

# Infrastructure Training

## Lesson 7 Recap

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Robot Setup – Connect to  
Orchestrator

# Manually connecting robots to Orchestrator

(using the Settings dialog box)



Provision the robot in Orchestrator first; copy the Robot Key



On the robot machine, click the UiPath icon in the system tray



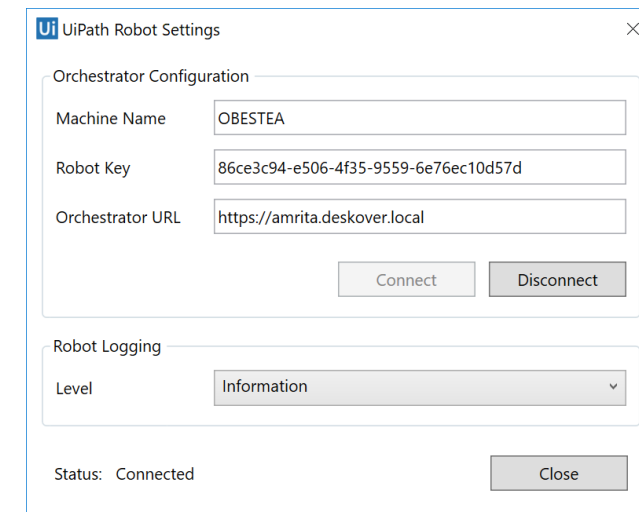
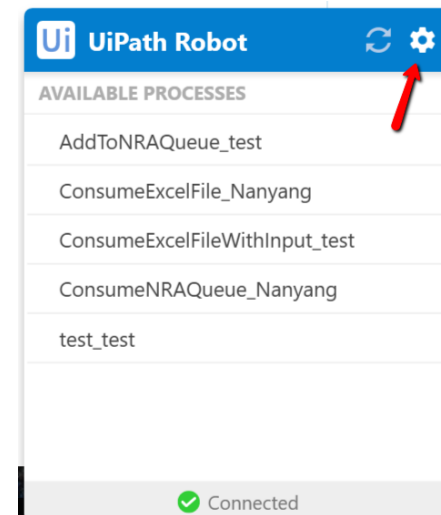
If the icon is not displayed, start the UiPath Robot program



Click the gear button and select Settings – you need to have elevated rights to open Settings

