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# Desktop Agent User Guide

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# 1 Desktop Agent User Guide

## 1.1 About the Desktop Agent 3

The desktop agent 3 (or agent 3) is a component that is installed locally on user desktops. It runs automation projects that launch and run applications of various kinds, read information from screens, enter data, choose options, and process data.

Automation projects are assigned to tenants running on the desktop agent 3. You can see what your desktop agent 3 is doing by accessing the menu from your computer's taskbar while your desktop agent 3 is ready or active.

When it's installed, the desktop agent 3 is configured to start at Windows logon by default. The agent can run in attended or unattended mode. In attended mode, you start the automations by choosing them, and in unattended mode, the automations run automatically without your intervention.

### 1.1.1 Install and Update the Desktop Agent 3

Before you start to install and use the desktop agent 3, check the following requirements:

- Make sure Microsoft.NET framework 4.7.2 is installed on your machine.
- To run projects with BAPI activities, your IT administrator must install a Windows component on your PC. If you have administrator access, please install [Microsoft Visual C++ 2010 Redistributable Package x86](#) on your machine. If you don't have this access, please ask your administrator to install the component.
- Update the Core SDK dependency in your project to version 1.26 or higher. For more information see, [Update a Dependency](#).
- If you want to install the agent service to keep the agent running when using unattended mode, you need administrator rights. For more information on the agent service, see [How the Agent Service Works \[page 18\]](#).

Supported Browsers

Category	Web Browser	Version	Cloud Factory	Cloud Studio	Captured Web Applications	Browser Extension	Store
Chromium-based browsers	Google Chrome	94 and greater	Supported	Supported	Supported	Supported	Supported
	Microsoft Edge	94 and greater	Supported	Supported	Supported	Supported	Supported

### 1.1.1.1 Enable Agent Download and Automatic Updates

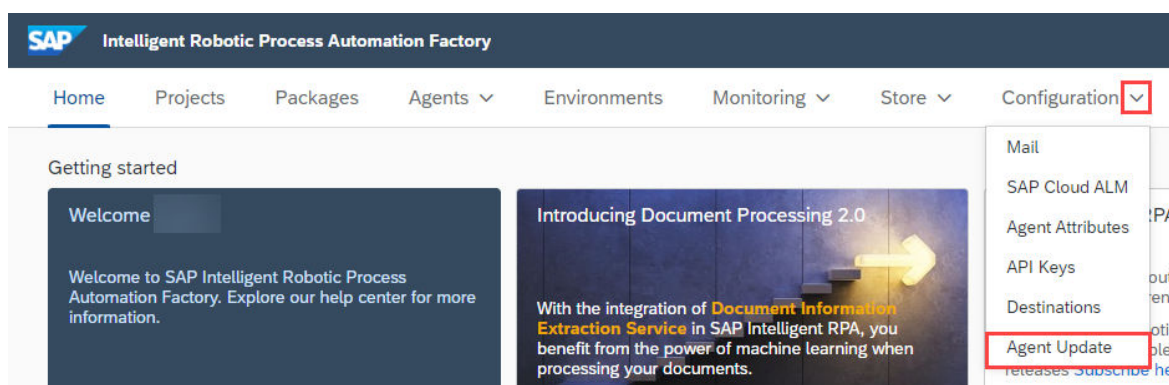
#### Context

In order to download and install the desktop agent 3, you must first create a technical user in the **Repository-Based Shipment Channel** portal (or **RBSC portal**) and copy its secret ID to your tenant.

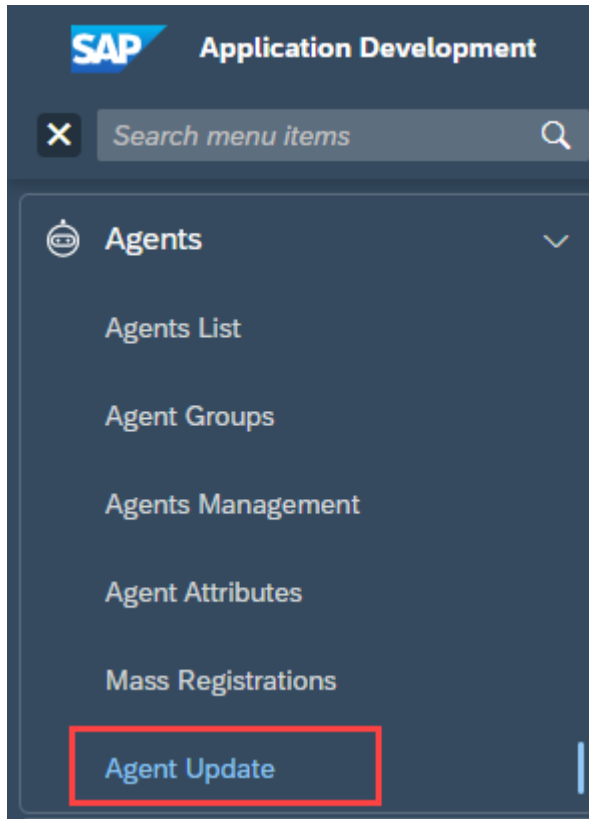
This secret ID is also required to update your agent 3 automatically when a new version is released. For more information, see [Enable Automatic Updates \[page 13\]](#).

#### Procedure

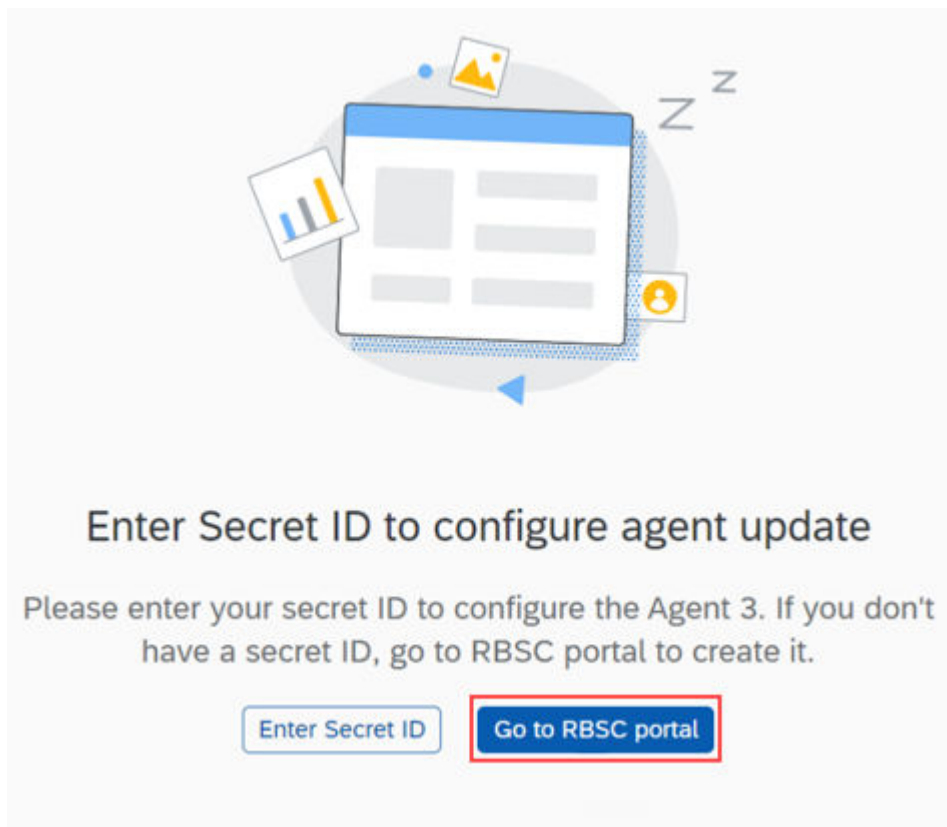
1. **If you use an RPA tenant:** In the Cloud Factory, choose the dropdown arrow next to [Configuration](#) and choose [Agent Update](#).



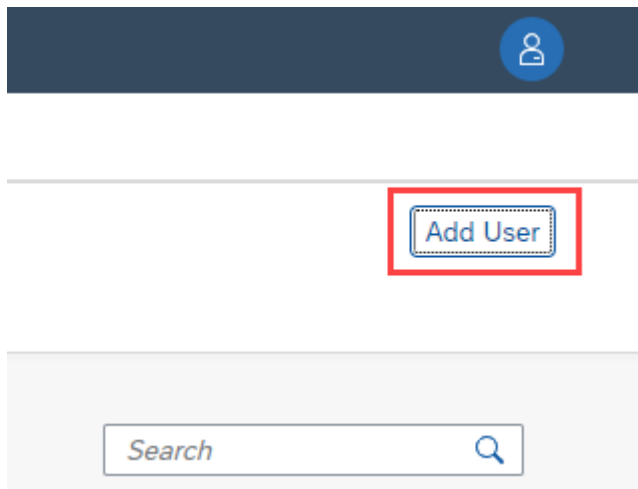
**If you use an SPA tenant:** In the tenant, go to [Settings](#), and choose [Agent Update](#).



