



Kryon ConsoleX

VERSION 20.9

ConsoleX

User Guide



KRYON™

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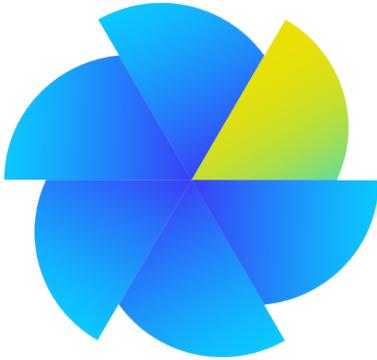
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Introduction to ConsoleX

ConsoleX is Kryon's next generation web-based orchestration and analysis tool for managing and controlling robots, tasks and triggers.

As your virtual workforce grows, you'll want to maximize its productivity. **ConsoleX** offers exceptional visibility into your RPA performance. It provides immediate, actionable insights for rapid drill down into issues, irregularities and trends.

Its upgraded interface is simple to use and enables easy data fetching, searching and filtering.

Under the hood, ConsoleX uses NGINX web server technology which enables highly efficient scalability and ensures the availability and reliability of the application.

About This Manual

ConsoleX is intended for use by RPA Managers, who deploy and manage the automation solution across a robot-based virtual workforce:

This manual covers the following topics:

- On-boarding robots and setting up robot teams.
- Creating tasks and triggers and managing the smooth functioning of the virtual workforce.
- Monitoring robot and task performance, with insights about issues that may need attention and ability to analyze and drill down in order to identify problems and solve them.
- Configuring credentials, the email server, email notifications, and dashboard insights thresholds.
- Using the External Kryon Web API
- Migrating your database if you are upgrading from previous Console versions to ConsoleX

Upgrading from Console to ConsoleX

If you are upgrading from an earlier Console version, there are several issues you should be aware of, and steps to take, corresponding to the additional functionalities of ConsoleX. For more information, see [About migrating data from Console to ConsoleX](#)

If you have upgraded, after migrating your database, all triggers are set to **inactive**. You need to review your triggers and activate those you want activated.

ConsoleX System Requirements

ConsoleX is a cloud application. It is supported on desktop devices using the following browsers:

- Google Chrome 64.0.3282 and above
- Kryon Browser App (for organizations whose policies block the Chrome browser). You can [download Kryon Browser App from here](#).

ConsoleX User Roles

Each user of the Kryon RPA platform is assigned to one or more user roles in the Kryon Admin application. These roles determine which platform component(s) each user can access. There are two user roles that have access to ConsoleX.

- **Console View Only:** A user who will monitor and analyze unattended robot/task performance, but will not schedule or edit robots/triggers.
- **Console Manager:** An RPA manager who will schedule and manage unattended robots / tasks using Kryon Console.

NOTE: The **Console Manager** role can manage tasks via API call. Tick the **SUPPORTS API CALL** check box that appears underneath for permission to create API call tasks.

User roles for ConsoleX are assigned in the **NEW USER** dialog in Kryon Admin, just like for the previous Console versions. For more information about creating users, see *Managing Users* in the *Kryon Admin User Guide*.

Kryon Admin - New User

New User

Username:

Full Name:

Email address:

Status: Active

User role:

- Attended Robot
- Unattended Robot
- Studio Developer
- Console View Only
- Console Manager
- Supports API calls

New password:

Confirm new password:

Options

User must change password at next login
The user must log out and then log in again for the change to take effect.

Accessing Console

Access **Kryon ConsoleX** using the **Chrome** web browser from any machine with access to the RPA server by entering its FQDN (Fully Qualified Domain Name), followed by `/console`. For example: `consoleserver.mycompany.com/console`.



NOTE

If your Kryon deployment uses SSL/TLS, be sure to include the `https:` prefix at the start of the URL, for example:

`https://consoleserver.mycompany.com/console`

If your server supports authentication using Active Directory, login will be automatic. Otherwise, to log in, use the credentials provided to you by your IT Administrator.

Welcome

Username

Password

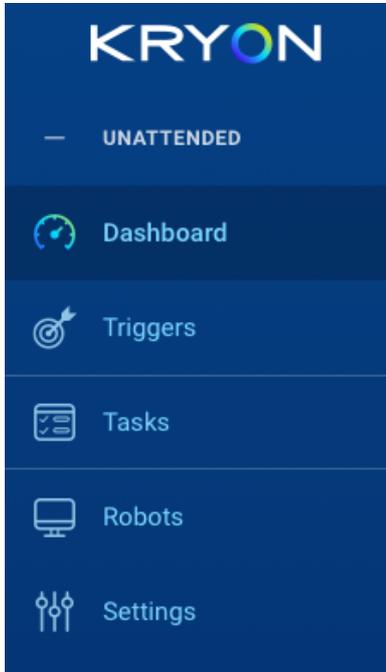
Remember me

LOG IN

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A Tour of ConsoleX

The ConsoleX is organized into several work areas that are accessed by the Navigation menu at the left side of the ConsoleX screen. When you click an item in the Navigation menu, its page with associated tabs and panes appears. The Navigation menu contains the following work areas:



DASHBOARD: Displays high-level charts, statistics, usage information, and insights to improve performance of the robot workforce and its tasks.

TRIGGERS: Triggers are mechanisms for creating tasks. Create, manage and monitor triggers.

TASKS: Tracks tasks in the system. Create, manage and monitor tasks.

ROBOTS: Monitor and manage Robots and Robot Teams.

SETTINGS: Configure the Credentials Vault, Email Notifications, the Email Server, and Dashboard thresholds.

Onboarding Robots

Robots – An Overview

ConsoleX supports the deployment and management of the virtual workforce of unattended robots. It's important to understand how robots are created, because the process begins outside of ConsoleX.

A robot is defined in the system by two combined factors:

- **The Windows Machine** (physical or virtual) from which the robot connects to the server for the first time
- **The OS Session User** on the Window machines who runs the robot application

Each OS Session User on a machine can create only one robot. On the other hand, several robots can be created on one machine, when they are created by different OS session users.

The Robot User

Specific robot credentials are created in advance either in *Active Directory* and synced to the Kryon Admin application or created in *Kryon Admin* itself.

To connect a robot to the server for the first time, the session user runs the robot application.



Tip

Creating usernames and passwords for robots

Instead of defining a username/password for each robot, you can create a common user/password for robots from the same *business unit* (that share similar permissions). This will save you time as you on-board the robots.

Approving a Robot

A robot must be approved in ConsoleX before it can get to work

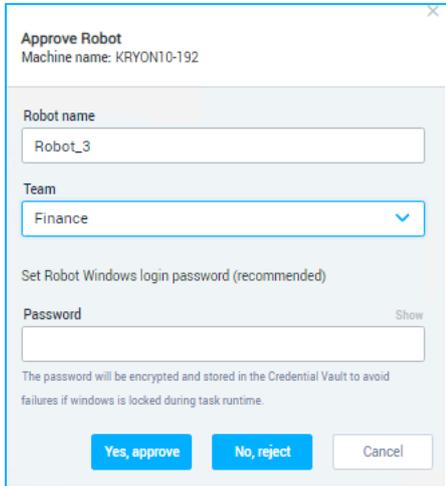
When a robot connects to the server for the first time, it waits for approval in the ConsoleX Pending Approval list on the **PENDING APPROVAL** tab of the Robots main page (in **ROBOTS** from the Navigation menu).

The screenshot shows the KRYON interface for managing robots. The left sidebar contains navigation options: UNATTENDED, Dashboard, Triggers, Tasks, Robots, and Settings. The main content area is titled 'Robots' and has a 'Pending approval' tab selected. Below the tab, there is a table of robots pending approval. The table has the following columns: Machine name, OS user name, Domain name, OS version, and Date of subscription. One robot is listed with Machine name IP-C0A80460, OS user name Administrator, Domain name IP-C0A80460, OS version Microsoft Windows 10 Enterprise, and Date of subscription Today at 9:45 AM. An 'Approve' button is highlighted over the first row.

Machine name	OS user name	Domain name	OS version	Date of subscription
IP-C0A80460	Administrator	IP-C0A80460	Microsoft Windows 10 Enterprise	Today at 9:45 AM

To approve a robot:

1. Click **ROBOTS** in the Navigation menu. On the Robots main page, click the **PENDING APPROVAL** tab.
2. Click the **APPROVE** button on the row of the selected robot, and complete the options in the following dialog box:



3. Enter a friendly **Robot Name**.

Why is this important? This field is optional but highly recommended since this way the robot will be identified in the dashboard and tables of ConsoleX.

4. Assign the robot to a Robot Team (optional). Learn more about [Robot Teams](#).

5. Enter and confirm a Windows OS **Password** for the robot.

If Windows is locked at the time a task is scheduled to run, this password will allow the robot to unlock the Windows session to run the task.

- The password you enter will be stored securely in the [Credentials Vault](#) (along with the robot's OS username) as an OS User credential.
- **Note:** You can add the robot's Windows password later if you don't want to at this point.

6. Click **YES, APPROVE** to approve the robot. The robot moves to the **APPROVED** tab of the Robots main page.

At this point, you can alternatively:

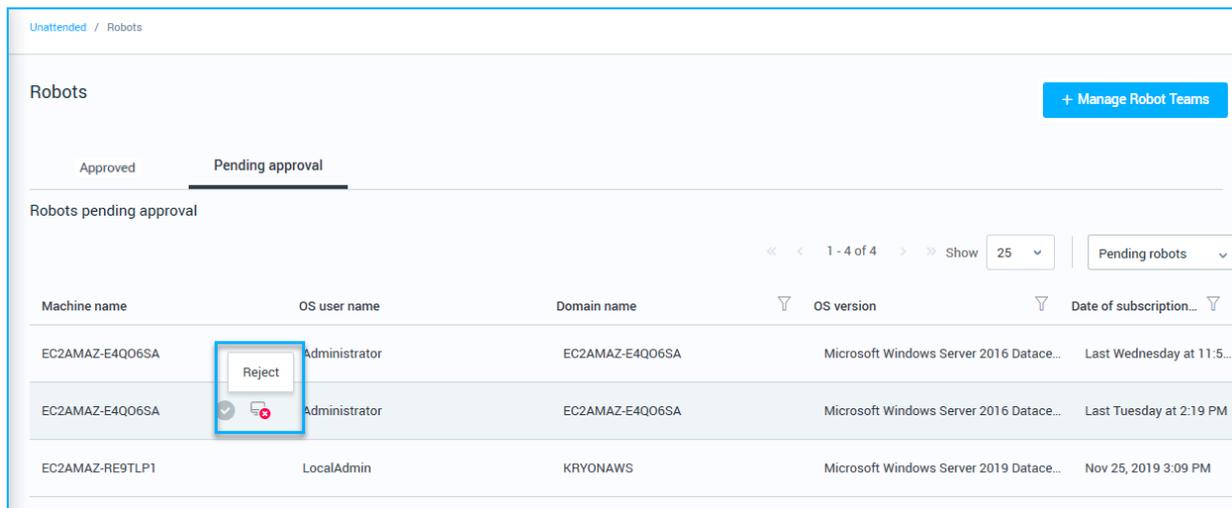
- Click **CANCEL** to return the robot to the **PENDING APPROVAL** list; or
- Click **NO, REJECT** to send the robot to the **REJECTED ROBOTS** list.

TIP

If you have configured email addresses to receive notifications when new robots are added, an email will be sent to specified address(es). Learn more about [Adding/Editing Robot Event Notifications](#).

Rejecting a Robot

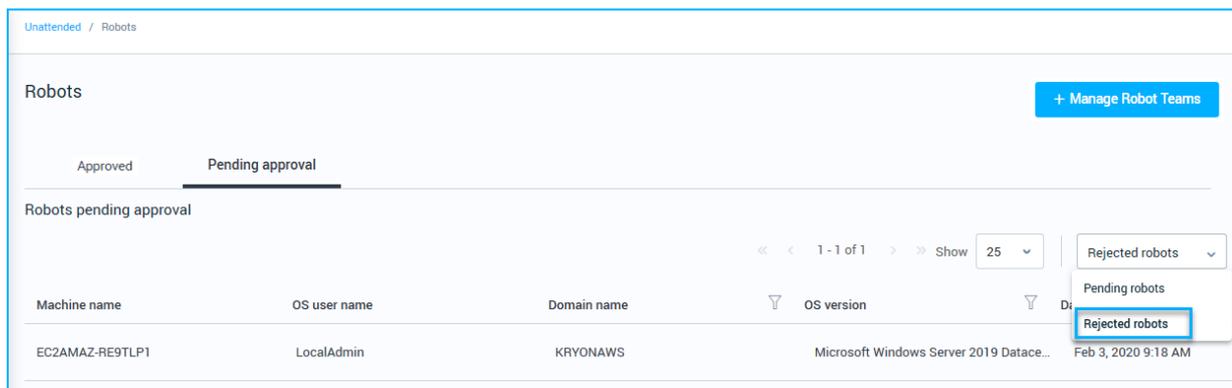
To reject a robot:



The screenshot shows the 'Robots' interface with the 'Pending approval' tab selected. A table lists robots with columns for Machine name, OS user name, Domain name, OS version, and Date of subscription. A 'Reject' button is highlighted on the first row of the table.

Machine name	OS user name	Domain name	OS version	Date of subscription...
EC2AMAZ-E4QO6SA	Administrator	EC2AMAZ-E4QO6SA	Microsoft Windows Server 2016 Datace...	Last Wednesday at 11:5...
EC2AMAZ-E4QO6SA	Administrator	EC2AMAZ-E4QO6SA	Microsoft Windows Server 2016 Datace...	Last Tuesday at 2:19 PM
EC2AMAZ-RE9TLP1	LocalAdmin	KRYONAWS	Microsoft Windows Server 2019 Datace...	Nov 25, 2019 3:09 PM

1. Click **ROBOTS** in the Navigation menu, go to the **PENDING APPROVAL** tab.
2. Click the **REJECT** button on the row of the robot you want to reject. The robot moves to the **REJECTED ROBOTS** list.
3. To view the Rejected Robots list, select **REJECTED ROBOTS** from the drop down at the top right of the list in the **PENDING APPROVAL** tab.



The screenshot shows the 'Robots' interface with the 'Rejected robots' list displayed. The 'Rejected robots' option is selected in the dropdown menu at the top right.

Machine name	OS user name	Domain name	OS version	Date of subscription...
EC2AMAZ-RE9TLP1	LocalAdmin	KRYONAWS	Microsoft Windows Server 2019 Datace...	Feb 3, 2020 9:18 AM

At this point, you can:

- Click **DELETE** to permanently delete the robot from the **REJECTED ROBOTS** list; or
- Do nothing to leave the robot in the **REJECTED ROBOTS** list

Why reject a robot?

A [new robot is created](#) whenever a robot client logs in from a specific machine for the first time. There are times that this can happen inadvertently (especially if your company has elected to create new Kryon users via Windows Active Directory), but rejecting the robot makes this easy to correct.



CAUTION

Don't forget to delete the user in Kryon Admin

If a Kryon user was inadvertently created via Active Directory, be sure to also delete the user in Kryon Admin so that it is not counted as one of your licensed users.



FOR EXAMPLE

IT users

Consider the following common scenario:

- An IT administrator performing maintenance uses his or her Windows username to log into to a robot's VM.
- The robot client automatically runs and (using Active Directory) creates and logs in a new Kryon user with the IT admin's username.
- A new Kryon username/machine name combination is created, thus creating a new robot.

This is exactly the type of robot you would likely choose to reject.

Robot approval warnings

The screenshot shows a dialog box titled "Approve robot" with a close button (X) in the top right corner. Below the title, it displays "Machine name\OS username: KSAmitLap\Amit.petal". The dialog contains several input fields: "Robot name" with the value "Robot_126", "Team" with a dropdown menu showing "Select a team", and "Password" with a "Show" link. Below the password field, a note states "The password will be encrypted and stored in the credential vault." A warning box with a yellow background and an exclamation mark icon is highlighted with a blue border. The warning text reads: "Before you approve this robot:" followed by two bullet points: "• This robot is on a machine (<machineName>) that is already running a robot. Does your system support simultaneous logins from the same machine?" and "• This robot's name is already in use by another robot. Does your domain permit simultaneous logins from different machines?". Below the warning, it asks "Are you sure you want to approve this robot?". At the bottom of the dialog, there are three buttons: "Yes, Approve" (blue), "No, Deny" (blue), and "Cancel" (white).

Kryon will warn you when it detects that you are about to approve a robot that might have been created in error:

- When a robot is created on a machine that is already running a robot; or
- When the robot's username is already used by another robot.

Depending on your network specifications and configuration, these types of robots may not be problematic at all – in which case you can choose to ignore the warnings and approve the robots.

Robot Teams

Much as you would organize a human workforce, Kryon gives you the option to create teams of robots and organize them according to whatever criteria you find useful (for example, according to department, task type, applications used). While organizing your robots into Robot Teams is completely optional, many companies find that using Robot Teams enhances efficiency in scheduling, monitoring, utilization, and more.