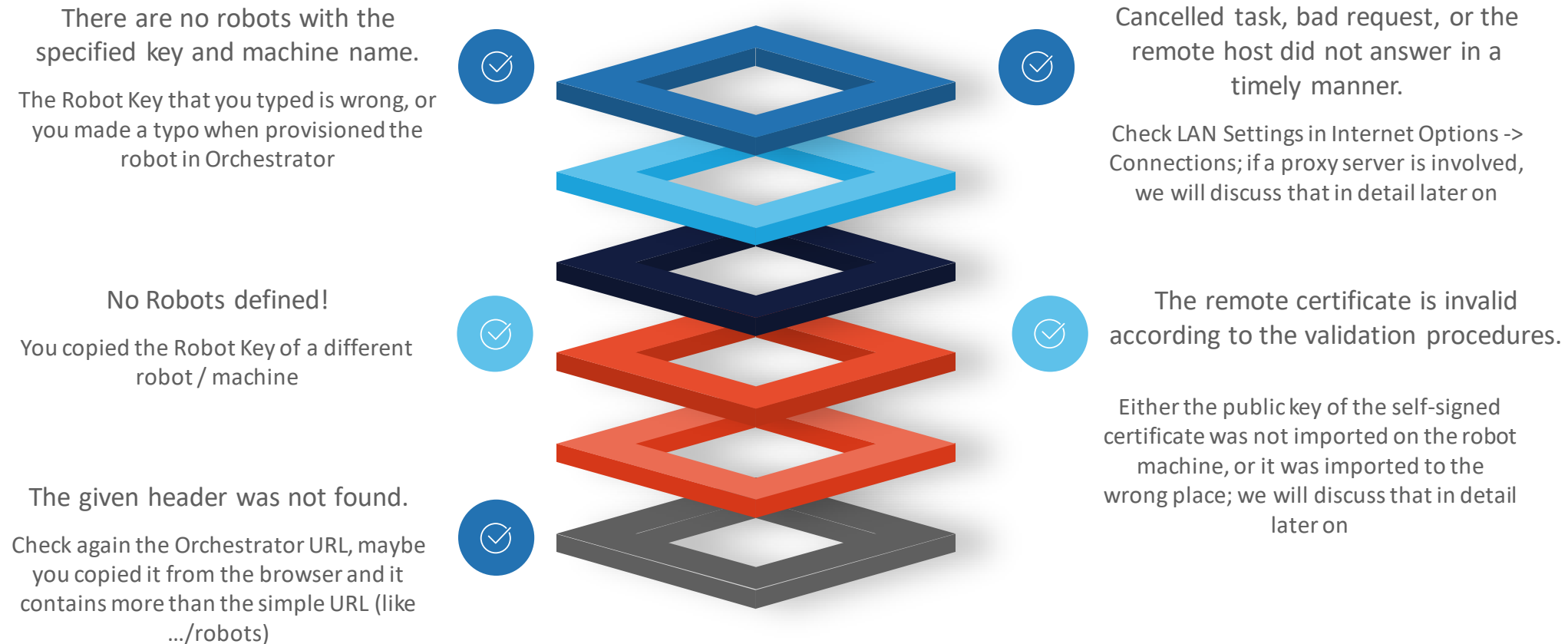


Provide the Robot Key copied earlier and the Orchestrator URL



# Connecting robots to Orchestrator – Potential Errors

Errors that can appear when we try to connect the robot to Orchestrator:



# Manually connecting robots to Orchestrator

## (using the command line)

Provision the robot in Orchestrator first; copy the Robot Key



On the robot machine, open cmd with elevated rights (Run as administrator)



Navigate to the main installation folder, C:\Program Files (x86)\UiPath\Studio (or C:\Program Files (x86)\UiPath Platform).



You can type UiRobot.exe -help at any time



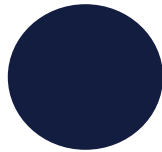
Connect the robot to Orchestrator by running:  
`Uirobot.exe --connect -url <orchestrator_url> -key <robot_key>`



The same errors as those for the Settings dialog box can appear

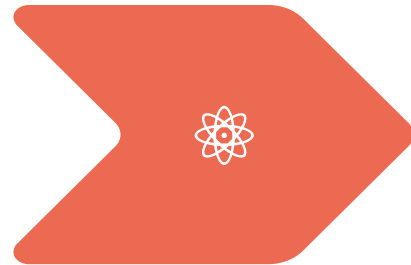


# Dealing with a proxy server



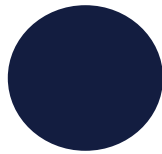
If the robot machine uses a proxy server (not a proxy script), then the following change needs to be made:

- In C:\Program Files (x86)\UiPath Studio\UiRobot.exe.config, add the following section, at the end of the <configuration> section (in this section, but at the end of it):



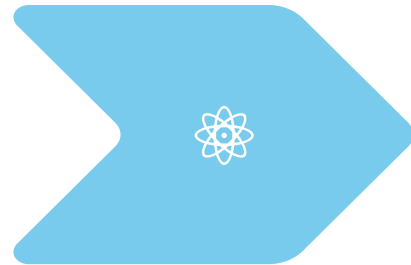
```
<configuration>
....
<system.net>
<defaultProxy>
<proxy
usesystemdefault="true"
proxyaddress="http://<your_proxy>:<your_port>"
bypassonlocal="true"
/>
</defaultProxy>
</system.net>
</configuration>
```

# Dealing with a proxy server (c-ed)



If UiPath Studio is also installed on the robot machine, the additional change below has to be made to enable Publishing from UiPath Studio to Orchestrator

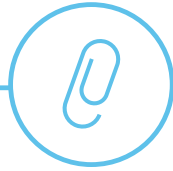
- In C:\Windows\SysWOW64\config\systemprofile\AppData\Roaming\NuGet\NuGet.config (create this file if it doesn't exist), add the following section, in the <configuration> node:



```
<configuration>
....
<config>
  <add key="http_proxy"
value="http://<your_proxy>:<your_port>"/>
</config>
</configuration>
```

Restart the “UiPath Robot” service.  
This only covers the un-authenticated proxy scenario.