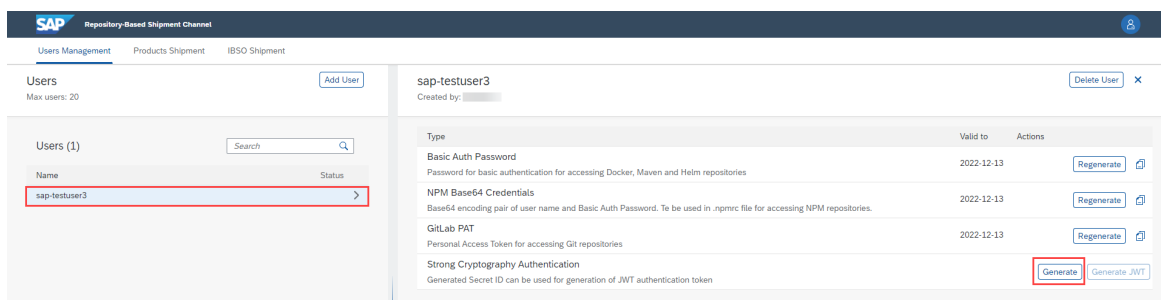
2. Choose *Go to RBSC Portal*.



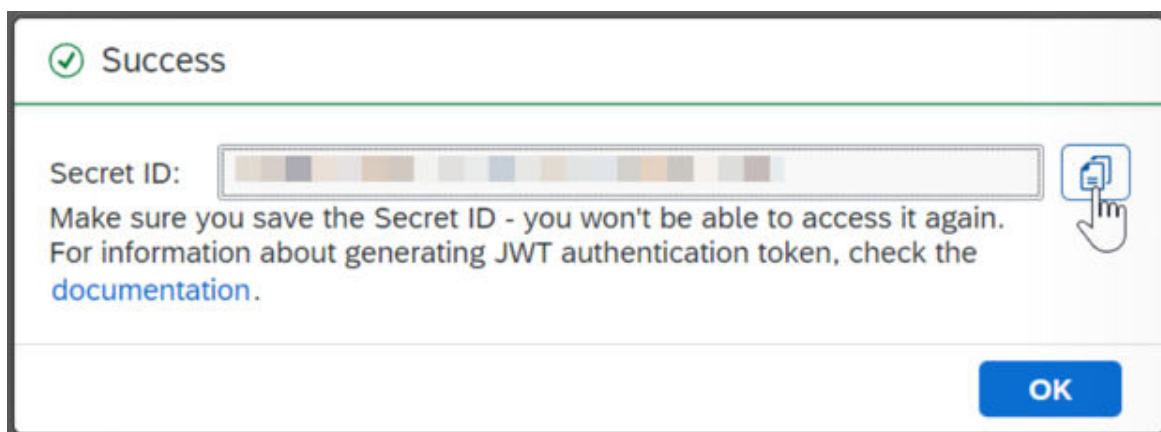
3. Choose [Add User](#).



4. Enter a name to create a technical user and choose [Add User](#).
5. On [Users](#) panel, choose the technical user you've created.
6. Go to the [Strong Cryptography Authentication](#) section and choose [Generate](#).

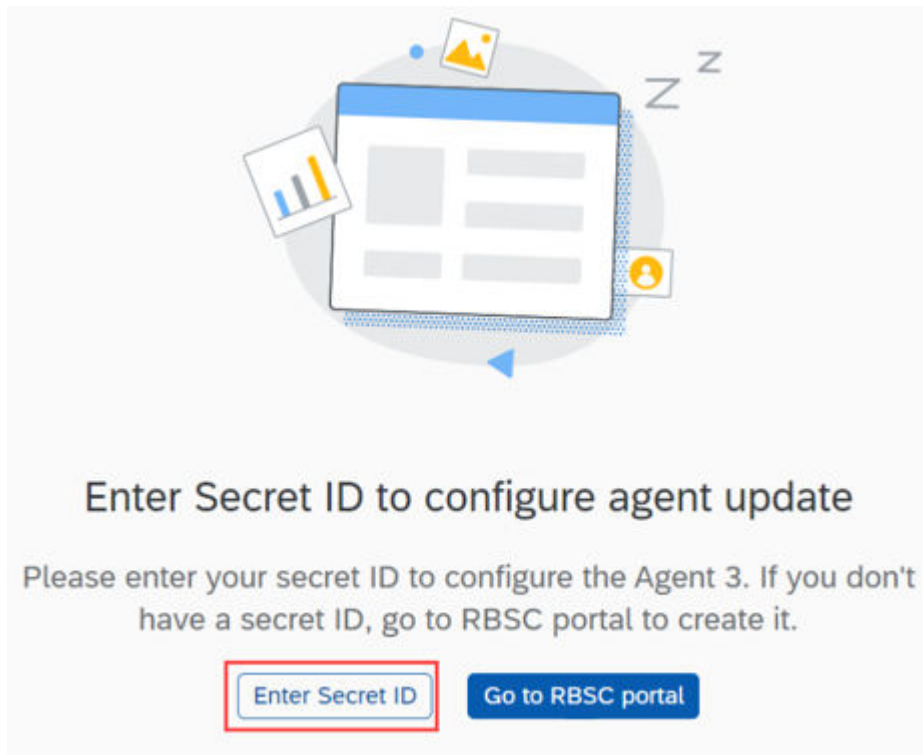


7. Choose  on the  [Success](#) window that appears to copy the generated secret ID. Choose [OK](#).



You've added a technical user and generated a secret ID.

8. Enter both the technical user and the secret ID in the [Agent Update](#) page: **If you use an RPA tenant:** In the Cloud Factory, choose the dropdown arrow next to [Configuration](#) and choose [Agent Update](#). **If you use an SPA tenant:** In the tenant, choose [Settings](#) and choose [Agent Update](#).
9. Choose [Enter Secret ID](#).



10. Enter your technical name in the *Name* field and paste the secret ID you copied from the RBSC page in the *Secret ID* field. Choose *Confirm*.

## Results

You can now install the desktop agent 3 or copy the link to the download page to send it to other users.

## 1.1.1.1.1 Update Expired RBSC Secret ID

### Context

The RBSC secret ID has a six-month expiration period. Therefore, you must regenerate a new secret ID once it expires.

To regenerate a new secret ID, refer to the following steps:

### Procedure

1. In SAP Build, go to *Control Tower*.
2. Choose ► *Agents* ► *Agent Update* ►.
3. On the *Agent Update* page, choose *Change Settings*.

The *Change Settings* pop-up window is displayed. Here, you can see the expiration date of your current secret ID.

4. Choose the *Go to RBSC portal* link.

Change Settings

---

**Authentication**


Name: \*

Secret ID: \*

Expires On:  
2/27/2024, 08:08:52 PM

[Go to RBSC portal](#) 

---

[Confirm](#) [Cancel](#)

5. On the RBSC portal, regenerate your new secret ID.



**Users Management**

**Users**  
Max users: 20

**Users (1)** Search by name

Type	Valid to	Actions
<b>Basic Auth Password</b> Password for basic authentication for accessing Docker, Maven and Helm repositories	2024-03-04	Regenerate
<b>NPM Base64 Credentials</b> Base64 encoding pair of user name and Basic Auth Password. Te be used in .npmrc file for accessing NPM repositories.	2024-03-04	Regenerate
<b>GitLab PAT</b> Personal Access Token for accessing Git repositories	2024-03-04	Regenerate
<b>Strong Cryptography Authentication</b> Generated Secret ID can be used for generation of JWT authentication token	2024-03-04	Regenerate Generate JWT

## Results

Your new secret ID is regenerated.

### 1.1.1.2 Install the Desktop Agent 3

## Context

You've generated a secret ID and pasted it in your tenant. You can now download and install desktop agent 3.

## Procedure

1. **If you use an RPA tenant:** In the Cloud Factory, choose the dropdown arrow next to [Configuration](#) and choose [Agent Update](#).

**SAP Intelligent Robotic Process Automation Factory**

Home Projects Packages Agents Environments Monitoring Store Configuration

Getting started

Welcome

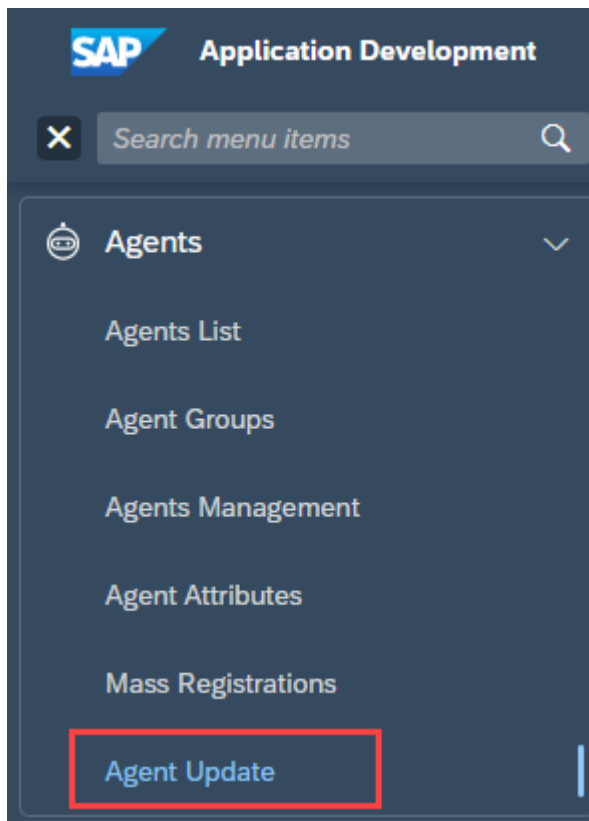
Welcome to SAP Intelligent Robotic Process Automation Factory. Explore our help center for more information.

