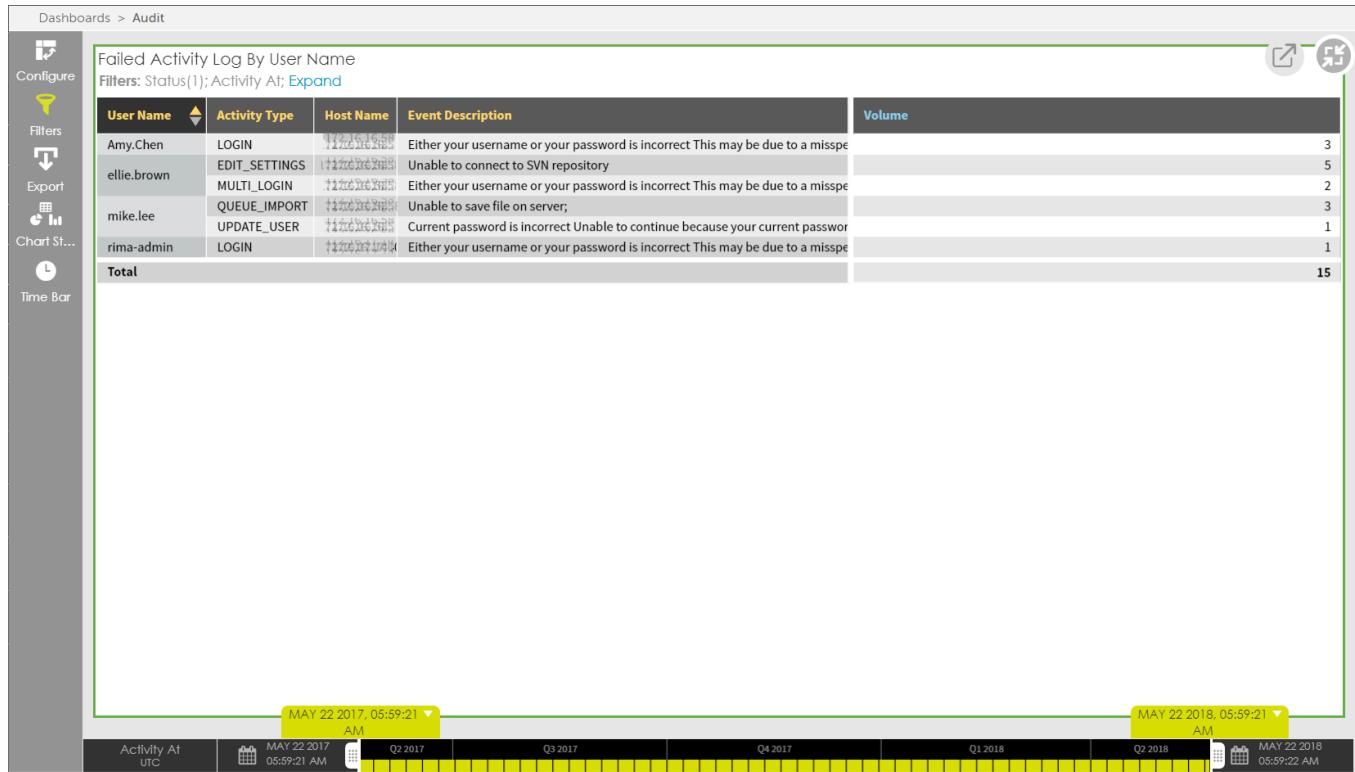
## Activity Audit Trail by User Name

This widget provides a chart based view of activities filtered on the **Action Taken By** column in the [Audit Log](#) page for as specific time period.



## Failed activity log by user name

This widget provides a chart based view of activities filtered on the **Action taken by**, **Action type**, and **Source** columns in the [Audit Log](#) page for as specific time period.



For more information on audit details, refer [View audit details](#).

# Dashboards - Workload page

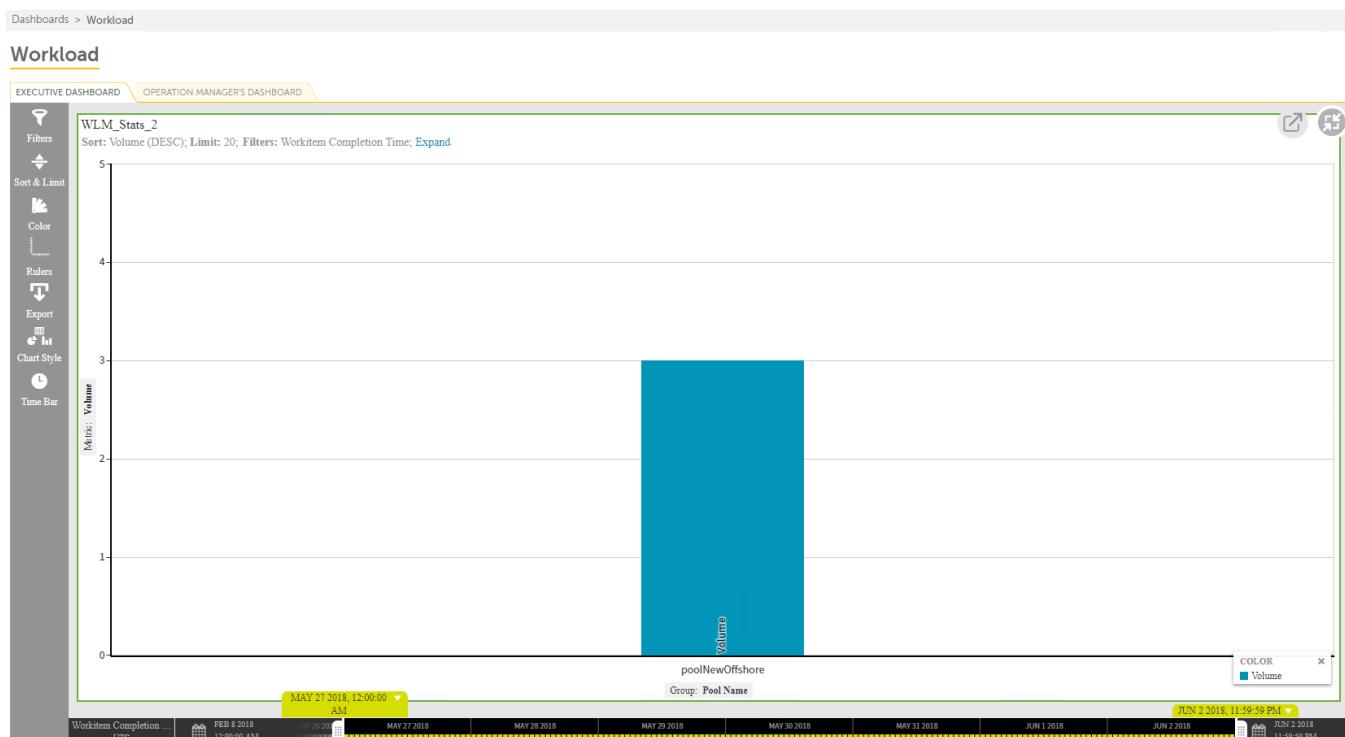
As a user with View Dashboard permissions, you can view Workload status of device pools, queues and work items in the Workload Executive and/or Operation Manager's Dashboard.

## Executive dashboard

In the Executive dashboard, you can monitor the progress of the queues for which you are owner and/or consumer:

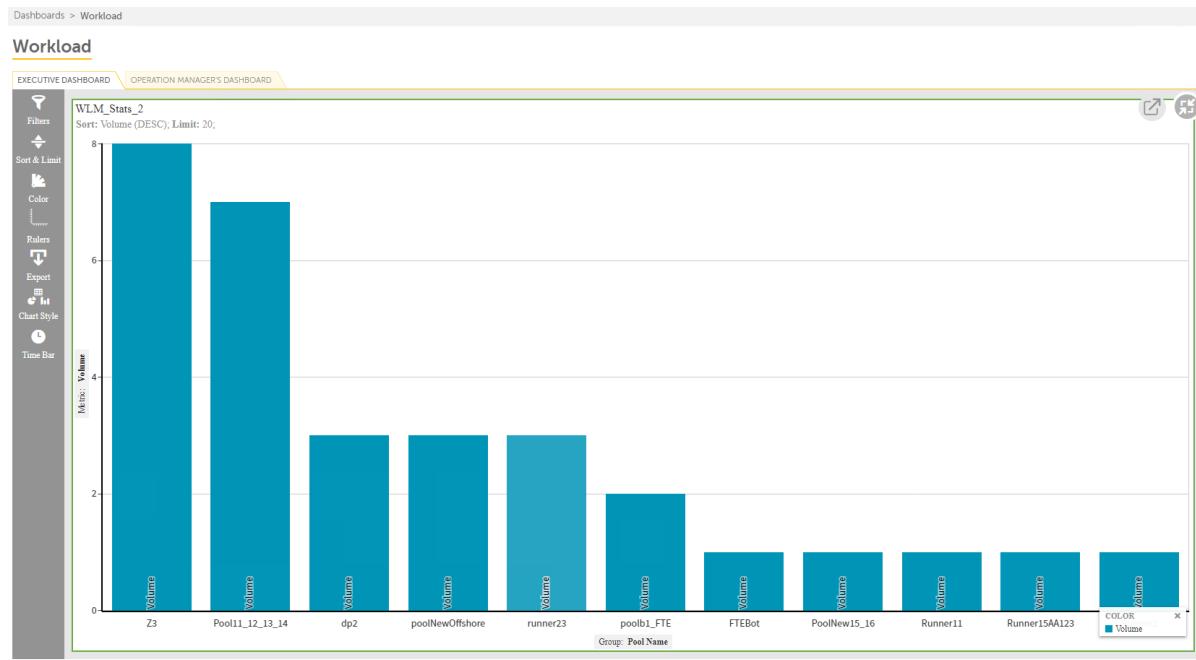
### 1. Device pools by backlog

In this widget, you can view the device pools by backlog. This allows you to adjust the device pool size or reorder the automations if required. The device pool backlog is measured in the number of hours it takes to complete the existing work items from all automations in that pool. Refer [SLA - Calculator](#) for details.



## 2. Queues by time to complete

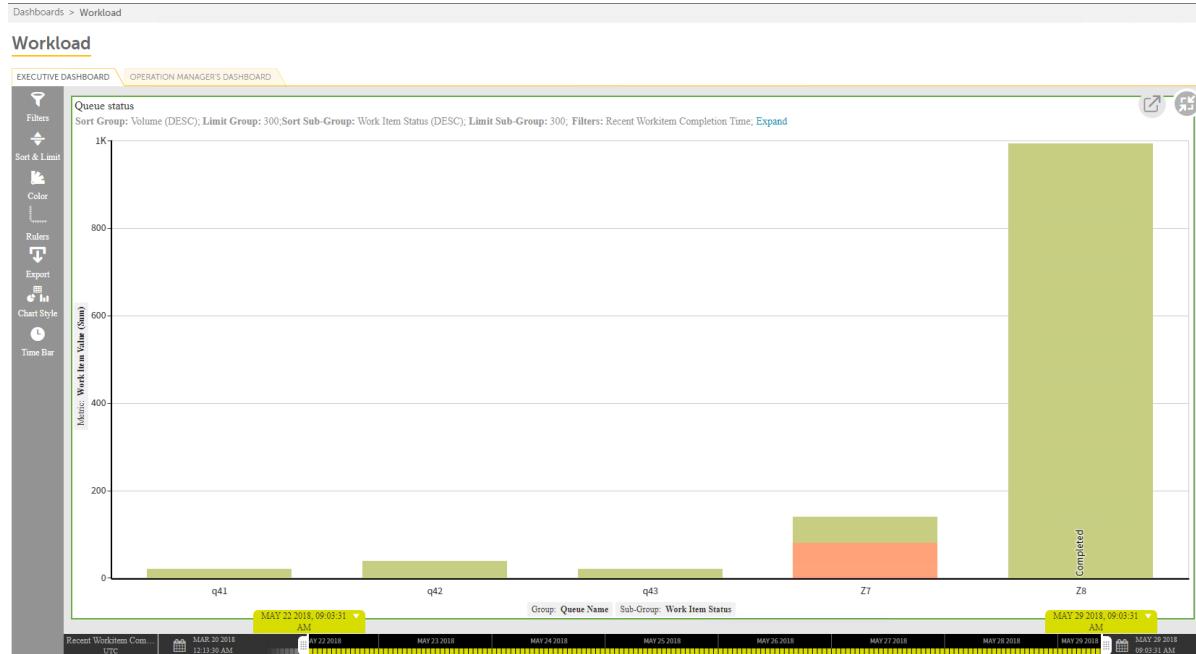
In this widget, you can view the list of queues ordered by time to complete. This allows you to pause or change the priority of the automations if required. Time to complete is measured in the number of hours it takes to complete the existing work items. Refer [SLA - Calculator](#) for details.