FOR EXAMPLE

Setting tasks to the first available robot in the Robot Team

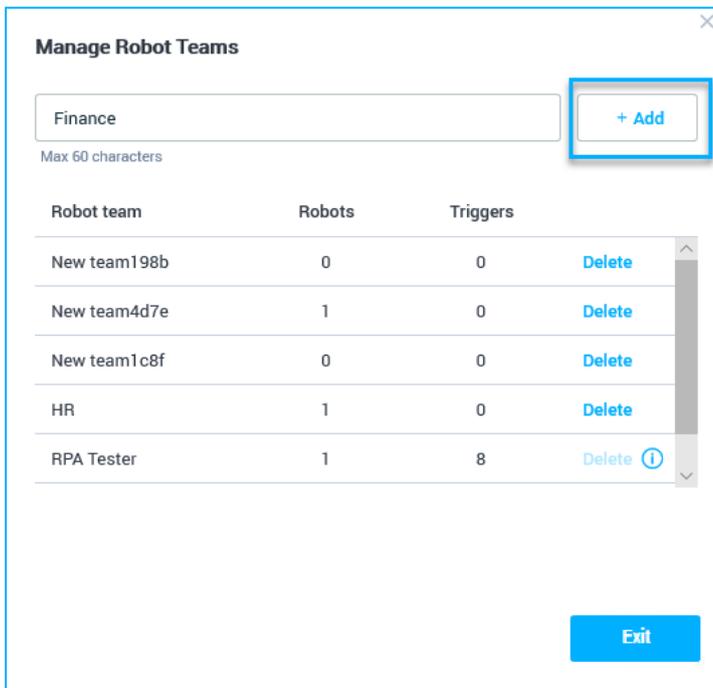
When you are assigning robots to triggers you are creating, you can select **First available robot in a Robot Team** instead of a specific robot to use. This way, if you want to change robots in the future, instead of having to edit all your triggers, you can simply manage the make-up of the robot team.

A screenshot of a dialog box titled "2 Choose robot" with an upward arrow in the top right corner. It contains three radio button options: "First available robot", "First available robot in the robot team" (which is selected with a blue dot), and "Specific robot". Below the selected option is a dropdown menu with the text "Select team" and a downward arrow. The entire dialog box is enclosed in a blue border.

Creating a Robot Team

To create a Robot Team:

1. Click **ROBOTS** in the Navigation menu. the Robots page opens.
2. On the Robots page, click **+ MANAGE ROBOTS TEAMS**. The **MANAGE ROBOT TEAMS** dialog opens.
3. Enter the Robot Team name (maximum 60 characters) and click the **+ADD** button. The newly created robot team appears in the list below.



Manage Robot Teams

Finance
Max 60 characters

+ Add

Robot team	Robots	Triggers	
New team198b	0	0	Delete
New team4d7e	1	0	Delete
New team1c8f	0	0	Delete
HR	1	0	Delete
RPA Tester	1	8	Delete ⓘ

Exit

4. Click **EXIT**

Deleting a Robot Team



NOTE

Robot teams can't be deleted if they have queued tasks and active triggers

To delete a Robot Team:

1. Click **ROBOTS** in the Navigation menu. The Robots page opens.
2. On the Robots page, click **+MANAGE ROBOT TEAMS**. The **MANAGE ROBOT TEAMS** dialog opens.
3. In the **MANAGE ROBOT TEAMS** dialog, click **DELETE** to the right of the row of the Robot Team you wish to delete. The Robot Team disappears from the list.

Robot team	Robots	Triggers	
New team198b	0	0	Delete
New team4d7e	1	0	Delete
New team1c8f	0	0	Delete
HR	1	0	Delete
RPA Tester	1	8	Delete ⓘ

4. Click **EXIT**

Assigning Robots to Robot Teams

Individual robots

You can assign a robot to a team or change the robot's team assignment directly from the Robots list. To assign an individual robot to a Robot Team:

1. Go to the **ROBOT** main page (by clicking **ROBOTS** in the Navigation menu)
2. On the **APPROVED** tab, click the robot's current team in the Robot Team column and select the team to assign the robot.

To remove the robot's team assignment, select **Unassign from the team**

The screenshot shows the 'Robots' page with the 'Approved' tab selected. A table lists robots with columns for Robot name, Machine name, Domain name, OS user name, OS password, Status, Task, and Robot team. A dropdown menu is open over the 'Robot team' column of the second row, showing options: 'Finance', 'HR', and 'Unassign from the team'. A '+ Manage Robot Teams' button is visible in the top right.

Robot name	Machine name	Domain name	OS user name	OS password	Status	Task	Robot team
Local name	KRYON10-69	KRYONAWS	localadmin@KRYONAWS	+ Add password	Disconnected	File create under temp lo...	HR
Robot 192.168.10.192	KRYON10-192	KRYONAWS	localadmin@KRYONAWS	+ Add password	Idle		Finance

Multiple robots

To assign multiple robots to Robot Teams:

1. Go to the **ROBOT** main page (by clicking **ROBOTS** in the Navigation menu)
2. On the **APPROVED** tab, tick the check boxes next to the robots you wish to assign to a Robot Team. The list toolbar appears above the list.
3. In the **ASSIGN TO TEAM** field, select the Robot Team to assign the selected robots to.

The screenshot shows the 'Robots' page with the 'Approved' tab selected. The table from the previous screenshot is shown with checkboxes in the left margin next to the first three rows. The 'Assign to team' dropdown menu is open, showing 'HR' selected. A '+ Manage Robot Teams' button is visible in the top right.

Robot name	Machine name	Domain name	OS user name	OS password	Status	Task	Robot team
<input checked="" type="checkbox"/>	Local name	KRYON10-69	KRYONAWS	localadmin@KRYONAWS	+ Add password	Disconnected	fsafsafas
<input checked="" type="checkbox"/>	Robot 192.168.10.192	KRYON10-192	KRYONAWS	localadmin@KRYONAWS	+ Add password	Disconnected	

Removing Robot Teams assignments

A robot can be assigned to only one Robot Teams at a time. Keep in mind that assigning a robot to a different Robot Team overwrites its current assignment.

To remove a robot's Robot Teams assignment without assigning it to a different Robot Teams (i.e., so that it is not part of any Robot Team), simply click the robot's current team status in the Robot Team row and change its team assignment to **Unassign from the Team**.

Setting Robot Preferences

Robot Preference options are found at the bottom of the left-hand panel of the specific robot's page.

To access a specific robot's page:

1. Go to the **ROBOTS** main page (by clicking **ROBOTS** in the Navigation menu)
2. Click on a specific robot name in the **APPROVED ROBOTS** list. The robot's Details page opens.

ID	Task name	Source	Status	Summary	Workflow	Started	Duration
258	Daily attendance reports March 6, 8:00	Daily attendance reports Every day at 20:00	Ended	Success	Employee folder created	Today, 12:56	00:05:25
258	Invoice processing Subject: Invoice DEMO	Invoice processing Subject: Invoice*	In queue		Invoice processing	Wednesday, 12:56	00:05:25
659	Log file created File: logfile_123.log	Log file created //server/logfile_*.log	Running		Employee folder created	Today, 12:56	00:05:25
343	Employee folder created Folder: Paco_Amado	Employee folder created //server/employee/*	Stopped		Invoice processing	Wednesday, 12:56	00:05:25
988	Clean up disk space	API call	Ended	Skipped	Log file created	Wednesday, 12:56	00:05:25
532	Sync salesforce and SAP	Marcos Pellegrini	Ended	Unsuccessful	Employee folder created	Monday, 12:56	00:05:25
986	Employee folder created Folder: Paco_Amado	Hybrid Silvana Di Lorenzo	Ended	Success	Log file created	Wednesday, 12:56	00:05:25

3. Set Robot Preferences options as follows:

a. Stop the robot on wizard error

- When **selected**, upon wizard error (that results in the wizard ending):
 - The robot's status is set to Stopped (the robot will be unavailable to run additional tasks); and
 - An email notification is sent if configured Learn more about [Adding/Editing Robot Event Notifications](#)
- When **unselected**, upon wizard error:
 - The robot remains active (and available to run additional tasks).

b. Auto login to this session when machine starts

When **selected**, when the machine starts it automatically logs in to this robot's Windows session. (requires that the robot's OS password has been set, see note below)

c. Unlocked mode

- When **Unlock only at runtime** is selected, the robot's Windows session is unlocked (using the robot's Windows password) only when the robot is running a task.
(requires that the robot's OS password has been set, see note below)
- When **Keep unlocked** is selected, the robot's Windows will remain unlocked at all times.



NOTE

Options 3b & 3c require that a Windows password is set for the robot. To set the password, you can either:

- Enter an OS password directly into the robot's row in the Robot list (in the **OS Password** column)

Robot name	Machine name	Domain name	OS user name	OS password	Status	Task	Robot team
Local name	KRYON10-69	KRYONAWS	localadmin@KRYONAWS	+ Add password	Running	File create under temp lo...	HR

- On the robot's Details page



Local name
Machine KRYON10-69

HR

Actions

OS user name
localadmin@KRYONAWS

Password
+ Add password

OS Version
Microsoft Windows Server 2019 Datacenter

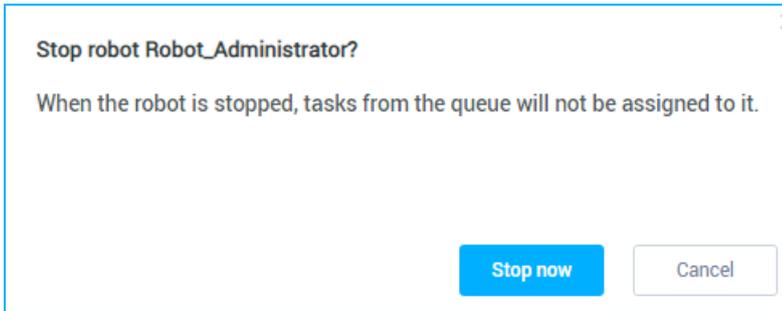
Paused

Managing Running Robots

Stopping a Robot

To stop a robot that is not currently running:

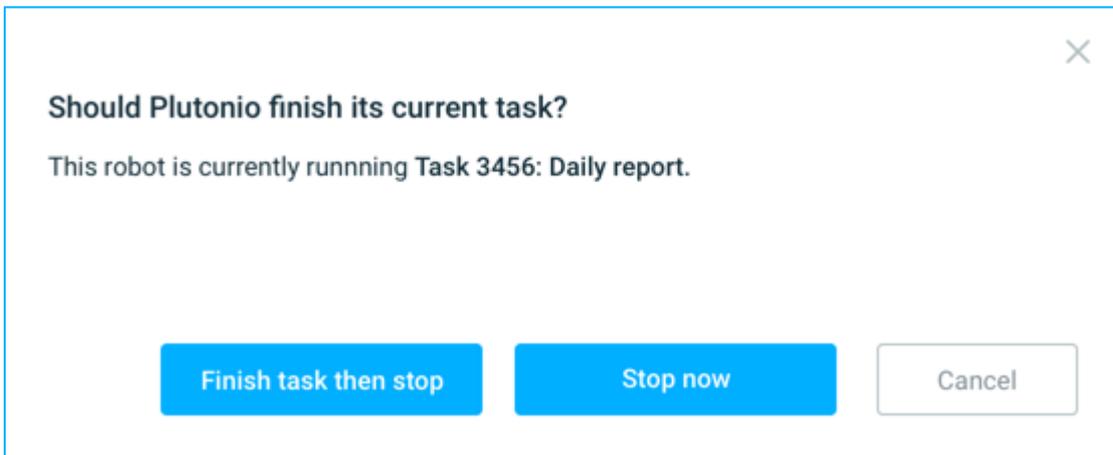
1. In the Approved robots tab, tick the check box of the robot you wish to stop.
2. Click the **STOP** button.
3. The following dialog box opens:



4. Click the **STOP NOW** button.

To stop a currently running robot (and the tasks it is running):

1. In the Approved robots tab, tick the check box of the robot you wish to stop.
2. Click the **STOP** button.
3. The following dialog box opens:



4. Click the **STOP NOW** button to Robot (and its current task immediately), or, click the **FINISH TASK THEN STOP** button to wait until the task is finished and then stop the robot.



NOTE

What's the difference between stopping a robot and stopping its tasks?

When you stop a **robot**:

- The task that it is currently running will stop (according the option chosen in the **Stop Robots** dialog box described above); and
- The robot will **not be available to run other tasks until it is restarted**

When you stop a robot's **tasks**:

- The tasks will stop (according to the option chosen in the **Stop Tasks** dialog box described above); and
- The robot **will be immediately available** to run other tasks

Pausing a Robot

To pause a currently running robot:

1. In the Approved robots tab, tick the checkbox of the robot you wish to pause
2. Click the **PAUSE** button
3. In the dialog box that opens, confirm that you wish to pause the selected robot



NOTE

What's the difference between stopping and pausing a robot?

When you **stop** a robot:

- The task that it is currently running will stop (according the option chosen in the **Stop Robots** dialog box described above); **and**
- When the robot is resume, the tasks that were running **will not** resume

When you **pause** a robot:

- The tasks will be paused; **and**
- When the robot is resumed, the tasks that were running **will** resume

Resuming a Stopped or Paused Robot

- In the Approved robots tab, click the **RESUME** button of the robot.

Robot Status

Robots can have the following statuses:

Status	Description
Running	The robot is current running a task
Stopping	The robot is currently running a task and is set to stop when it finishes running
Stopped	The robot is currently stopped and cannot take any tasks
Disconnected	There is no connection available to the robot
Idle	The robot is not currently running but is available to run tasks
Paused	The robot is temporarily paused while running a task (in this case the task is also paused)

Tasks

Once you've hired and on-boarded your robot workforce, it's time to get the robots to work! How? By assigning them tasks to perform.

A task is like a work order for a single job: a specific robot is assigned one wizard to execute. (Wizards are business processes that are created in Kryon Studio).

Tasks can be created in four ways:

1. They can be manually created in ConsoleX and sent directly to the [queue](#).
2. They can be initiated by Triggers that are created in ConsoleX. See [Creating Triggers](#).
3. They can be created by API call. See [The External Web API](#) ; and
4. They can be created by robots when the wizards they are running include the `Add Automation Task to Queue` Advanced Command. See the document, *Advanced Commands Reference Guide (Add Automation Task to Queue)*.

Lifecycle of a task

Every task runs once.

1. The task is created and waits in the queue for its turn to run. For more information see [The Task Queue](#)
2. The task is currently running. See [Currently Running](#).
3. The task is in history. See [Tasks History](#)



Task Outcomes

Tasks can have the following outcomes:

Status	Description
Successful	The task has finished successfully
Unsuccessful	The task finished but the wizard result is marked unsuccessful in the wizard Advanced Command
Skipped	The robot tried but wasn't able to run the task (possibly because lack of permissions etc)
Stopped	The task (or the robot running it) was stopped by the user
Failed	The task started running but failed before finishing (technical failure)

The Task Queue

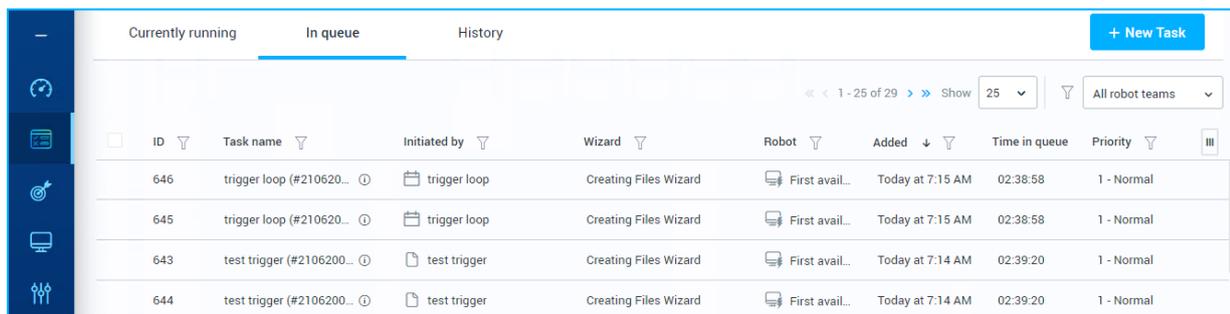
The **Task Queue** displays tasks that are currently waiting in line for their assigned robot to run them. Tasks are executed in accordance to a defined [Queue Priority](#).

When a task is assigned a robot and for some reason the robot cannot execute, the task receives the status **SKIPPED**. It moves the list in the **HISTORY** tab.

Accessing the Task Queue

To access the Task Queue for all robots, click **TASKS** in the ConsoleX Navigation menu. Select the **IN QUEUE** tab.

What Appears in the Task Queue?



ID	Task name	Initiated by	Wizard	Robot	Added	Time in queue	Priority
646	trigger loop (#210620...)	trigger loop	Creating Files Wizard	First avail...	Today at 7:15 AM	02:38:58	1 - Normal
645	trigger loop (#210620...)	trigger loop	Creating Files Wizard	First avail...	Today at 7:15 AM	02:38:58	1 - Normal
643	test trigger (#2106200...)	test trigger	Creating Files Wizard	First avail...	Today at 7:14 AM	02:39:20	1 - Normal
644	test trigger (#2106200...)	test trigger	Creating Files Wizard	First avail...	Today at 7:14 AM	02:39:20	1 - Normal

Tasks created by the following methods appear in the Task Queue:

- Tasks manually created in Console
- Tasks created by triggers
- Tasks created by API call
- Tasks created by human or robot user when the wizards they are running include the **ADD AUTOMATION TASK TO QUEUE** Advanced Command.