Introducing Document Processing 2.0

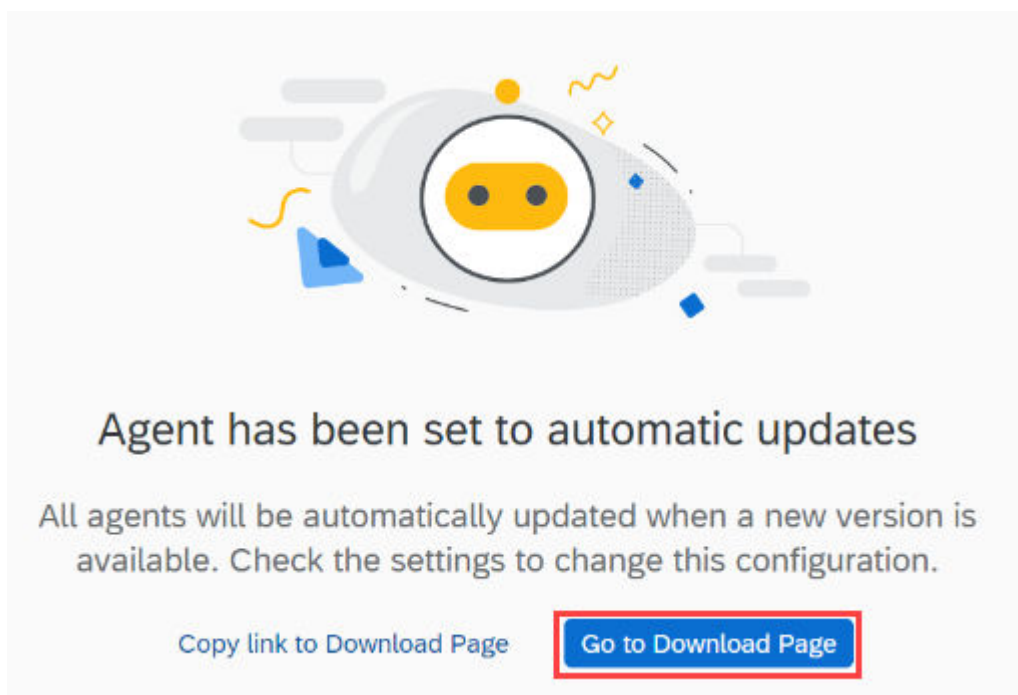
With the integration of **Document Information Extraction Service** in SAP Intelligent RPA, you benefit from the power of machine learning when processing your documents.

Mail  
SAP Cloud ALM  
Agent Attributes  
API Keys  
Destinations  
**Agent Update**

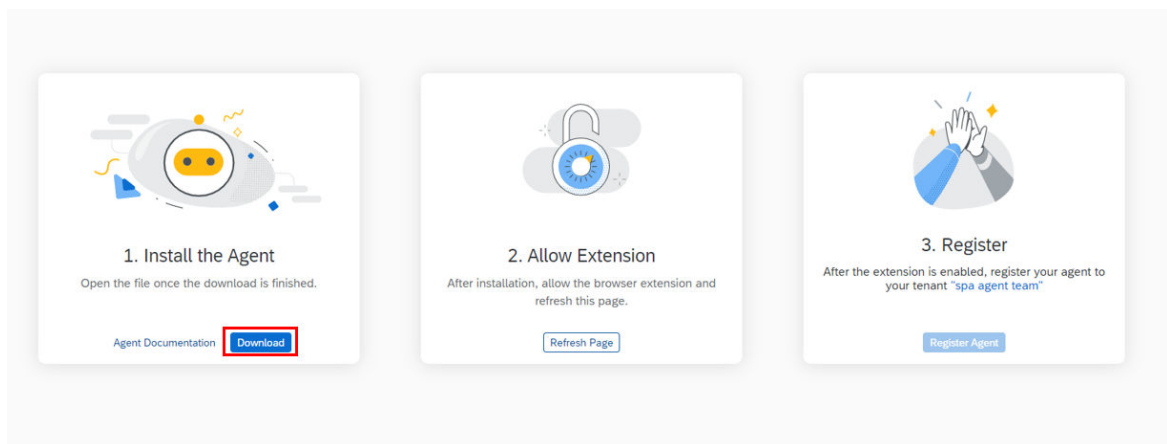
If you use an SPA tenant: In the tenant, go to [Settings](#), and choose [Agent Update](#).



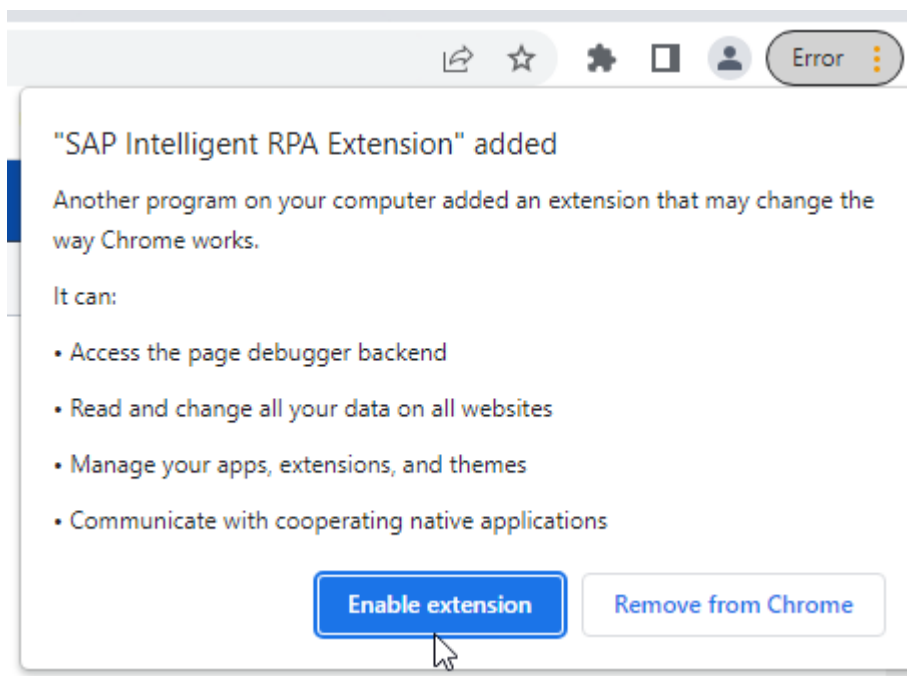
2. Choose [Go to Download Page](#).



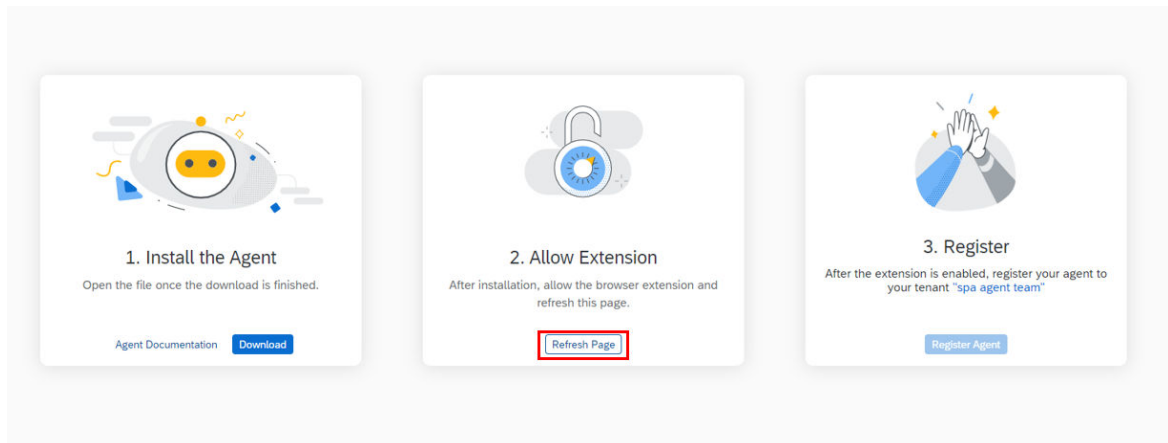
3. Choose [Download](#).



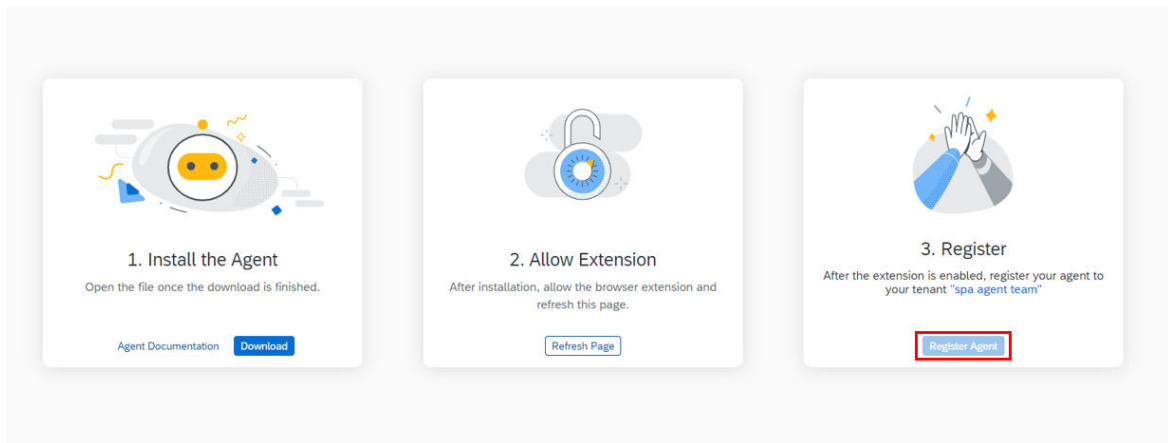
4. Open the file and wait until the installation of the agent 3 is complete.
5. Enable the extension in your browser.