**Tip:** Click on individual queue to view its details such as queue name, number of open items, average processing time, and expected time to complete.

## 3. Queue status

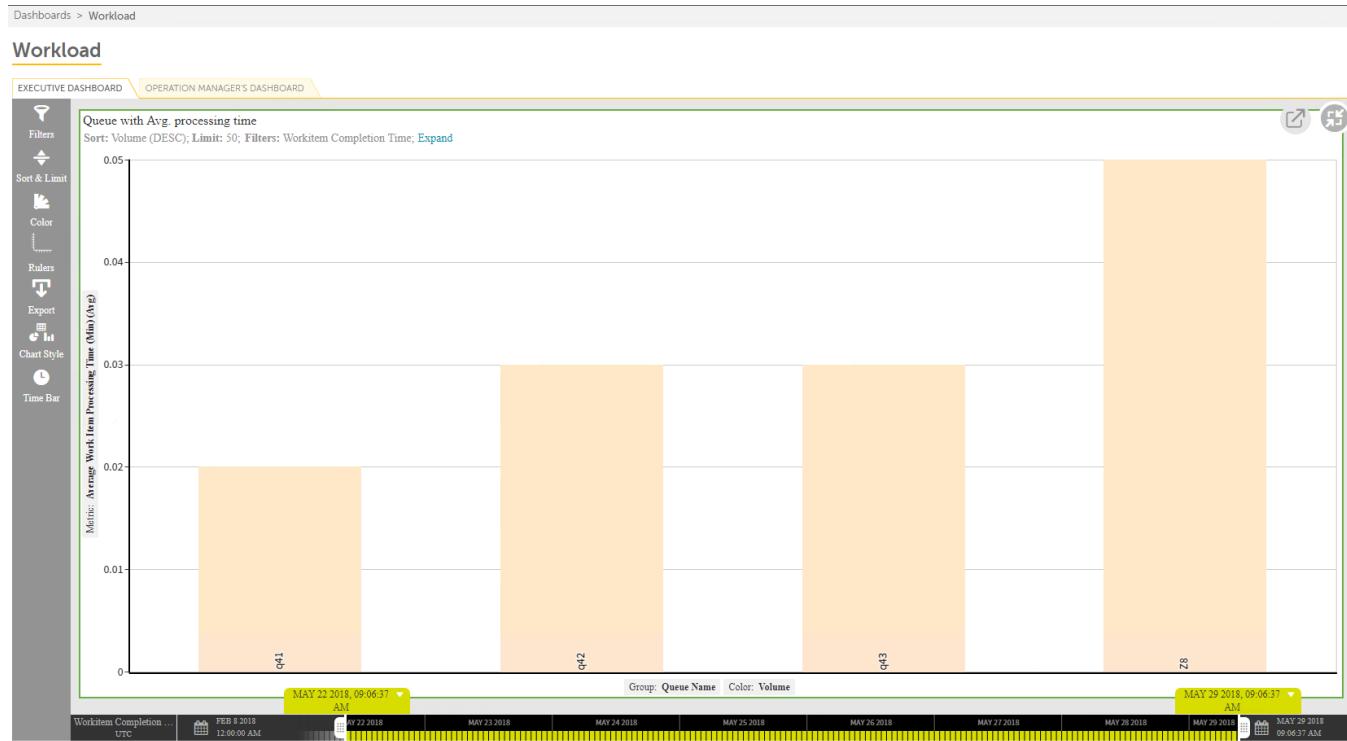
In this widget, you can view the list of queues that were processed in the last n days. This allows you to monitor the progress (status) of your workload items. The statuses displayed for the work items of each queue are Active, Successful, Unsuccessful, Ready to run, On hold, and Data error.



**Tip:** By default the queues that were processed in the last 7 days are shown. You can opt to provide a custom date range for last 6 months.

#### 4. Queue with average processing time

In this widget, you can view the list of queues that were processed in the last **n** days with average processing time. This allows you to understand if there is any issue with the processing of these work items. The list of queues are shown on the basis of the average processing time for a work item with a daily average.



##### Tip:

- Click on individual queue to view its details such as queue name, automation name, date, and average processing time.
- By default the queues that were processed in the last 7 days are shown. You can opt to provide a custom date range for last 6 months.

## Operation Manager's dashboard

In the Operation Manager's dashboard, you can monitor the queues for which you are owner, consumer, and/or participant.

### 1. Device pools by FTE (Full Time Equivalent)

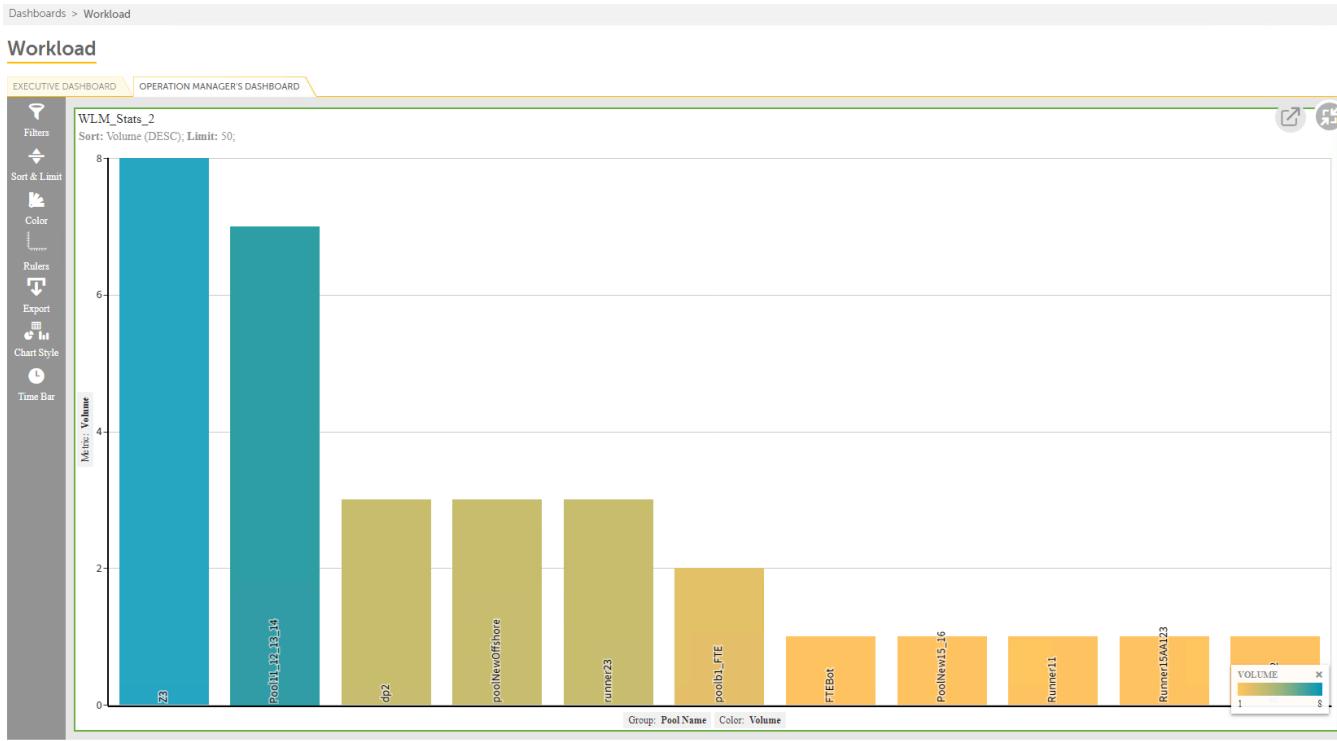
In this widget, you can view pools in descending order of FTE (Full Time Equivalent). This allows you to measure the value of each pool in terms of the equivalent manual effort required to process the same work item.



**Tip:** By default the queues that were processed in the last 7 days are shown. You can opt to provide a custom date range for last 6 months.

## 2. Pools by decreasing error rate

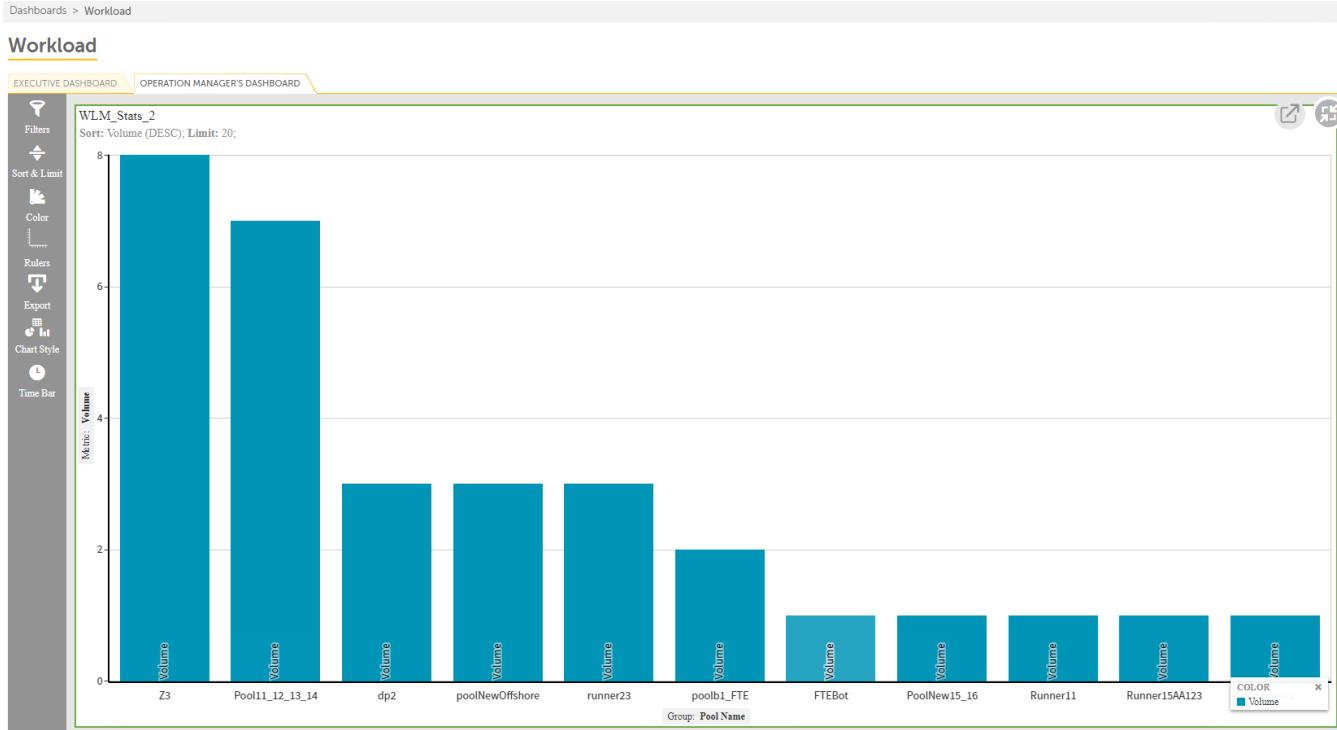
In this widget, you can view the list of pools ordered by decreasing error rate. It thus gives you a quick view of pools that require attention. This error rate is measured by the number of work items failed divided by the number of work items processed from that pool.



