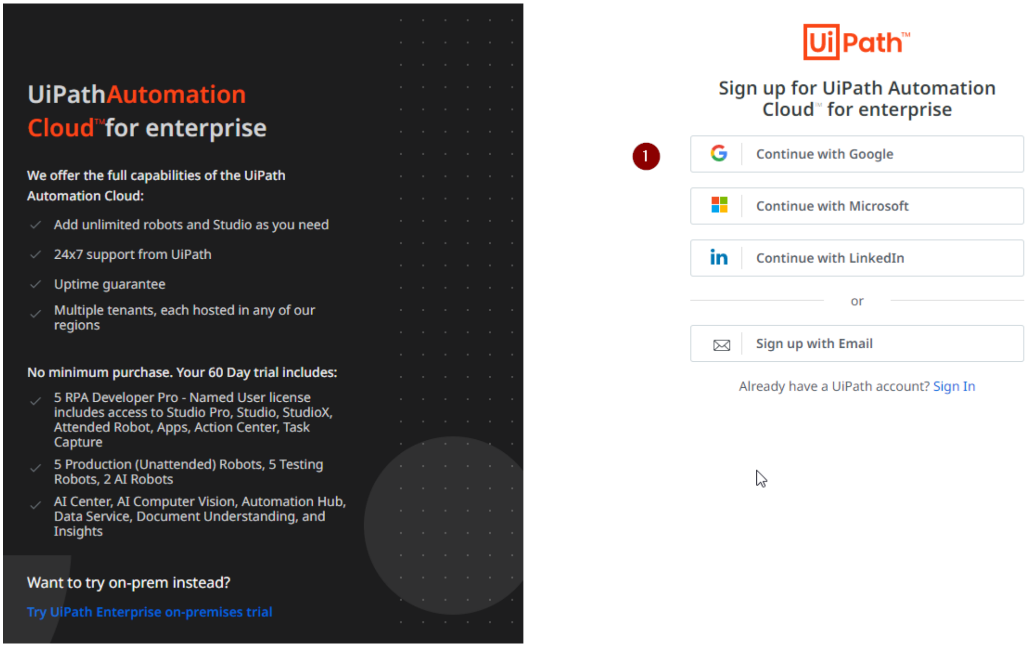
Setting Up the Cloud Orchestrator and Robots

The Orchestrator setup in Cloud is very simple compared to the on-prem setup as all the setup is already managed by UiPath and we just need to get a license for its usage. We will use a Trial version setup to demonstrate its setup and its capabilities.

UiPath Cloud Setup

1. Login to our desktop or set up an EC2 instance with Windows Server 2019 type and login to the Admin account. This will be the workspace where we will access the Cloud orchestrator and also set up a Studio/Studio Pro developer studio and an Assistant to run the bot.
2. Setup a trial account at this URL: `https://cloud.uipath.com/portal_/register?subscriptionPlan=trial`



UiPathAutomation Cloud™for enterprise

We offer the full capabilities of the UiPath Automation Cloud:

- ✓ Add unlimited robots and Studio as you need
- ✓ 24x7 support from UiPath
- ✓ Uptime guarantee
- ✓ Multiple tenants, each hosted in any of our regions

No minimum purchase. Your 60 Day trial includes:

- ✓ 5 RPA Developer Pro - Named User license includes access to Studio Pro, Studio, StudioX, Attended Robot, Apps, Action Center, Task Capture
- ✓ 5 Production (Unattended) Robots, 5 Testing Robots, 2 AI Robots
- ✓ AI Center, AI Computer Vision, Automation Hub, Data Service, Document Understanding, and Insights

Want to try on-prem instead?

Try UiPath Enterprise on-premises trial

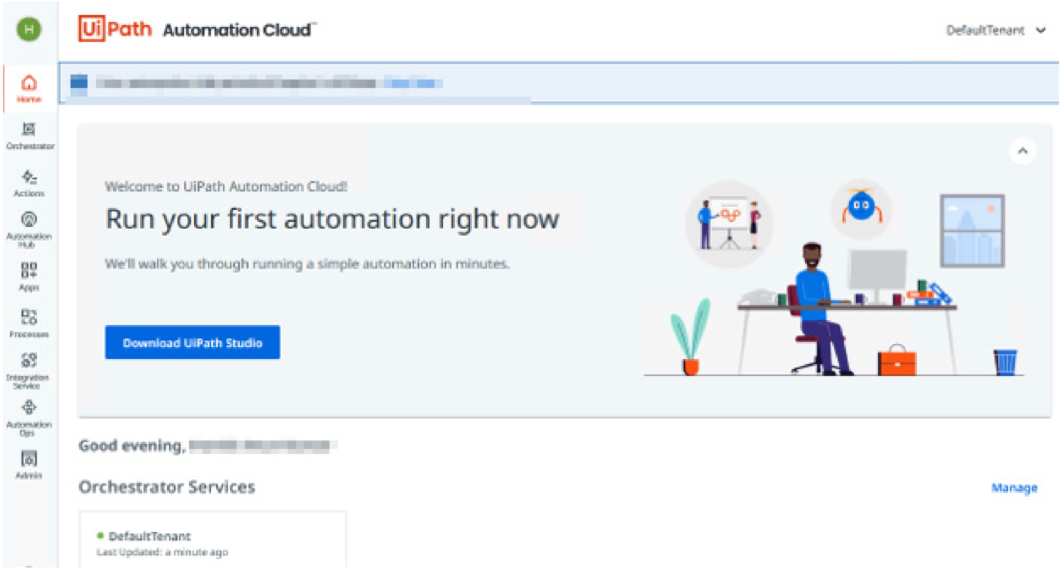
UiPath™

Sign up for UiPath Automation Cloud™ for enterprise

Already have a UiPath account? Sign In

Figure B.01

3. Once the UiPath cloud account is created, please log in with the same credentials.



[redacted]

Welcome to UiPath Automation Cloud!

Run your first automation right now

We'll walk you through running a simple automation in minutes.

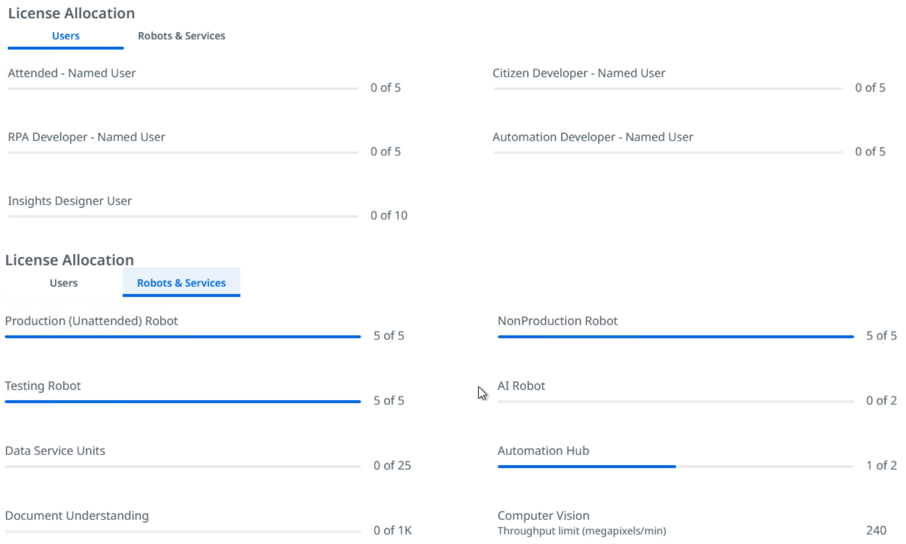
Good evening, [redacted]

Orchestrator Services

DefaultTenant
Last Updated: a minute ago

Figure B.02

4. Check the licenses allocated for the Trial account. RPA Developer (Studio /Studio X), Attended and Unattended Robot and Non-prod & Test robots licenses are allocated as part of the Trial setup.