Once tasks start running, they leave the queue and move to the list in the **CURRENTLY RUNNING** tab.

Deleting Tasks from the Queue

To delete one or more tasks from the queue:

1. Tick the checkbox of the task(s) you wish to delete
2. Click the **DELETE** button



CAUTION

Deleting a task from queue is irreversible, so make sure this is really what you want to do!

Currently Running

The **CURRENTLY RUNNING** tab displays the details of currently running tasks.

Access it by clicking **TASKS** from ConsoleX Navigation menu, and selecting the **CURRENTLY RUNNING** tab.

- The **CURRENTLY RUNNING** tab displays currently running tasks **within the context of all robots in the organization**
- By default the page refreshes every 10 seconds
- Click on a row in the **CURRENT TASK** column to go to that task's [Task Details page](#)

Tasks History

The **HISTORY** tab enables you to analyze your RPA solution over time to track RPA trends. It displays the history and results of all tasks executed by all robots in the organization.

ID	Task name	Summary	Initiated by	Wizard	Robot	Started	Task ended	Duration
588	trigger loop (#1706...)	Success	trigger loop	Creating Files Wizard	Robot_2	Last Wednesd...	Last Wednesday at ...	00:00:13
587	trigger loop (#1706...)	Success	trigger loop	Creating Files Wizard	Robot_2	Last Wednesd...	Last Wednesday at ...	00:00:12
586	trigger loop (#1706...)	Success	trigger loop	Creating Files Wizard	Robot_2	Last Wednesd...	Last Wednesday at ...	00:00:11
585	trigger loop (#1706...)	Success	trigger loop	Creating Files Wizard	Robot_2	Last Wednesd...	Last Wednesday at ...	00:00:11
584	trigger loop (#1706...)	Success	trigger loop	Creating Files Wizard	Robot_2	Last Wednesd...	Last Wednesday at ...	00:00:11

Access this page by clicking **TASKS** from ConsoleX Navigation menu and selecting the **HISTORY** tab.

- Click on the link in the **TASK NAME** column to go to that task's [Task Details page](#)

Manually Creating a New Task

To manually create a new task in ConsoleX and send it directly to the queue, follow these steps:

1. Click **TASKS** in the ConsoleX Navigation menu. The Tasks page opens.
2. Click the **+NEW TASK** button. The New Task dialog opens.

Step #1: Define task name and priority



The screenshot shows a form with a text input field on the left containing the placeholder text "Enter task name" and a small pencil icon. To the right of the input field is a dropdown menu labeled "Priority:" with "Normal" selected and a downward arrow.

- a. Give the task a name. (The task is identified by this name in ConsoleX, so you should give it a name you will recognize.)
- b. Select the queue priority of the task, either **Normal** or **High**.



NOTE

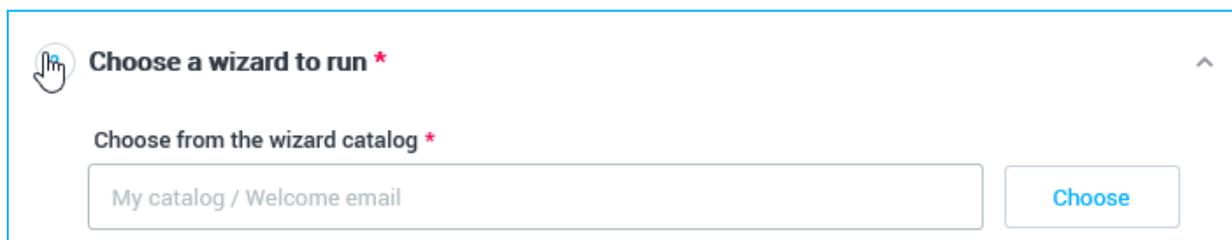
What is queue priority?

All tasks go into the task queue until they are assigned to a robot for execution:

- A new task with **Normal** queue priority enters the queue at the bottom of the list
- A new task with **High** queue priority enters the queue at the top of the list (though under other high-priority tasks already in queue)

Step #2: Choose a wizard to run

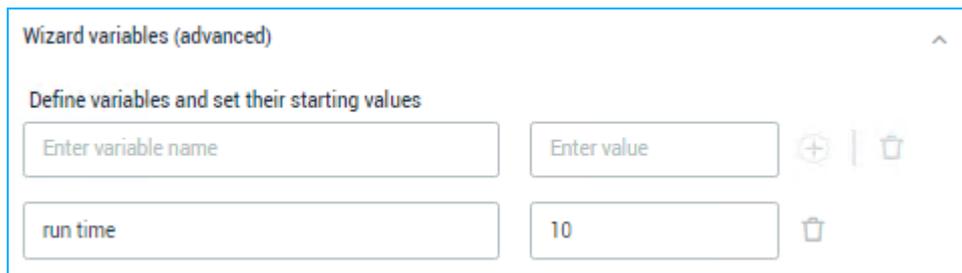
The Kryon Catalog is created in Studio and contains published wizards available for your robot workforce to use.



The screenshot shows a dialog box titled "Choose a wizard to run" with a hand cursor icon on the left and an upward arrow on the right. Below the title is the text "Choose from the wizard catalog". There is a search input field containing "My catalog / Welcome email" and a blue "Choose" button to its right.

- Click the **CHOOSE** button to open the Kryon catalog and browse or search for the wizard that the task will execute.

Wizard variables (advanced)



Wizard variables (advanced)

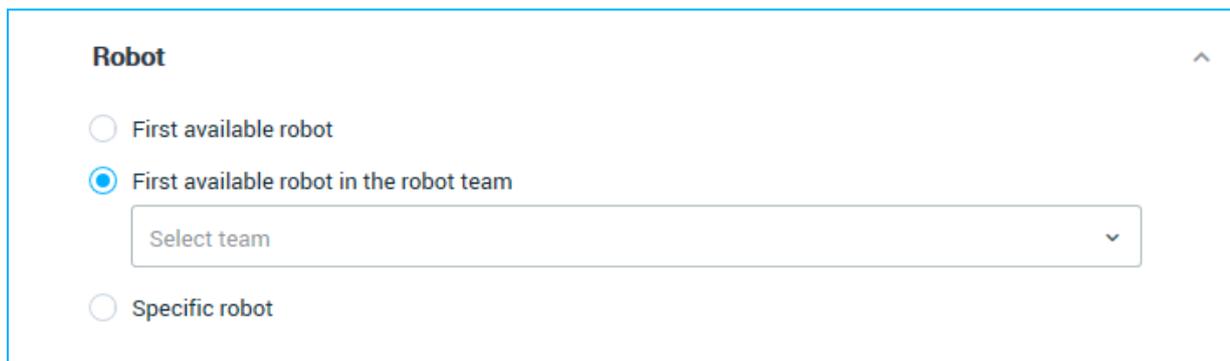
Define variables and set their starting values

Enter variable name	Enter value	
run time	10	+
		+

If you want the wizard to begin with specified values for certain variables each time it runs:

1. Click **Wizard variables (advanced)** to expand the section below.
2. Enter the name of the variable for which you would like to set a starting value
NOTE: The name entered here must exactly match the name of a variable in the selected wizard (it's not case-sensitive)
3. Enter the starting value for the variable
4. If you wish to set the value for another variable, click the + button to add a row
To delete a variable/value you have already set, click **Delete**

Step #3: Assign tasks to a robot



Robot

First available robot

First available robot in the robot team

Select team

Specific robot

Indicate the robot you want the task to be assigned to:

- The first available robot (any robot in your organization)
- The first available robot in a specific Robot Team (select the Robot Team from the drop-down list); or
- A specific robot (select the robot from the drop-down list)

Step #4: Set Notifications (optional)

Notifications (optional) ^

Select alert type ▼ Recipient email address(es) (comma separated)

Add notification

If you want the system to send out notifications by email when task-related events occur:

1. Notifications are sent from the email configured on the [Notification Settings](#) page. Make sure to specify the email address/es to which you'd like notifications to be sent from there.
2. Click **Set Notifications**
3. Select the event type from the list
4. Enter the email address/es to which a notification should be sent when the indicated event occurs (separate multiple email addresses with commas)



NOTE

Notifications are sent from the email configured on the [Notification Settings](#) page.

Step #5: Save the task and send directly to the queue

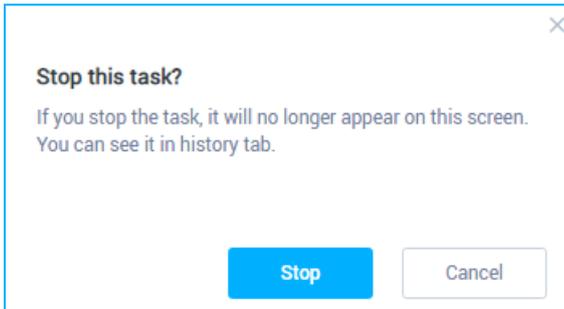
- To save the task you have created and send it to the queue, click the **ADD TO QUEUE** button. The task goes directly to the queue.

Managing Running Tasks

Stopping Tasks

To stop a task:

1. Tick the check box of the task you wish to stop.
2. Click the **STOP** button.
3. The following dialog box opens:



NOTE

What's the difference between stopping a robot and stopping its tasks?

When you stop a **robot**:

- The task that is currently running will stop (according to the option chosen in the **Stop Robots** dialog box described above); and
- The robot will **not be available to run other tasks until it is resumed**

When you stop a robot's **tasks**:

- The tasks will stop (according to the option chosen in the **Stop Tasks** dialog box described above); and
- The robot **will be immediately available** to run other tasks

Pausing a task

To pause a currently running task:

1. Tick the checkbox of the task you wish to pause
2. Click the **PAUSE** button
3. In the dialog box that opens, confirm that you wish to pause the selected task

Triggers

What is a Trigger?

A trigger is a mechanism that creates tasks. You can set up time-based or event-based triggers, as follows:

Time-based triggers

A time-based trigger is an instruction to the Kryon server to initiate tasks in the queue according to a schedule you specify. The scheduling of time-based triggers is extremely flexible and can be in time frames as small as minutes or as large as years.

Event-based triggers

An event-based trigger is an instruction to the Kryon server to monitor events on your company's network and initiate tasks in the queue whenever a specified event occurs.

Types of event-based triggers

Event-based triggers constantly check events in the background and invoke task automation when a relevant action occurs. You can create triggers instructing the Kryon server to monitor for the following types of events:

- **File** – initiates a new task whenever a file is created, modified, or deleted
- **Folder** – initiates a new task whenever a folder is created or deleted
- **Email** – initiates a new task whenever an email is received
- **Database** – initiates a new task whenever database records are inserted, updated, or deleted

Creating Triggers

To create a new trigger

1. Click **TRIGGERS** in the ConsoleX Navigation menu. The Triggers list appears showing all current triggers in the systems.
2. Click the **+NEW TRIGGER** button. The **NEW TRIGGER** dialog opens.

Step 1: Define trigger name and priority



Enter trigger name Priority: Normal

- a. Give the trigger a name. (The trigger will be identified by this name in Console, so you should give it a name you will recognize.)
- b. Select the queue priority of the tasks created by the trigger, either **Normal** or **High**.



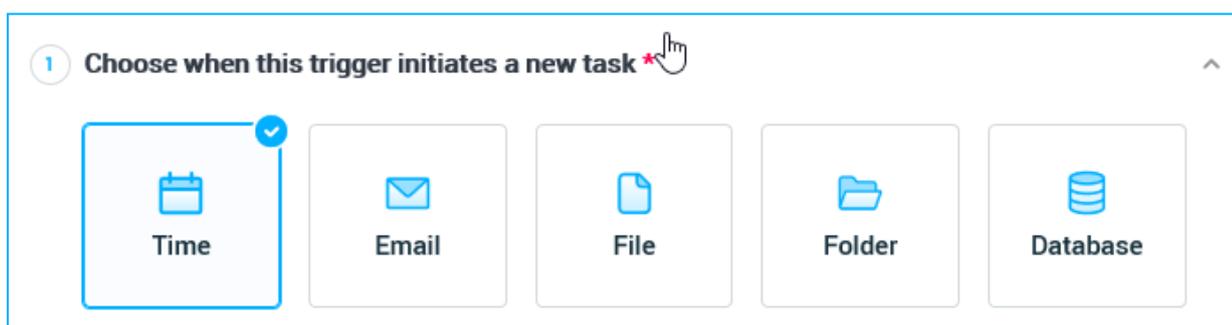
NOTE

What is queue priority?

Tasks go into the task queue until they are assigned to a robot for execution:

- A new task with **Normal** queue priority enters the queue at the bottom of the list
- A new task with **High** queue priority enters the queue at the top of the list (though under other high-priority tasks already in queue)

Step 2: Choose when the trigger initiates new tasks



1 Choose when this trigger initiates a new task

Time Email File Folder Database

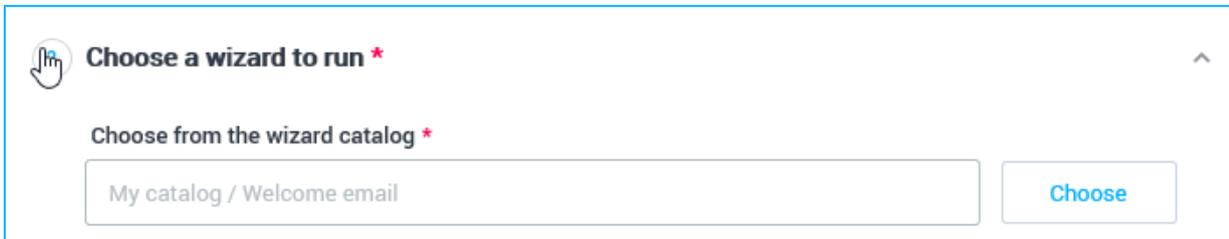
Choose the type of trigger you want to create. Settings for the trigger type you have selected appear. For instructions for each type, see:

- [Creating File Triggers](#)
- [Creating Folder Triggers](#)
- [Creating Email Triggers](#)

- [Creating Database Triggers](#)
- [Creating Time-Based Triggers](#)

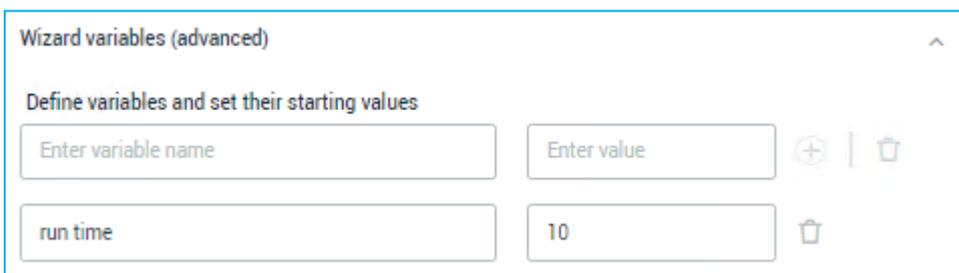
Step 3: Choose a wizard to run

The Kryon Catalog is created in Studio and contains published wizards available for your robot workforce to use.



- Click the **CHOOSE** button to open the Kryon catalog and browse or search for the wizard that the task will execute.

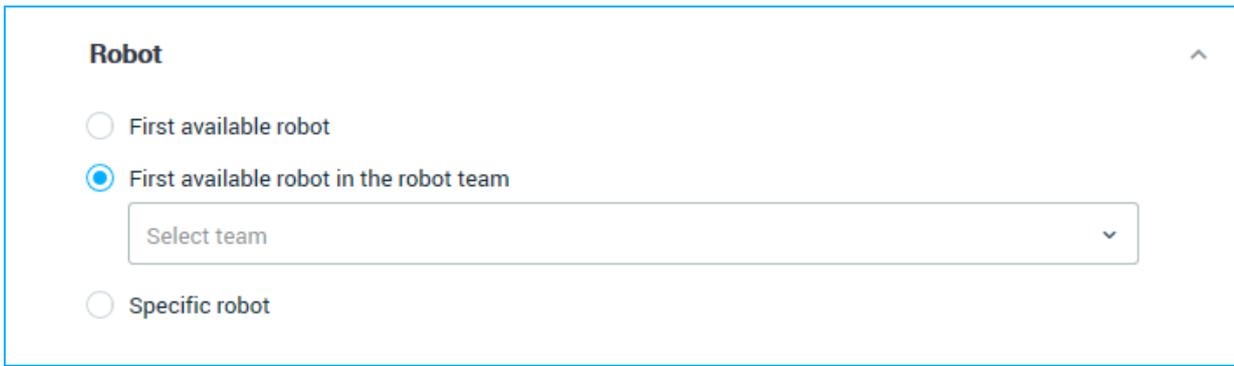
Edit wizard variables (advanced)



If you want the wizard to begin with specified values for certain variables each time it runs:

1. Click **Edit wizard variables (advanced)** to expand the section below.
2. Enter the name of the variable for which you would like to set a starting value
NOTE: The name entered here must exactly match the name of a variable in the selected wizard (not case-sensitive)
3. Enter the starting value for the variable
4. If you wish to set the value for another variable, click the + button to add a row
 To delete a variable/value you have already set, click **Delete**

Step 4: Assign tasks to a robot



Robot ^

First available robot

First available robot in the robot team

Select team v

Specific robot

Indicate to which robot to assign the tasks initiated by the trigger:

- The first available robot (any robot in your organization)
- The first available robot in a specific Robot Team (select the Robot Team from the drop-down list); or
- A specific robot (select the robot from the drop-down list)

Step 5: Set Notifications (optional)

If you want the system to send out notifications by email when task-related events occur

1. Notifications are sent from the email configured on the [Notification Settings](#) page. Make sure to specify the email address/es to which you'd like notifications to be sent from there.
2. Click **Set Notifications**
3. Select the event type from the list
4. Enter the email address/es to which a notification should be sent when the indicated event occurs (separate multiple email addresses with commas)



NOTE

How does a wizard use trigger output

While monitoring events, an event-based trigger collects data (for example, the filename and path of a newly created file or the data contained in modified database records) and stores it on the Kryon RPA Server. Then, when the trigger activates a task, the task executes the wizard specified in the trigger configuration.