**Tip:** Click on the individual pool to view details such as pool name, automation name, queue name, number of items processed, and number of failed items.

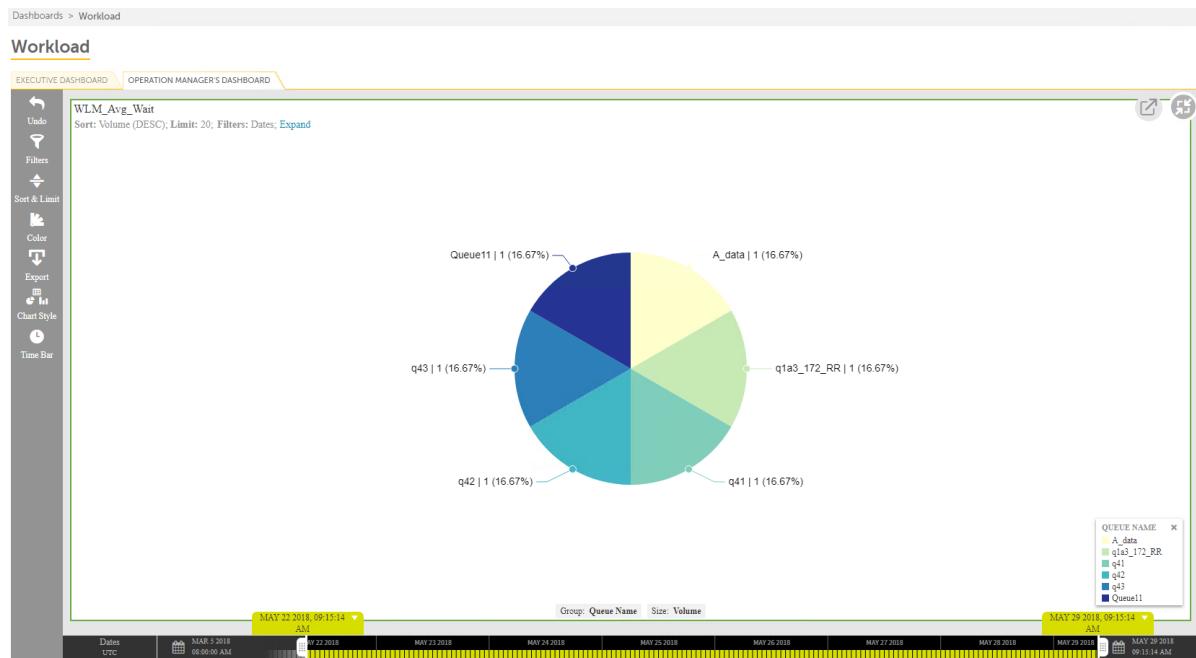
## 3. Device pools by backlog

In this widget, you can view the device pools by backlog. This allows you to adjust the device pool size or reorder the automations if required. The device pool backlog is measured in the number of hours it takes to complete the existing work items from all automations in that pool. Refer [SLA - Calculator](#) for details.



#### 4. Queues with average wait time

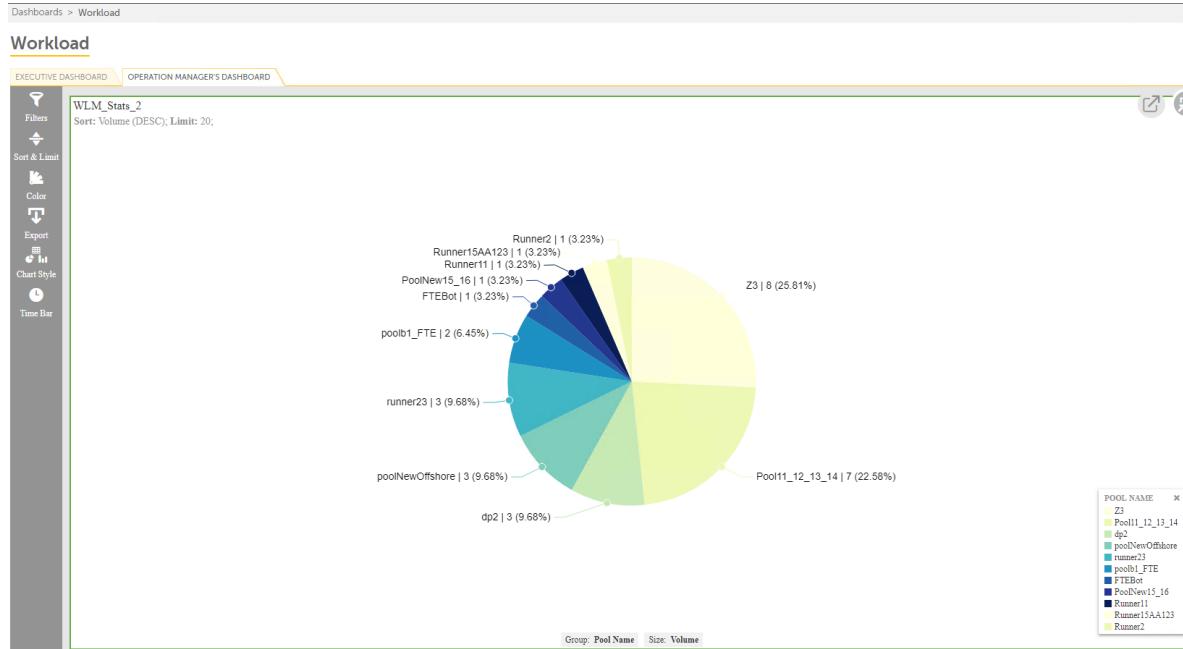
In this widget you can view the list of queues that were processed in the last **n** days with average wait time. This allows you to decide whether to increase priority or pool size to meet the business needs as required. For each queue, the average wait time for a work item in that queue with a daily average is shown. The wait time is calculated by subtracting processing start time from the automation start/resume time.



**Tip:** By default the queues that were processed in the last 7 days are shown. You can opt to provide a custom date range for last 6 months.

#### 5. Queues by decreasing error rate

In this widget, you can view the list of queues ordered by decreasing error rate. It thus gives you a quick view of queues that require attention. This error rate is measured by the number of work items failed divided by the number of work items processed from that pool.



**Tip:** Click on individual pool to view details such as pool name, automation name, queue name, number of items processed, and number of failed items.

Refer articles in the [Workload](#) module for details on queues, work items, and queue processing.

# Dashboards - Insights page

Bot Insights helps automation experts to access real-time business insights and digital workforce performance measurement by leveraging massive amounts of content-level and productivity data that the deployed bots generate, touch, interact with, and process. It helps the automation experts and consumers to interactively analyze task data and enhance widgets.

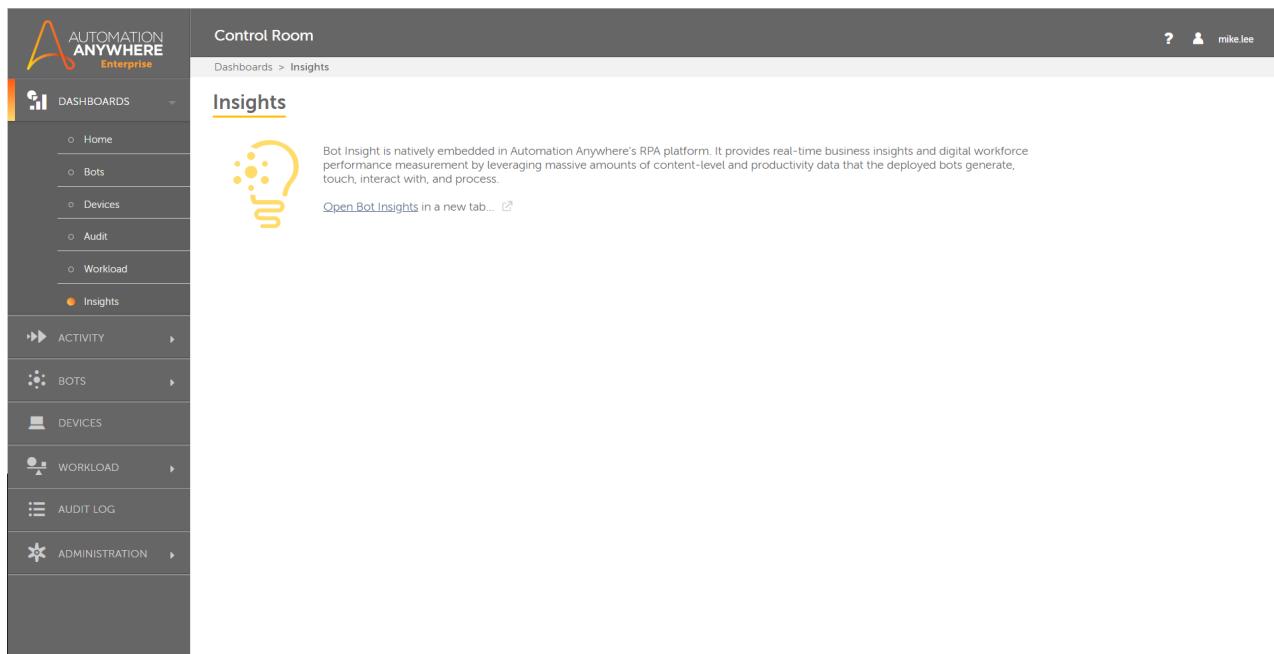
## Accessing Bot Insights

You can access the Bot Insights application from the Control Room Insights dashboard if you are a **Bot Creator** and/or a Control Room user with **AAE\_Bot Insight Admin**, **AAE\_Bot Insight Consumer**, or **AAE\_Bot Insight Expert** role privileges. Refer [Create a role](#) for description on system defined roles.

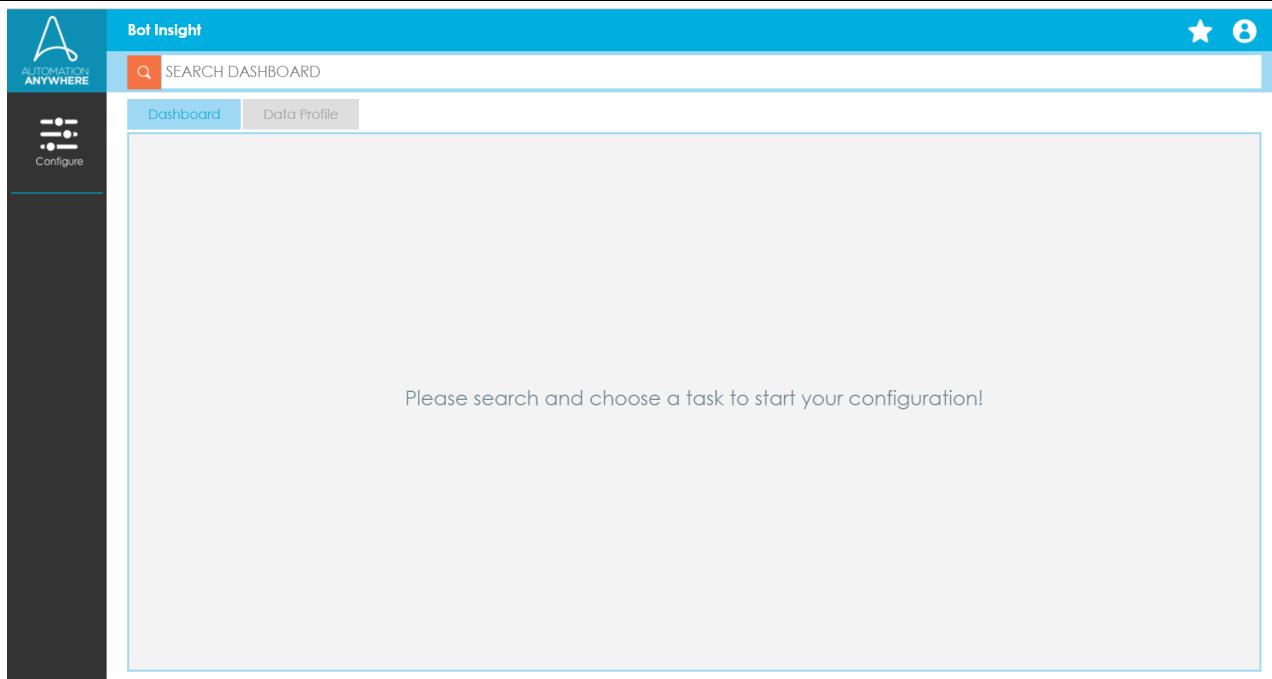
Additionally, the **Bot Insights - Business Analytics** license also needs to be turned on. Refer [Licenses - an overview](#) for details.