License Allocation

Attended - Named User	0 of 5	Citizen Developer - Named User	0 of 5
RPA Developer - Named User	0 of 5	Automation Developer - Named User	0 of 5
Insights Designer User	0 of 10		

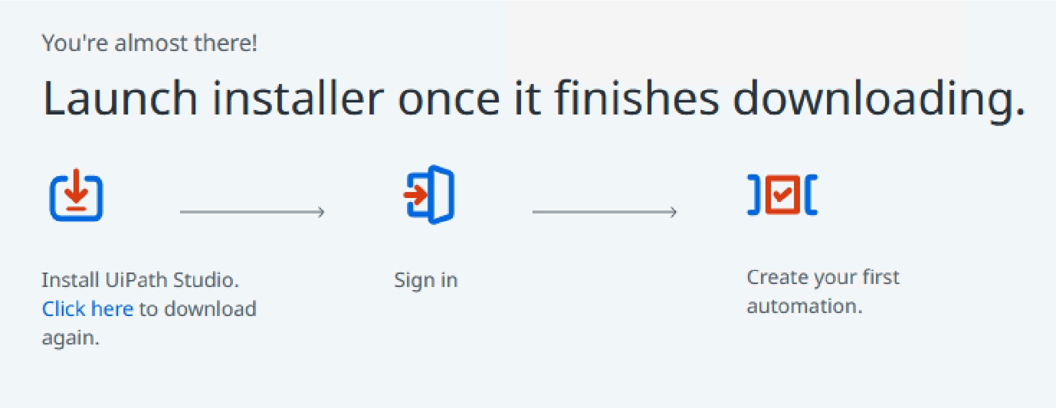
License Allocation

Production (Unattended) Robot	5 of 5	NonProduction Robot	5 of 5
Testing Robot	5 of 5	AI Robot	0 of 2
Data Service Units	0 of 25	Automation Hub	1 of 2
Document Understanding	0 of 1K	Computer Vision Throughput limit (megapixels/min)	240

Figure B.03

Install UiPath Studio and Assistant

1. Once the licenses allocation is confirmed, install the UiPath studio and an Assistant to run the automation. The installer file is also available for download from the Cloud orchestrator account.



You're almost there!

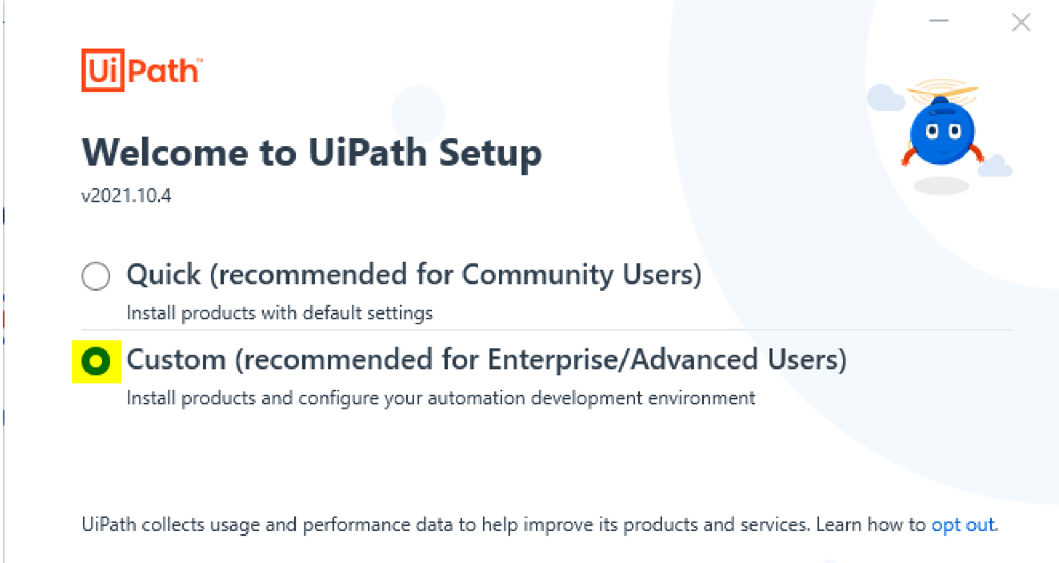
Launch installer once it finishes downloading.

Install UiPath Studio. Click here to download again.

Sign in

Create your first automation.

Figure B.04



Welcome to UiPath Setup

v2021.10.4

○ Quick (recommended for Community Users)

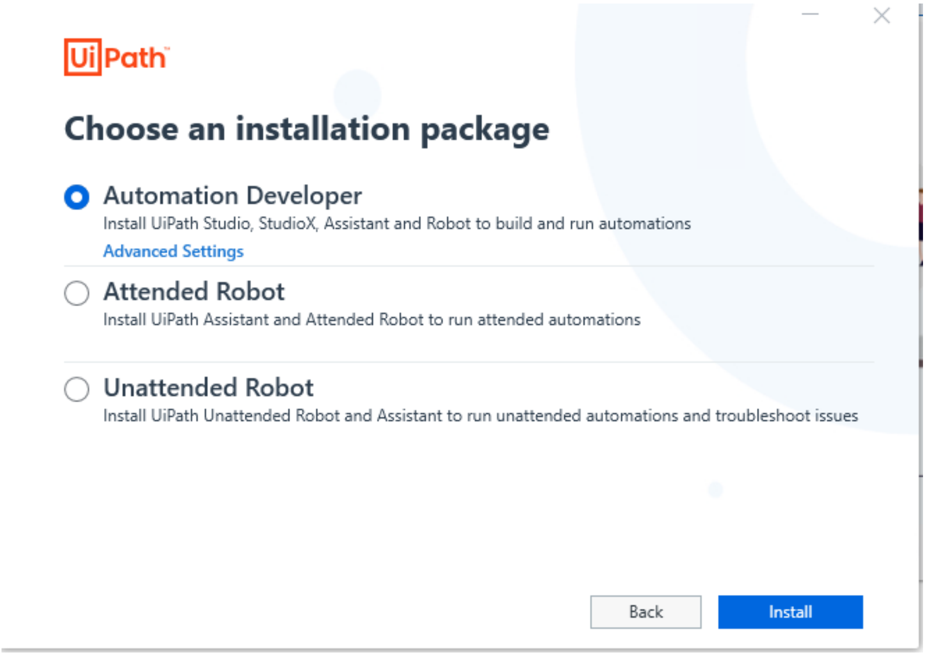
Install products with default settings

● Custom (recommended for Enterprise/Advanced Users)

Install products and configure your automation development environment

UiPath collects usage and performance data to help improve its products and services. Learn how to opt out.

Figure B.05



Choose an installation package

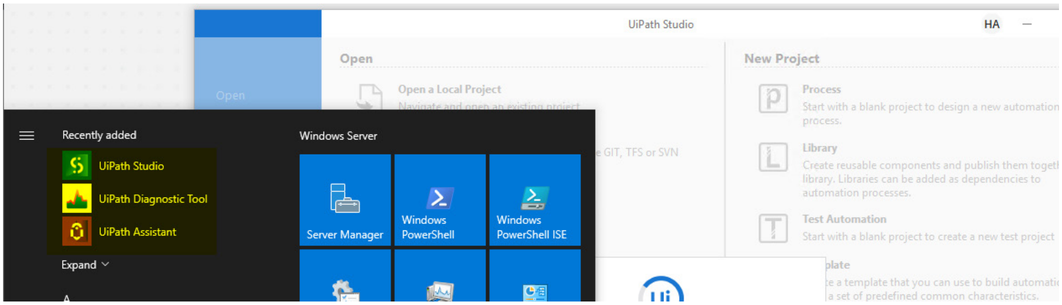
● Automation Developer
Install UiPath Studio, StudioX, Assistant and Robot to build and run automations
Advanced Settings

○ Attended Robot
Install UiPath Assistant and Attended Robot to run attended automations

○ Unattended Robot
Install UiPath Unattended Robot and Assistant to run unattended automations and troubleshoot issues

Figure B.06

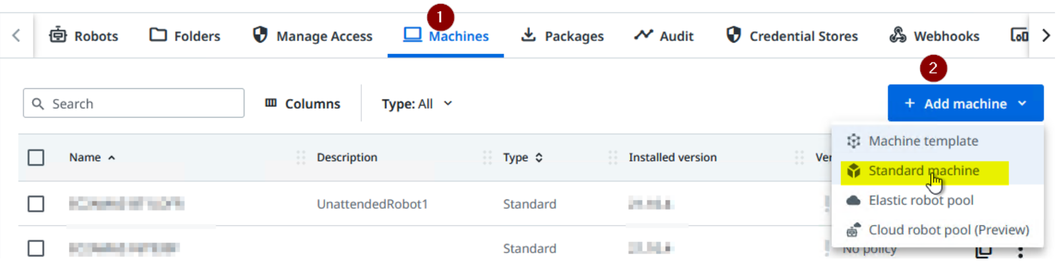
2. After you download and install the Studio and assistant, verify the software from the tray.