6. Choose [Refresh Page](#).



7. Choose [Register Agent](#).



8. Open your agent to finalize the setup and accept the tenant configuration.

## Results

You've added your tenant to your agent and registered it. You can now start working on your projects.

### 1.1.1.3 Register Desktop Agent 3

After you have installed desktop agent 3, you need to register your agent and connect it to a tenant before you can run automations.

## Prerequisites

You have installed desktop agent 3 as described in [Install the Desktop Agent 3 \[page 9\]](#).

## Procedure

1. In SAP Build, choose [Control Tower](#) and [Agents](#).
2. Choose [Register New Agent](#) and [Copy and Close](#).
3. Open the agent, choose [Tenants](#), and [Add Tenant](#).
4. Enter a name for your tenant in the [Name](#) field, paste the copied URL into the [Domain](#) field, and [Save](#) your changes.
5. [Activate](#) the tenant and authenticate in the browser pop up.
6. Optional: If the authentication window does not appear, choose [Settings / System](#), and uncheck [Use browser for tenant registration](#). Then repeat the above step: [Activate](#) and authorize.

## Results

Your agent is now connected to the tenant.

### 1.1.1.4 Update the Desktop Agent 3

New versions of the desktop agent 3 are frequently available.

By default, the agent 3 is configured to be automatically updated. This way, the newly available version is automatically pushed to your agent. For more information, see [Enable Automatic Updates \[page 13\]](#).

You can also choose to manage agent updates for testing purposes for example. For more information, see [Manage Updates \[page 15\]](#).

#### 1.1.1.4.1 Enable Automatic Updates

### Prerequisites

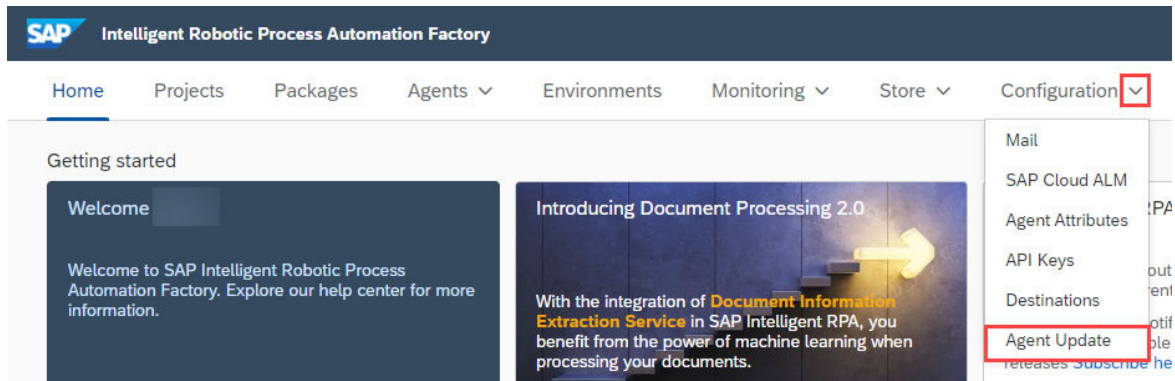
You have generated a secret ID from the RBSC portal as described in [Enable Agent Download and Automatic Updates \[page 4\]](#).

### Context

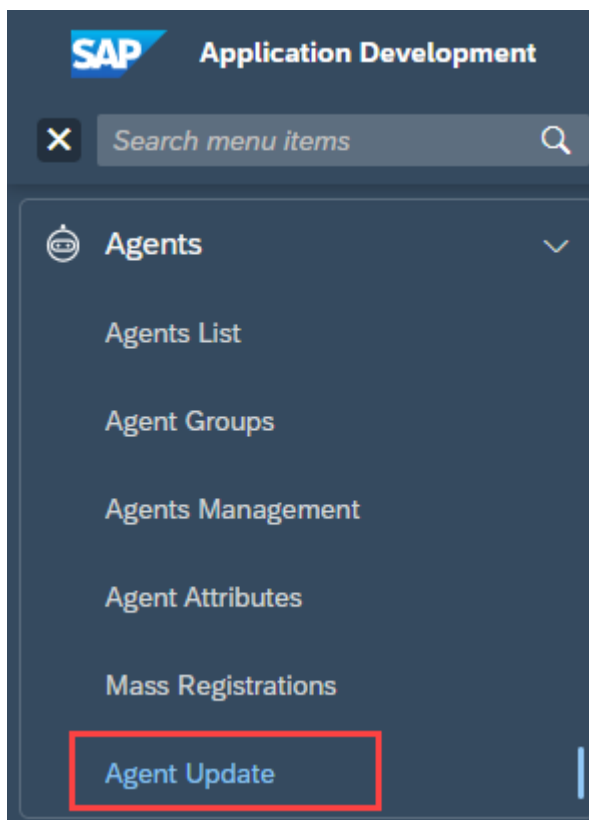
Automatic updates deliver the latest version of the agent 3 directly to your machine or to all your users' machines.

## Procedure

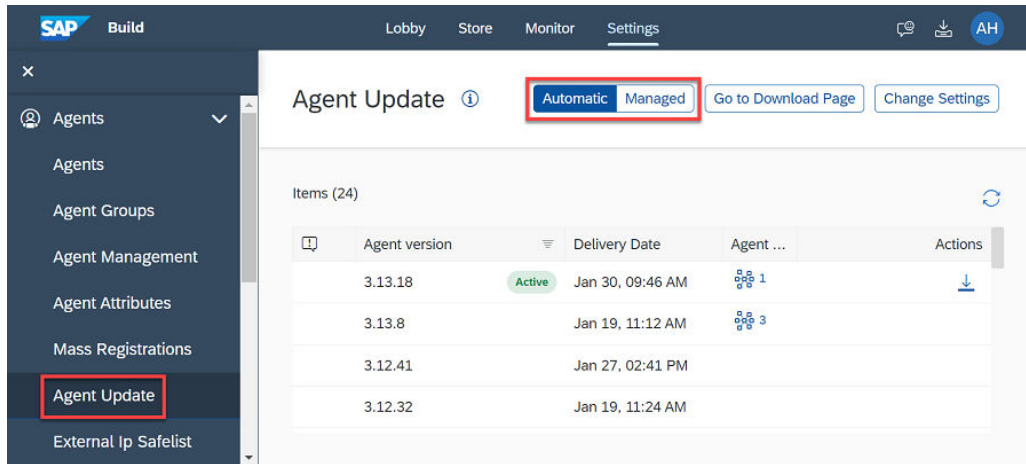
1. **If you are using an RPA tenant:** In the Cloud Factory, click the dropdown arrow next to [Configuration](#) and select [Agent Update](#).



**If you are using an SPA tenant:** In the tenant, go to [Settings](#), and select [Agent Update](#) on the left-hand side panel.



2. Click [Change Settings](#).
3. In the [Change Settings](#) dialog, check [Enable automatic updates](#).



## Results

The updates are automatically delivered to your agent if it is in unattended mode.

If your agent is in attended mode, when a new update is available, it is automatically downloaded, and you receive a notification prompting you to open your agent. You can then choose to update your agent now or tonight by selecting one of the two options on the pop-up window that appears.

### 1.1.1.4.2 Manage Updates

## Prerequisites

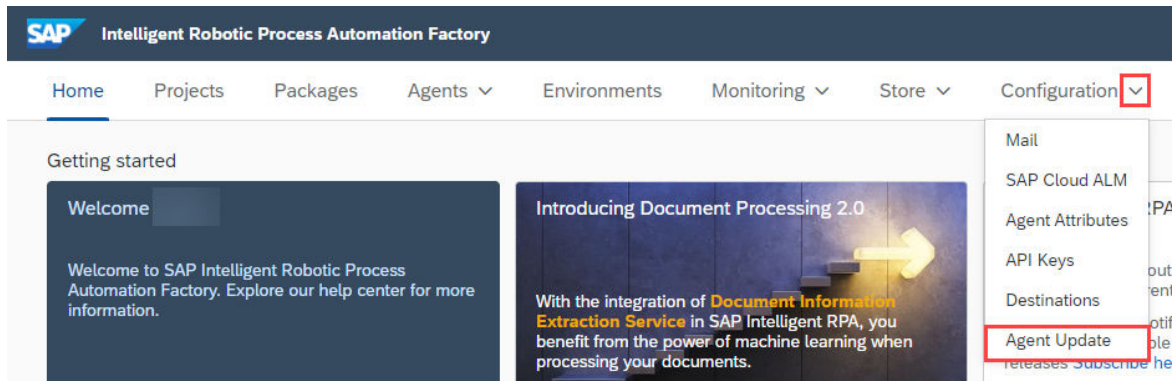
You have generated a secret ID from the RBSC portal as described in [Enable Agent Download and Automatic Updates \[page 4\]](#).