But how does the wizard identify and access the necessary data collected and stored by the trigger? **Through an Advanced Command.**

Any wizard that is designed to be initiated by an event-based trigger should include the appropriate Advanced Command (determined by trigger type) to retrieve the data collected by the trigger and read it into variables for use by the wizard. To learn more about the use of these Advanced Commands, see the following topics in the ***Advanced Commands Reference Guide***:

- Get File Trigger Input
- Get Folder Trigger Input
- Get Email Trigger Input
- Get Database Trigger Input

Step 6: Save/activate trigger

- To save the trigger you have created and get it started monitoring events immediately, click the **SAVE AND ACTIVATE** button.
- To save the trigger you have created but wait before activating it, click the the down arrow next to the SAVE AND ACTIVATE button and select the **SAVE** button.

Creating File Triggers

A file trigger initiates a new task whenever a file is created, modified, or deleted in a specified location.

Files can reside in two folder options:

1. **File Systems:** local and network folders
2. **Sharepoint** (on-premises version) folder



NOTE

Each robot that could have a task assigned to based on this trigger must have connectivity and access rights to the specified root folder (so that it can read and act on the folders/files within it)

The Kryon RPA Server must also have access to this folder (to monitor it)

To create a file trigger:

1 Choose when this trigger initiates a new task *


 Time


 Email


 File
 ✓


 Folder


 Database

File definitions

Folder location (must be accessible to robots) *

File system ▾
Folder path (for example: ../../support/)

Also include files in subfolders
 Use credentials

File name *

For example, MonthlyReport.txt or *.txt

Monitoring frequency

20
↕
sec (min 20 / max 300)

A new task will be initiated whenever a file is *

Created
 Modified
 Deleted

For Files in File systems: local and network folders:

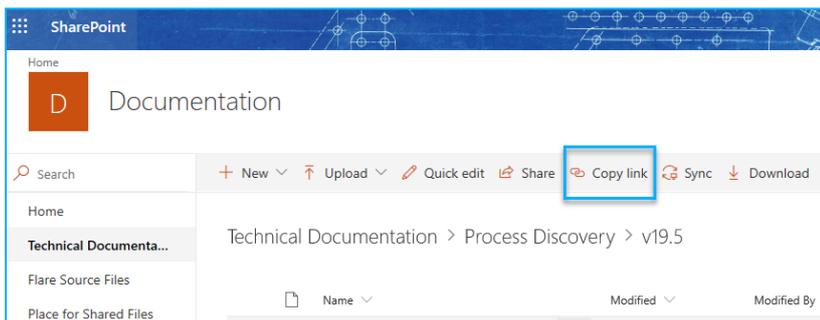
1. Select the folder type **File systems**
 2. Enter the **folder path** of the root folder that the trigger should monitor in the Folder field
 3. Tick the **Include Folders** check box if you want the trigger to monitor subfolders as well
 4. Enter the **file name** of the file the trigger should monitor in the File field
- You can use an asterisk as a wildcard for one or more characters within the file name, for example:
 - If you enter the filename `*.docx`, the trigger will look for files with a `*.docx` extension (such as `invoice1.docx` and `premium notice.docx`)
 - If you enter the filename `*invoice.*`, the trigger will look for files with the word `invoice` in the filename (such as `december 2017 invoice.xlsx` and `invoice122017.pdf`)

5. Indicate one or more event(s) for which the trigger should monitor

NOTE: When you select the option to monitor a new file/folder, the option **INCLUDE EXISTING FILES** becomes enabled. Select this option if you wish the trigger to initiate tasks based on files existing in the specified folder at the time the trigger is created.
6. Enter the **Monitoring frequency** (the acceptable range is from 20 sec to 300 seconds)
7. (optional) By default, the system logs in to network folder using the Windows Login credentials. For files on a network, you can select to use a credential from the credential vault, or, you can enter another user name and password combination manually.
 - To select a credential from the credentials vault: Select **From vault**. Select a credential from the list
 - To add credentials manually: Select **Manually**. Enter the **User name** and the **Password**

For Files in a Sharepoint folder:

1. Select the folder type **Sharepoint**
2. Enter the **Webdav path** of the root folder that the trigger should monitor
3. **NOTE:** to get the Webdav path, open the folder in **Sharepoint** and click **Copy Link** in the menu bar



4. Tick the **Include Subfolders** checkbox if you want the trigger to monitor subfolders as well
5. Enter the **file name** of the file the trigger should monitor
 - You can use an asterisk as a wildcard for one or more characters within the file name, for example:
 - If you enter the filename `*.docx`, the trigger will look for files with a `*.docx` extension (such as `invoice1.docx` and `premium notice.docx`)
 - If you enter the filename `*invoice.*`, the trigger will look for files with the word `invoice` in the filename (such as `december 2017 invoice.xlsx` and `invoice122017.pdf`)
6. Indicate one or more event(s) for which the trigger should monitor

NOTE: When you select the option to monitor a new or renamed file, the option **INCLUDE EXISTING FILES** becomes enabled. Select this option if you wish the trigger to initiate tasks based on files existing in the specified folder at the time the trigger is created.

7. Enter the **Monitoring frequency** (the acceptable range is from 20 sec to 300 seconds)
8. To log into Sharepoint: You can select to use a credential from the credential vault, or, you can enter another user name and password manually
 - To select a credential from the credentials vault: Select **From vault**. Select a credential from the list
 - To add credentials manually: Select **Manually**. Enter the **User name** and the **Password**



CAUTION

Take special care with Microsoft Office files

Microsoft Office creates temporary files when documents are opened. As a result, editing Office files directly within the monitored folder may cause unexpected results (e.g., the trigger may initiate multiple tasks for a single file modification).

Creating Folder Triggers

A folder trigger initiates a new task whenever a folder is created or deleted in a specified location. You have two monitoring options:

1. **File Systems:** local and network folders
2. **Sharepoint** (on-premises version) folder



NOTE

Each robot that could have a task assigned to based on this trigger must have connectivity and access rights to the specified root folder (so that it can read and act on the folders/files within it)

The Kryon RPA Server must also have access to this folder (to monitor it)

To create a folder trigger:

The screenshot shows the configuration interface for a Folder trigger. At the top, there are five buttons: Time, Email, File, Folder, and Database. The 'Folder' button is selected and highlighted with a blue border and a checkmark icon. Below the buttons, the configuration steps are as follows:

- 1 Folder definitions**
Folder location (must be accessible to robots) *
File system (dropdown menu) Folder path (for example: //.../support/)
 Also include subfolders
 Use credentials
- 2 Folder name ***
For example, Invoices*
- 3** (This step is indicated by a blue circle with the number 3, but no specific configuration text is visible for this step in the image.)
- 4 Monitoring frequency**
20 sec (min 20 / max 300)
- 5 A new task will be initiated whenever a file is ***
 Created
 Deleted

For File systems: local and network folders:

1. Set folder definitions:
 - a. Select the folder location: **File systems**
 - b. Enter the **folder path** of the root folder that the trigger should monitor in the Folder field
 - c. Tick the **Also include subfolders** checkbox if you want the trigger to monitor subfolders as well
2. Enter the **folder name** of the folder that the trigger should monitor in the Folder field
 - You can use an asterisk as a wildcard for one or more characters within the folder name, for example:
 - If you enter the folder name `invoices*`, the trigger will look for folders with the word `invoices` at the beginning (such as `invoices2017` and `invoices for processing`)
 - If you enter the folder name `*claims`, the trigger will look for folders with the word `claims` at the end (such as `2017_claims` and `approved claims`)
3. (optional) By default, the system logs in to network folder using the Windows Log in credentials. For network folders, you can select to use a credential from the credential vault, or, you can enter another user name and password combination manually.
 - To use credentials, tick the **Use Credentials** checkbox.
 - To select a credential from the credentials vault: Select **From vault**. Select a credential from the list
 - To add credentials manually: Select **Manually**. Enter the **User name**, the **Password**, and the **Domain**
4. Enter the **Monitoring frequency** (the acceptable range is from 20 sec to 300 seconds)
5. Indicate one or more event(s) for which the trigger should monitor (created/deleted)

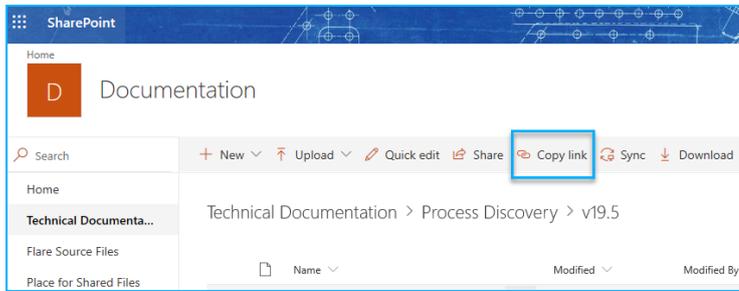
NOTE: When you select the option to monitor a new file/folder, the option **INCLUDE EXISTING FILES** becomes enabled. Select this option if you wish the trigger to initiate tasks based on files existing in the specified folder at the time the trigger is created.

NOTE: When you select the option to monitor a deleted folder/file, and you rename a file/folder, the rename action initiates the "deleted" monitoring.

For a SharePoint folder:

1. Set folder definitions:
 - a. Select the folder location: **Sharepoint**.
 - b. Enter the **Webdav path** of the root folder that the trigger should monitor.

NOTE: to get the Webdav path, open the folder **Sharepoint** and click **Copy Link** in the menu bar



- c. Tick the **Also Include Subfolders** checkbox if you want the trigger to monitor subfolders as well
2. Enter the **folder name** of the folder the trigger should monitor in the Folder field
 - You can use an asterisk as a wildcard for one or more characters within the folder name, for example:
 - If you enter the folder name `invoices*`, the trigger will look for folders with the word `invoices` at the beginning (such as `invoices2017` and `invoices for processing`)
 - If you enter the folder name `*claims`, the trigger will look for folders with the word `claims` at the end (such as `2017_claims` and `approved claims`)
 3. To log into Sharepoint: You can select to use a credential from the credential vault, or, you can enter another user name and password manually
 - Tic the **Use Credentials** checkbox.
 - To select a credential from the credentials vault: Select **From vault**. Select a credential from the list
 - To add credentials manually: Select **Manually**. Enter the **User name** and the **Password**
 4. Enter the **Monitoring frequency** (the acceptable range is from 20 sec to 300 seconds)
 5. Indicate one or more event(s) for which the trigger should monitor

Creating Email Triggers


Time


Email


File


Folder


Database

Email server

Server type *

Exchange 2007 and above (EWS) ▾

Server address *

Enter server address

Mailbox information

Mailbox credentials

Manually From vault

User name *

Enter user name

Password *

Enter password

Domain

Enter domain

Use shared mailbox

A new task will be initiated whenever an email message is received

in folder *

inbox

Additional filters

select filter ▾

select filter first

+

|

🗑️

Has attachments

An email trigger initiates a new task whenever an email message matching a specified filter is received. To create an email trigger:

1. Enter the settings required to access the incoming email server and account
2. Enter mailbox credentials:
 - To select a credential from the credentials vault: Select **From vault**. Select a credential from the list

- To add credentials manually: Select **Manually**. Enter the **User name**, the **Password**, and the **Domain**
3. (optional) If the mailbox is shared:
 - Select **Use Shared Mailbox**
 - Enter the shared mailbox name
 4. (Required) Enter the folder name of the folder that is monitored for incoming mail messages
NOTE: This is the folder on the email server that will be monitored for messages matching the other email filter requirements. Generally, the name of this folder is `Inbox` (or a translation of `Inbox`), but it can vary based on email server/account configuration.
 5. Set additional filters for the messages to be monitored:
 - a. (Optional) **From:** The email address **from** which the message must be sent
 - b. (Optional) **To:** The email address **to** which the message must be sent
 - c. (Optional) **Subject contains:** A word or a phrase that the subject of the message must contain
 - d. (Optional) **Body contains:** A word or a phrase that the body of the message must contain
 6. (Optional) **Has attachments:**
 - When this box is checked, a message must include attachments in order to cause the trigger to initiate a new task
 - If left unchecked, any message matching the other filter requirements (whether or not it includes attachments) will cause the trigger initiate a new task

Creating Database Triggers

Time Email File Folder **Database**

Connection to database
Enter connection string and then click Fetch *

1

Use credentials from vault

Database definitions

2 Table/View * ⓘ

3

Where statement (optional)

4

Monitoring frequency

5 sec (min 20 / max 300)

A new task will be initiated whenever database records are: * ⓘ

6 Inserted
 Updated
 Deleted

Data to fetch

7 What data to fetch? ⓘ

8 Max. rows per fetch

Delimit columns by

9

Delimit rows by

10 Create a single task for all returned rows

A database trigger initiates a new task whenever database records are inserted, updated, or deleted. To create a database trigger:

1. Enter the connection string for the data source; **and**
Indicate whether you would like to retrieve database login credentials from the Kryon Credentials Vault. If credential vault is *not checked*, the credentials must be included within the connection string in order for the connection to work. If *checked* - no need to enter credentials in the connection string

NOTE: Test connectivity to the data source with the entered string by clicking the **FETCH** button

2. Select the table/view the trigger should monitor from the drop-down list

NOTE: The list will display the available tables/views after you have connected successfully to the selected database

3. Identify required columns

NOTE: Depending on the event(s) you selected in Step 1, one or more of these fields will be displayed (and are mandatory)

4. (Optional) Enter any applicable WHERE clauses to further refine the events to monitor

5. Indicate how often the trigger should fetch data (i.e., check for the events specified in Step 1)

6. Indicate one or more event(s) for which the trigger should monitor (database records inserted/updated/deleted)

NOTE: To use the "Delete" monitor, the table must support logical delete. See [About using the "Delete" monitoring option in Database Trigger](#).

7. Select the data (database columns) to be fetched for each record returned

NOTE: Available columns will be displayed after you have connected successfully to the selected database

8. Indicate the maximum number of records to be returned each time the trigger checks for the specified events

9. Enter the delimiters to use to separate each row and column in the returned data

NOTE: These delimiters will be used by the wizard the trigger initiates to loop through the retrieved data

10. Indicate whether to create a single task for all returned rows

NOTE: By default this box will be unchecked indicating that an individual task will be initiated for each record returned

Creating Time-Based Triggers

A time-based trigger initiates new tasks according to a schedule you specify. To create a time-based trigger:

1. Choose the time frame (based on how often you want the task to recur).

Set the task initiation schedule

Minutes Hourly **Daily**  Weekly Monthly Custom

2. Fill in the information required to establish the pattern of recurrence you need
3. To verify the scheduled dates/times of the next tasks that the trigger will initiate, click VERIFY SCHEDULE.

[Verify Schedule >](#) 

View upcoming tasks to make sure they're when you want them

The list of the next triggered tasks appears.

4. Instruct Kryon what to do if a task initiated by the trigger is still waiting in queue at the time the next recurrence is triggered:

Prevent overloading the queue
If a task created by this trigger is already waiting, additional tasks won't be added.

- **Activated:** the second task won't be added to the queue (to prevent duplication of tasks and overcrowding the queue)
- **Deactivated:** The second task will be added.



CAUTION

Keep the calendar in mind!

If you elect to run a task on a day that doesn't exist, the task will be skipped for that recurrence. Take a careful look at the **view schedule** to ensure that this won't happen.

For example, if you specify a task to run monthly on the 31st, you will notice that February, April, June, September, and November are skipped in the list of triggered tasks.



BEST PRACTICE

Time triggers and daylight savings time

During Day Light Saving Time (DST) switchover, clocks are set forward by one hour in the spring, from 2am to 3am (*spring forward*), and set back by one hour in autumn, from 2am to 1am (*fall back*).

If you have a time trigger set to initiate a task during switchover time, we recommend you either disable this trigger, or change the schedule to either before or after the switchover.