UiPath Studio
HA
Open
Open
Open a Local Project
Navigate and open an existing project
e GIT, TFS or SVN
New Project
Process
Start with a blank project to design a new automation process.
Library
Create reusable components and publish them togeth library. Libraries can be added as dependencies to automation processes.
Test Automation
Start with a blank project to create a new test project
plate
e a template that you can use to build automati a set of predefined common characteristics.
Recently added
UiPath Studio
UiPath Diagnostic Tool
UiPath Assistant
Expand
A
Windows Server
Server Manager
Windows PowerShell
Windows PowerShell ISE

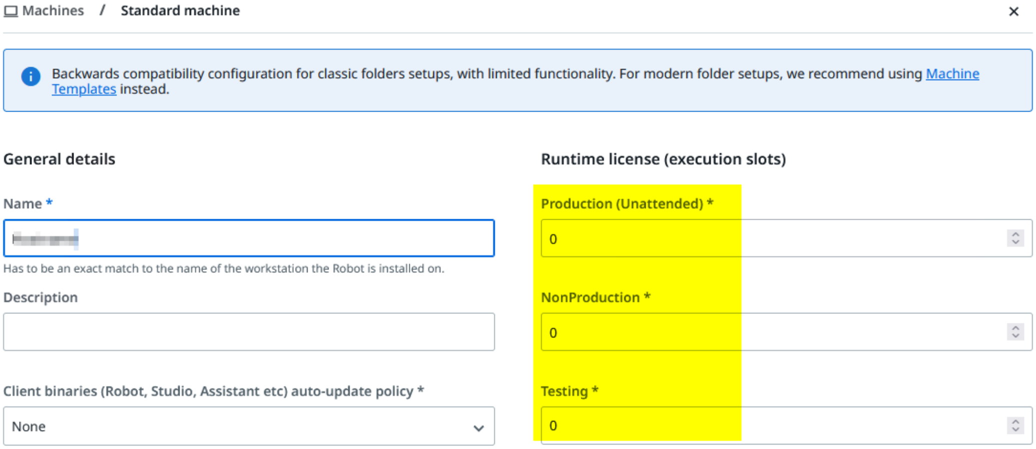
Figure B.07

3. We need to add this machine to Orchestrator now. Login to Orchestrator and add a Standard machine in the Orchestrator



□	Name ⌃	Description	Type ⇕	Installed version	Ver
□	[redacted]	UnattendedRobot1	Standard	[redacted]	
□	[redacted]		Standard	[redacted]	No policy

Figure B.08



Backwards compatibility configuration for classic folders setups, with limited functionality. For modern folder setups, we recommend using Machine Templates instead.

General details

Name *

[redacted]

Has to be an exact match to the name of the workstation the Robot is installed on.

Description

Client binaries (Robot, Studio, Assistant etc) auto-update policy *

None

Runtime license (execution slots)

Production (Unattended) *

0

NonProduction *

0

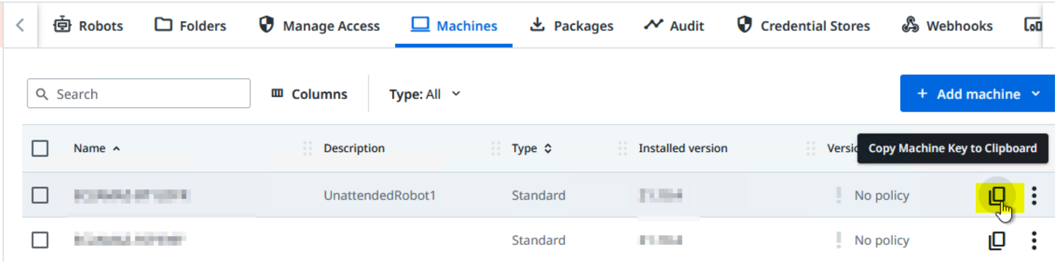
Testing *

0

Figure B.09

Note

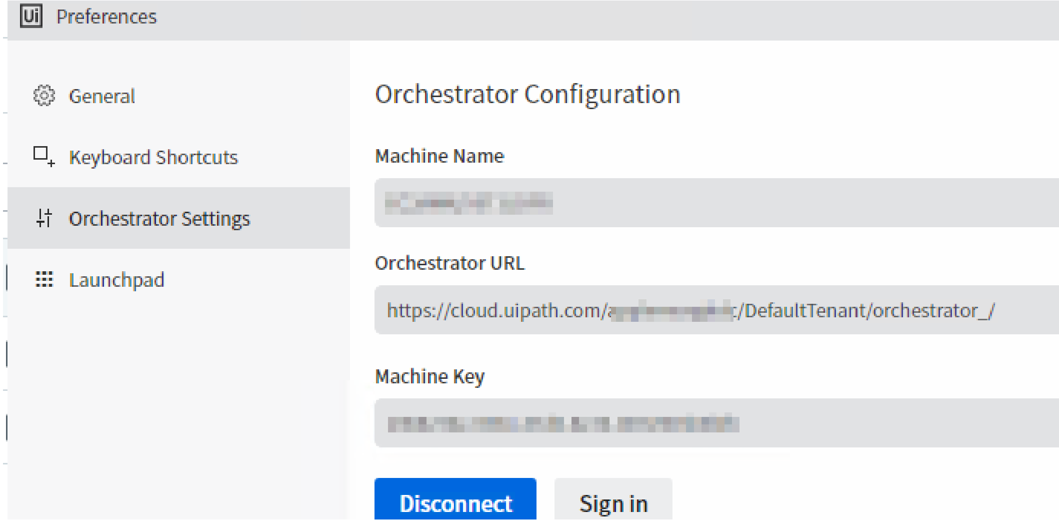
We don't need any runtime licenses to run automation on this machine.



□	Name ⌃	Description	Type ⇕	Installed version	Versi
□	[redacted]	UnattendedRobot1	Standard	[redacted]	No policy
□	[redacted]		Standard	[redacted]	No policy

Figure B.10

4. Once the machine is added, copy the machine key.
5. Now launch and login to UiPath Assistant with the user account you registered and then open the Orchestrator setting. Then update the orchestrator URL from the cloud setup URL and provide the copied machine key.



Orchestrator Configuration

Machine Name

[redacted]

Orchestrator URL

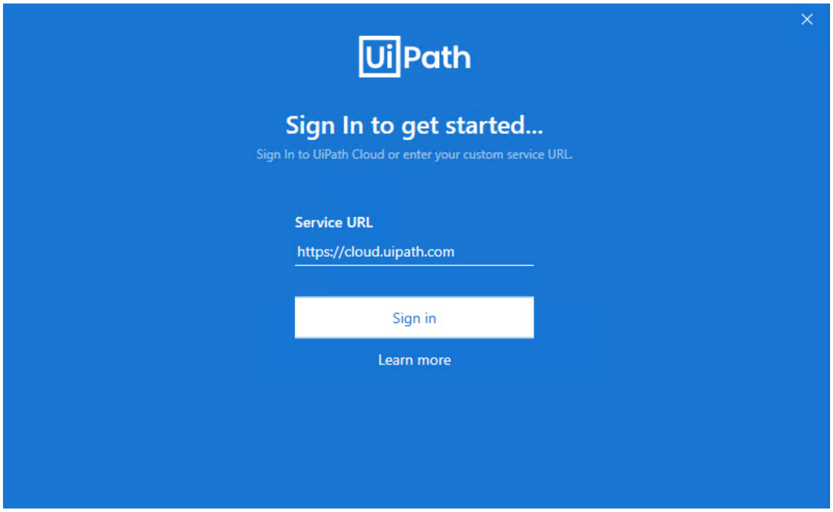
https://cloud.uipath.com/[redacted]/DefaultTenant/orchestrator_/

Machine Key

[redacted]

Figure B.11

6. Open UiPath studio and sign in to the cloud account to activate the license.



Sign In to get started...

Sign In to UiPath Cloud or enter your custom service URL.