To access Bot Insight application,

1. Go to Control Room → DASHBOARDS → Insights.



2. Click on the **Open Bot Insights** link.
3. The system opens the Dashboard of Bot Insights application in a separate tab:



When you are already logged into the Control Room, you do not need to login again into Bot Insights. For more information about the Single Sign-on feature into applications, see [Log onto Bot Insights](#).

- If you do not have the Bot Insight permission, you are shown:

You are not authorized to login to Bot Insight.  
Please contact your administrator for access.

[Go to Control Room](#)

- Click on **Go to Control Room**.
- If the license has expired, you are shown:



**The Control Room license is expired**

To continue, please contact your system administrator.

For more information on Bot Insights, refer the Bot Insights user guide.

# Control Room APIs

The Automation Anywhere Enterprise Control Room provides various public APIs which allow you to customize your business automation for third party applications. It enables the third party applications to consume RPA, orchestrate bots and manage the RPA data based on events.

Control Room offers the following APIs:

1. Authentication
2. Bot Login Credentials
3. Bot Deployment
4. Export Import Workload Management Configuration
5. Get list of all queues
6. Get list of all work items in a given queue
7. Insert work item data to a given queue

## API for authentication

All the APIs are preceded by an Authentication API, wherein the user invoking third party application has to authenticate so as to use the downstream APIs. [Click here](#) for details.

## API to manage bot login credentials

In enterprise organizations where the password rotation policy is applied, the Client user has to remember to update the password from Tools → Options → Login Settings during each password rotation. To automate this process, Control Room enables you to use an API to create, update or delete the Login Credentials stored in the credential vault. [Click here](#) for details.

## API for bot deployment

To deploy Bots onto the Automation Environment the user has to login into Control Room, select the Bot and the Bot Runners and then 'Run/Schedule' the task. However, as the Automation scenarios scale up, there is an increasing need to deploy/trigger Bots from an external third party application. To meet this business requirement, you can use the Bot Deployment API which enables you to trigger a Bot from an External System. [Click here](#) for details.

## API for export import of bots for Business Lifecycle Management

Usually, the Control Room user has to depend on means other than Control Room (for example email) to deploy TaskBots from one environment to another. Using the Export-Import APIs, you can easily introduce a customized BLM solution thus removing all external factors that could possibly disrupt your automation life cycle. [Click here](#) for details.

## API to export and import Workload Management (WLM) configuration

Automation Anywhere has provided the Workload Management configuration API which can be used to export and import Workload configuration to move validated configurations from one environment to another. [Click here](#) for details.

## API to get list of all queues

Automation Anywhere has provided a REST API that allows you to fetch the list and queue details available in the Control Room. [Click here](#) for details.

## API to get all work items in a given queue

Automation Anywhere has provided a REST API that allows you to fetch the list of work items in a given queue and its details available in the Control Room. [Click here](#) for details.

## API to add/insert work item data to a given queue

Automation Anywhere has provided a REST API that allows you to insert work item data in a given queue available in the Control Room. [Click here](#) for details.

# Control Room API for Authentication

Control Room v.11 exposes public APIs so as to manipulate the Control Room data and to deploy bots from an external system. This enables third party applications to consume RPA, orchestrate bots and to manage the RPA data based on events - for example, create an AAE user as soon as a user is created in SAP system; update the login credentials in AAE as soon as password is rotated in domain controller.

All the APIs are preceded by an Authentication API, wherein the invoking third party application user has to authenticate so as to use the downstream APIs.

## Authentication API

### API: v1/authentication

If the Control Room URL is <https://ultron.com:81>, then the API will be <https://ultron.com:81/v1/authentication>

The API takes two parameters as input in JSON format:

1. The username of the AAE user
2. The password of the AAE user

**Note:** All parameters are mandatory.

#### For example:

1. The AAE username is **mike\_williams**.
2. The AAE password is **abc123**, then the JSON will be :

```
{
  "Username": "mike_williams",
  "Password": "abc123"
}
```

If the authentication is successful, the Control Room will issue an authentication token which needs to be passed on to the Deployment API as header information.

**Note:** The authentication token will ONLY be valid for 15 minutes from the time it is issued.

## Authentication API Response Codes

Http Status code	Response	Description
200	<pre>{   "token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJIUzI1NiJ9. eyJ1c2VyljoiMSIsImlzcyI6Imh0dHA6Ly9sb2NhbGhvc3Qvd2ViY3 JzdmMvliwiYXVkljoiaHR0cDovL2xvY2FsaG9zdC93ZWJcnN2Yy8iLCJle HAIoJE0OTUwOTAwOTksIm5iZil6MTQ5NTA4OTE5OX0.qPPhpti0j7 LGAmWkj3XFymFfJXzA1P4zPehljVYfulc" }</pre>	Authentication is successful
401	<pre>{   "message": "Invalid credentials." }</pre>	<ul style="list-style-type: none"> <li>○ The password is invalid</li> <li>○ User does not exist</li> <li>○ AD Authentication - Credentials are Invalid</li> </ul>
401	<pre>{   "message": "Please verify your email by clicking on the email verification link. This is mandatory as you will be able to login post verification only." }</pre>	Email notification is enabled - user has not verified email

	}	
402	{ "message": "License expired." }	License has expired
403	{ "message": "Your account is not activated. Please contact the admin." }	User is deactivated

# Control Room API for Bot Deployment

To deploy Bots onto the Automation Environment, currently, the user has to login into Control Room, select the Bot and the Bot Runners and then 'Run/Schedule' the task.

However, as the Automation scenarios scale up, there is an increasing need to deploy/trigger Bots from an external third party application.

To meet this business requirement, Automation Anywhere Enterprise has published Application Programming Interfaces (APIs) using which a Bot can be triggered from an External System.

A Control Room user can use these APIs to deploy Bots (Tasks) to BotRunners on commencement of events specified by a third party/external application.

## Key Features and Business Benefits of Control Room APIs

- Bots can be deployed from an external third party systems using AAE APIs.
- The input and output of APIs is JSON based (industry standard data-interchange format).
- Bot Deployment can be orchestrated from an External Application / Workflow using a combination of scripts and AAE APIs.

**Note:** The Bot deployment API can ONLY be invoked once the system/user has authenticated using the [Authentication API](#)

Also, the user will need to have the 'Run my bots' privileges and the privileges of the bot runners on which the bot is to be deployed.

## Deployment API

The Deployment API is used to deploy Bots to BotRunners.

### API: <Control Room URL>/v1/schedule/automations/deploy

For example, if the Control Room URL is <https://www.ultron.com:81> ; then the bot deployment API will be <https://www.ultron.com:81/v1/schedule/automations/deploy>

The user can pass three parameters as JSON string.

1. Bot name with relative path - This is mandatory.
2. List of Bot-Runners and users in JSON format - This is mandatory.
3. Use RDP based approach - This is optional and set to **false** by default.

Deployment Scenario and corresponding JSON string:

1. For example, the name of the Bot is AccountsBot.atmx and the Bot is under 'My Tasks'
2. The Bot is to be deployed on 3 machines
  - First machine hostname BR-1 with user U-1
  - Second machine hostname BR-2 with user U-2
  - Third machine hostname BR-3 with user U3.
3. The JSON string in the above scenario will be:

```
{  
  "taskRelativePath": "My Tasks\\AccountsBot.atmx", "botRunners":  
  [  
    {  
      "client": "BR-1", "user": "U-1"  
    },  
    {  
      "client": "BR-2", "user": "U-2"  
    },  
    {  
      "client": "BR-3", "user": "U-3"  
    }  
  ]  
}
```

## Bot Deployment API Response Codes

Http(s) Status code	Response - Description
200	Succesful creation of automaton.
400	Bad Request
401	Authentication Required
403	Unauthorized access
409	Conflict
500	Internal Server error

# Control Room API to manage bots login credentials

When the Bot is deployed from Control Room to the Bot Runner, the Bot will auto-login into the Bot Runner (if the machine is locked / logged off). The Bot will use the credentials stored in the Credential Vault for auto-login. These credentials are set by the user using the Tools → Options → [Login Settings](#) of AAE Client.

However, there could be cases when the user's Windows password is modified; especially in Enterprises where there is a password rotation policy. In such cases, the user has to remember to update the new password from Tools → Options → Login Settings.

In order to automate the above process, Control Room 11.1 provides a direct API to create, update or delete the Login Credentials stored in the credential vault.

There are 2 steps to use this API:

1. Invoke the Authentication API
2. Invoke the Login Credentials API

## Authentication API

The details for the Authentication API are provided in the article [Control Room API for Authentication](#).

## Login Credentials API

Note that only the Control Room Administrators (users having AAE\_Admin Role) can use the Login Credentials API; this means that if the user invoking the Authentication API has an AAE\_Admin role, only that user can use the Login Credentials API.

Also, this API will make use of the authentication token that is obtained using the Authentication API. The authentication token has to be passed on as one of the header inputs to the Login Credentials API.

### API: v1/credentialvault/external/credentials/loginsetting

If the Control Room URL is <https://ultron.com:81>, then the API will be: <https://ultron.com:81/v1/credentialvault/external/credentials/loginsetting>

The API takes three parameters as input in JSON format:

1. The username of the AAE user.
2. The Login (Windows) username for the user which is to be updated in the Credential Vault against that user.
3. The Login (Windows) password for the user which is to be updated in the Credential Vault against that user.

**Note:** All parameters are mandatory.

## For example:

If we take a 'Database Authentication' scenario (where users are stored and authenticated by the Control Room) and

1. The AAE username is **mike\_williams**
2. The fully qualified Login username is **ultron.com\mike.williams**
3. The Login password is **abc123**, then the JSON will be  
`{ "Username": "mike_williams", "Windows_Username": "ultron.com\\mike.williams", "Windows_Password": "abc123" }`

Using the Login Credentials API, the Control Room Admins can:

1. Create a user's Login Credentials in the Control Room - by using the 'POST' method
2. Update a user's Login Credentials in the Control Room - by using the 'PUT' method
3. Delete a user's Login Credentials from Control Room - by using the 'DELETE' method.