TIP

Using ADVANCED time-based triggers

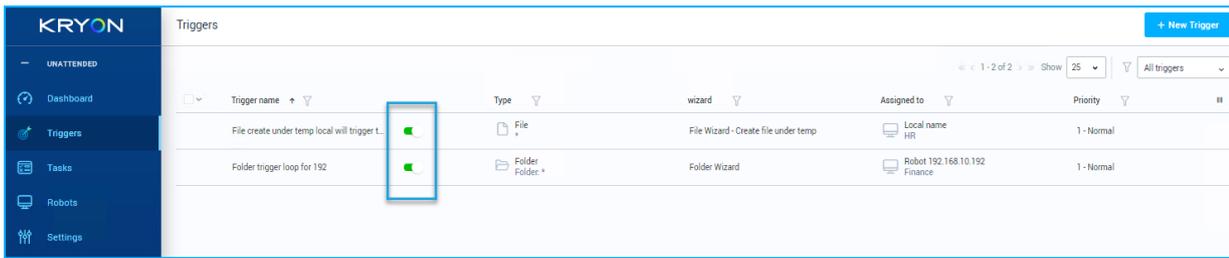
Selecting the **CUSTOM** time-based trigger tab allows even more precision by giving you the option to use cron expressions to define the recurrence pattern. Learn more about how to create cron expressions [here](#).

- Console gives you real-time feedback on the validity of the cron expression you've entered:
 - If the entered expression is valid, the  icon will appear
 - If the entered expression is invalid, the  icon will appear
- Use the preview of triggered tasks to check the recurrence pattern created by the cron expression you've entered

Working with Triggers

To view a list of all triggers, click **TRIGGERS** from Console's Navigation menu.

Trigger status



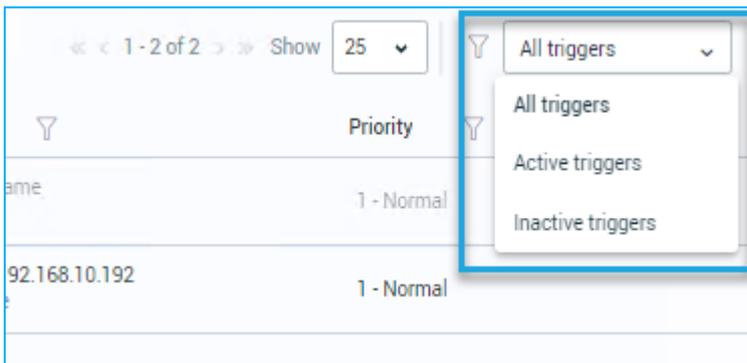
For each trigger, the **Status** column displays one of three possible trigger statuses:

Activated	The trigger is active and currently monitoring the event(s) it is configured to monitor
Activated with warning	The trigger is active but currently unable to monitor event(s). (Shown with ! icon near the trigger name)
	 <ul style="list-style-type: none"> This is generally caused by the trigger's inability to access the resource it is configured to monitor (file, folder, email account, or database) Correct this status by confirming connectivity to the specified resource or by editing the trigger's properties (if necessary)
Deactivated	The trigger is currently set not to monitor events

Learn more about [Activating/Deactivating triggers](#).

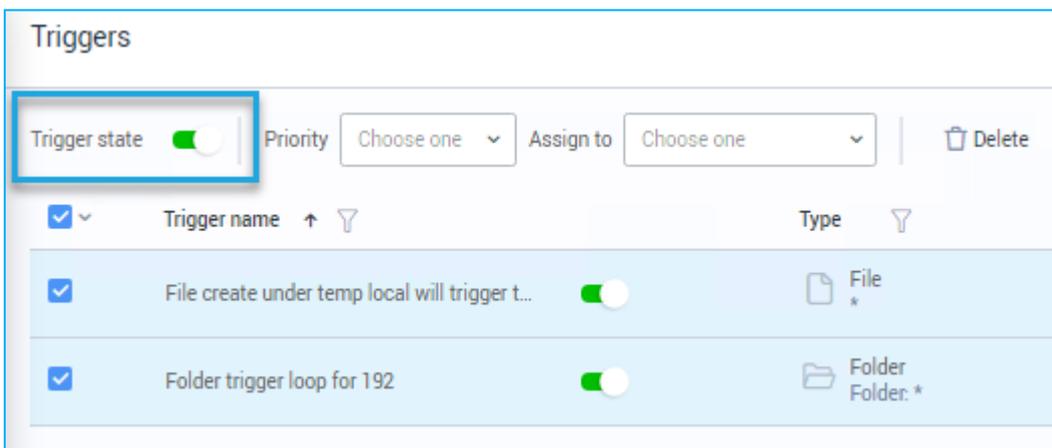
Filtering the Trigger List

You can filter the Trigger list by selecting from the filter triggers drop-down.



Activating/Deactivating triggers

To activate or deactivate one or more triggers:



1. Click the trigger in the list or for multiple triggers, tick the checkboxes of the triggers you wish to activate
2. Set the **TRIGGER STATE** toggle

Other Quick actions

To see a specific trigger's Trigger Details page, simply click on it from the list.

The screenshot shows the KRYON interface for editing a trigger. The left sidebar contains navigation options: UNATTENDED, Dashboard, Triggers, Tasks, Robots, and Settings. The main area is titled 'File create under temp local will trigger this'. It features a 'File trigger' section with a 'File trigger' icon, 'Normal priority', and 'Local name, HR'. Below this is a 'Wizard' section for 'File Wizard - Create file under temp', including fields for 'File', 'Folder type', 'File system', and 'Folder path' (set to 'C:\Users\LocalAdmin\AppData\Local\Temp\2'). It also shows 'Last triggered' at 8:10 AM and 'Last updated' at 10:24 AM by localuser. The right side shows a table of triggered tasks.

ID	Task name	Status	Summary	Robot	Created	Time in queue	Started	Duration
2912	File create under temp local w... File: bt380a.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:06	Yesterday at 5:1...	00:00:16
2913	File create under temp local w... File: th1dpwy1.m2m.t...	Ended	Success	Local name	Yesterday at 5:1...	00:00:16	Yesterday at 5:1...	00:00:14
2914	File create under temp local w... File: bt380a.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:36	Yesterday at 5:1...	00:00:14
2915	File create under temp local w... File: vz1w02u.ura.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:16	Yesterday at 5:1...	00:00:14
2916	File create under temp local w... File: tz24qzr.6ib.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:16	Yesterday at 5:1...	00:00:17
2917	File create under temp local w... File: tmpda65.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:56	Yesterday at 5:1...	00:00:17
2918	File create under temp local w... File: brcnstm.4zx.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:00:26	Yesterday at 5:1...	00:00:18
2919	File create under temp local w... File: tmpda65.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:01:06	Yesterday at 5:1...	00:00:17
2920	File create under temp local w... File: y41511b5.cp4.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:01:36	Yesterday at 5:1...	00:00:16
2921	File create under temp local w... File: d3el3oum.psv.tmp	Ended	Success	Local name	Yesterday at 5:1...	00:01:46	Yesterday at 5:1...	00:00:16

To edit the trigger's properties:

1. From the trigger properties page, click the **ACTIONS** button, then select **EDIT**



NOTE

Triggers can be edited only when they are inactive. If the trigger you elect to edit is currently active, you will be given the option to deactivate it in order to edit it.

2. Edit the trigger details as necessary, then click **SAVE** to save your changes



CAUTION

Don't forget to reactivate your trigger (if you want to) if you deactivated it in order to edit it!

To change trigger Priority:

1. Tick the checkbox(es) of the trigger(s) you wish to change priority.
2. Choose a new **PRIORITY**

To change assign to a trigger a new Robot team:

1. Tick the checkbox(es) of the trigger(s) you wish to assign a new Robot team.
2. Choose a new Robot Team from the **ASSIGN TO** dropdown list.

Deleting a trigger

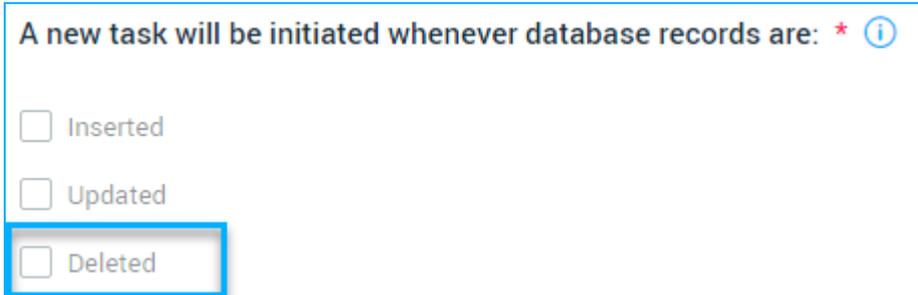
To delete one or more triggers:

1. Click **TRIGGERS** from the Navigation menu
2. Tick the check box of the trigger(s) you wish to delete

3. Click the **DELETE** button

About using the "Delete" monitoring option in Database Trigger

When creating a database trigger, you have the option to set the trigger initiation to whenever database records are deleted:



A new task will be initiated whenever database records are: * ⓘ

- Inserted
- Updated
- Deleted

Database Trigger's **Delete** monitor only works with logical delete. This means that the table you choose has to have a column that determines whether the row was deleted or not (false/0 - not deleted, true/not 0 - deleted). The **Delete** monitor works by recognizing that the **IsDeleted** field has changed to something different than 0.

About renaming files/folders that have the "Deleted" monitoring set

Monitoring

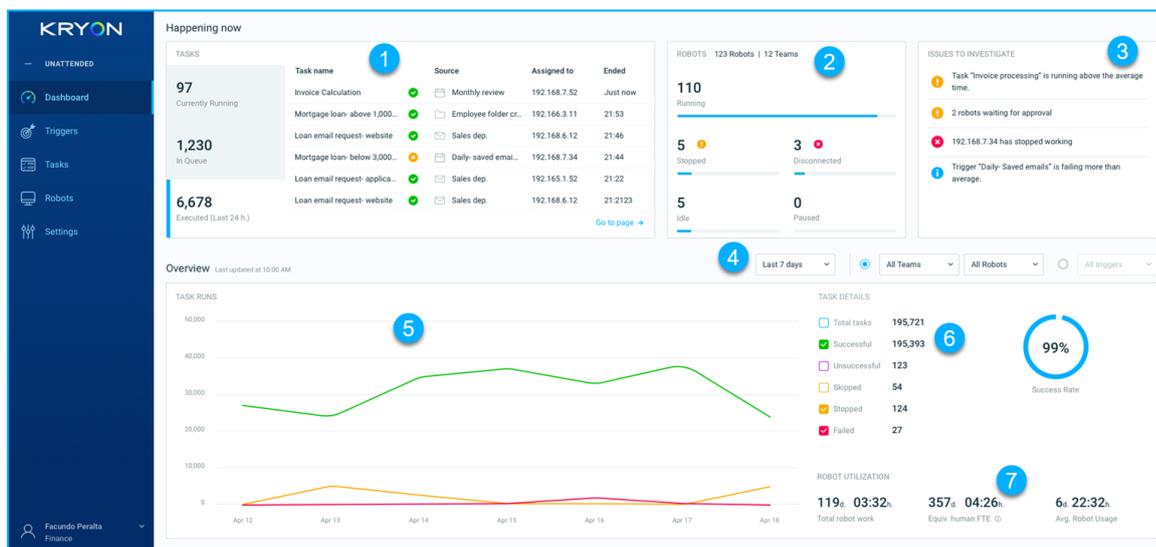
You can monitor the live status of your RPA tasks and virtual workforce to ensure your RPA solution is operating smoothly. You can also identify and solve problems as they occur – such as robot inactivity, process errors, and task overload.

Get business insights over the performance of your robots so you can make smarter decisions on your RPA operations.

ConsoleX Analytics Dashboard

The Analytics Dashboard is the page you'll see when you first enter ConsoleX. It provides a visual overview of your entire robot workforce with high-level charts and statistics for task volume and performance – filterable by time range and by robot group. Additionally, it provides an easy way to dig deeper into the details, down to the granular level of individual robots and tasks.

Dashboard tour



The **HAPPENING NOW** area:

1. **Tasks:** Gives you an at-a-glance view of Tasks in the system: **CURRENTLY RUNNING**, **WAITING IN QUEUE**, and **EXECUTED** (in the past 24 hours) tabs. View the most recent tasks in each category by clicking the tab. Click a task in the list to open its **TASK PROPERTIES** page or drill down even further by clicking **SHOW ALL**.
2. **Robots:** Sums up current robot activity. Click an item to open up the Robots list filtered per your selection.
3. **Issues to Investigate:** Displays actionable insights and event when they happen for rapid troubleshooting of abnormal behavior of tasks, triggers and robots. Click an item to drill down into the issue.

TIP

You can configure which issues appear in this list by setting the analytics-associated thresholds in [Insight Notification Thresholds Configuration](#).

The **OVERVIEW** area:

4. **Area Filters:** You can filter the data in the Overview area by time and by Robot Team, Robot name, or by Trigger.

The image shows a horizontal filter bar with four sections, each with a dropdown menu and a radio button. The sections are:

- Time:** Labeled 'Time' in blue, with a dropdown menu showing 'Last 7 days' and a downward arrow.
- Robot Team:** Labeled 'Robot Team' in blue, with a radio button that is selected (filled with blue), a dropdown menu showing 'HR team' and a downward arrow.
- Robot:** Labeled 'Robot' in blue, with an unselected radio button, a dropdown menu showing 'robot1, robot2...' and a downward arrow.
- Trigger:** Labeled 'Trigger' in blue, with an unselected radio button, a dropdown menu showing 'All triggers' and a downward arrow.

5. **Task Runs:** View task run totals over the selected dates per task outcomes. You can select task details data to show in the Task graph. Hover your mouse over the graph to drill down for information for a specific date.
6. **Task Details:** Sums up tasks outcomes provides a success rate metric
7. **Robot Utilization:** Shows you how much total time the robot worked and converts this amount to equivalent human full time employment (based on a 6 hour day) .

Accessing the Dashboard

View the Dashboard at any time by clicking **DASHBOARD** on the ConsoleX Navigation menu.

Digging Into Performance Details

Once you've seen high-level charts and statistics for your entire robot workforce in the [Analytics Dashboard](#), you can dig further into the details of task performance directly from there. Console also provides detailed monitoring capabilities for current and historical task performance.

Task Performance & History

To access detailed task performance history for an individual task,

1. Click **TASKS** in the Navigation menu. The **TASKS** main page opens.
2. Access the task's **Task Details page** from the [History](#) or [Currently Running](#) tabs: Double-click on the row of the task for which you want to see detailed information.

From the task's **Task Details page**, the following types of detailed information are available:

The screenshot displays the KRYON console interface for a specific task. The navigation menu on the left includes options like Dashboard, Triggers, Robots, and Settings. The main content area shows the task details for 'File create under temp local will trigger this (#270220105842)'. The task is marked as 'Ended'. Below the task name, there are sections for 'File trigger', 'Wizard', 'Variables', and 'Notifications'. The 'Task run history' table on the right lists several actions, including 'Task Ended', 'Task Resumed', 'Task Paused', 'Wizard Ended Successfully', and 'Task Started'. Callouts point to various elements: 'Task Name' points to the task title, 'Task source' points to the file path, 'Task run status' points to the 'Ended' status, 'Robot current task assignment' points to the 'Local name' field, and 'Wizard details' points to the wizard configuration section.

TIP

The **LOG AN ACTION** advanced command reports its results here

If a task executes a wizard that includes one or more **Log an Action** advanced commands, you'll find the collected data in the **Run History** for that task.

To learn more, see the ***Advanced Commands Reference Guide (Log an Action)***.

Trigger Performance & History

To access detailed trigger performance history for an individual trigger,

1. Click **TRIGGERS** in the Navigation menu. The **TRIGGERS** main page opens.
2. Access the trigger's **Trigger Details page** by clicking on the row of the trigger for which you want to see detailed information.

From the trigger's **Trigger Details page**, the following types of detailed information is available:

The screenshot displays the 'Trigger Details' page for 'SQL EXPRESS Credential Vault'. The interface includes a sidebar with navigation options (Dashboard, Triggers, Tasks, Robots, Settings) and a main content area. The main content area is divided into several sections:

- Trigger Header:** Shows the trigger name 'SQL EXPRESS Credential Vault', its status (ON), and a description: 'Initiate a task for every update action in LeoApplications table'. It includes an 'Actions' dropdown menu.
- Configuration:** Shows 'Database trigger', 'Normal priority', and 'First available'.
- Wizard:** A section for configuring the trigger, including 'variable that is defined on task', 'Database', 'Provider=SQLOLEDB.1;Persist Security Info=True;In...', 'Credential Vault (Data Base SQLEXPRESS)', and 'Table/View LeoApplications'.
- Performance:** Shows 'Last triggered' on 02/18/2020 11:56 AM and 'Last updated' on 02/18/2020 12:20 PM, by console.
- Variables and Notifications:** Sections for managing variables and notifications.
- Triggered tasks:** A table showing the history of tasks triggered by this trigger. The table has columns for ID, Task name, Status, Summary, Robot, Created, Time in queue, Started, and Duration. It lists four tasks, all with 'Ended' status, except for one 'Stopped' task.