Service URL

https://cloud.uipath.com

Figure B.12

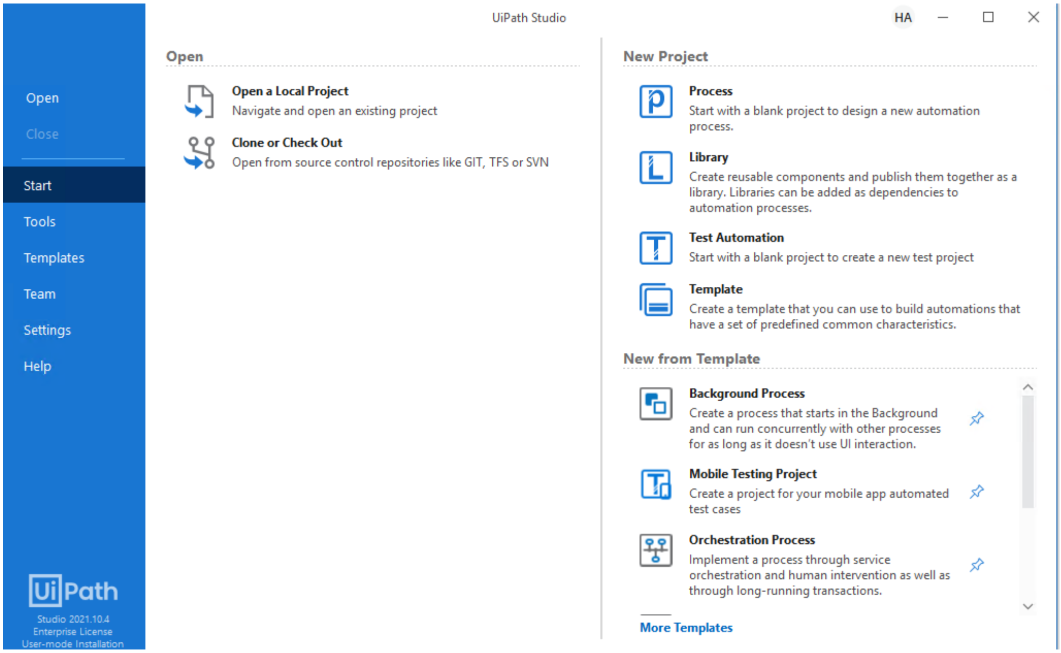
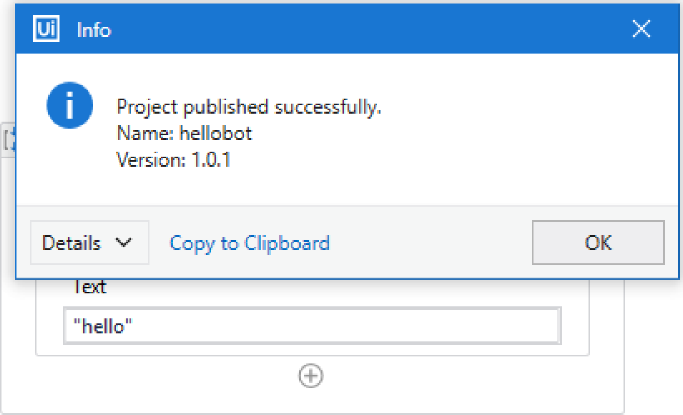

UiPath Studio
HA
Open
Close
Start
Tools
Templates
Team
Settings
Help
UiPath
Studio 2021.10.4
Enterprise License
User-mode Installation
Open
Open a Local Project
Navigate and open an existing project
Clone or Check Out
Open from source control repositories like GIT, TFS or SVN
New Project
Process
Start with a blank project to design a new automation process.
Library
Create reusable components and publish them together as a library. Libraries can be added as dependencies to automation processes.
Test Automation
Start with a blank project to create a new test project
Template
Create a template that you can use to build automations that have a set of predefined common characteristics.
New from Template
Background Process
Create a process that starts in the Background and can run concurrently with other processes for as long as it doesn't use UI interaction.
Mobile Testing Project
Create a project for your mobile app automated test cases
Orchestration Process
Implement a process through service orchestration and human intervention as well as through long-running transactions.
More Templates

Figure B.13

7. Then try to create a new process with a simple command and publish the package to verify the connectivity.



Project published successfully.
Name: hellobot
Version: 1.0.1

"hello"

Figure B.14

8. Run the process from assistance to verify the robot's readiness.

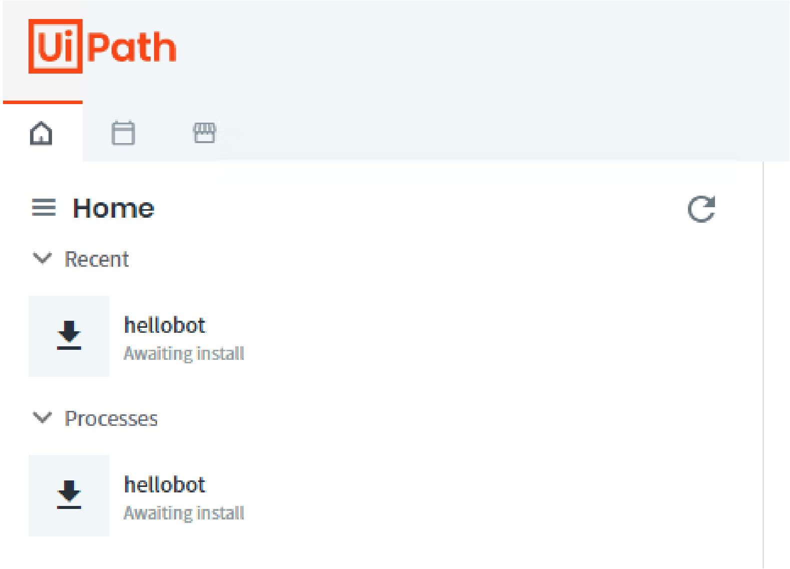


Figure B.15

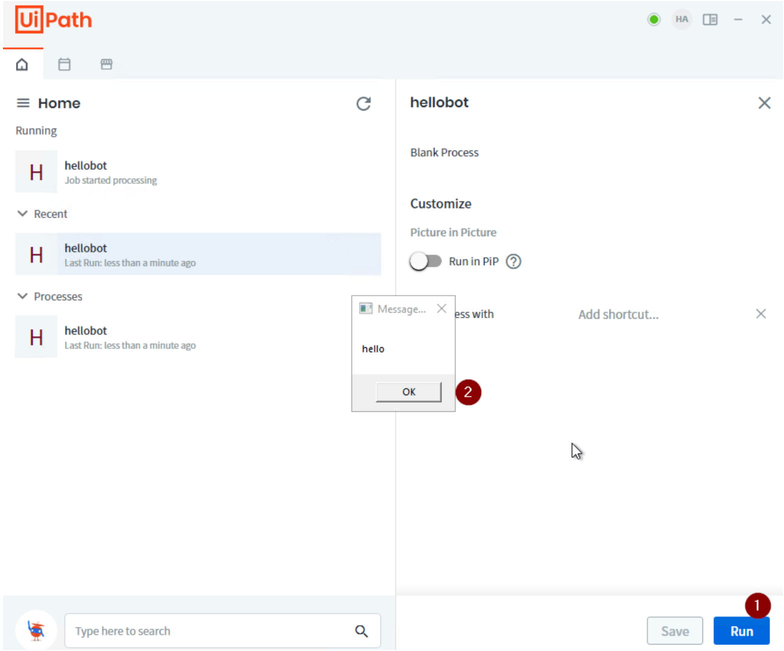
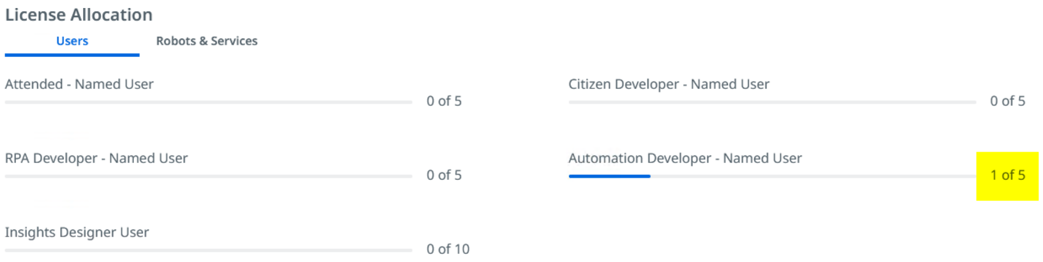


Figure B.16


License Allocation

Attended - Named User 0 of 5

Citizen Developer - Named User 0 of 5

RPA Developer - Named User 0 of 5

Automation Developer - Named User 1 of 5

Insights Designer User 0 of 10

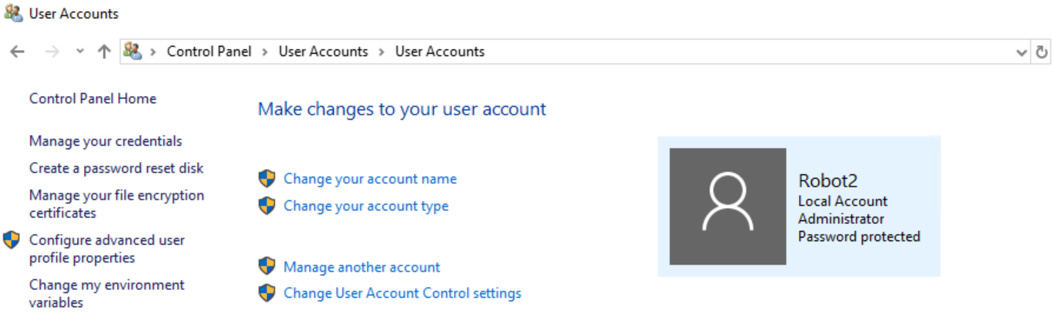
Figure B.17

> **Note**
>
> You will find that the available Automation Developer license count is reduced by 1.