## Context

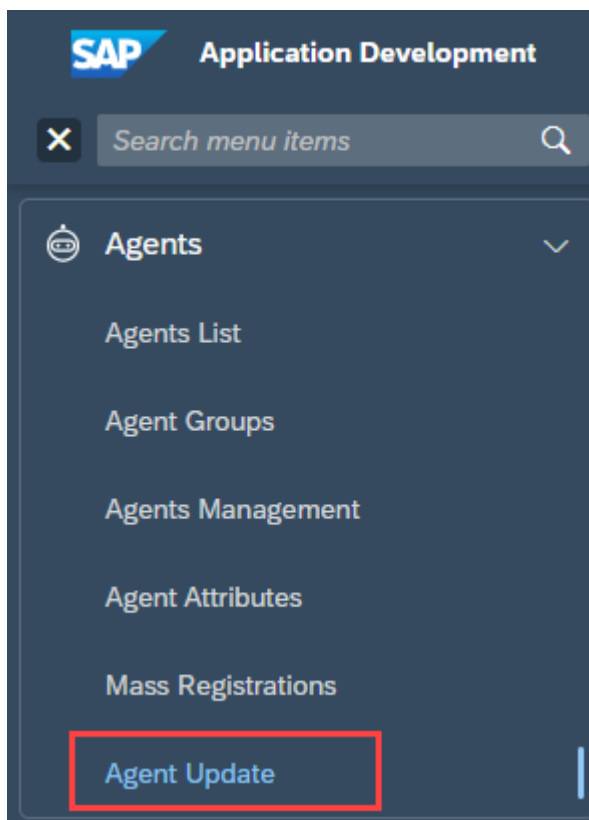
If you decide to manage updates, you can pause these updates to test them, for instance. You can then choose which versions you want your users to receive on their machines.

## Procedure

1. **If you are using an RPA tenant:** In the Cloud Factory, click the dropdown arrow next to [Configuration](#) and select [Agent Update](#).



**If you are using an SPA tenant:** In the tenant, go to [Settings](#), and select [Agent Update](#) on the left-hand side panel.



2. Click [Change Settings](#) in the top right-hand corner.
3. In the [Change Settings](#) dialog, deselect [Enable automatic updates](#) and click [Confirm](#).



Change Settings

Authentication

Name: \*

Secret ID: \*

Expires On:  
11/2/2022, 10:04:59 AM  
[Go to RBSC portal](#)

Distribution Policy

☐ Enable automatic updates

Confirm

Cancel

## Results

On the [Agent Update](#) page, you can see the list of the last published agent versions and manage updates.

Home
Projects
Packages
Agents
Environments
Monitoring
Store
Configuration

Agent Update
Go to Download Page
Change Settings

Agent version	Agent Count	Actions
3.4.33 <span>Beta</span>	1	<div> <div> <div></div> <div></div> <div></div> </div> <div> <div>Activate</div> <div></div> </div> </div>
3.4.3 <span>Active</span>	1	<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>
3.3.76		<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>
3.3.75		<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>
3.3.61		<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>
3.3.44		<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>
3.3.24		<div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> </div> </div>

You can perform several actions such as:

- Activate an agent version.  
 To do so, click **...** under **Actions** next to the version of your choice and select **Activate**.  
 You can also click the **Activate** button next to the beta version to set this version as the active version.
- Set an agent version as a beta, if you want to test this version for example.  
 To do so, click **...** under **Actions** next to the version of your choice and select **Activate as Beta**.  
 You can then select to which agents this beta version will be pushed and click **Activate Beta**.

Activate version 3.5.17 as beta

Select the agents for which the beta version will be activated.

Items (7)


<input type="checkbox"/>	Machine	Login	Current version
<input checked="" type="checkbox"/>	[REDACTED]	[REDACTED]	3.4.15
<input type="checkbox"/>	[REDACTED]	[REDACTED]	3.5.30
<input checked="" type="checkbox"/>	[REDACTED]	[REDACTED]	3.4.45
<input checked="" type="checkbox"/>	[REDACTED]	[REDACTED]	3.5.30
<input type="checkbox"/>	[REDACTED]	[REDACTED]	3.5.22
<input type="checkbox"/>	[REDACTED]	[REDACTED]	3.3.61
<input type="checkbox"/>	[REDACTED]	[REDACTED]	3.5.18

Activate Beta

Cancel

You can edit the agents for which the beta version is activated by clicking **...** under *Actions* and selecting *Edit Beta Agents*.

- Download an agent version on your machine.  
To do so, click **...** under **Actions** next to the version of your choice and select **Download**.  
You can also click **↓** next to the active version to download it.

By clicking  <sup>1</sup> next to an agent version, you can see which agents are registered in this version.

### 1.1.1.5 How the Agent Service Works

The service ensures that the agent is always running and is required when the agent is running in unattended mode.

When the agent is installed on a machine, a service named `SAPDesktopAgentService.exe` can also be installed. This service runs under the local system identity. It is independent of the agent that runs under the session user identity.

To check if the agent service is installed on your machine, choose [About](#) and [Agent Details](#) in the agent. If the agent service is not installed on your machine, the service state is [Not detected](#), and the service version is [Unknown](#).

## What Is the Purpose of the Agent Service?

The service ensures that the agent is always running and monitors it for issues. Therefore, if you are using an RDP environment, we recommend that you install the service.

The service is also required when the agent is running in unattended mode. The agent sometimes needs to unlock and lock the session to perform activities and for security. Enable the agent to automatically unlock a session by entering the credentials in the [Connection](#) tile. For more information, see [Configure the Connection Settings \[page 23\]](#).

## How to Install and Update the Agent Service

As an admin, you can install the service on your users' machines at the same time as you install the desktop agent 3. To do so, you must run the setup as administrator and check the corresponding checkbox on the installation window. If you don't run the setup as administrator, the checkbox is not visible.

You can also install the service using the following command line (if your script has been started as an administrator): `xxx.exe /s --service`

When a new version of agent 3 is available, a new version of the service is also available.

### i Note

You must update the service manually. If automatic updates are enabled, only the agent is automatically updated.

### i Note

If you are using desktop agent version 3.17 and under, make sure that the `SAPDesktopAgentService.cfg` file has been configured correctly. For more information, see SAP Note [0003388923](#).

## 1.1.1.6 Enable Batch Installation

### Context

As an administrator (`IRPAOfficer` role), install and configure automatically the desktop agent 3 on several machines with the batch installation.

This procedure shows you how to create a PowerShell script that will automatically install and configure the desktop agent 3 the first time a user logs into a machine (Windows Desktop or Windows Server sessions).

## i Note

Agent 3 is an installation per user, not per machine. It means that one independent agent is installed for every session.

## Procedure

1. Define a shared location within your company environment, accessible from the different machines, to store the files required for the batch installation of the desktop agent 3. It can be:
  - within your company network: // . . .
  - in a public folder: %programdata%\SAP for instance
2. Download the .exe installation file of the desktop agent 3 as described in the step 3 of the [installation procedure \[page 9\]](#). Store this file in the shared location defined in the step 1.
3. Create and download a registration token as a .json file as described in the registration procedure of the [Mass Agent Registration](#). Store this file in the shared location defined in the step 1.
4. Create a configuration .json file named `agentSettings.json` with the attributes you want to configure, following this pattern:

```
{
  "generalSettings": {
    "language": "en",
    "agentMode": "unattended",
    "startOnWindowsLogon": true
  }
}
```

Choose between the following values:

- language: "en", "fr", "en\_US\_sapspd", "es", "de", "it", "ja", "ko", "pt", "ru", "zh\_CN", "zh\_TW"
- agentMode: "attended", "unattended"
- startOnWindowsLogon: true, false

Store this file in the shared location defined in the step 1.

5. Create the PowerShell script that will automatically install and configure the desktop agent 3 on a machine. According to your specific needs and methods, you can write or adapt your own script. For example:

```
Write-Host "-----"
Write-Host " - Agent 3.x User Deployment - "
Write-Host "-----"

$notInstalled=$true

$Folder = $HOME+'\AppData\Local\Programs\SAPDesktopAgent '
$File = $Folder+'\SAPDesktopAgent.exe'

if (Test-Path $Folder) {
    if (Test-Path $File){
        $notInstalled=!$true
        Write-Host "agent 3.x already installed"
```

```

        Write-Host "-----"
    }
}

if ($notInstalled) {
    if (Test-Path "$PSScriptRoot\SAPDesktopAgentSetup*.exe") {
        foreach ($files in Get-ChildItem $PSScriptRoot) {
            if ($files.Name -match "SAPDesktopAgentSetup-.*.exe") {
                $setup = $files.FullName
            }
        }
        Write-Host "agent 3.x is installing ..."

        $ps = [System.Diagnostics.Process]::Start($setup, "/S")
        $ps.WaitForExit()

        Write-Host "agent 3.x has been installed correctly."

        Write-Host
        "-----"
    }
    else {
        Write-Host "No setup in the folder"

        Write-Host
        "-----"
    }
}
}

```

- On all the targeted machines, add the run registry key that will be used to launch the execution of the PowerShell script. We recommend to use `HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Run`.

For example:

`HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\RunOnce\SAPDesktopAgentSetup` with the value `< definedLocation> \SAPDesktopAgentInstallation.ps1 /s`.

## Results

When the specified machines start, the PowerShell script will automatically install and configure the Desktop Agent 3.

### Note

Even if the agent is connected and configured, the user still needs to activate the browser extension. For more information, see [Install the Desktop Agent 3 \[page 9\]](#).