# Automating the connection of robots to Orchestrator



## Fact:

Each robot has a distinct machine name and a unique Robot Key (ignore High Density Robots, where several robots share the same machine name and Robot Key)



## Problem:

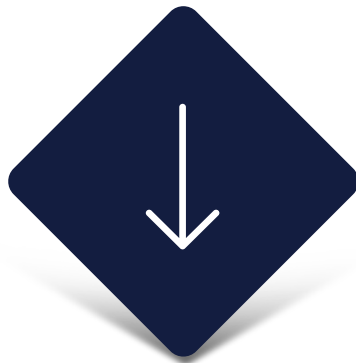
To deploy 500 robots after provisioning them in Orchestrator, we have to edit the settings of each robot to specify the Robot Key; that operation is very hard to automate, because each machine needs to be configured with a different Robot Key



## Solution:

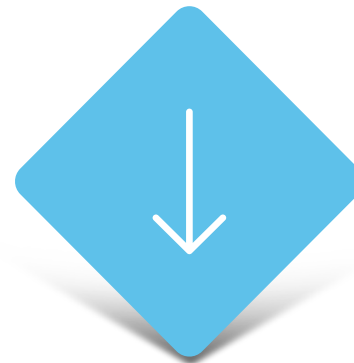
Let the robots access a specific endpoint in Orchestrator API to extract the configuration (Robot Key, Nuget API Key, Orchestrator URL, Activities Feed, etc.)

# Automating the connection of robots to Orchestrator(c-ed)

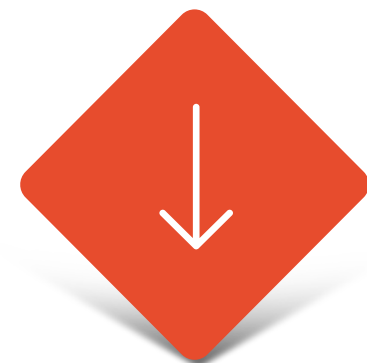


## Implementation:

1. At installation time, using the MSI installer;
2. After installation, using UiRobot.exe



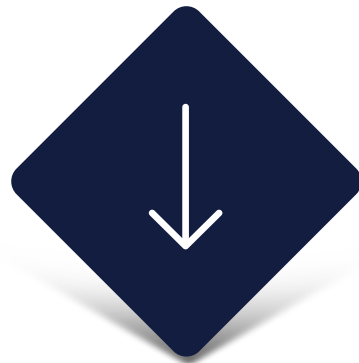
1. At installation time: run UiPathPlatform.msi with CONNECTIONSTRING. One single command is used for all the robots, because the connection string is the same.



```
msiexec /i  
UiPathPlatform.msi  
ADDLOCAL=DesktopFeature,  
Robot,RegisterService,Packa  
ges,StartupLauncher  
CONNECTIONSTRING=https:  
//orchestrator/api/robotsser  
vice/GetConnectionData?te  
nantId=1 /qn
```

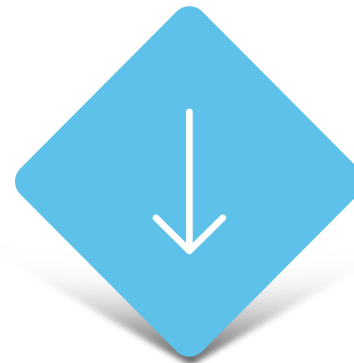


# Automating the connection of robots to Orchestrator(c-ed)

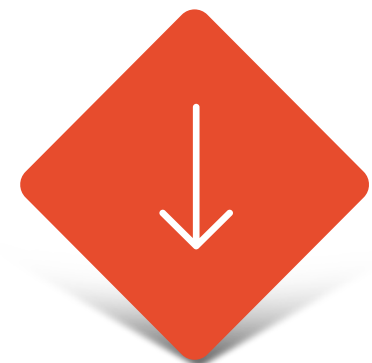


## Implementation:

1. At installation time, using the MSI installer;
2. After installation, using UiRobot.exe



2. Post installation: run UiRobot.exe with --connect -connectionString



## The command is the following:

```
UiRobot.exe --connect -
connectionString
https://orchestrator/api/robot
sservice/GetConnectionData?t
enantId=1
```