ID	Task name	Status	Summary	Robot	Created	Time in queue	Started	Duration
673	SQL EXPRESS Cre...	Ended	Success	Rafael...	Feb 18, 2020...	00:00:12	Feb 18, 2020...	00:00:17
674	SQL EXPRESS Cre...	Ended	Success	Rafael...	Feb 18, 2020...	00:00:42	Feb 18, 2020...	00:00:28
675	SQL EXPRESS Cre...	Ended	Success	Rafael...	Feb 18, 2020...	00:00:11	Feb 18, 2020...	00:00:14
676	SQL EXPRESS Cre...	Ended	Stopped	Rafael...	Feb 18, 2020...	00:00:31	Feb 18, 2020...	00:09:57

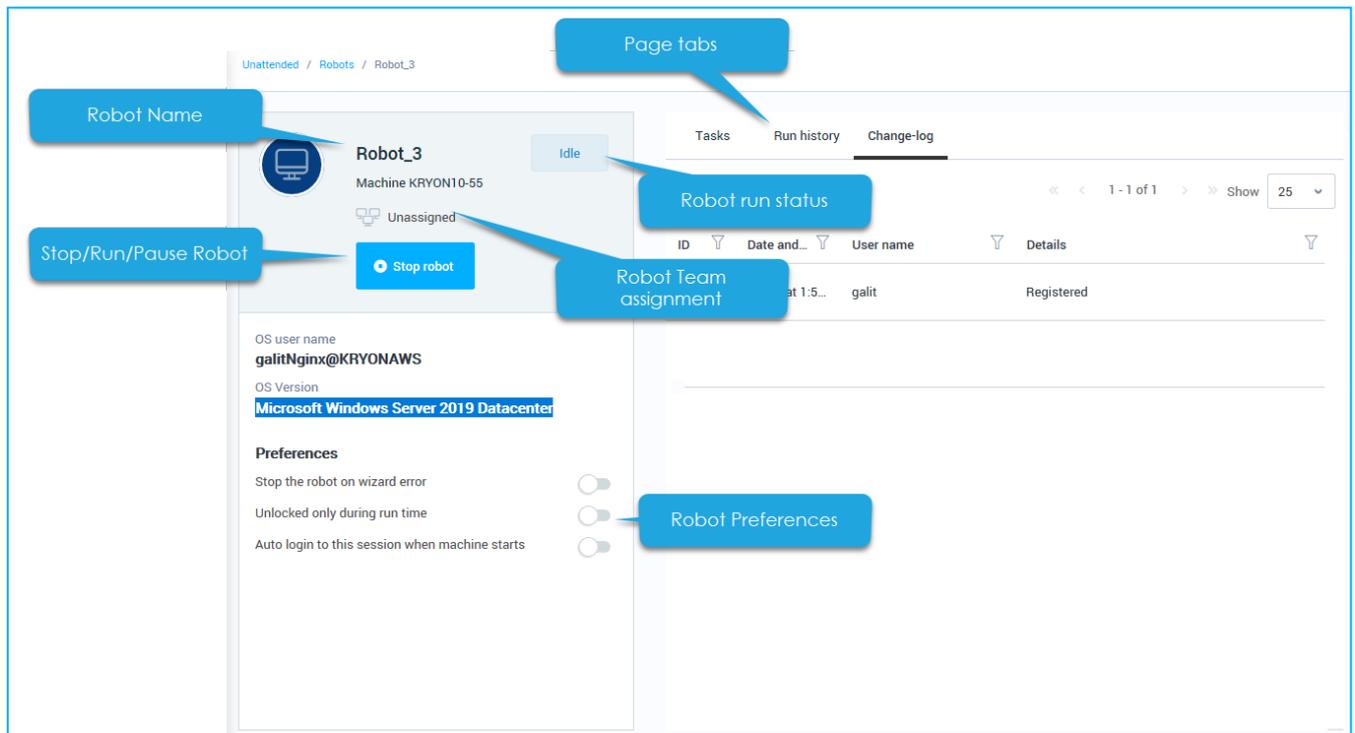
- **TRIGGERED TASKS** tab: to see a summary of task's created by the trigger (either in queue, running or ended)
- **RUN-LOG** tab: to see detailed task history for task initiated by this trigger
- **CHANGE-LOG** tab: to see a record of changes made to the trigger

Robot Performance & History

Accessing Detailed Robot Data

To access detailed robot data:

1. Click **ROBOTS** in the Navigation menu. The **ROBOTS** main page opens.
2. On the **APPROVED** tab, click on the row of the robot for which you want to see detailed information.
 - The robot's **Robot Details** page opens.



On the **Robot Details** page, click on the relevant tab to access detailed data:

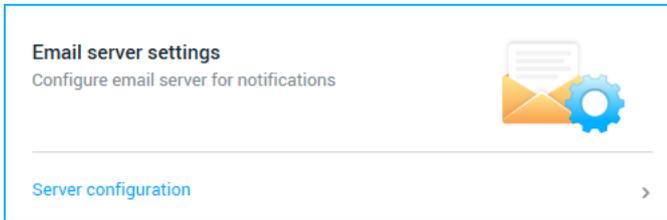
- **TASKS** Lists all the current and past tasks done by the robot along with some basic information about each task (tasks in the queue are not included).
- **RUN HISTORY** A detailed history of the robot's status, activity, and all tasks executed by the robot.
- **CHANGE-LOG** Lists all a detailed history of all changes made to the robot like team assignments, etc.

ConsoleX Settings

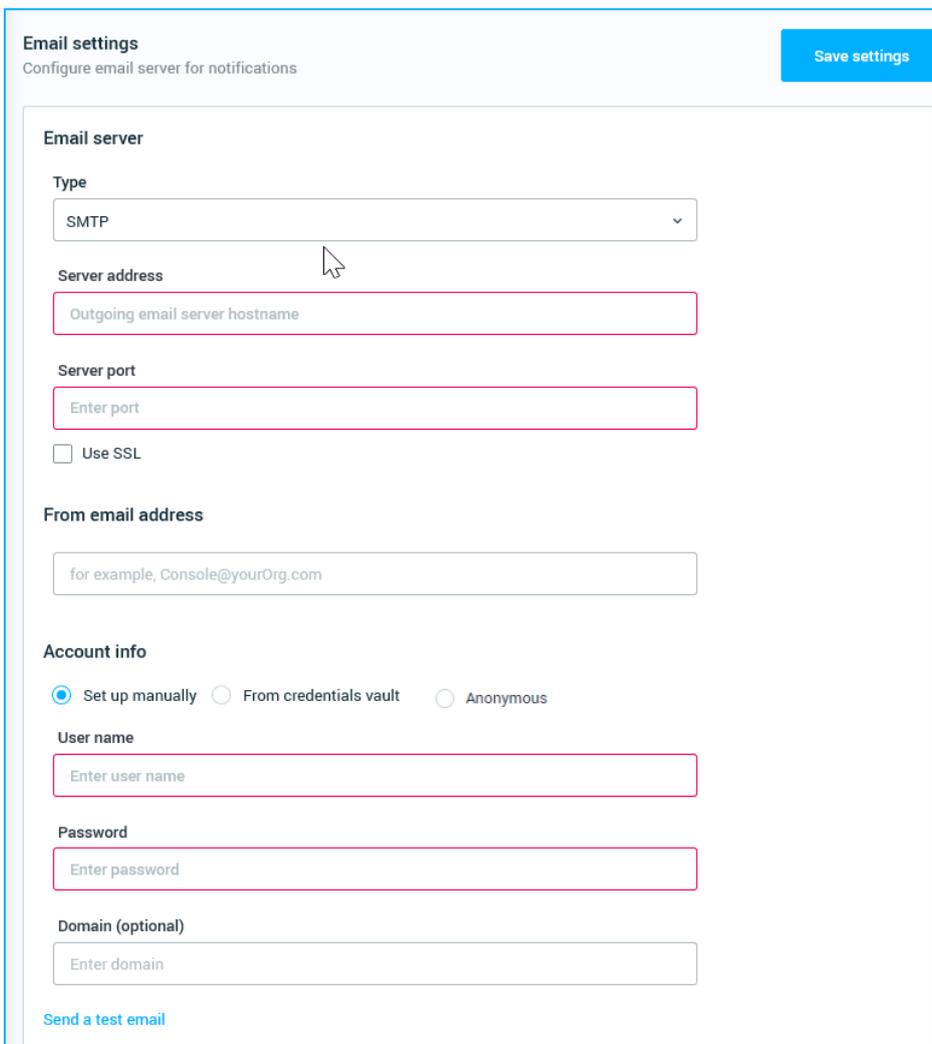
Setting Up the Email Server

To access the Email Server Settings:

1. Click **SETTINGS** in the Navigation menu. The Settings page opens.



Click **SERVER CONFIGURATION** to access the Email Settings dialog:

A screenshot of the "Email settings" dialog box. The title is "Email settings" and the subtitle is "Configure email server for notifications". A "Save settings" button is in the top right corner. The dialog is divided into several sections: "Email server" with a "Type" dropdown menu set to "SMTP", "Server address" (placeholder: "Outgoing email server hostname"), "Server port" (placeholder: "Enter port"), and an unchecked "Use SSL" checkbox; "From email address" (placeholder: "for example, Console@yourOrg.com"); "Account info" with three radio buttons: "Set up manually" (selected), "From credentials vault", and "Anonymous"; "User name" (placeholder: "Enter user name"); "Password" (placeholder: "Enter password"); and "Domain (optional)" (placeholder: "Enter domain"). A "Send a test email" link is at the bottom left.

1. In the **EMAIL SERVER** section, enter the settings required to access the outgoing email server and account
2. Enter the **FROM EMAIL ADDRESS** from which notifications will be sent.

3. Set up **ACCOUNT INFO**. You can enter info manually, select **FROM CREDENTIALS VAULT**, or you can select to log in anonymously (if using an SMTP server).
4. (Optional) Verify your settings: Specify an email address to which to send a text email, and click **SEND A TEST EMAIL**

Adding/Editing Robot Event Notifications

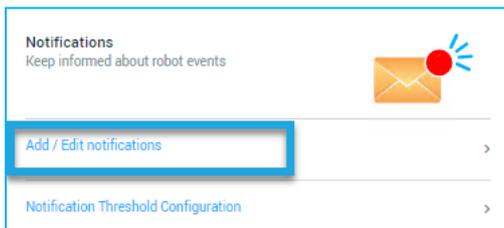
You can receive email notifications to keep informed when important events occur, like when a robot is:

- Added to ConsoleX;
- Stopped; or,
- Becomes disconnected or unresponsive.

TIP

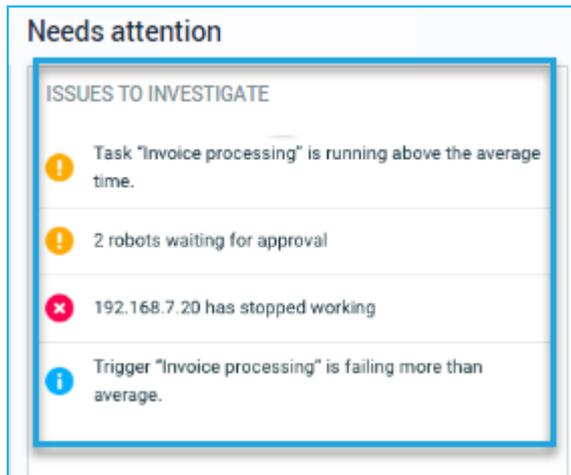
You can set email notifications for Task and Trigger related events when creating a new trigger or task, or editing them. These use the server and account details (See [Setting Up the Email Server](#)) and are sent from the email address that you configure in this section.

1. Click **SETTINGS** in the Navigation menu. The **SETTINGS** page opens.
2. Click **ADD/EDIT NOTIFICATIONS**.



3. Select the **EVENTS** type.
4. Specify the email address/es to which you'd like notifications to be sent:
 - Email addresses can be the same or different for each event type (robot added, robot stopped, etc.).
 - Separate multiple email addresses with commas.
5. Click **ADD NOTIFICATIONS** to add more events-based notifications.
6. Click **SAVE SETTINGS**.

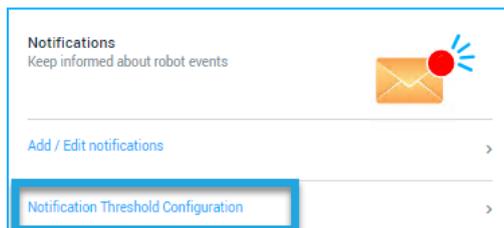
Insight Notification Thresholds Configuration



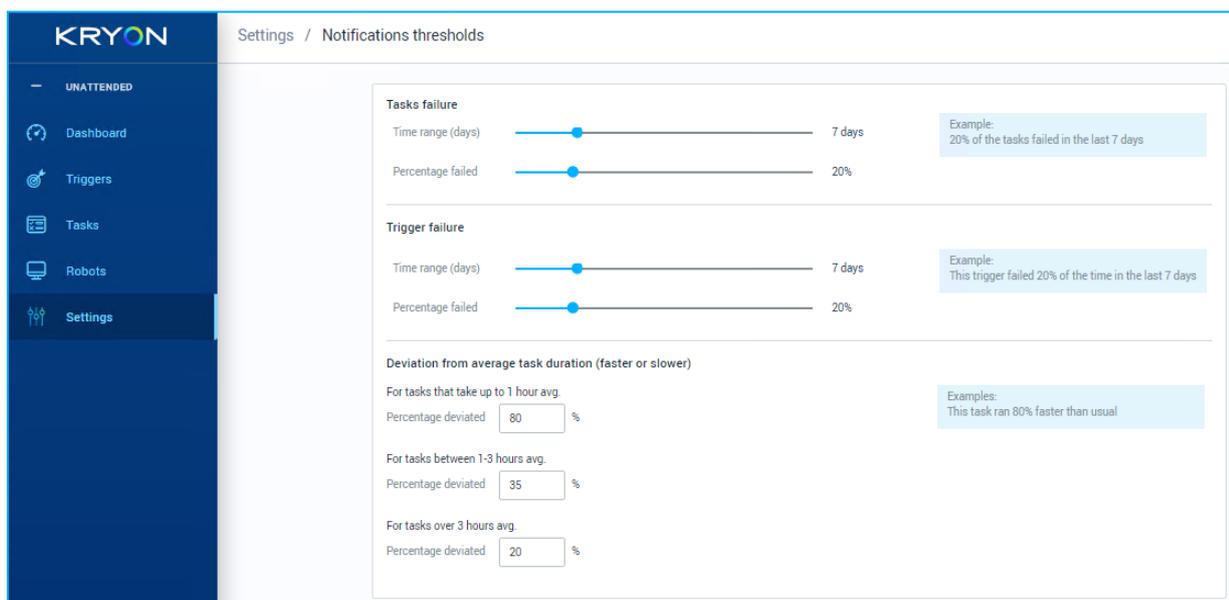
The **NEEDS ATTENTION** area in the [ConsoleX Analytics Dashboard](#) lists issues that may impact performance, so are worth investigating further. You can configure which issues appear in this list by setting the analytics-associated thresholds.

To configure Notifications thresholds:

1. Click **SETTINGS** in the Navigation menu. The **SETTINGS** page opens.
2. Click **NOTIFICATION THRESHOLD CONFIGURATION**



The Notifications Thresholds page open:



Tasks Failure Threshold

An issue will be generated when the percentage of tasks that failed during the sample time exceeds the threshold.

An example message is: Over 20% of the tasks have failed in the last 7 days.

1. Use the **PERCENTAGE FAILED** slider to set the threshold percentage of failed tasks above which an alert is generated.
2. Use the **TIME RANGE** slider to set the time range for the sample.

Trigger Failure Threshold

An issue will be generated when the percentage of tasks created by a trigger have failed more than % of the time in the sample time.

An example message is: The trigger **Send_Email** failed over 20% of the time in the last 7 days.

1. Use the **PERCENTAGE FAILED** slider to set the threshold for the percentage a time a trigger has failed above which an alert is generated.
2. Use the **TIME RANGE** slider to set the time range for the sample.

Deviation for average task durations (faster or slower)

An issue will be generated when the time it takes for a specific task to run, from beginning to end, is above or below the average time it usually takes. You can set a different percentage deviation based on the average task duration.

An example message is: The task **Check_Mail** ran 70% faster than usual
or The task **Check_Mail** ran 70% slower than usual

1. **For tasks that take up to 1 hour avg.:** Set the percentage deviation (faster or slower) that will generate an issue in the dashboard
2. **For tasks between 1-3 hours avg.:** Set the percentage deviation (faster or slower) that will generate an issue in the dashboard
3. **For tasks over 3 hours avg.:** Set the percentage deviation (faster or slower) that will generate an issue in the dashboard

Credentials Vault

The Credentials Vault provides secure storage of the usernames and passwords used by the robot workforce. The credentials are stored using a 2-phase encryption mechanism, which allows only Kryon clients to retrieve and decrypt the data and enter the credentials when required. You can also access the Credentials Vault directly from Kryon Studio when you are developing wizards. From Studio, all Credentials Vault credentials are available except credentials for the OS User).

Types of Credentials

Credentials Vault can store 4 different types of credentials, each represented by a tab at the top of the **CREDENTIALS VAULT** page:

- Application Users
- Specific Users
- [General Users](#)
- [OS Users](#)

Although you can access all credential types from within the ConsoleX, only General User and OS User Credentials are relevant for your activities in ConsoleX.