## VB Script to Create User's Login Credentials

```
'AUTHENTICATION API - START
Set objStream = CreateObject("ADODB.Stream")
objStream.CharSet = "utf-8"
objStream.Open
objStream.LoadFromFile("D:\Deven.Deshpande\Office\Products\API for CV\auth-input.txt")

restRequest = objStream.ReadText()

objStream.Close
Set objStream = Nothing

contentType = "application/json"

Set oWinHttp = CreateObject("WinHttp.WinHttpRequest.5.1")

oWinHttp.Open "POST", "http://products.lt12.aaspl-brd.com:81/v1/authentication", False
oWinHttp.setRequestHeader "Content-Type", contentType
oWinHttp.Send restRequest

response = oWinHttp.StatusText

MsgBox response

Dim AuthToken

' Set oJson = new aspJSON

AuthToken = oWinHttp.ResponseText

'oJson.loadJSON(AuthToken)

'MsgBox oJson.data("token")

MsgBox AuthToken

'AUTHENTICATION API - ENDS

'-----
'RESPONSE HEADER PARSING - START
Dim sToken
Dim posUser

sToken = Right(AuthToken, Len(AuthToken) - 10)

MsgBox(sToken)

'sToken = Left(sToken, Len(sToken) - 4)

posUser = InStr(sToken, "user")

MsgBox posUser

sToken = Left(sToken, posUser - 4)

MsgBox(sToken)

'RESPONSE HEADER PARSING - END

'DEPLOYMENT API - START

Set objStream_dep = CreateObject("ADODB.Stream")
objStream_dep.CharSet = "utf-8"
objStream_dep.Open
objStream_dep.LoadFromFile("D:\Deven.Deshpande\Office\Products\API for CV\cred-input.txt")

restRequest = objStream_dep.ReadText()
```

```
objStream_dep.Close
Set objStream = Nothing

contentType = "application/json"

Set oWinHttp = CreateObject("WinHttp.WinHttpRequest.5.1")

oWinHttp.Open "POST", "http://products1t12.aaspl-brd.-com:81/v1/credentialvault/external/credentials/loginsetting", False

oWinHttp.setRequestHeader "Content-Type", contentType

oWinHttp.setRequestHeader "X-Authorization", sToken

oWinHttp.Send restRequest

response = oWinHttp.StatusText

MsgBox response

Dim DeployResponse

DeployResponse = oWinHttp.ResponseText

' MsgBox DeployResponse

'DEPLOYMENT API - ENDS
```

### Contents of Input Files

*Applicable to the above VB Script*

The text Of auth-input.txt will have the input JSON String For authentication `{"UserName":"admin","Password":"12345678"}`

The text For deploy-input.txt will have the input JSON String For deployment

```
{ "Username": "mike_williams", "Windows_Username": "ultron.com\\mike.williams", "Windows_Password": "abc123" }
```

# API - Export and Import Bots for Bot Lifecycle Management

Usually, the Control Room user has to depend on means other than Control Room (for example email) to deploy TaskBots from one environment to another. Using the Export-Import APIs, you can easily introduce a customized Bot Lifecycle Management (BLM) solution thus removing all external factors that could possibly disrupt your automation life cycle.

As a Control Room user with **Export bots** and **Download** bots permission, you can export a bot and its dependent files. Similarly, as a user with **Import bots** and **Upload** bots permission, you can import that bot and its dependent files.

For example, you can move the Bots that are verified as production ready from staging to production.

You can use the Control Room Export Import REST API to manage your automation TaskBots including dependent files in different environments such as Development, Testing, Acceptance, and Production based on your organization's automation needs.

Refer [Export bot files](#) and [Import bot files](#) to use the functionality from your Control Room user interface.

## Features and benefits

- Role based access control on Bot Lifecycle Management
- Automatic export of dependencies (files and bots)
- Audit and traceability on source and target environment for compliance
- Email notification on successful execution or failure of export and import.

## Prerequisites

### Export

- The Control Room user whose credentials are used for authentication must have **Export bots** permission
- The Control Room user whose credentials are used for authentication must have **Download** permission on the Bots, minimum **Execute** permission on MetaBot, and dependencies that are being exported.
- If Version Control is enabled in the source Control Room, the production version of all bots and dependencies which you want to export must be set.
- User account that is used to run the Control Room services must have access to the location where package is getting exported, e.g. network location(shared drive) or on Control Room server machine

### Import

- The Control Room user whose credentials are used for authentication must have **Import bots** permission
- The Control Room user whose credentials are used for authentication must have **Upload** permission on the Bots and dependencies that are being imported.
- The Control Room user who will use the APIs to import multiple bots must have access to the exported package file provided by Automation Anywhere.

## API Endpoints

- a. **Export** - <Control Room URL>/v1/alm/export  
For example, <https://crdevenv.com:81/v1/alm/export>
- b. **Import** - <Control Room URL>/v1/alm/import  
For example, <https://crtestenv.com:82/v1/alm/import>

Using the above end points of the BLM Export Import API you can export and import a single bot and all of its dependencies.

### Export Bot

Export a single bot with its dependent files using the Export API provided by Automation Anywhere:

1. Use the Post method to generate a token using the end point `http(s)://<hostname:port>/v1/authentication`. For this provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.  
For example, <https://crdevenv.com:81/v1/authentication>
2. Use the Post method and state the parameters for credentials in Body Data. Refer sample:  

```
{  
  "username": "cradmin",  
  "password": "password"  
}
```

```

    "password": "cr@admin"
}

```

3. Click Play/Start
4. BLM Export API will make use of the authentication token that is obtained using the Authentication API. The authentication token has to be passed on as one of the header inputs to the BLM Export API.
5. Provide parameters such as **filename**, **destination path** and **package name** in Body Data to export a bot. Following list provides parameter description:
  - **filename** - use this to specify the filepath ending with the name of the bot that you want to export
  - **destination path** - use this to specify the destination path where the exported package is to be stored
  - **package name** - use this to specify the package name that you want to assign to the exported package

Refer sample,

```

{
  "filePath": "Automation Anywhere\\My Tasks\\Finance\\Account Reconciliation.atmx",
  "destinationPath": "tempshare\\datashare\\Finance Department",
  "packageName": "Finance package"
}

```

6. Click Play/Start
7. You can use multiple sources to view the export results in,
  - Response Data that comprise **package path** and **checksum**.
  - Audit Log page (landing page as well as details page)
  - Email when you receive notification on success or failure, if configured

## Import Bot

Once the bot is successfully exported to a network drive or Control Room machine path, another authorized user can import that package to a different Control Room using the Import API:

1. Use the Post method to generate a token using the end point **http(s)://<hostname:port>/v1/authentication**. Provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.  
For example, <https://crtestenv.com:82/v1/authentication>
2. Use the Post method and state the parameters for credentials in Body Data.

Refer sample:

```

{
  "username": "cradmin2",
  "password": "cr@admin"
}

```

3. Click Play/Start
4. BLM Import API will make use of the authentication token that is obtained using the Authentication API. The authentication token has to be passed on as one of the header inputs to the BLM Import API.
5. Once your credentials are authenticated, provide parameters such as **package path** and the **checksum** that was generated as a token during export in Body Data.

Refer sample:

```

{
  "packagePath": "tempshare\\datashare\\Finance Department\\Finance Package_20171221-154403.aapkg",
  "checksum": "ZLyQ+Lbu2N+beEuXf6qd2Qi9uwi3BZxApn57C7mYjKQ="
}

```

**Tip:** You can copy the response of the **BLM Export API** and directly pass that as an input to the **BLM Import API**, if the package path is same and is accessible to the **BLM Import API** user.

## API Response Codes

Http(s) Status code	Response - Description	Corrective Action
200	Package created successfully	NA
400	Bad request parameter	Retry with valid parameters
404	File not found	Ensure that the file/bot is present in Control Room
501	Permission error	Ensure that you have the <b>Export/Import bots or Upload/Download</b> permission

## Audit Logs

An audit entry is logged in the Control Room **Audit Log** page when you export or import bots. The illustration below shows the detailed audit entries for Export Bots and Import Bots

### Export bots audit details

Audit log > View action

 Export bot files [< Back](#)

ACTION DETAILS	
Status	Successful
Action taken by	Mike
Object type	Action
Source device	172.16.16.135
Item name	Credit Card Bots Package_20180112-150708.aapkg
Time	2018-01-12 15:07:17 IST
Action type	Export bot files
Source	API

EXPORT BOT FILES DETAILS	
ATTRIBUTE	VALUE
Package File Path	\datashare\Tempshare\Rajendra Vijay\BLM Demo\Credit Card Bot
Exported Bot	Automation Anywhere\My Tasks\Finance Bots\Credit Card Payment
Exported Dependency(1)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process
Exported Dependency(2)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process
Exported Dependency(3)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process
Exported Dependency(4)	Automation Anywhere\My MetaBots\CyberArk Integration.mbot

## Import bots audit details

Audit log > View action

### Import bot files

< Back

#### ACTION DETAILS

Status  
Successful

Action taken by  
john

Object type  
Action

Device  
172.16.16.135

Item name  
Credit Card Bots Package\_20180112-150708.apkg

Time  
2018-01-12 16:04:21 IST

Action type  
Import bot files

Source  
API

#### IMPORT BOT FILES DETAILS

ATTRIBUTE	VALUE
Source Control Room	http://PRODUCTLT05.AASPL-BRD.COM:81/
Package File Path	\\datashare\Tempshare\Rajendra Vijay\BLM Demo\Credit Card Bot
Imported Bot	Automation Anywhere\My Tasks\Finance Bots\Credit Card Payment
Imported Dependency(1)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process
Imported Dependency(2)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process
Imported Dependency(3)	Automation Anywhere\My Tasks\Finance Bots\Credit Card Process

# API - export and import workload management configuration

As a Control Room administrator or a user with Export and Import bots permissions, you can export and import Workload configuration to move validated configurations from one environment to another.

For example, you can move the queues that are verified as production ready from staging to production.

You can use the Control Room Export Import REST API to manage your automation in different environments such as Development, Testing, Acceptance, and Production based on your organization's automation needs.

## Features and benefits

- Role based access control on Workload Management module
- Audit and traceability on source and target environment for compliance

## Prerequisites

### Export

- The Control Room user whose credentials are used for authentication must be either ADMIN or should have **Export bots** permission
- The Control Room user must be either **Queue Admin** or should be **Owner** of the queue to export a particular queue
- Since details of queue Owners, Consumers, Participants are not part of the export, you need to manually add those as required after import.
- User account that is used to run the Control Room services must have read/write access permission to the folder where package is getting exported, i.e. the application path which could be either a network location (shared drive) or local machine.

For example,

**C:\Users\Public\Documents\Server Files\wlm-files\export**

- Maximum 200 queues can be exported in a package
- Queues in draft state cannot be exported
- Entire export operation will fail, if any of the queue export fails.

### Import

- The Control Room user whose credentials are used for authentication must have **Import bots** permission
- The Control Room Queue Admin can import **all** queues.
- The Control Room user who will use the APIs to import multiple bots must have **read /write** access permission to the folder where the exported package file shall be provided by Automation Anywhere. i.e. the application path which could be either a network location (shared drive) or local machine.

For example,

**C:\Users\Public\Documents\Server Files\wlm-files\import**

- The user who imports the package becomes the Owner of the imported queue by default. Add **Participants**, **Consumers** or additional **Owners** manually on the imported queues as required.
- If a queue category is already created by any previous import, subsequent imports will just use that queue category as long as all column names and types match.

## API Endpoints

- a. **Export** - <Control Room URL>/v1/wlm/queues

For example,

**https://crdevenv.com:81/v1/wlm/queues**

- b. **Import** - <Control Room URL>/v1/wlm/queues

For example,

**https://crttestenv.com:82/v1/wlm/queues**

Using the above end points of the WLM Export Import API you can export and import queues.

## Export Queues

To export queues using the Export API provided by Automation Anywhere:

1. Use the POST method to generate a token using the end point **http(s)://<hostname:port>/v1/authentication**. For this provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.

For example, **https://crdevenv.com:81/v1/authentication**

2. Use the POST method and state the parameters for credentials in Body Data.

For example,

```
{
  "username": "Mike.Lee",
  "password": "1234567890"
}
```

3. Click Play/Start/Send

4. The Workload Export API will make use of the authentication token that is obtained using the Authentication API. The authentication token has to be passed on as one of the header inputs to the Workload Export API.

5. Provide Request parameters **X-Authorization**, **Accept** and **queue-ids** as Headers.

For example,

```
{
  "X-Authorization": "authorization token issued by Control Room after login",
  "Accept": "application/json/file",
  "queue-ids": "1,2,3,4,5"
}
```

6. Click Play/Start/Send

7. The action is successful when the response status is 200 OK.

8. Copy the package name from the response frame. You can use this to import the queue package.

**Tip:** Ensure the import package has the correct extension - **.wlmpkg**

For example, copy the **filename** given in **content-disposition**:

```
cache-control → no-cache, no-store, max-age=0, must-revalidate
content-disposition → attachment; filename=WorkloadPackage_20180524_180900.wlmpkg
content-length → 887
content-type → application/aapkg
date → Thu, 24 May 2018 12:39:00 GMT
expires → 0
pragma → no-cache
x-frame-options → SAMEORIGIN
```

## Import Queues

Once the queue package is successfully exported to a network drive or Control Room machine path, another authorized user can import that package to a different Control Room using the Import API:

1. Use the Post method to generate a token using the end point **http(s)://<hostname:port>/v1/authentication**. Provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.