Setup unattended robot

Let's try to set up Unattended bots and schedule jobs to run on that. We will configure bots on separate Virtual machines.

1. Setup another EC2 instance with Windows Server 2019 type and login to the Admin account.
2. Once you are in the Admin login, add a new Robot user which can be used as 'unattended bots' e.g. Robot2 to the Administrator user group.

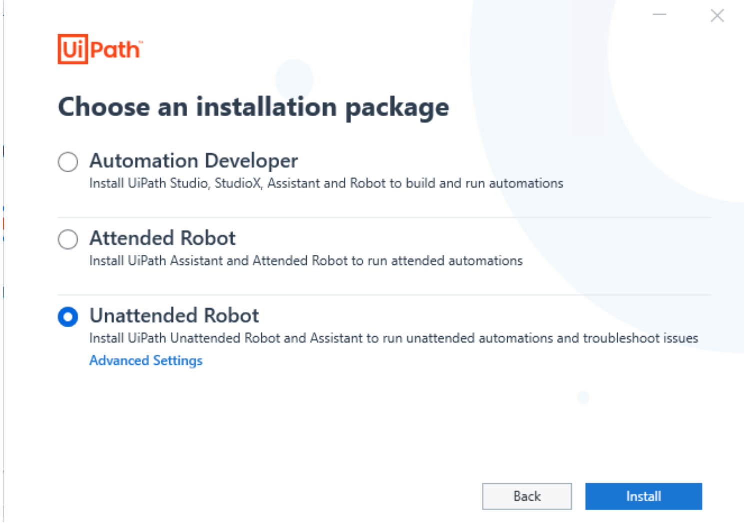

User Accounts
Control Panel > User Accounts > User Accounts
Control Panel Home
Manage your credentials
Create a password reset disk
Manage your file encryption certificates
Configure advanced user profile properties
Change my environment variables
Make changes to your user account
Change your account name
Change your account type
Manage another account
Change User Account Control settings

Robot2
Local Account
Administrator
Password protected

Figure B.18

3. Try to remote to the **Robot 2** account on the EC2 virtual instance.

4. Now let's try to login into the already set up Enterprise Cloud Orchestrator instance. We can ideally configure in any machine, but we do it after logging into this instance because we need the installer to install the UiPath Assistant software here.



Choose an installation package

○ Automation Developer
Install UiPath Studio, StudioX, Assistant and Robot to build and run automations

○ Attended Robot
Install UiPath Assistant and Attended Robot to run attended automations

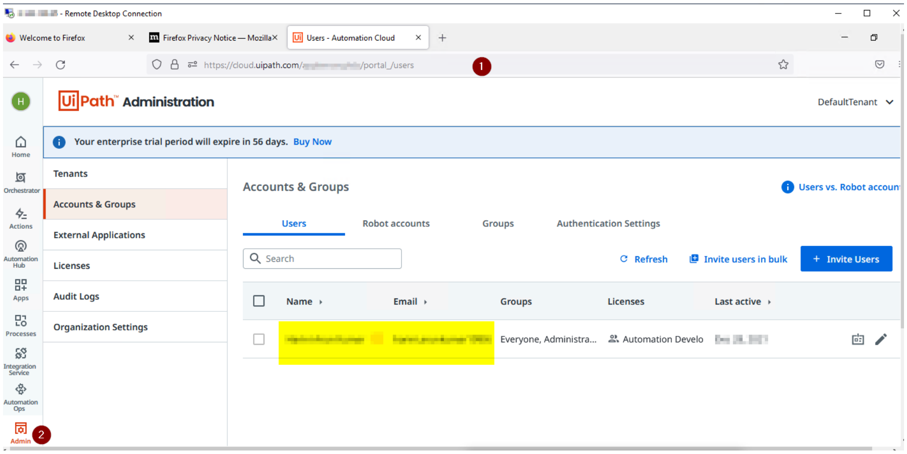
● Unattended Robot
Install UiPath Unattended Robot and Assistant to run unattended automations and troubleshoot issues

Figure B.19

5. Once the unattended robot software setup is complete, you can see the UiPath assistant in the startup menu.

6. Before we connect the robot to Orchestrator, let's create a new user for the Robot account.

7. Login to cloud Orchestrator and go to **Admin| Accounts & Group**. You will find the default user you used to register added under users.



[redacted] - Remote Desktop Connection

https://cloud.uipath.com/[redacted]/portal_/users

Your enterprise trial period will expire in 56 days. Buy Now

Accounts & Groups

☐	Name	Email	Groups	Licenses	Last active
☐	[redacted]	[redacted]	Everyone, Administra...	Automation Develo	[redacted]

Figure B.20

8. Now, let's add a new Robot account:

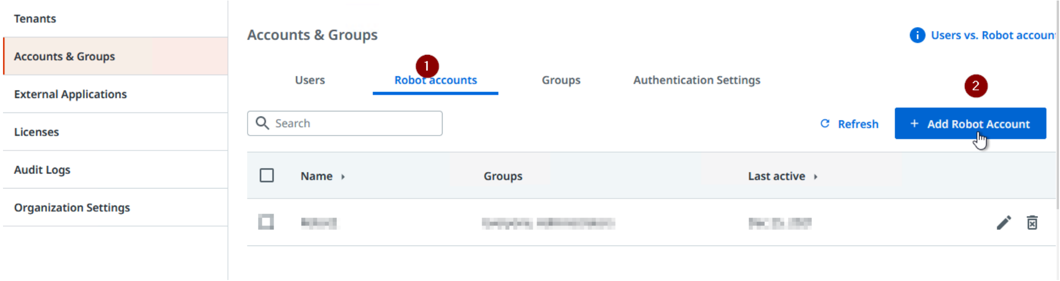
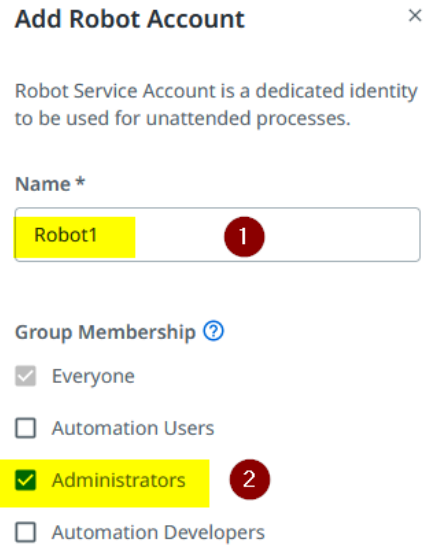


Figure B.21



Add Robot Account

Robot Service Account is a dedicated identity to be used for unattended processes.

Name *

Robot1

Group Membership

☑ Everyone

□ Automation Users

☑ Administrators

□ Automation Developers

Figure B.22

The robot account was added successfully!

Note

Automation User is the minimum rights that can be provided.