## 1.1.2 Use the Desktop Agent 3

Using the desktop agent 3, you can perform different actions to run and monitor your projects such as:

- [Add and Manage Tenants](#) [page 22]
- [Configure the Connection Settings](#) [page 23]
- [Change the Agent Mode](#) [page 30]
- [Monitor the Agent](#) [page 32]
- [Manage Traces](#) [page 33]

### 1.1.2.1 Add and Manage Tenants

You use the [Tenants](#) tab to see information about the tenants associated with your agent.

#### Context

Add a new Tenant

The tenant your agent is connected to is at the top of the [Tenants](#) list and is labeled as **Active**.


By clicking  next to a tenant in the [Tenants](#) list, you can activate, edit, duplicate, or delete it.

You can associate multiple tenants with your agent.

To associate a new tenant to your agent:

#### Procedure

1. Click [Add Tenant](#).
2. Enter a name for the tenant in the [Name](#) field.
3. Provide the URL of the tenant in the [Domain](#) field.
4. Click [Save](#).

5. If you want to connect your agent to this tenant and click  next to your newly added tenant and select [Activate](#)

Your tenant will move at the top of the [Tenants](#) list.

## 1.1.2.2 Configure the Connection Settings

You can configure the service to unlock a session and start the agent automatically when a machine boots.

### Prerequisites

Agent service 3 or higher is installed and running.

### Context

Configure the connection settings of the agent to allow the service to open the Windows session automatically when booting. If the agent is in unattended mode, the service can, after a reboot, automatically open the Windows session and start the agent.

By default, no credentials are entered and the service will not login to the session automatically. So when you start the machine, you need to login manually.

### Procedure

1. In your agent, choose [Settings](#) and [System](#).
2. In the [Connection](#) tile, choose [With user account](#), enter your username and password, and [Save Settings](#).

### Results

If your session locks, the service is able to unlock it automatically.

#### i Note

- If the connection tile is disabled, the agent service is either not installed, not running, or its version is below agent service 3.
- If you disable [Automatically start at Windows login](#), the agent will not start.

## 1.1.2.3 Run Unattended Jobs with Activities on Graphic Sessions

The agent sometimes performs graphic activities, for example, a mouse click, on a running automation. If the computer screen is locked, the agent cannot perform graphic activities.

When unattended bots are configured on open Windows Remote Desktop Protocol (RDP) sessions and the sessions remain active but without graphic sessions, the agent cannot unlock the sessions for security reasons.

The RDP manager mode allows you to keep open Windows RDP sessions or to automatically open them when needed. Enable RDP manager mode to register and manage Windows RDP sessions on different computers to automatically perform activities when an automation is running.

If your automation includes the following activities, you can use the agent service to unlock the sessions, and the RDP mode to reconnect to graphic sessions:

### Graphic Activities

Activity	Technology
Screenshot	All
Keystroke	All except WebGUI
Set Element	All
Click	UI Automation
ClickSync	UI Automation
MouseClicked	All
ClickDouble	All
ClickRight	All
Maximize	All
Minimize	All
Restore	All
Iconify SAP GUI	All
SetFocus (Element)	All

## Key Points

- SAP desktop agent service manages unlocking the sessions.
- The RDP manager keeps sessions open.



## 1.1.2.3.1 Register Users to Unlock User Sessions

Register the users.

### Context

The users of the RDP sessions must register in the Windows SAP desktop agent service. There's one service per machine. If several sessions are running on the same machine, they use the same service. Each session for which the user is registered can be unlocked.

The following user roles are available:

- UNLOCK TYPE: Only allows to unlock the session.
- LOGON TYPE: Includes the creation of the session by the service and the management of the UNLOCK role.

#### i Note

Only one user of type LOGON can be registered per machine. We recommend that you register the user of the RDP manager session with the LOGON TYPE role.

### Procedure

1. Open Command Prompt.
2. Go to the directory `C:\ProgramFiles(x86)\SAP\IntelligentRPA\SAPDesktopAgentService`.
3. Run the following commands.

1. For the LOGON user: `CxStoreCred.exe userId= ***** password=***** type=LOGON`

#### i Note

Alternatively, you can register the LOGON user directly in the desktop agent under ► [Settings](#) ► [System](#) ► [With user account](#) ►. Enter the user name and password, and set [Automatically start at Windows login](#).

2. For the UNLOCK user: `CxStoreCred.exe userId= ***** password=***** type=UNLOCK`

#### i Note

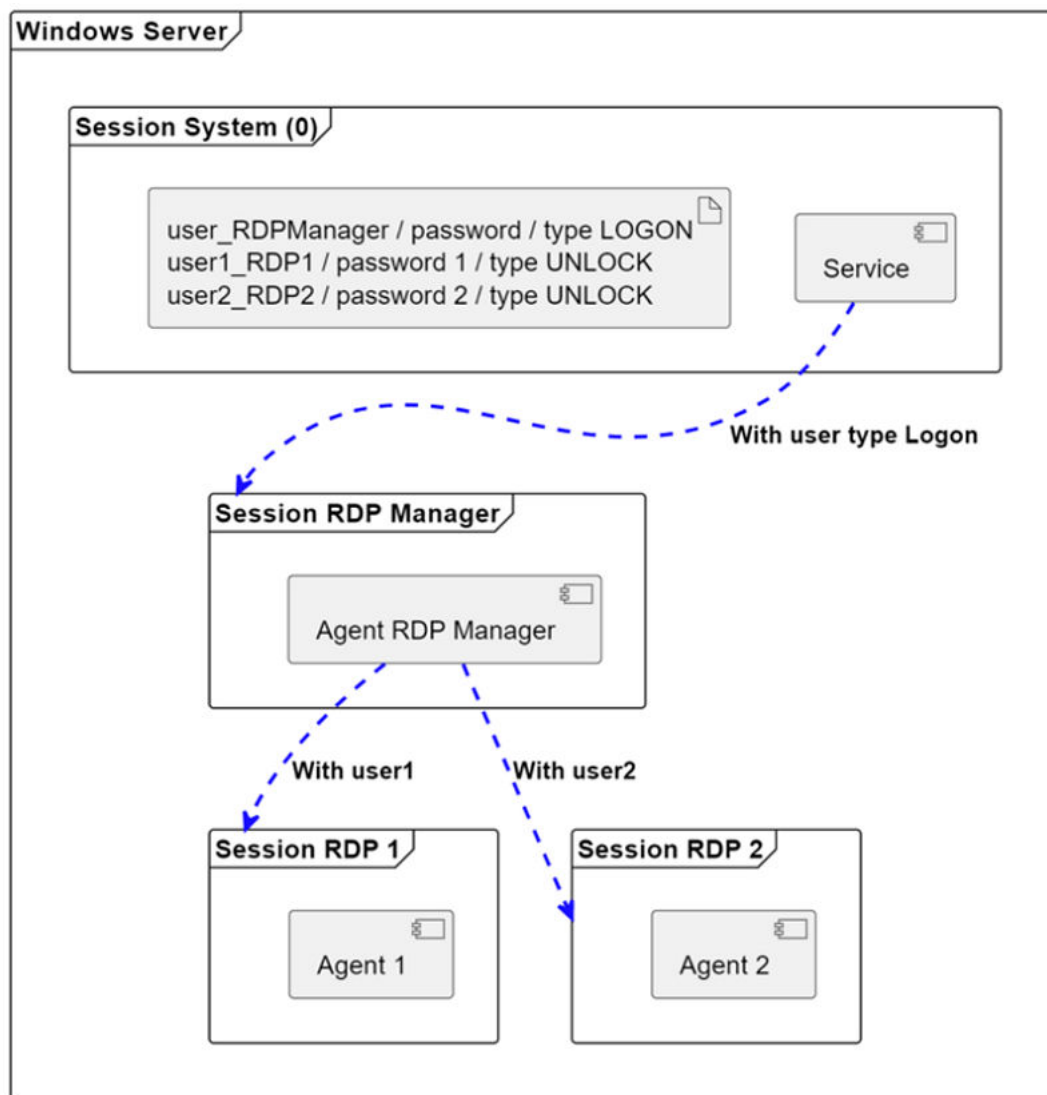
- If you don't specify the user type in the command line, it's LOGON by default.
- The `userId` and the `password` are limited to 32 characters each.
- Special characters in the password must be in straight quotes (""), for example, "cbkug^cna".

## Example

Users can be registered in the agent service from any session on their machine. Once registered, the user is stored in the session system through the service. In the example, you can therefore:

- Register all users in one of the sessions on the machine, that is, RDP manager session, RDP session 1, or RDP session 2.  
Register each user from their own session. user\_RDPManager in session RDP manager and user1\_RDP1 in session RDP 1, and user2\_RDP2 in RDP session 2.

Example: Configuration of an RDP Manager Session that Opens Two Sessions



## 1.1.2.3.2 Keep Sessions Open with the RDP Manager

The RDP manager is a mode of the agent available from version 3.8.

### Prerequisites

The users are registered. See [Register Users to Unlock User Sessions \[page 25\]](#).

### Context

RDP manager mode is only available for version 3.8 and higher. However, an agent in RDP manager mode can manage sessions with other running agents of version 2 and 3.

#### i Note

The session that runs the agent in RDP manager mode can't run automations. It's dedicated to run the agent in RDP manager mode.

The RDP manager can keep sessions open on the local machine or a remote machine.