For example, **https://crtestenv.com:82/v1/authentication**

2. Use the POST method and state the parameters for credentials in the request body.

Refer sample:

```
{
  "username": "Tom.Watson",
  "password": "1234567890"
}
```

3. Click Play/Start/Send

4. Workload Import API will make use of the authentication token that is obtained using the Authentication API. The authentication token has to be passed on as one of the header inputs to the Workload Import API.

5. Provide Request parameters **X-Authorization**, and **Content-Type** as Headers.

For example,

```
"X-Authorization": "authorization token issued by Control Room after login",
"Content-Type": "multipart/form-data"
```

6. Now provide the parameters **Content-Disposition: form-data; name="upload"; filename="{file name}"** to import the queue package in the request body.

For example,

```
Content-Disposition: form-data;
name="upload"; filename="{WorkloadPackage_20180524_180900.wlmpkg}"
```

7. Click Play/Start/Send

8. The action is successful when the response status is 200 OK.

### API Response Codes

Http(s) Status code	Response - Description	Corrective Action
200	Package created successfully	NA
400	Bad request parameter	Retry with valid parameters
404	File not found	Ensure that the queue is present in Control Room
501	Permission error	Ensure that you have the required permission

### Audit Logs

An audit entry is logged in the Control Room **Audit Log** page when you export or import queues. The illustration below shows the audit entries (successful as well as unsuccessful) for Export queues:

Audit log

**Audit log**

Action type ▾ Choose action type

Action type: Export queues X

Actions (9 of 112)

STATUS	TIME	ACTION TYPE	ITEM NAME	ACTION TAKEN BY	SOURCE DEVICE	SOURCE	REQUEST ID
Successful	18:48:46 IST 2018-05-24	Export queues	WorkloadPackage_20180524_184846.wlmpkg	mike.lee	172.16.16.58 172.16.16.58	Control Room	ec66aaa7-ffc7-4d38-9...
Successful	18:09:00 IST 2018-05-24	Export queues	WorkloadPackage_20180524_180900.wlmpkg	mike.lee	172.16.16.58 172.16.16.58	Control Room	f99e6daa-3990-4d83-...
Unsuccessful	18:07:53 IST 2018-05-24	Export queues	--	ellie.brown	172.16.16.58 172.16.16.58	Control Room	b49b5db2-9475-47b1-...
Successful	16:27:55 IST 2018-05-24	Export queues	WorkloadPackage_20180524_162755.wlmpkg	tom.watson	172.16.16.58 172.16.16.58	Control Room	a8705960-b57b-4ee2-...
Successful	16:27:32 IST 2018-05-24	Export queues	WorkloadPackage_20180524_162732.wlmpkg	tom.watson	172.16.16.58 172.16.16.58	Control Room	9a5833c8-c146-4e34-...
Unsuccessful	16:25:23 IST 2018-05-24	Export queues	--	tom.watson	172.16.16.58 172.16.16.58	Control Room	f650b8d5-2249-4167-...
Unsuccessful	16:22:37 IST 2018-05-24	Export queues	--	tom.watson	172.16.16.58 172.16.16.58	Control Room	bcbf42c2-fd19-4029-8...
Unsuccessful	16:21:17 IST 2018-05-24	Export queues	--	tom.watson	172.16.16.58 172.16.16.58	Control Room	29833f15-b6e6-4d25-a...
Unsuccessful	16:21:05 IST 2018-05-24	Export queues	--	tom.watson	172.16.16.58 172.16.16.58	Control Room	86fa4dc8-c7d0-45ce-...

# API - get all queues

As a Control Room user with Export and Import Bots and Queue Admin role permissions, you can use the Get all queues API fetch the list of work items of **all queues** and its details available in the Control Room.

Similarly as Control Room **user** with **Export and Import Bots** permissions as well as **Queue Owner, Participant, and/or Consumer** privileges, you can use the Get all queues API to fetch the list of work items **in a given queue** and its details available in the Control Room.

## API End Point

Use the following end point to access the API:

<Control Room URL>/v1/wlm/queues

For example,

<https://crdevenv.com:81/v1/wlm/queues>

## Get all queues

1. Use the Post method to generate a token using the end point [http\(s\)://<hostname:port>/v1/authentication](http://<hostname:port>/v1/authentication). For this provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.

For example,

<https://crdevenv.com:81/v1/authentication>

2. Use the GET method to access the Workload APIs

For example,

GET <https://crdevenv.com:81/v1/wlm/queues>

3. Provide the following Request parameters in Headers

"X-Authorization" : "Authorization token"  
"Content-Type" : "application/json"

4. Click **Send**

5. The action is successful when the response status is **200 OK**.

6. You can view the result in the Body data.

For example,

```
[  
{  
  "id": 1, "createdBy": 2, "createdOn": "2018-05-23T16:53:46+05:30", "updatedBy": 2, "updatedOn":  
  "2018-05-24T16:26:02+05:30", "tenantId": 1, "version": 2, "name": "Invoice Queue", "description": "",  
  "reactivationThreshold": 1, "status": "IN_USE", "expiry": null, "manualProcessingTime": null, "manu-  
  alProcessingTimeUnit": "SECONDS", "workItemProcessingOrders": [ { "id": 3, "priority": 1, "columnId":  
  2, "sortDirection": "asc" } ], "displayColumnIds": null, "workItemModelId": 1  
},  
  
{  
  "id": 2, "createdBy": 2, "createdOn": "2018-05-25T12:28:36+05:30", "updatedBy": 2, "updatedOn":  
  "2018-05-25T12:28:36+05:30", "tenantId": 1, "version": 0, "name": "Devices for deployment queue",  
  "description": "", "reactivationThreshold": 1, "status": "NOT_IN_USE", "expiry": null, "manu-  
  alProcessingTime": null, "manualProcessingTimeUnit": "SECONDS", "workItemProcessingOrders": [ { "id":  
  4, "priority": 1, "columnId": 6, "sortDirection": "asc" } ], "displayColumnIds": null,  
  "workItemModelId": 2  
}  
]
```

## API Response Codes

Http(s) Status code	Response - Description	Corrective Action
200	Queue details listed successfully	NA
400	Bad request parameter	Retry with valid parameters
404	File not found	Ensure that the queue is present in Control Room
501	Permission error	Ensure that you have the required permission

# API - add/insert work item data to queue

As a Control Room administrator or a user with **Export** and **Import Bots** and **Queue Admin** role permissions as well as **Queue Owner**, **Participant**, and/or **Consumer** privileges, you can use the REST API provided by Automation Anywhere to add work item data to queues created in the Control Room.

## API End Point

Use the following end point to access the API:

<Control Room URL>/v1/wlm/queues/<queue-id>/workitems

For example,

`https://crdevenv.com:81/v1/wlm/queues/1/workitems`

## Steps to add work item data to a queue

1. Login to Control Room. Refer [Log on to Control Room](#) for more information.
2. Create a queue. Refer [Create a queue](#) for more information
3. For the next step, you need to note down the Queue Id from the database that you configured for your Control Room. Refer AAE Control Room Installation Guide for more information.

For example,

- a. Go to Control Room Database
- b. Right click dbo.QUEUES in the Tables node
- c. Click Select Top 1000 Rows to run the SQL query for Queues.
- d. Identify the queue **id** that is displayed beside the queue **name** column - in this case 1

4. Use POST method to the insert work item data to queue API to upload work items.

For example, if the Queue Id is '1', use the following parameters,

`https://crdevenv.com:81/v1/wlm/queues/1/workitems`

5. Provide the following Request parameters in Headers

```
"X-Authorization" : "Authorization token"
"Content-Type" : "application/json"
```

6. In the Request Body provide required parameters i.e. the work item column names with its data to insert it in a queue. Ensure the parameters for columns in the body data match that of the queue structure.

For example,

```
[{"Invoice Id": "INV5001", "Customer Name": "Daniel", "Amount": "55555", "email": "daniel@aae.com", "Invoice Date": "2018-05-28"}]
```

7. Click **Send**

8. The action is successful when the response status is 200 **OK**.

9. You can view the result in the Body data.

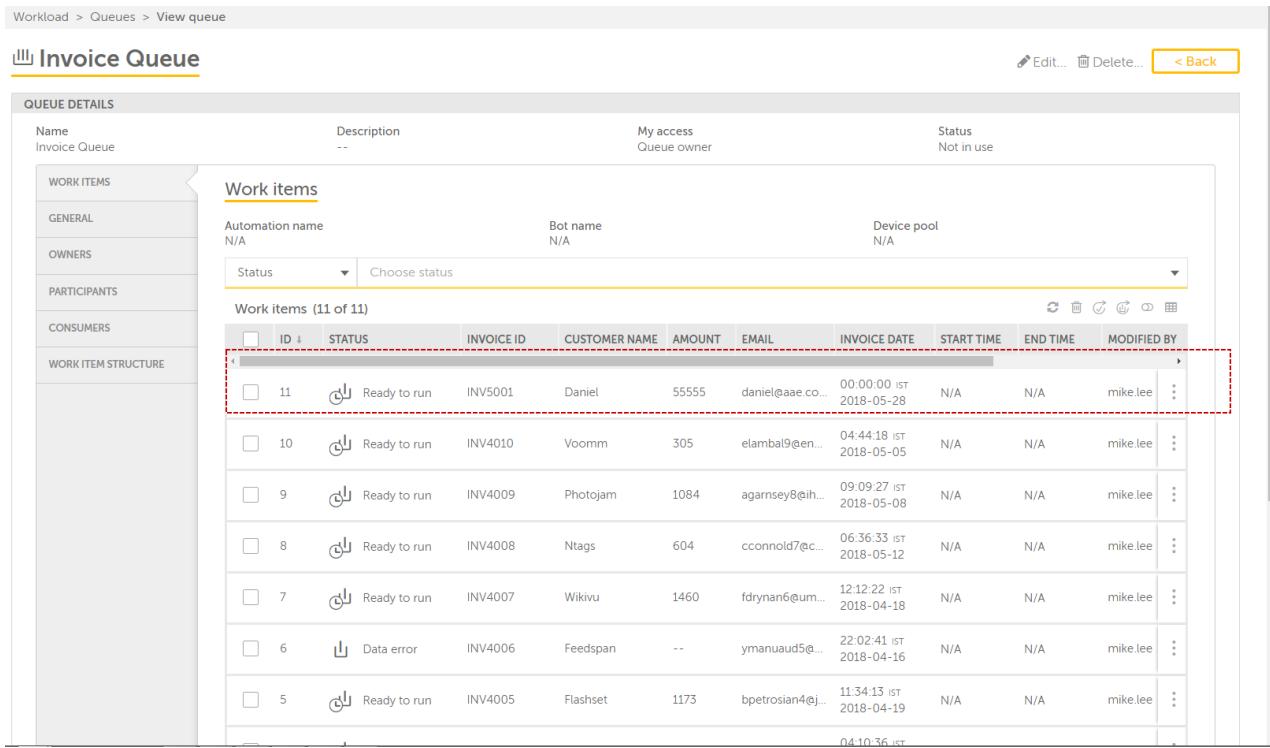
For example,

```
[
{
  "id": 11, "createdBy": 2, "createdOn": "2018-05-28T12:29:22+05:30", "updatedBy": 2, "updatedOn": "2018-05-28T12:29:22+05:30", "tenantId": 1, "version": 0, "json": "q+j74omkZEMS0Ta2obN0Pvm-b1se/xK+MDc3k0/V4TOXfm1ICoG2jNEsT/yPlW5Xc64op0qAuozVoSf8Hg/us3HqI0tKRun-IJB4is/rCG9xK7g9LN+e3Cg4DTlgfoxD9UeB0oU+bXKKq1b3p6EI9f07gvvrymM45pIsoktSkM3+U=", "deviceId": null, "status": "NEW", "startTime": null, "endTime": null, "col1": "INV5001", "col2": "Daniel", "col3": "55555", "col4": "daniel@aae.com", "col5": "2018-05-28", "brUserId": null, "queueId": null, "comment": null, "botId": null, "poolId": null, "automationId": null, "lastPausedTime": null, "totalPausedTime": 0}
```

}

]

10. Go to Control Room → Workload → Queues → View page to verify that the data is added:



The screenshot shows the 'Invoice Queue' view in the Control Room. The 'QUEUE DETAILS' section includes the name 'Invoice Queue', a description field with two dashes, 'My access' set to 'Queue owner', and a 'Status' of 'Not in use'. The 'WORK ITEMS' section has tabs for 'GENERAL', 'OWNERS', 'PARTICIPANTS', 'CONSUMERS', and 'WORK ITEM STRUCTURE'. The 'WORK ITEMS' table lists 11 items, with the first item highlighted by a red box. The columns in the table are: ID, STATUS, INVOICE ID, CUSTOMER NAME, AMOUNT, EMAIL, INVOICE DATE, START TIME, END TIME, and MODIFIED BY. The first item is for invoice INV5001, customer Daniel, amount 55555, and was created on 2018-05-28 at 00:00:00 IST.