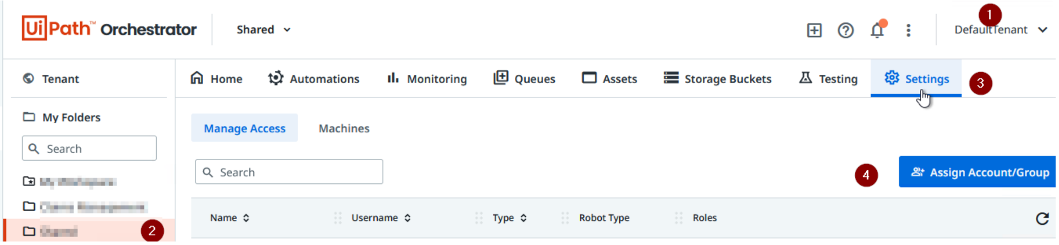
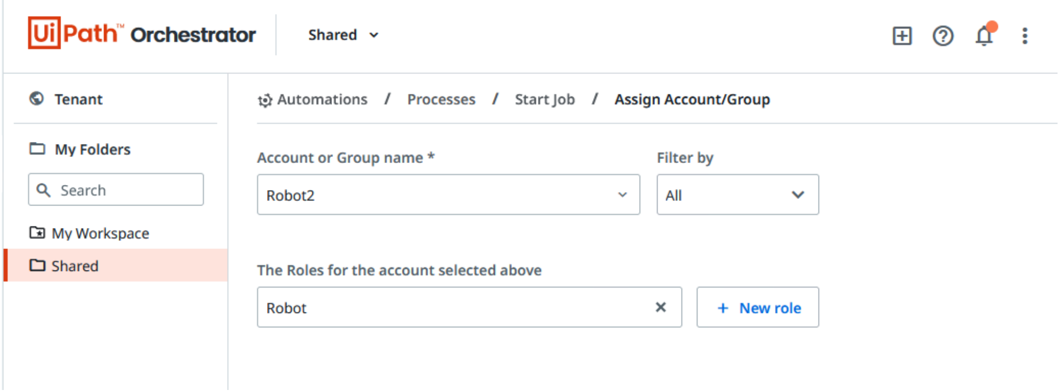


Figure B.23



Account or Group name *: Robot2

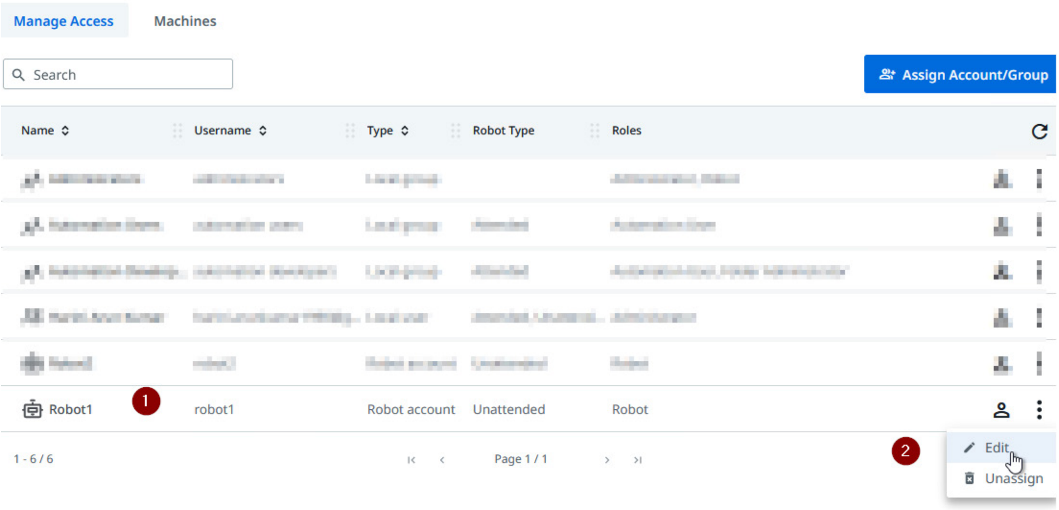
Filter by: All

The Roles for the account selected above: Robot

Figure B.24

Note

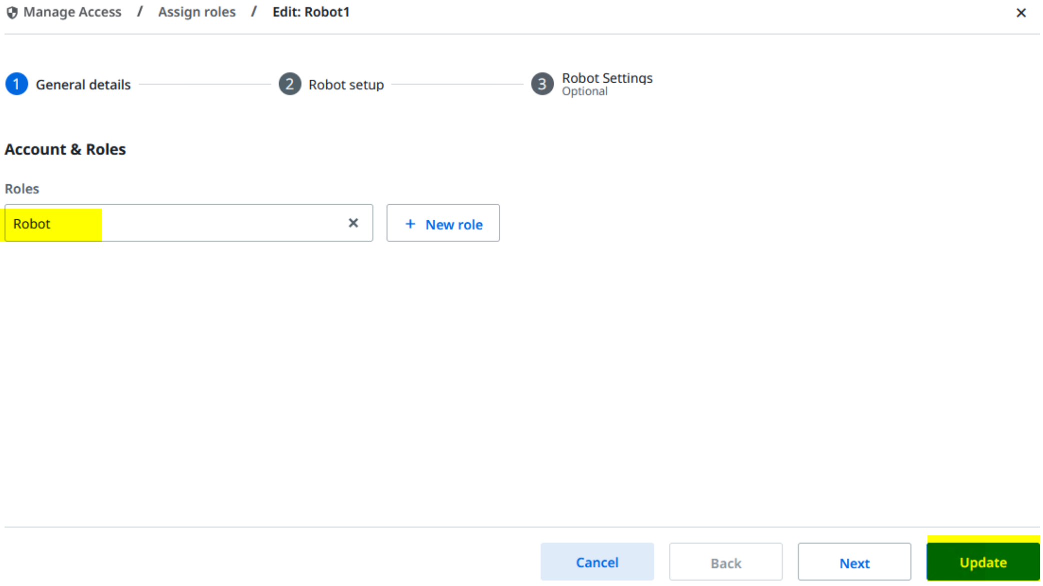
In order to use the unattended robot account, we need to configure unattended runtimes to this bot.



Name	Username	Type	Robot Type	Roles
[redacted]	[redacted]	[redacted]		[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Robot1	robot1	Robot account	Unattended	Robot

1 - 6 / 6 Page 1 / 1

Figure B.25

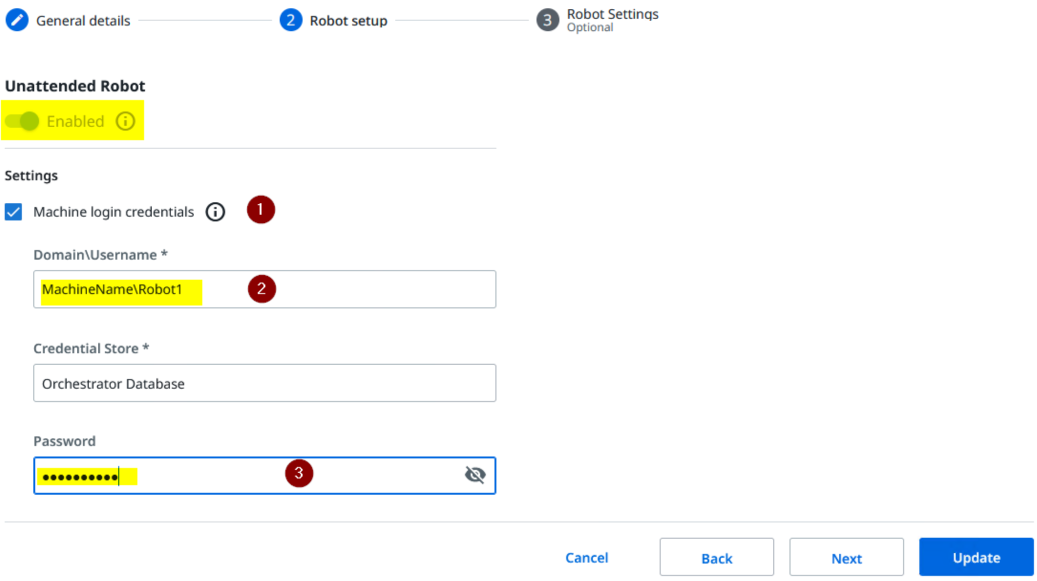

Manage Access / Assign roles / Edit: Robot1
1 General details
2 Robot setup
3 Robot Settings Optional
+ New role
Cancel
Back
Next
Update