You can temporarily open an RDP session on another machine. If the session is open, the RDP manager doesn't try to open it. But if you close the RDP session, the RDP manager automatically detects that and opens it again. The RDP manager checks every 30 seconds whether the session is open.

To configure the RDP manager mode, do the following:

### Procedure

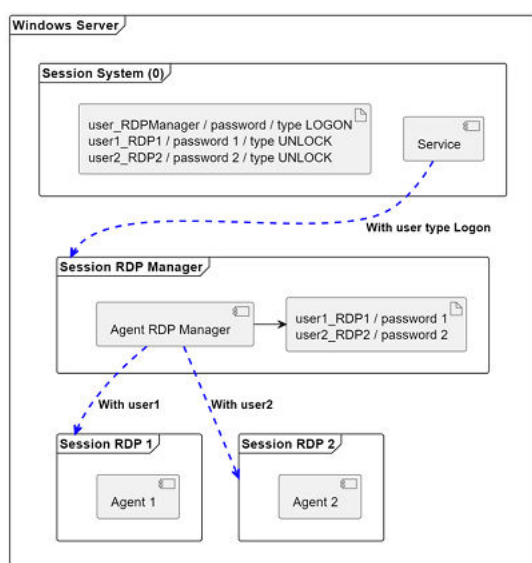
1. Open desktop agent 3.
2. Choose ► [Settings](#) ► [System](#) ▾, and set [Automatically start at Windows logon](#).
3. Choose ► [Settings](#) ► [Mode](#) ▾, and choose [Activate](#) on the [RDP Manager Mode](#) bar.
4. Choose [RDP Sessions](#) and [Add an RDP session](#).
5. Enter the required data. The [Session Name](#) is for information only.
6. Choose [Add](#).

## 1.1.2.3.3 Example on How to Register Users in the Service

Find two possible configurations for Windows SAP desktop agent service.

### Configuration 1

- Uses a single Windows server machine to open multiple RDP sessions.
- Automatically opens of the RDP manager session.
- Session RDP 1 runs with agent version 2 and Session RDP 2 runs with agent version 3.



This configuration has the following options:

- Option 1: Register all users in the service in the session where the RDP manager is running.

#### Sample Code

```
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user_RDPManager password=password type=LOGON
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user1_RDP1 password=password1 type=UNLOCK
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user2_RDP2 password=password2 type=UNLOCK
```

- Option 2: Register each user in each session.  
Session RPD Manager:

#### Sample Code

```
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user_RDPManager password=password type=LOGON
```

RPD Session 1:

#### Sample Code

```
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user1_RDP1 password=password1 type=UNLOCK
```

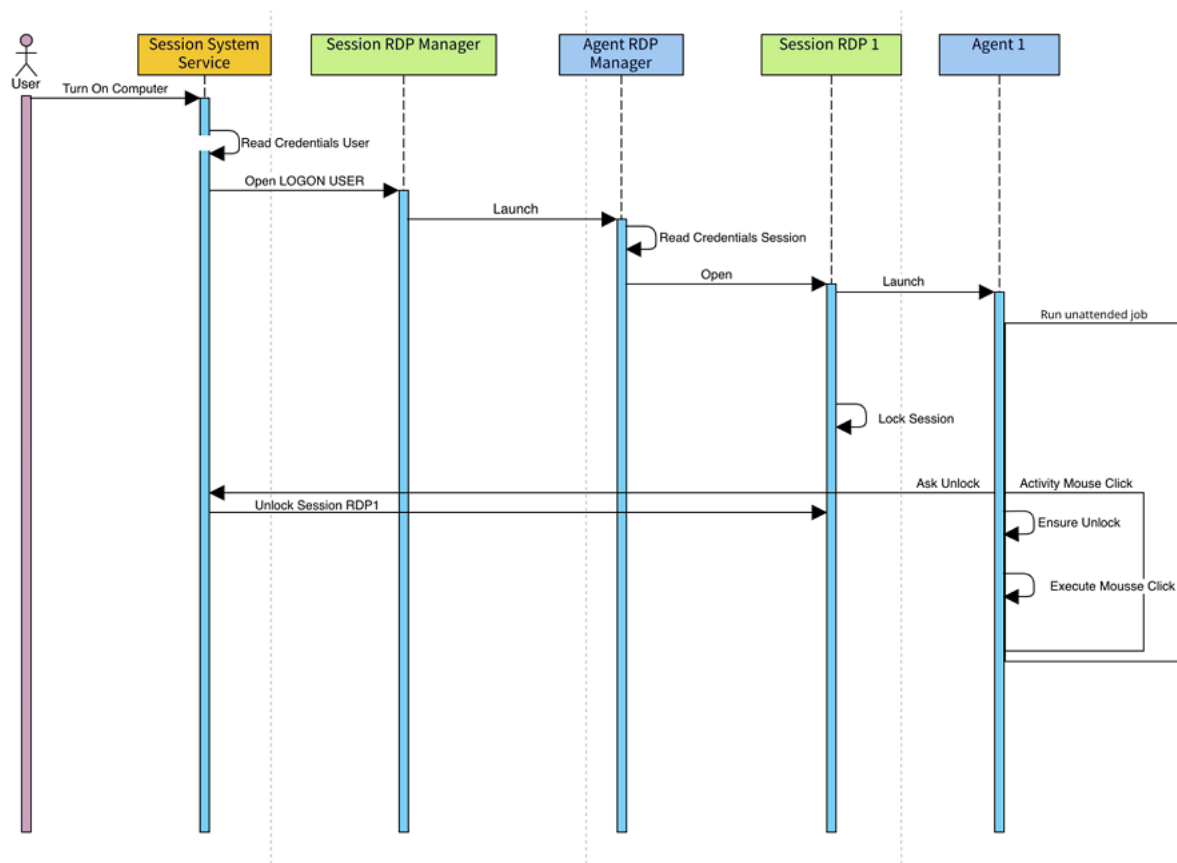
RPD Session 2:

#### Sample Code

```
C:\Program Files
(x86)\SAP\IntelligentRPA\SAPDesktopAgentService\CxStoreCred.exe userId=
user2_RDP2 password=password2 type=UNLOCK
```

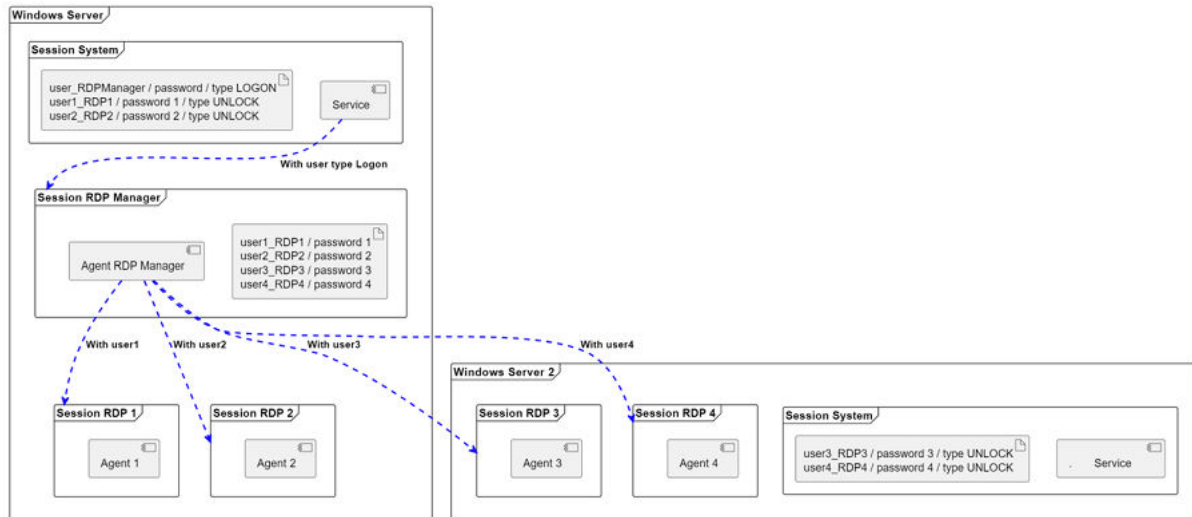
### Flow Diagram

This is a graphical representation of the interactions during the execution phase of an unattended job. Agent 1 and the session RDP manager are on the same machine.



## Configuration 2

- Uses two machines with multiple sessions on each machine.
- Automatically opens the RDP manager session.



For this configuration, the following applies:

- User1\_RDP1 and user2\_RDP2 are registered in the Windows server machine.
- User3\_RDP3 and user4\_RDP4 are registered in the Windows server 2 machine.

### 1.1.2.4 Change the Agent Mode

Using the desktop agent 3, you can change the mode of your agent.

The agent can be in three different modes:

- **Attended mode:** In this mode, you can launch the automation jobs by yourself or by configuring events to trigger them. This mode allows you to manually restart a project.
- **Unattended mode:** In this mode, the agent runs automations automatically and without your intervention.
- **RDP Manager mode:** In this mode, you can register and manage different Windows sessions on your agent with the RDP manager. If your agent is in RDP Manager mode, it cannot run automations.

#### i Note

You can only choose to activate the attended, unattended and RDP Manager modes from the Agent 3. For more information, see [Activate the RDP Manager Mode \[page 31\]](#).

- **Design mode:** In this mode, you can design and troubleshoot your automations.

#### i Note

This mode is only activated automatically when you test an automation.