ID	STATUS	INVOICE ID	CUSTOMER NAME	AMOUNT	EMAIL	INVOICE DATE	START TIME	END TIME	MODIFIED BY
11	Ready to run	INV5001	Daniel	55555	daniel@aae.co...	00:00:00 IST 2018-05-28	N/A	N/A	mike.lee
10	Ready to run	INV4010	Voomm	305	elambal9@en...	04:44:18 IST 2018-05-05	N/A	N/A	mike.lee
9	Ready to run	INV4009	Photojam	1084	agarnsey@qih...	09:09:27 IST 2018-05-08	N/A	N/A	mike.lee
8	Ready to run	INV4008	Ntags	604	cconnold7@co...	06:36:33 IST 2018-05-12	N/A	N/A	mike.lee
7	Ready to run	INV4007	Wikivu	1460	fdrynan6@um...	12:12:22 IST 2018-04-18	N/A	N/A	mike.lee
6	Data error	INV4006	Feedspan	--	ymanuaud5@j...	22:02:41 IST 2018-04-16	N/A	N/A	mike.lee
5	Ready to run	INV4005	Flashset	1173	bpetrosian4@j...	11:34:13 IST 2018-04-19	N/A	N/A	mike.lee
						04:10:36 IST			

## API Response Codes

Http(s) Status code	Response - Description	Corrective Action
200	Work item data inserted successfully	NA
400	Bad request parameter	Retry with valid parameters
404	File not found	Ensure that the queue is present in Control Room
501	Permission error	Ensure that you have the required permission

# API - get all work items of a queue

As a Control Room user with Queue Admin role or **Queue Owner**, **Participant**, and/or **Consumer** privileges, you can use the Get all queues API to access all work items of a particular queue.

## API End Point

Use the following end point to access the API:

<Control Room URL>/v1/wlm/queues/<queue-id>/workitems

For example,

<https://crdevenv.com:81/v1/wlm/queues/1/workitems>

## Get all queues

1. Use the Post method to generate a token using the end point [http\(s\)://<hostname:port>/v1/authentication](http://<hostname:port>/v1/authentication). For this provide the Control Room instance as **Server Name /Hostname /IP** and the **Port** number.

For example,

<https://crdevenv.com:81/v1/authentication>

2. Use the GET method to access the Workload API and the work items within a specific queue

For example,

GET <https://crdevenv.com:81/v1/wlm/queues/1/workitems>

3. Provide the following Request parameters in Headers

"X-Authorization" : "Authorization Token"  
 "Content-Type": "application/json"

4. Click **Send**

5. The action is successful when the response status is 200 OK.

6. You can view the result in the Body data.

For example,

```
[  

  { "id": 1, "createdBy": 2, "createdOn": "2018-05-23T16:54:15+05:30", "updatedBy": 2, "updatedOn":  

    "2018-05-23T16:54:15+05:30", "tenantId": 1, "version": 0, "deviceId": null, "status": "ERROR",  

    "startTime": null, "endTime": null, "brUserId": null, "queueId": 1, "comment": null, "botId": null,  

    "poolId": null, "automationId": null, "data": { "Invoice Id": "INV4001", "Customer Name": "Mymm",  

      "Amount": "", "email": "bfreshwater0@nps.gov", "Invoice Date": "2018-04-17T02:33:32Z" },  

    "lastPausedTime": null, "totalPausedTime": 0  

  },  

  { "id": 2, "createdBy": 2, "createdOn": "2018-05-23T16:54:15+05:30", "updatedBy": 2, "updatedOn":  

    "2018-05-23T16:54:15+05:30", "tenantId": 1, "version": 1, "deviceId": null, "status": "NEW",  

    "startTime": null, "endTime": null, "brUserId": null, "queueId": 1, "comment": null, "botId": null,  

    "poolId": null, "automationId": null, "data": { "Invoice Id": "INV4002", "Customer Name": "Vipe",  

      "Amount": 1025, "email": "ibricksey1@godaddy.com", "Invoice Date": "2018-04-14T08:52:35Z" },  

    "lastPausedTime": null, "totalPausedTime": 0  

  },  

  { "id": 3, "createdBy": 2, "createdOn": "2018-05-23T16:54:15+05:30", "updatedBy": 2, "updatedOn":  

    "2018-05-23T16:54:15+05:30", "tenantId": 1, "version": 1, "deviceId": null, "status": "NEW",  

    "startTime": null, "endTime": null, "brUserId": null, "queueId": 1, "comment": null, "botId": null,  

    "poolId": null, "automationId": null, "data": { "Invoice Id": "INV4003", "Customer Name": "Skyndu",  

      "Amount": 1466, "email": "vwooster2@nymag.com", "Invoice Date": "2018-04-25T14:02:29Z" },  

    "lastPausedTime": null, "totalPausedTime": 0  

  },  

  ....]  

]
```

## API Response Codes

Http(s) Status code	Response - Description	Corrective Action
---------------------	------------------------	-------------------

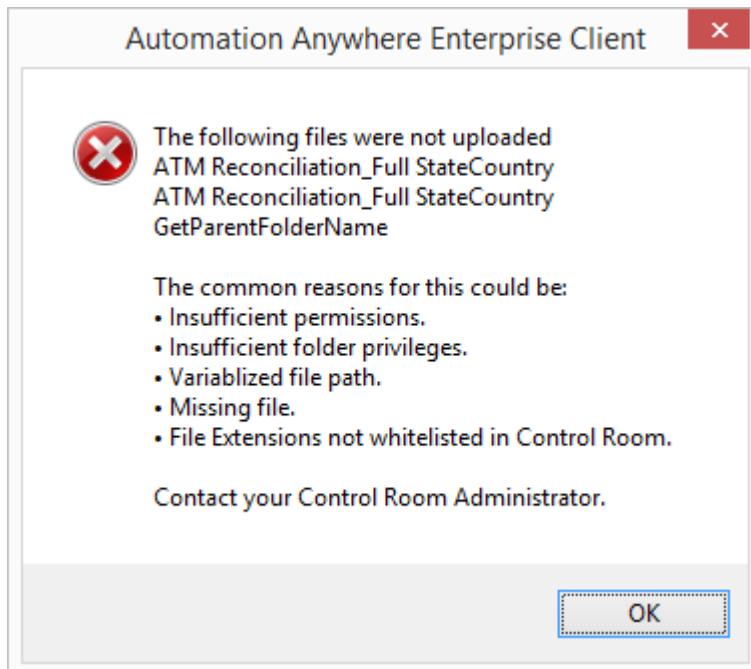
tion		
200	Work items listed successfully	NA
400	Bad request parameter	Retry with valid parameters
404	File not found	Ensure that the queue is present in Control Room
501	Permission error	Ensure that you have the required permission

## Restrict upload of malicious files

As a Control Room Administrator you can add file extensions to the configuration file that restricts the Bot user from uploading files that have extensions other than the ones whitelisted in it. This will help restrict uploading of malicious files to the Control Room repository.

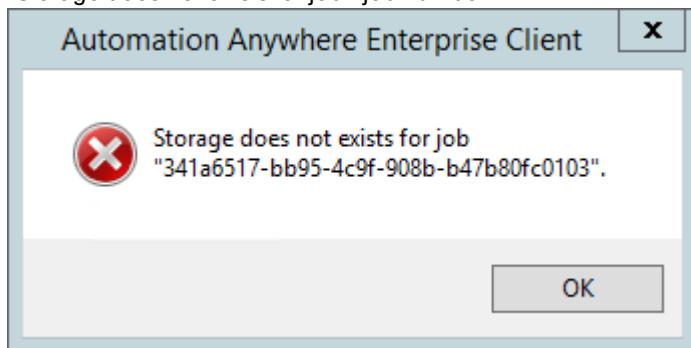
To whitelist files,

1. Open the config folder from Control Room installation path.  
For example, C:\Program Files\Automation Anywhere\Enterprise\config
2. Open the **repository.properties** file in edit mode; preferably in **Run as administrator** mode
3. Update “**repository.whitelisted.file.extensions=**” to include the files that you wish to white list. Add the extensions separated by a comma (,)  
For example, repository.whitelisted.file.extensions=atmx,mbot,csv
  - a. To allow files with all extensions, use asterisk (\*)
  - b. DO NOT add space between the extension names
  - c. If using load balancer, update the config file in all nodes
4. Using **POST** method execute the Authentication API. Refer article on [Authentication API](#) for details.
  - The token passed through this API has to be used for the next step.
5. Using the **PUT** method execute the API **http(s)://{{hostname}}:{{port}}/v1/repository/fileExtensions/update**  
For example, <https://ultron.com:81/v1/repository/fileExtensions/update>
6. On successful implementation, when a Bot user attempts to upload files that are not part of the whitelist from the AAE Client, the following message is shown in AAE Client,



## Troubleshooting Control Room

- When I try to upload an automation file from AAE Client in a distributed environment, the following error message is displayed.  
"Storage does not exists for job <job number>"



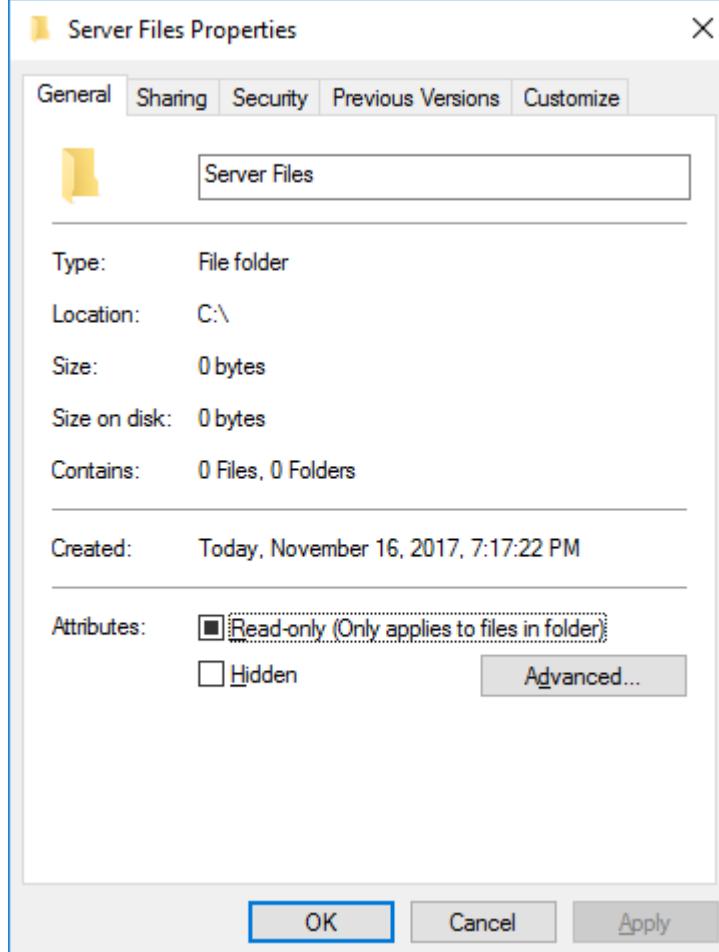
This is due to one of the following reasons.