# Importing the public key of a self-signed certificate

A self-signed certificate, if generated from IIS, is automatically saved in the "Personal" store

On the robot machine, copy the file locally

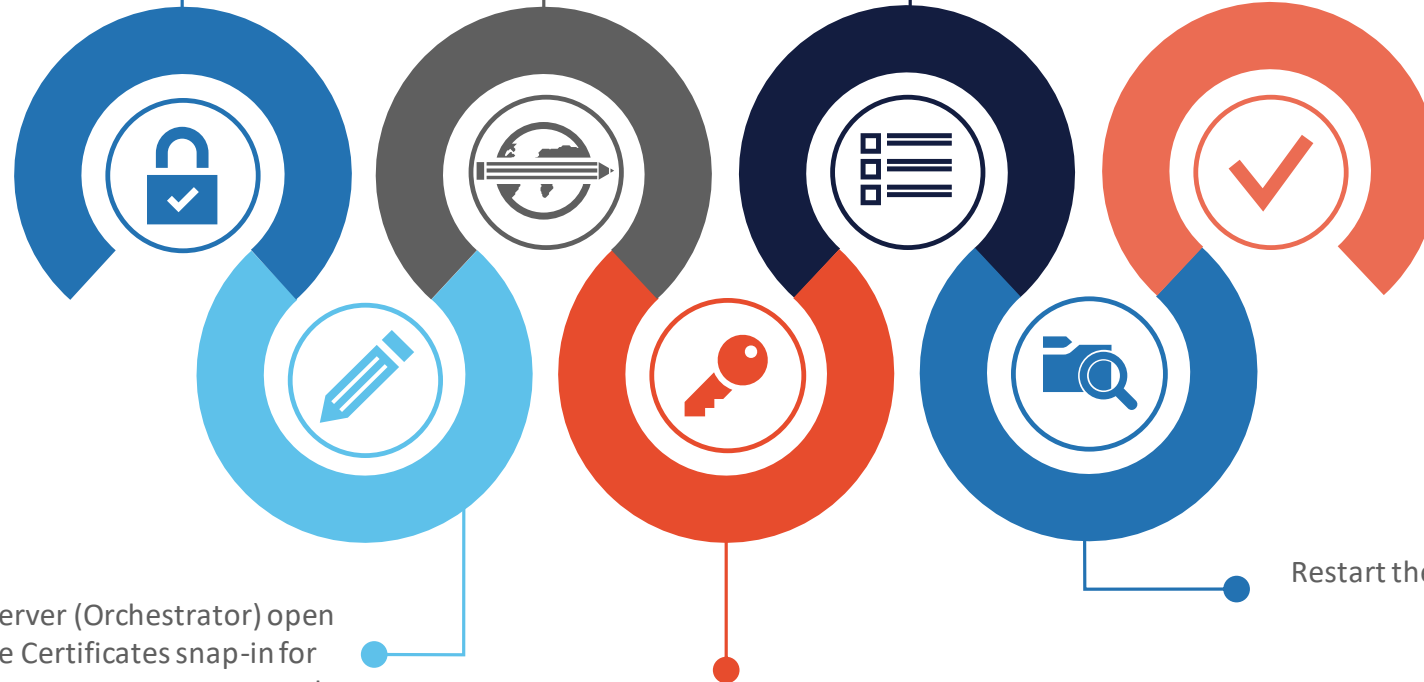
Open MMC, add the Certificates snap-in for the Computer account, go to Trusted Root Certification Authorities store, right click on Certificates, All Tasks, Import

Import the ".cer" file copied from the server

Restart the UiPath Robot Service

On the web server (Orchestrator) open MMC, add the Certificates snap-in for the Computer account, go to Personal store, select the self-signed certificate, right click, All Tasks, Export

Choose to not export the private key; leave the other options with their defaults and save the file



# Thank you!

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