General Users

A **General User** credential is a username-password combination that is used to access a general computing resource. These include email server credentials to set notifications or to initiate an email trigger, database login credentials for setting Database triggers, and file / folder credentials for file and folder triggers.

To learn how to add a **General User** credential, see [Adding a new General User credential](#).

OS Users

An **OS User** credential is a username-password combination that is used by robot to log in to Windows. This is used by the robot to unlock a locked machine in order to run a wizard. You can also create an OS User credential for a robot when you are approving the robot during on-boarding, from the Robots list and from the Robot details page.

To learn how to add an **OS User** credential, see [Adding a new OS User credential](#).

Accessing the Credentials Vault in ConsoleX

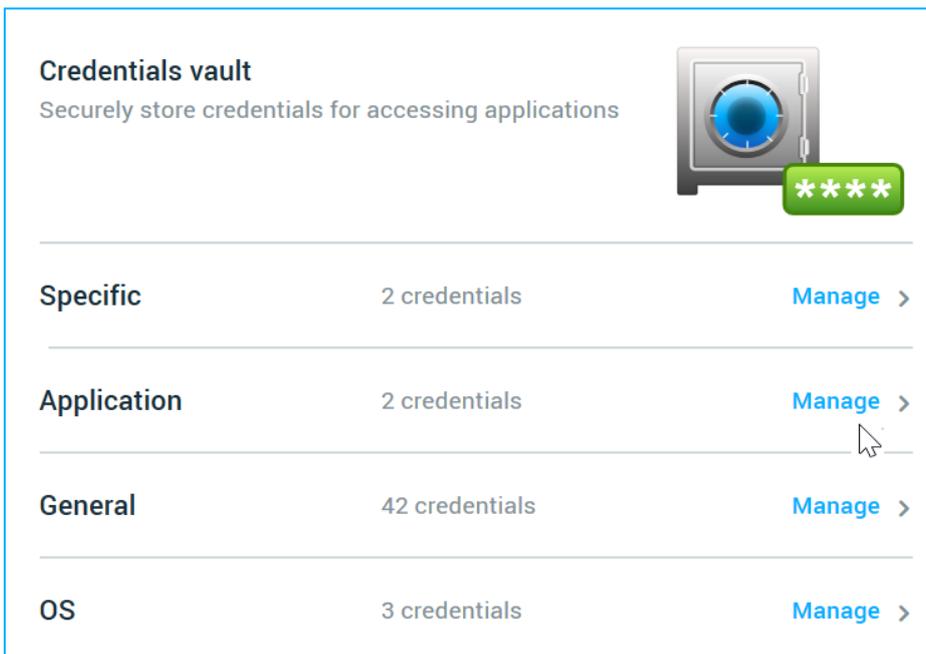
There are three access levels to the Credentials Vault:

1. **Regular access:** Full permissions
2. **Secured access:** Access is password protected (defined in Admin)
3. **No Access:** Credentials vault access is turned off for the whole company (defined in admin)

The following instructions assume you have access to the Credentials Vault:

To access the Credentials Vault from ConsoleX:

1. Click **SETTINGS** in the Navigation menu.



2. Click **MANAGE** to access selected credential type

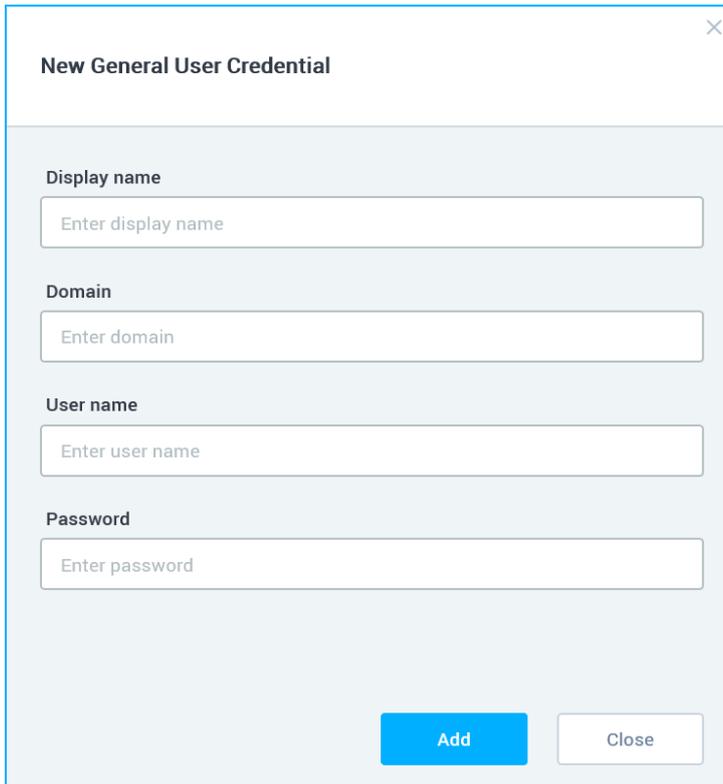
Adding Credentials

The information required to add credentials varies by the [type of credential](#) you are creating. Learn to add:

- [General User credentials](#)
- [OS User credentials](#)

Adding a new General User credential

1. From the **GENERAL USERS** tab, click **+ADD CREDENTIAL**.



New General User Credential

Display name
Enter display name

Domain
Enter domain

User name
Enter user name

Password
Enter password

Add Close

2. Enter a descriptive **display name** that can be used to later recognize and access this credential.
3. Enter the **domain** on which the relevant resource is located.
4. Enter the **username**.
5. Enter the **password**.
6. Click **ADD** to save the new credential.

Adding a new OS User credential

1. From the **OS USERS** tab, click **+ADD CREDENTIAL**.

New OS User Credential ×

Domain

Enter domain

When adding credentials for a local user, use the computer name as the domain

User name

Enter user name

Password

Enter password

Add **Close**

2. Enter the **domain** for which the OS user credential is valid.
 - If the credential is for a local user of the machine (as opposed to a domain user), enter the computer name in this field.
3. Enter the **username**
4. Enter the **password**
5. Click **ADD** to save the new credential.

Working with Credentials

Viewing credential properties

- To view the properties of a credential, simply click on it from the list on the applicable tab of the **Credentials Vault**.

Credentials vault

Securely store credentials for accessing applications

Application Specific **General** OS

General User credentials: to access computing resources (like a mail server or database) with no login screen + Add credential

« < 1 - 2 of 2 > » Show 25 ▾

Display name ↓ ▾	User name ▾	Domain ▾	Last update ▾
IMAP Gmail	kryonrafael@gmail.com		Feb 18, 2020 9:57 AM
Data Base SQLEXPRESS	sa		Feb 18, 2020 9:58 AM

- To edit the credential's properties, click on the credential in the list, make the required changes, then click **SAVE**.

Robey-3

Vault Details Usage

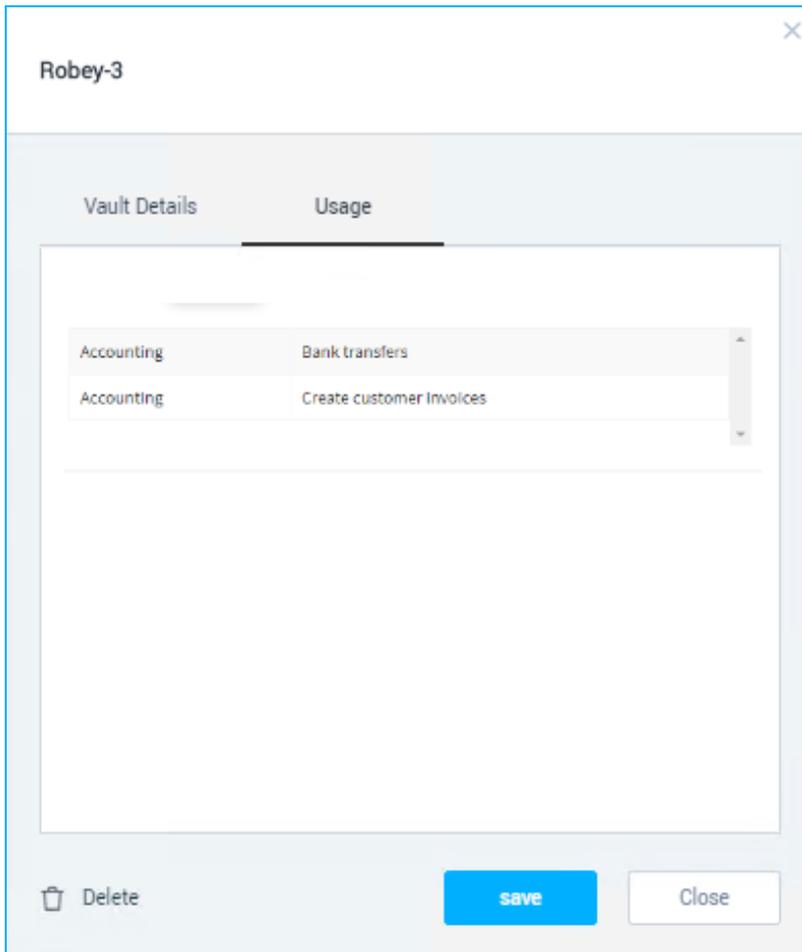
Display name

Domain

User name

Password Show

- To view the wizards in which a specific credential is used, click on the **USAGE** tab.
 - **NOTE:** For an **OS User credential**, the **USAGE** tab will display the robots that utilize the credential instead.



Deleting a credential

To delete a credential, click the **DELETE** button



NOTE

A credential which is assigned to wizards in the Studio can't be deleted (the delete button is disabled).

CHAPTER A: The External Kryon Web API

The Kryon Web API allows external applications to invoke/monitor the RPA tasks of the Kryon solution. It utilizes the ASP.NET MVC (Web API) model with 2 methods:

- POST - creates a new task in the task queue
- GET - retrieves task status

All incoming requests are processed by the Kryon RPA Server and responses are sent back to the calling application. If a process fails, an error response is sent to the external application along with error details.

Authentication

The user of the web API must have a user defined in the Kryon Admin with the User Role option **Supports API Calls** selected (see *User Roles* in the *Kryon Admin User Guide*). Each web request requires the user credentials in the header line:

- **username** - Kryon username
- **pwd** - Kryon password

Authentication is performed on the Kryon RPA Server for every API call, using the provided Kryon account credentials (username and password).

In case of authentication failure, the appropriate response, along with the error code is sent to the calling application.

Code	Meaning
0	No Error
1	User Not Found
2	User Inactive
3	Server Error
4	License Error
10	Unknown
11	User Locked
12	Password Change Required
13	Password Expired

API Reference

Add Task

POST ConsoleServerAddress:API_port_number/task/add

- ConsoleServerAddress = FQDN of the ConsoleX Server as defined during Kryon RPA Server installation
- API_port_number = API port as defined during Kryon RPA Server installation
 - If required, you can check this number in NGINX (in the Bindings for the WebAPI website)
 - Default value = 44445
- Example: MACHINENAME.COMPANYDOMAIN.COM:44445/task/add

API controller name	Task
Method name	Add
Input	WebRequest (json)
Output	WebResponse (json)

Add Task: WebRequest Parameters

WizardCustomId	String	ID of the wizard to execute <ul style="list-style-type: none"> See Appendix A for information about viewing/creating wizard custom IDs
NumberOfRuns	Long	Parameter is obsolete. Number of wizard runs per task is always set to 1. Warning is sent to log if set greater than 1.
SingleRunEstimation	Long	Parameter is obsolete. Warning is sent to log if parameter is used.
Variables	Array (String, String)	List of initial variable names and values to be populated into the wizard
QueuePriority	Integer	Priority in task queue: <ul style="list-style-type: none"> 0 - normal (default) 1 - high
GroupName	String	Robot group to which to assign the task; default is empty (any available robot)
MachineName	String	Robot name to which to assign the task; default is empty (any available robot)

Add Task: WebResponse Parameters

```
{  
  TaskId: <long>,  
  Status: <int>,  
  Error: <int>,  
  OutputData: <string>  
}
```

TaskId	Long	ID of the added task
Status	Integer	<i>(N/A – will be empty)</i>
Error	Integer	<i>(N/A – will be empty)</i>
OutputData	String	<i>(N/A – will be empty)</i>

Example

```
var request = { WizardCustomid: 'A_123',
                Variables: [{Name: 'var1', Value: 'one'},
                            {Name: 'var2', Value: 'two'}]};
$.ajax({
  url: '/task/add',
  data: JSON.stringify(request),
  type: 'post',
  crossDomain: true,
  contentType: 'application/json; charset=utf-8',
  beforeSend: function(request) {
    request.setRequestHeader("username",
                             'username'),
    request.setRequestHeader("pwd",
                             'password');
  }
})
.done(function(resp) {
  return resp;
})
.fail(function(error) {
  throw new Error("Error getting the
  data");
});
```

Get Status

GET ConsoleServerAddress:API_port_number/task/status?tid=*taskid*

- ConsoleServerAddress = FQDN of the ConsoleX Server as defined during Kryon RPA Server installation
- API_port_number = API port as defined during Kryon RPA Server installation
 - If required, you can check this number in NGINX (in the Bindings for the WebAPI website)
 - Default value = 44445
- Example: MACHINENAME.COMPANYDOMAIN.COM:44445/task/status?tid=taskid

API controller name	Task
Method name	GetStatus
Parameter	TaskId (long)
Output	WebResponse (json)

Get Status: WebResponse Parameters

```
{
  TaskId: <long>,
  Status: <int>,
  Error: <int>,
  OutputData: <string>
}
```

TaskId	Long	ID of the queried task
Status	Integer	Task status (<i>see table below</i>)
Error	Integer	Error code (<i>see table below</i>)
OutputData	String	<p>Output data reported by wizard</p> <p>In order for this output parameter to be returned, the relevant wizard must utilize the Report Wizard Output advanced command.</p> <ul style="list-style-type: none"> For additional details, see the document: <i>Advanced Commands Reference Guide (Report Wizard Output)</i>

Status Code	Meaning
0	Started
1	Stopped
2	Ended
3	Delayed
4	Inactive
5	Skipped
6	Queued
7	Faulty (<i>see table below</i>)

Error Code	Meaning
0	OK (no error)
1	General
2	Login
3	Expired
4	Failed To Create Task
5	Wizard Not Found
6	Failed To Get Status
7	Task Not Found

Example

```
$.ajax({    url: '/task/status?tid=1',
           type: 'get',
           crossDomain: true,
           beforeSend: function(request) {
               request.setRequestHeader("username",
                                       'username'),
               request.setRequestHeader("pwd", 'password');}
           })
           .done(function(resp) {
               return resp;
           })
           .fail(function(error) {
               throw new Error("Error getting the data");
           });
```

Task Queue

The task creation process is managed by the Kryon Server according to robot availability.

If no robot is available to immediately execute a task, the task is created and placed in queue with the status **Queued**.

A queued task is saved for up to 24 hours. If no robot becomes available to perform the task during that time, the task status is changed to **Skipped**, and the task is permanently removed from the queue.

Testing

The Web Service API can be tested using the provided **tester.html** file, which allows you to test the two API methods:

- The default location for this file is {InstallFolder}\RPA\Kryon Web Server 64bit\WebAPI

Add Task

Wizard custom id:	<input type="text" value="custom name"/>
Number of runs:	<input type="text" value="1"/>
Single run estimation:	<input type="text" value="10"/>
Queue priority:	<input type="text" value="Normal"/>
Machine Name:	<input type="text"/>
Group Name:	<input type="text"/>
User Name:	<input type="text" value="DOMAIN\UserName"/>
Password:	<input type="password" value="*****"/>

Use **variables** as parameters for the task's wizard.