- The Control Room installation wizard did not create the folder where automation files will be uploaded
- The folder where automation files are to be uploaded does not have the required shared permission

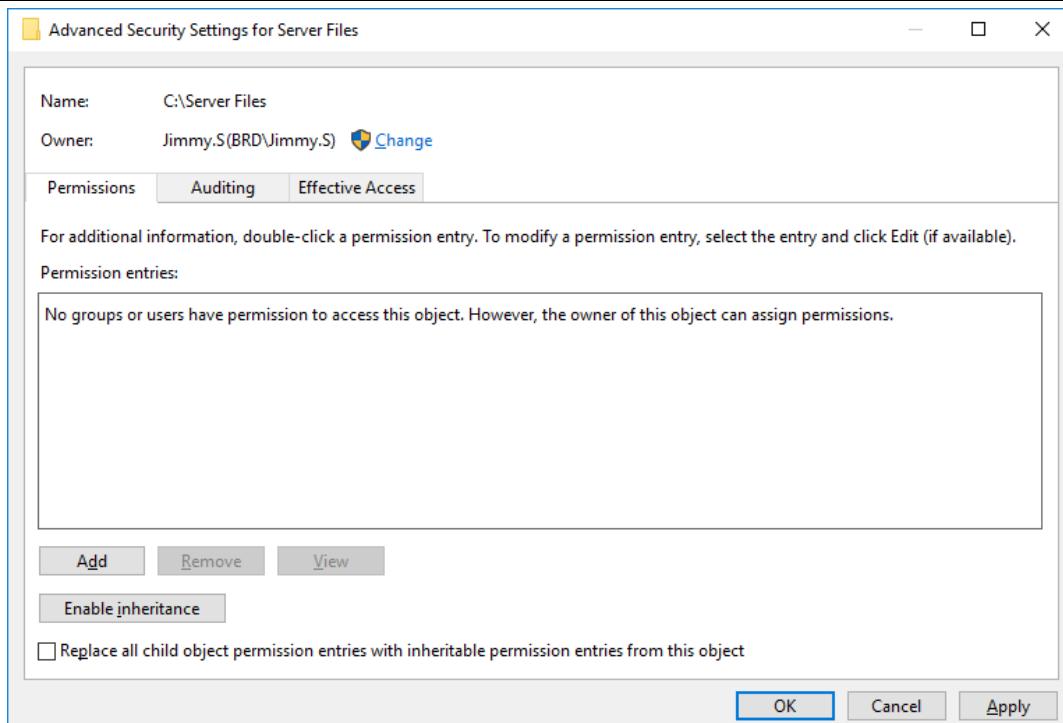
To troubleshoot this, perform the following steps.

- Ensure that the folder where automation files are to be uploaded has been created.
- If the folder has been created, ensure that the folder has the **Enable inheritance** and **shared** permissions. To do this perform the following steps.

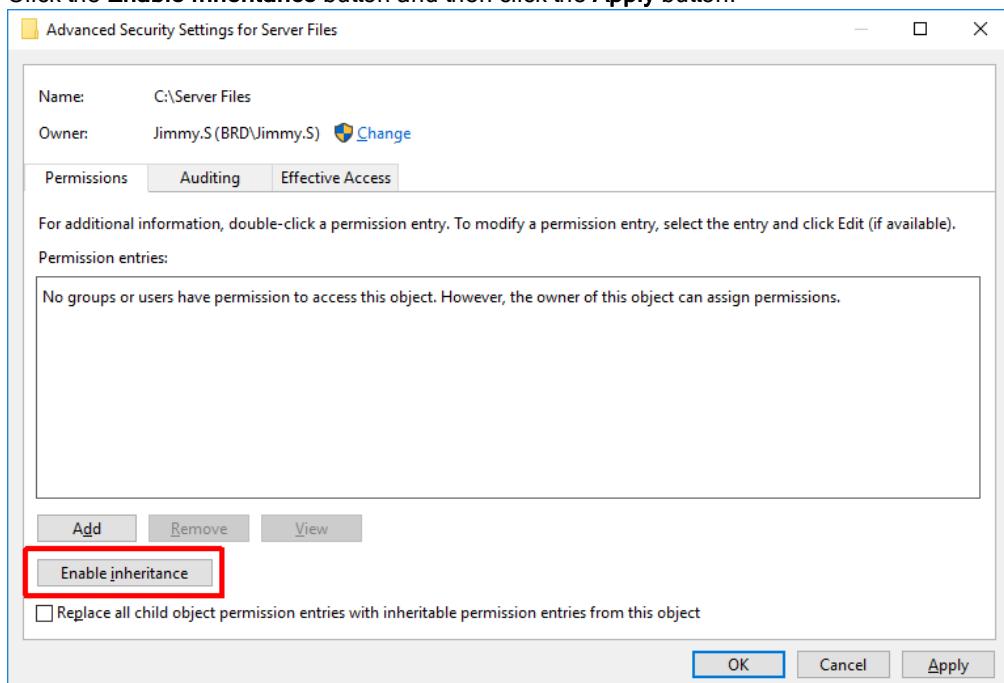
- Right-click the folder and click **Properties**. The folder properties are displayed.



- Click the **Security** tab and then click the **Advanced** button. The **Advanced Security Setting** dialog box is displayed.



- iii. Click the **Enable Inheritance** button and then click the **Apply** button.



# Appendix - Guidelines for General Data Protection Regulation

The General Data Protection Regulation (GDPR) is one of the strictest compliance frameworks with respect to maintaining privacy of personal data. The GDPR defines personal data as any data that can be used to identify a natural person. That natural person is defined as the Data Subject. Business entities that define and determine the purpose and means of the processing of personal data (business process) are defined as Data Controllers. Business entities that perform the processing of personal data are defined as Data Processors. Data controllers and processors must be ready to demonstrate that their data processing activities and security processes adhere to the GDPR if the personal data they process refers to any Data Subject that is a citizen of any European Union (EU) member country or territory, even when that processing is performed outside of the EU. The purpose of the GDPR is to make sure that the rights of Data Subjects with respect to their personal information are maintained. These rights are concerned with privacy, processing for legitimate business purposes only, the right to control, access, and remove their personal information from the Data Processors systems.

Automation Anywhere customers, which utilize Automation Anywhere Enterprise (AAE) are typically Data Controllers and/or Data Processors in the context of GDPR. As software that is purchased, deployed and managed by the customer, compliance with GDPR depends upon the policies and procedures of the deploying customer entity. GDPR compels the deploying entity to implement appropriate technical and organizational measures to assure data is processed for stated purposes and that data is protected by design and by default. The guidelines described below must be followed to assure that AAE is being utilized in a way that is compliant with the GDPR.

## Data Protection

Automation anywhere has a full set of security features that either automatically provide or are configurable by design to provide data protection. As with any enterprise application the consistent and proper utilization of security controls depends upon the organization. Several aspects of security within a customer environment are outside the scope of AAE, for example the security posture of the operating system upon which AAE is deployed, or the network security of the environment.

AAE utilizes encryption technologies for data at rest, data in motion, and data in memory. Encryption technologies are documented in the AAE Security Architecture Guides (for versions 10 and 11).

All users accessing AAE may be authenticated utilizing standard centralized authentication methods such as Active Directory. Additionally credential access by AAE may be done either with the built-in bank grade secure Credential Vault or with external credential storage systems such as CyberArk.

Authorization of AAE users is outside the scope of AAE software, the deploying entity must assure that only authorized personnel with a business need can access AAE. Corporate users with access to AAE can be granted fine grained permissions via roles within the product supporting role based access controls (RBAC). The permissions and roles support sophisticated RBAC models assuring dual-controls and separation of duties within the operations of AAE. Permissions can be implemented on all aspects of AAE operation including: credentials, bots, bot runners, bot creators, bot schedules, audit log access, workload management queues, and pools. Because AAE allows for the automation of any type of business process, it is the responsibility of the deploying entity to assure that only those personnel that are permitted to access applications involved with any automation are authorized to do so. Within this consideration, AAE provides all permissions necessary to separate different bots, bot runners, and operating personnel along any line of business or processing, assuring separate processing domains within the product.

All user actions are audited within AAE providing records of all access and actions taken by operations personnel. AAE audit logging supports all major compliance frameworks.

AAE supports a redundant and load balanced architecture that scales with business needs assuring availability of processing resources. AAE support state synchronization across geographically distinct deployments supporting disaster recovery and resiliency in processing.

Bots are software programs developed by customer business experts, and as with any enterprise application development, state of the art requires Secure Software Development Life Cycle (SDLC) processes be implemented. AAE supports separation of Development, Testing, and Production environments through a combination of separate deployments and RBAC as described above. See Security Architecture documents for more details (for versions 10 and 11).

## Pseudonymization

GDPR specifically calls out pseudonymization as an appropriate technical measure to protect data. An in-depth discussion of pseudonymization is outside the scope of AAE. Pseudonymization transforms data to artificial identifiers. This gives the Controller and Processor a way to process data such that it is no longer possible to use the data to identify a natural person. Tokenization is another approach that transforms data such that it can be referenced later but in terms of the tokenized data such that it cannot be used to identify a natural person. Automation Anywhere recommends adherence with GDPR Article 25 in the use of pseudonymization and tokenization, in all cases where personal information is being processed by bot. The use of pseudonymization for personal data removes any risk involved with data remanence within the AAE platform.

## Data Remanence In Control Room

There are instances where data is retained within the databases which support the AAE Control Room. Specifically when using Workload Management, Bot Insight, and IQ Bot. In all cases regarding data remanence in Control Room, pseudonymization and tokenization reduce Controller and Processor entity effort to comply with GDPR. Also, when enabling logs for debugging information such as username (users of the platform) will be retained in the logs.

## Workload Management and Queues

When utilizing workload management to deploy multiple bots to the same automation, the work items that are placed into the queues are stored in the database. Through the Control Room UI any work item may be queried, reviewed, and deleted. When processing personal data in work items, queues should be periodically deleted.

### Bot Insight

When using Bot Insight, any field that is tagged for analytics inside the automation task built in the AAE developer tool will be logged and stored in the Analytics database. In version 11 Bot Insight, all variables are automatically tagged for capturing data and therefore would be stored in the database. For version 11 Bot Insight, this default action of tagging all data variables should be unchecked for fields that contain personal data.

### IQ Bot

IQ Bot stores images uploaded by users or RPA tasks and extracts structured data from those images. These images and the extracted data are temporarily stored in the database while IQ Bot is running or when it is halted with an exception. After all exceptions in an IQ Bot run are either validated or invalidated, the data is removed from the database. Training images for IQ Bot are stored in the database and should not contain personal data that can identify a natural person. For IQ Bot version 5.2.1 or earlier the system will automatically move production images to the training environment. The training environment should be reviewed periodically to identify production images and remove them. In version 5.3, scheduled for release in June 2018, there will be a feature to disable this automatic movement of production images to the training environment.

## User Credentials

User credentials in AAE versions 10 and 11 can be added and deleted by any administrator with the appropriate privileges, set by a role. The Control Room supports the querying, reviewing, and deleting of any credential at any time.

## AAE Databases and Data Removal

If processing has been done and pseudonymization has not been applied, it may be necessary to remove data from AAE databases. AAE uses a standard SQL database either co-resident on the Control Room server or a corporate database server or cluster identified during installation and configuration of the Control Room. Consult your database admins to find, report, extract data from the AAE database. A Bot is available from the Automation Anywhere Bot Store that can be used and adapted for this purpose.