Account & Roles

Roles: Robot

Figure B.26

9. Provide the Admin robot account user credentials which we added to the AWS EC2 robot machine.



Unattended Robot

Enabled

Settings

☑ Machine login credentials

Domain\Username *

MachineName\Robot1

Credential Store *

Orchestrator Database

Password

••••••••••

Figure B.27

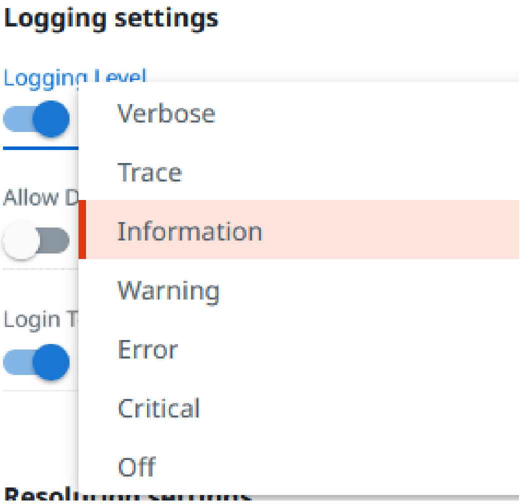
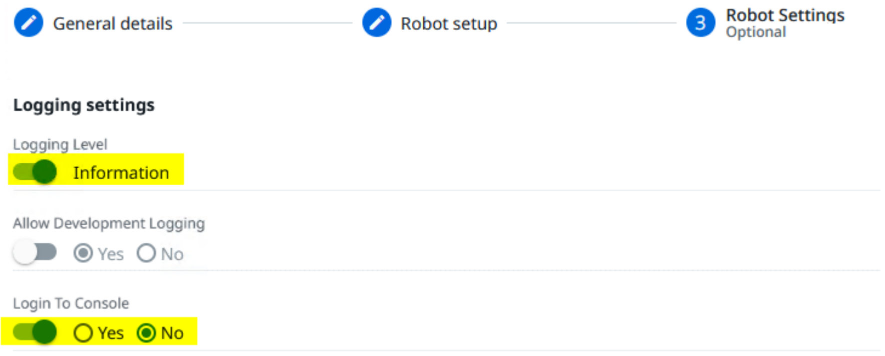


Figure B.28

Note:

There are different levels of logging. Please refer here for more details: `https://docs.uipath.com/robot/docs/logging-levels`.



Logging settings

Logging Level: Information

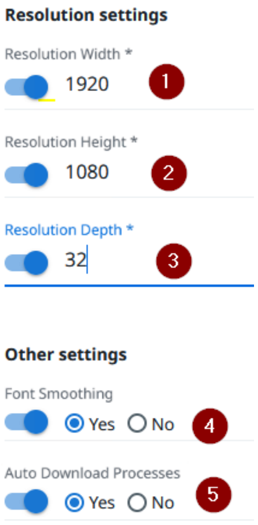
Allow Development Logging: ● Yes ○ No

Login To Console: ○ Yes ● No

Figure B.29

Note

When **Login to Console** is set to **No**, the user account will not be logged off when the automation runs, and we can view the script in action.



Resolution settings

Resolution Width *: 1920

Resolution Height *: 1080

Resolution Depth *: 32

Other settings

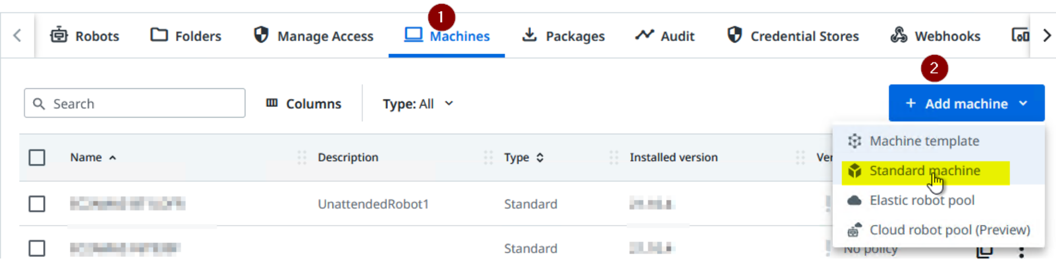
Font Smoothing: ● Yes ○ No

Auto Download Processes: ● Yes ○ No

Figure B.30

> **Note**
>
> It is a best practice to provide resolution width, height, and depth.

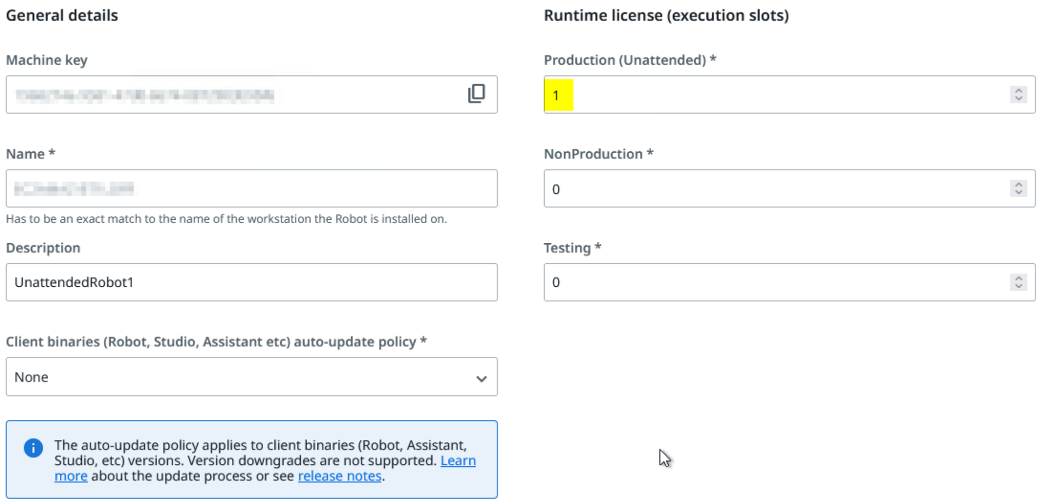
10. Once these setups are done, we need to add this Robot machine to Orchestrator too.
11. Add a machine in the Orchestrator:



□	Name	Description	Type	Installed version	Ver
□	[redacted]	UnattendedRobot1	Standard	[redacted]	
□	[redacted]		Standard	[redacted]	No policy

Figure B.31

But this time, we need to assign runtime licenses.



General details

Machine key: [redacted]

Name *: [redacted]

Has to be an exact match to the name of the workstation the Robot is installed on.

Description: UnattendedRobot1

Client binaries (Robot, Studio, Assistant etc) auto-update policy *: None

The auto-update policy applies to client binaries (Robot, Assistant, Studio, etc) versions. Version downgrades are not supported. Learn more about the update process or see release notes.

Runtime license (execution slots)

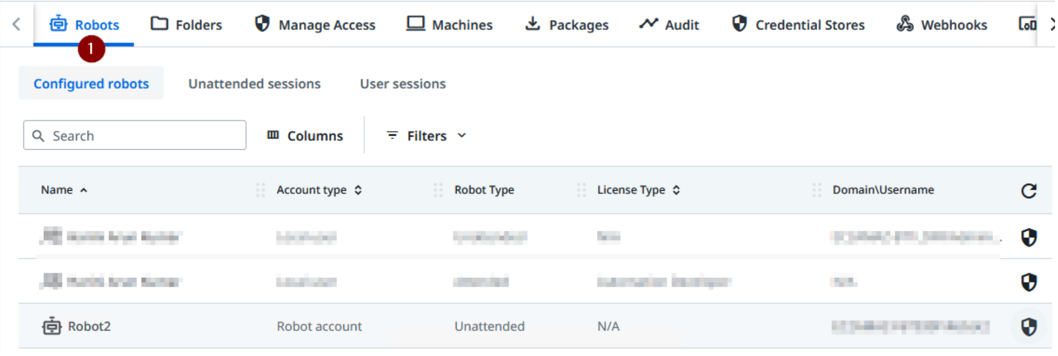
Production (Unattended) *: 1

NonProduction *: 0

Testing *: 0

Figure B.32

12. Use the machine key and connect the unattended robot to Orchestrator as we did before.
13. Now robots appear in the robot tray



Name	Account type	Robot Type	License Type	Domain\Username
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Robot2	Robot account	Unattended	N/A	[redacted]

Figure B.33

We can try to run the test package we uploaded from Studio on this unattended robot. We need to create a new process with the package which was deployed from Studio.