<input type="text" value="Variable name"/>	<input type="text" value="Value"/>	<input type="button" value="Add"/>
<input type="text" value="xvar1"/>	<input type="text" value="2"/>	
<input type="text" value="xvar2"/>	<input type="text" value="3"/>	

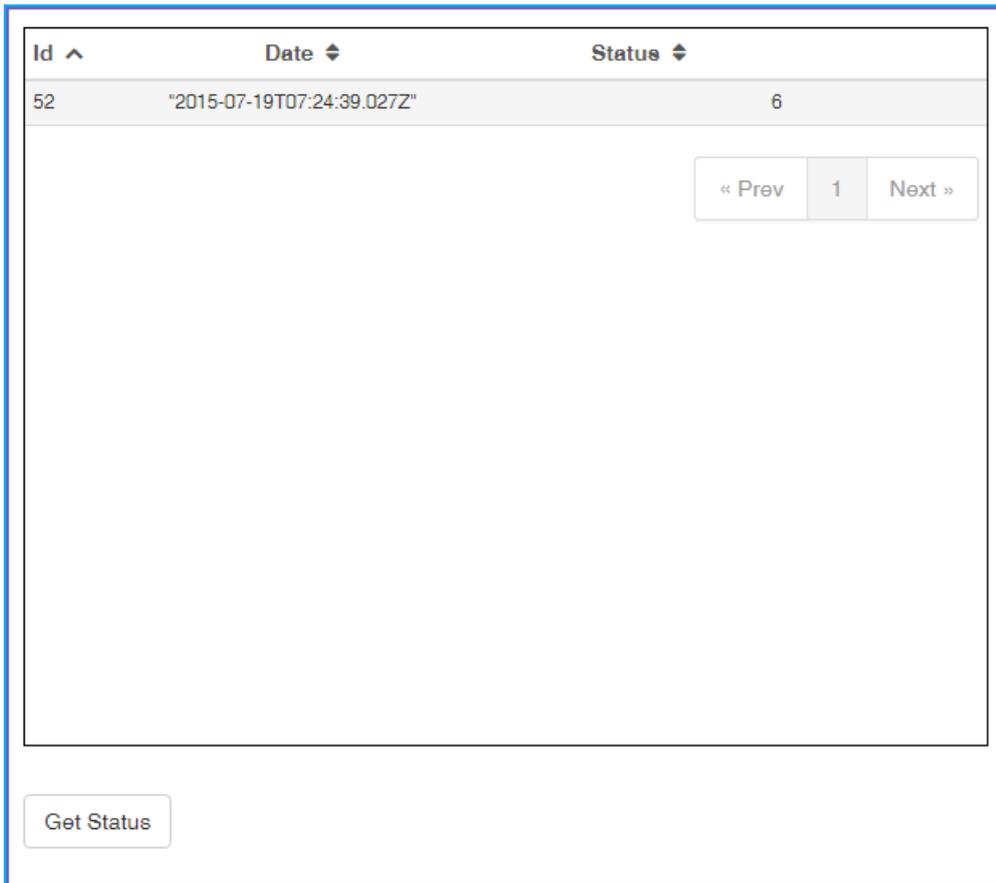


NOTE

Prior to testing, you should ensure that a wizard custom ID exists.

Get Status

Use the tester to add task IDs for status monitoring:



Id ^	Date ↕	Status ↕
52	"2015-07-19T07:24:39.027Z"	6

« Prev 1 Next »

Get Status



NOTE

Upon manual page refresh (F5), task information is lost and can no longer be monitored from the tester (only from Kryon ConsoleX or via custom API implementation).

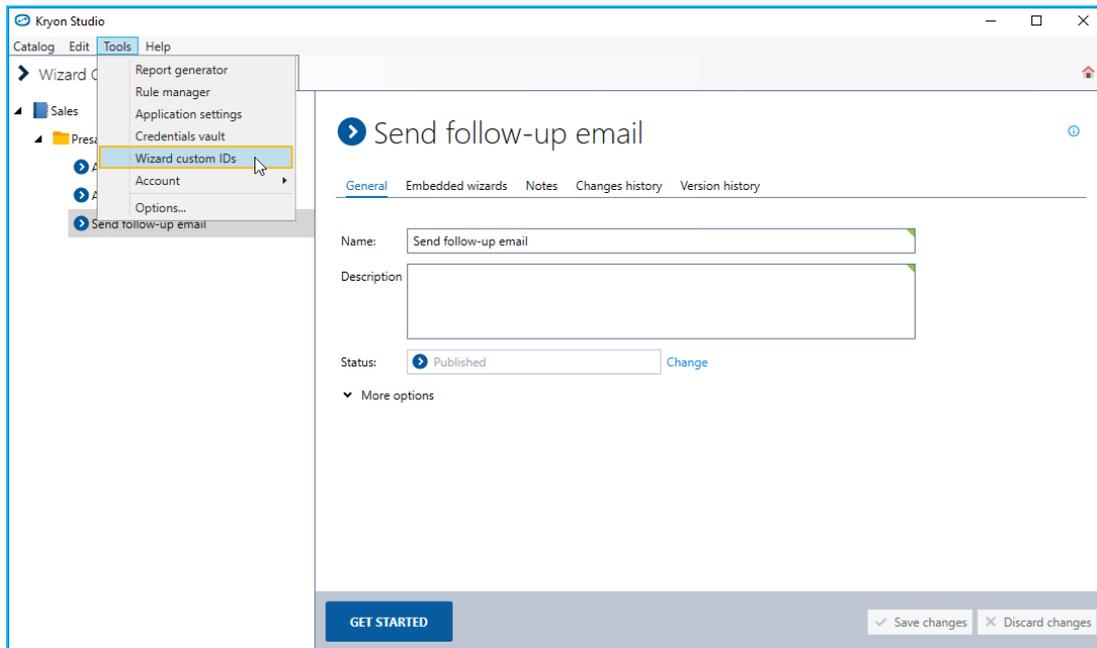
Wizard Custom IDs

To [add a task to the queue](#) using the API, you must identify the wizard that the task will run. You do so by referencing a **wizard custom ID** assigned to the wizard in **Kryon Studio**.

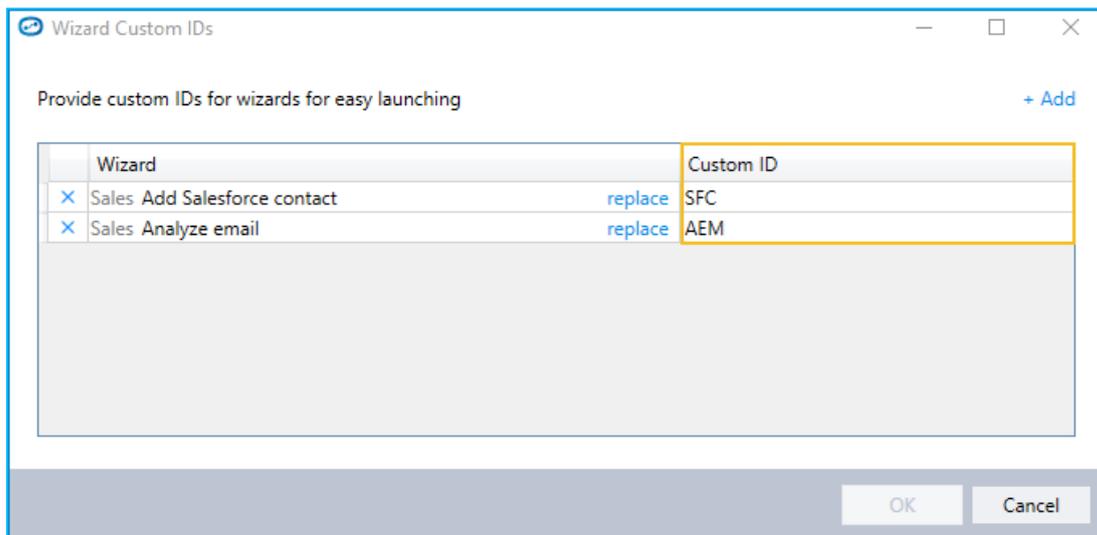
Accessing wizard custom IDs

To view a list of wizard custom IDs:

1. From the menu in the main Kryon Studio window, click **Tools > Wizard custom IDs**



2. A list of all previously created wizard custom IDs will open:

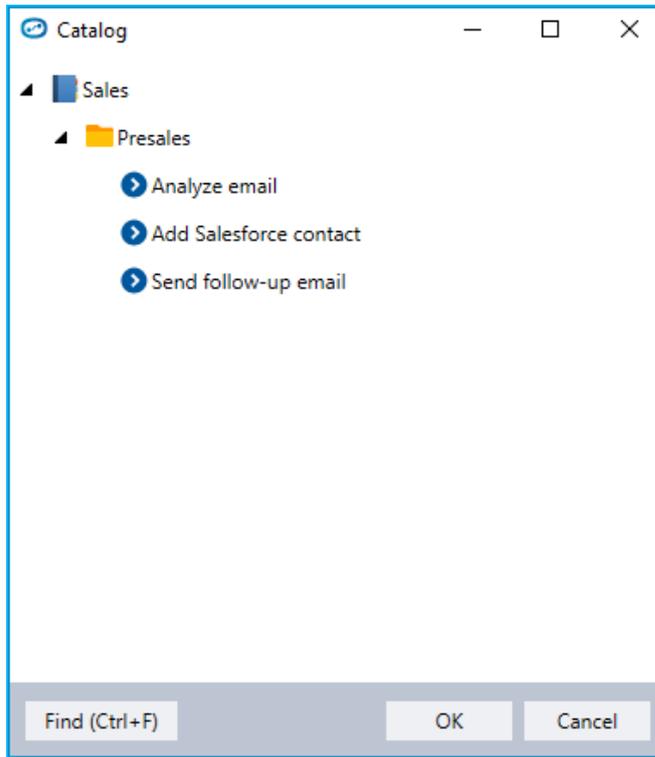


- If the wizard you need to reference appears in the list, you're in good shape. Simply make note of the value in the **Custom ID** column, and use it in the [Add Task](#) API call.
- If the wizard you are looking for doesn't appear in the list, you can [create its wizard custom ID](#) by following the steps below

Creating a wizard custom ID

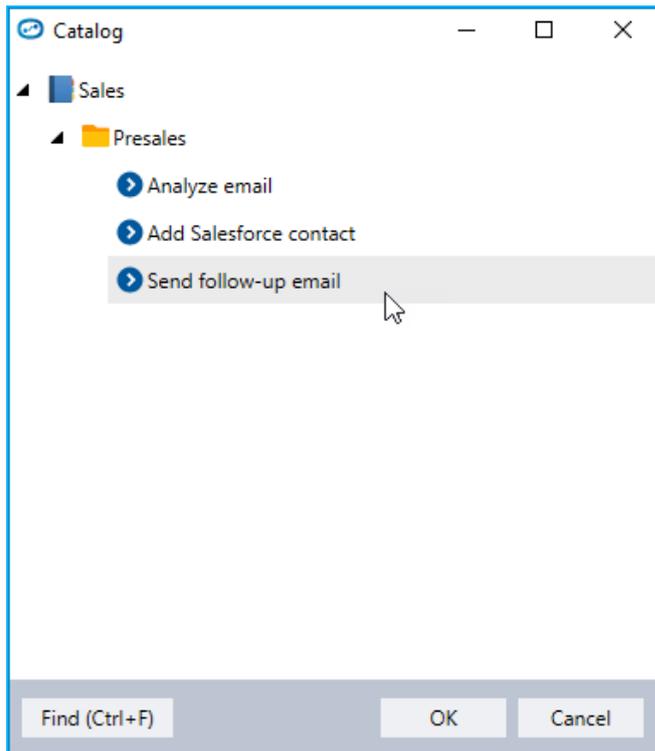
To create a new wizard custom ID:

1. [Access the list of wizard custom IDs](#) as described above
2. Click the [+ Add](#) link in the upper right-hand corner of the window
3. A window displaying a hierarchy tree of all published wizards in the catalog will open

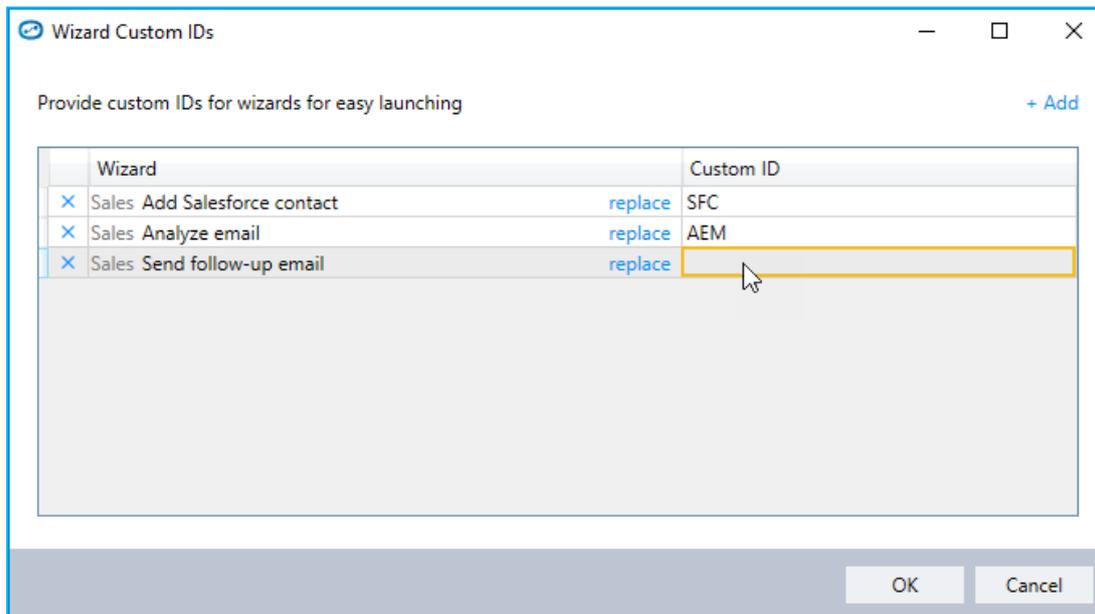


4. Locate the wizard you need either by browsing the tree or by clicking the Find (Ctrl+F) button to search for it

5. Select the wizard to which you want to assign a wizard custom ID, then click **OK**



6. The name of the wizard you selected will now appear in the list of wizard custom IDs:



7. Double-click in the empty **Custom ID** column for that wizard and type the desired ID
8. Click **OK** to save
9. Make note of the new wizard custom ID, and use it in the [Add Task](#) API call

APPENDIX B: About migrating data from Console to ConsoleX

If you are upgrading from Console to ConsoleX, your database must be prepared using the data migration scripts provided by Kryon support.

During database migration, objects that are no longer supported will be modified to the new functionality.

The following changes in functionality from Console to ConsoleX impact the database structure when migrating:

Functionality	Console	ConsoleX
New task	Tasks assigned directly to robots	Tasks added to the queue
New task - # of runs	A task could be run: X times / Y hours / Forever	Task can run only once
New task - recurrence	Task recurrence available	Recurrence is supported only by triggers using CRON expression
Triggers - yearly recurrence	Available	Available only via 'custom' CRON expression

After migration, all triggers are set to inactive. You need to review your triggers and activate those you need activated.

The following explains specific changes:

Task with recurrences

New time trigger is created:

- The new Trigger Name is the same as the original Task Name with '(migrated)' added to it
- Recurrence is changed: daily, weekly, monthly is changed to time trigger CRON expression; yearly appears as a custom CRON expression.
 - **NOTE:** Since the new CRON does not support *weekly* recurrences greater than every one week or *daily* recurrences greater than every 31 days, these use cases are treated differently:
 - If the task offset was set with *weekly* recurrences greater than every one week, a new trigger is created with recurrence set to every 1 week.

- If the task offset was set with *daily* recurrences greater than every 31 days, a new trigger is created with recurrence set to every 31 days
- The assigned Wizard is copied to the new trigger
- Robots are copied, if they exist; if not, set for first available robot
- Notifications are copied from task
- The change-log receives a new line: "Created during migration from older versions"
- For task history of the new trigger: Task names receive index ID (for example, [Task name] #1)

Example of log data for the change:

Task #123 migrated to a new trigger (#312)

- Task name
- Start time
- # of Runs / Hours / Forever
- Wizard
- Robot
- Variables
- Notifications
- 5 tasks were created: 111, 222, 333, 444, 555. Make sure to validate this trigger and activate it.

For task offset with recurrences set with weekly recurrences greater than every one week: Task #123 migrated to a new trigger (#312). The task offset was set to run every X weeks and converted to run every 1 week.

For task offset with recurrences set with daily recurrences greater than every 31 days: Task #123 migrated to a new trigger (#312). The task offset was set to run above 31 days and converted to run every 31 days.

Task with no recurrences, with single run in the past

Individual task does not change.

Task with no recurrences, with multiple runs in the past

Every run will be migrated as a separate task that appears in the HISTORY tab.

Task names receive index ID (for example, [Task name] #1)

Example of log data for the change:

Task #123 could not be migrated (number of runs not supported)

- Task name
- Start time
- # of Runs / Hours / Forever

- Wizard
- Robot
- Variables
- Notifications
- 5 tasks were created to keep history: 111, 222, 333, 444, 555.

Task with no recurrences, with a future single run

New time trigger is created:

- New Trigger Name is the same as the original Task Name with '(migrated)' added.
- The event is changed: time is changed to trigger CRON expression with same date as the original task.
- Robots are copied, if they don't exist set for first available robot.
- Notifications copied from task
- The change-log receives a new line: "Created during migration from older versions"

Example of log data for the change:

Task #123 migrated to a new trigger (#312)

- Task name
- Start time
- # of Runs / Hours / Forever
- Wizard
- Robot
- Variables
- Notifications
- 5 tasks were created: 111, 222, 333, 444, 555 Make sure to validate this trigger and activate it.

Task with no recurrences, with future multiple runs

New time trigger is created:

- This task will be migrated according to its start date, but will run only once.
- Example: A Task with start time at 20/05/2020 18:05, and number of Runs is 5, will be migrated to a Time Trigger that will be triggered only once at 20/05/2020 18:05.

Example of log data for the change:

Task #123 migrated to a new trigger (#312)

- Task name
- Start time

- # of Runs / Hours / Forever
- Wizard
- Robot
- Variables
- Notifications

Task in the queue

Tasks that are In Queue will remain the same:

Except for tasks whose number of runs is greater than 1. In this case:

1. Number of runs will be updated to 1. (only modified in memory when running the task and not saved to DB)
2. A warning message is sent to the logs

Example of log data for the warning message:

- Automation task queue #{taskId} had NumberOfRuns > 1, and was updated to NumberOfRuns = 1