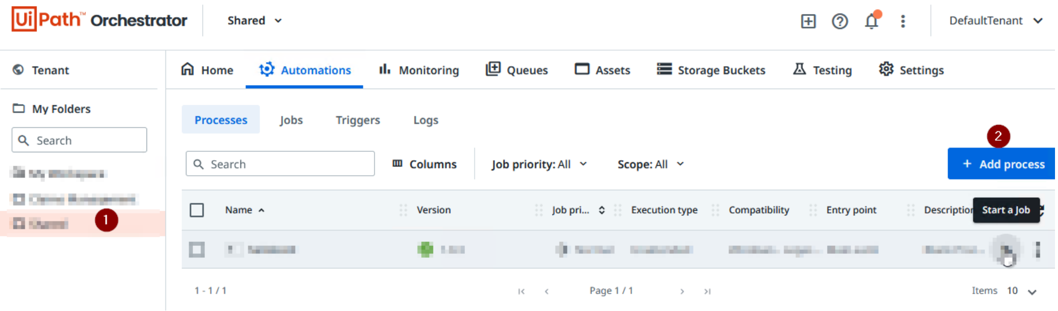
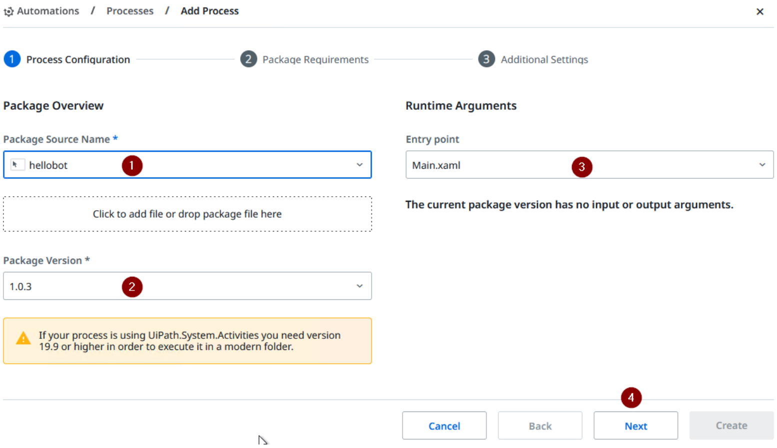


Figure B.34



Package Source Name * hellobot

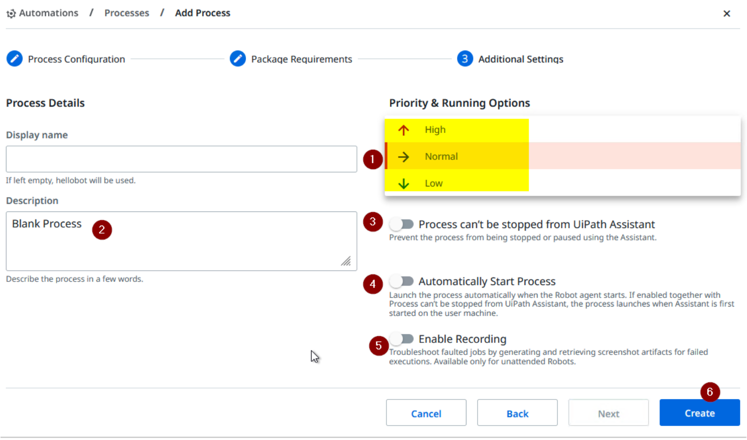
Package Version * 1.0.3

Entry point Main.xaml

The current package version has no input or output arguments.

If your process is using UiPath.System.Activities you need version 19.9 or higher in order to execute it in a modern folder.

Figure B.35



Automations / Processes / Add Process ×

Process Configuration — Package Requirements — 3 Additional Settings

Process Details

Display name

If left empty, hellobot will be used.

Description

Blank Process 2

Describe the process in a few words.

Priority & Running Options

1
- ↑ High
- → Normal
- ↓ Low

3 Process can't be stopped from UiPath Assistant
Prevent the process from being stopped or paused using the Assistant.

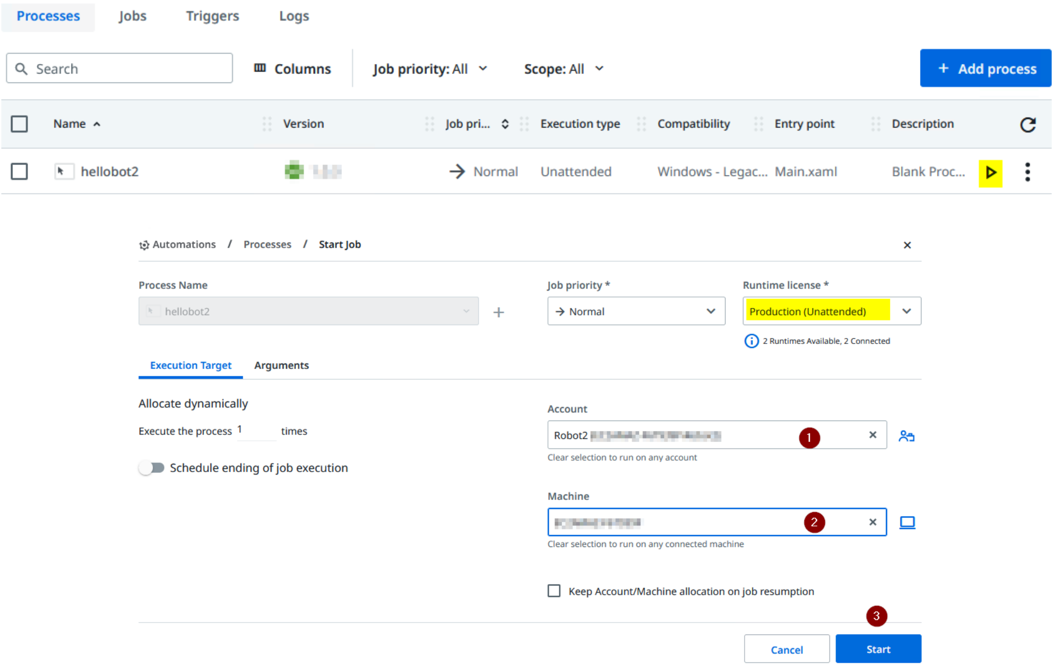
4 Automatically Start Process
Launch the process automatically when the Robot agent starts. If enabled together with Process can't be stopped from UiPath Assistant, the process launches when Assistant is first started on the user machine.

5 Enable Recording
Troubleshoot faulted jobs by generating and retrieving screenshot artifacts for failed executions. Available only for unattended Robots.

Figure B.36

> **Note**
>
> Priority of the jobs, recording and other options can be enabled from this dialog.

14. Now we can try to run the process



☐	Name	Version	Job pri...	Execution type	Compatibility	Entry point	Description
☐	hellobot2	[redacted]	→ Normal	Unattended	Windows - Legac...	Main.xaml	Blank Proc...

Automations / Processes / Start Job ×

Process Name: hellobot2

Job priority *: → Normal

Runtime license *: Production (Unattended)

2 Runtimes Available, 2 Connected

Allocate dynamically

Execute the process 1 times

Schedule ending of job execution

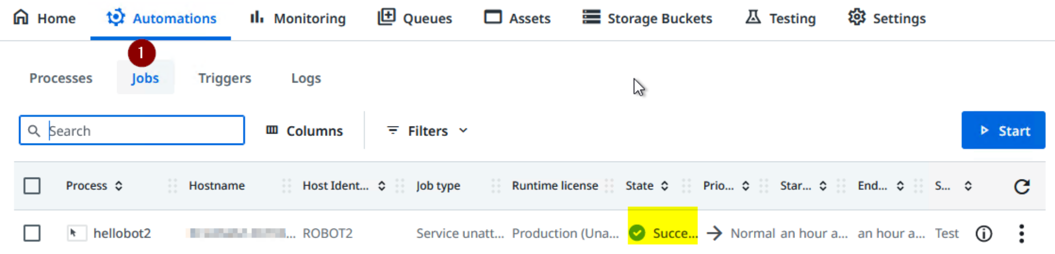
Account: Robot2 [redacted] 1 ×
Clear selection to run on any account

Machine: [redacted] 2 ×
Clear selection to run on any connected machine

☐ Keep Account/Machine allocation on job resumption

Figure B.37

15. You can check the job status from **Jobs**



□	Process	Hostname	Host Ident...	Job type	Runtime license	State	Prio...	Star...	End...	S...
□	hellobot2	[redacted]	ROBOT2	Service unatt...	Production (Una...	✓ Succe...	→ Normal	an hour a...	an hour a...	Test

Figure B.38

You can also try to use **Triggers** to run these jobs on a particular schedule.

Schedule the job runs on un-attended Robot

You can also create a trigger for the process to run at scheduled intervals. To do this:

1. Click on **Triggers** on the automation panel
2. Click on **Add on a new Trigger** and choose **Time** on the next screen
3. Provide a **Name** for the Trigger
4. Choose your Timezone
5. Choose the **Process** you like to schedule
6. Choose your unattended Robot we just added
7. Select the Schedule you like the process to run (For e.g. You can schedule as **Daily** and add time)
8. Finally, click on **Add** to schedule the process

Once the trigger is enabled, jobs will be triggered, and the runs can be monitored from Orchestrator.