The agent will exit design mode and return to the previously-chosen mode (attended or unattended) after 30 minutes of inactivity.

## Change the Agent Mode

If you want to put your agent in attended, unattended or RPD Manager mode:

1. Click [Settings](#) and select [Mode Settings](#).
2. Hover over the mode you want to activate.
3. Click [Activate](#).

You've successfully changed the mode of your agent.

### 1.1.2.4.1 Activate the RDP Manager Mode

Activate RDP Manager Mode to register and manage different Windows Remote Desktop Protocol (RDP) sessions on different computers to perform actions when an automation is running.

RDP Manager Mode is best suited for unattended jobs. Use it to run agents installed on remote machines.

An automation is running on a remote machine and the agent performs graphical actions such as a mouse click. If the computer screen is locked, the agent cannot perform a graphical action. The [RDP Manager](#) mode solves the previously mentioned issue. The mode allows you to register and manage secondary Windows sessions directly from your main session agent. In each session you add, an agent can run automations and perform graphical actions.

#### **i** Note

- The RDP Manager uses a Windows Remote Desktop Connection to keep RDP connected.
- The RDP Manager checks every 30 seconds if the declared connections are open, and opens them if they're closed.
- The RDP Manager retries each declared connection twice and stops if it fails on the second try.
- If no user is connected, the RDP Manager uses the Windows remote desktop connection to reopen the RDP connection again. If a user is connected, the RDP Manager does not disconnect that user.


#### **⚠** Caution

We recommend using only one agent in RDP Manager mode to manage the same set of connections. Using more than one can work but is not guaranteed by SAP, as it relies on the underlying Microsoft tools and protocol.

### 1.1.2.4.1.1 Register, Manage, and Activate RDP Sessions

Register, manage and activate RDP sessions in desktop agent 3.


#### Procedure

1. From your agent in the systray, choose [Settings](#), [Mode](#) and [Activate](#) the RDP Manager Mode.
2. A new tab  [Sessions](#) appears in the agent where you can see all of your registered RDP sessions.
3. Choose [Add an RDP session](#).
4. Enter a name for your session, the user name and password that the agent needs to open an RDP session on another computer. Choose [Add](#)

#### i Note

Opening sessions using the secondary users closes the session used with the RDP Manager.

#### Results

The agent opens the RDP session that you have created. You can open the window of the RDP session by choosing  and [Activate](#).

Once the RDP session is connected, go to the [RDP Sessions](#) in the agent. The tool tip of the icon in the [State](#) column indicates the connected client.

### 1.1.2.5 Monitor the Agent

You can directly monitor your agent from the [History](#) tab.

You can click the [History](#) tab and select [Event History](#). From this tab, you are able to see all the events related to the activity of your agent.

If you click the [History](#) tab and select [Job History](#), you can see all the details about the jobs executed by your agent.



## 1.1.2.6 Manage Traces

Desktop agent 3 continuously records traces. You can use traces to monitor the agent and jobs.

### Prerequisites

You have activated the support mode. See [Activate Support Mode](#)

### Context

Traces are continuously recorded. However, you can only access the tracer settings, if you activated the support mode.

Traces are encrypted and stored locally by default and can later be pushed to the cloud. If you disable encrypted traces, as described below, unencrypted traces are stored locally and cannot be sent to the cloud.

The trace recorder in the desktop agent traces different types of traces of several components.

#### i Note

You can also manage tracer settings on the trigger, that means the tenant. If you manage traces on both, the agent and the tenant, the tenant has priority over the agent.

### Procedure

1. In the desktop agent, choose [Settings](#) and [Tracer](#).
2. **Optional:** Disable [Encrypt Traces](#). This can be helpful, if you want to troubleshoot locally in case of a connection issue.
3. **Optional:** Enable [Show Trace Viewer](#), if you want to show traces in real time.
4. **Optional:** Choose the components you want to record. You can further enable [Detailed](#) tracing for each component. However, we recommend that you do not enable [Detailed](#) tracing because it can slow down the trace recorder.
5. [Save Settings](#).

### Results

- If you changed and saved the default settings, the trace recorder stops and starts a new trace recording with your settings.
- You can view the completed recordings by choosing [History](#) and [Reports](#).

## Related Information


[Manage Traces](#)

### 1.1.2.6.1 More Information


You can view the ongoing trace by choosing [History](#) and then [Reports](#).

To stop the ongoing trace and begin uploading it, choose **⋮** [More](#) and then click [Upload Trace](#).

If the agent is connected to a tenant, you can upload encrypted traces by choosing **⋮** [More](#) and then clicking [Upload Trace](#). However, if the agent is not connected to any tenant, you can choose **⋮** [More](#) and then click [Get Traces for Manual Upload](#) to download the traces and manually upload them to the cloud service.


You can open unencrypted traces in the trace viewer by choosing **⋮** [More](#) and then clicking [Open in Trace Viewer](#). To download traces, choose **⋮** [More](#) and then click [Get Traces](#). If the traces fail to be sent to the cloud service, a warning message is displayed by clicking the  [Warning](#) icon.

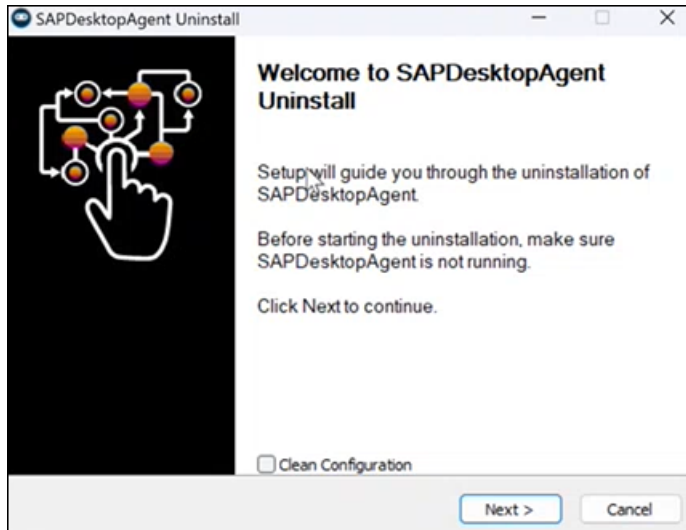
To reset all filters, click the  [Reset All Filters](#) button.

If the support mode is not activated during the execution of an automation in the Cloud Studio, you can open the screen tester on design mode on the agent side. To open the screen tester, choose  [Tools](#) and then click [Open Screen Tester](#).

## 1.1.3 Best Practices for the Desktop Agent 3

In this section, you will find our recommended best practices for using the agent 3.

- We strongly recommend that you uninstall the desktop agent 2 from your computer before installing the desktop agent 3.  
However, if you want to have both desktop agents on your computer at the same time, for example if you are testing the migration from desktop agent 2 to desktop agent 3, note that there are some limitations. For more information about these limitations, see SAP Note [3238616](#) .
- You can choose to clean up any sensitive or personal stored data such as storages, local cache, registry keys, credentials and so on while uninstalling agent 3 from your computer. To do so, you must check the [Clean Configuration](#) checkbox on the uninstallation window.



## 1.1.4 Register Authentication on Agent 3

The list of authentications defined in the Cloud Factory for a specific tenant is displayed in agent 3 when it is connected to that tenant.

- To view the list of authentications, go to the [Control Tower](#) tab and select [External Authentication](#).
- Initially, the [Status](#) is displayed as [Not registered](#). For instance, the authentications with the type **GOOGLE** are the ones specific to Google.  
To register any authentication with Not Registered status, click the specific authentication and then, enter the email ID with which the input field will be connected to activate the Register button of that

authentication. Next, click the save (  ) button.

Once you click the [Register](#) button, the browser is launched for authentication and authorization. If the Chrome browser is installed, it is launched; else, the Edge browser is launched. Once registered, the status is displayed as [Registered](#), and the authentication can be used in automation.

### **i** Note

It is recommended to enable the SPA extension on the Chrome or Edge browser so that the browser tab opened for authorization is closed automatically. Otherwise, the browser tab must be closed manually.

- The first authentication with the [Registered](#) status is set as a [Default](#) authentication automatically. To set a different authentication as a [Default](#) authentication, click **...** (More options) under [Action](#) and then click [Set as default authentication](#) corresponding to that authentication.
- To unregister any existing registered authentication, click [Unregister](#).

For more information on how to authenticate authentications using agent 3 UI, see [Create External Authentication](#).

## 1.2 About the Desktop Agent 2

The Desktop Agent is a component of SAP Intelligent Robotic Process Automation that is installed locally on a computer. The agent starts automation projects that launch and run applications, reads information from screens, enters data, chooses options, and processes data.

Projects are assigned to tenants running on a Desktop Agent. You can check the status of your desktop agent in the system tray (systray), that is accessible while your desktop agent is ready or active.

After installation, the desktop agent is configured to start at Windows logon automatically. Don't change this configuration because your agent can be assigned background (unattended) jobs.

The first time you launch the Desktop Agent on your workstation, you're prompted to log in. If you're unsure of your login details, contact an administrator.

### Related Information

[The System Tray \[page 37\]](#)

[Running Projects \[page 54\]](#)

[Status of the Desktop Agent \[page 36\]](#)

### 1.2.1 Status of the Desktop Agent

The icon of the systray indicates the status of the desktop agent.

Icon's Appearance	Meaning
Gray	The desktop agent is in idle mode - no project is loaded.
Purple	A project is loaded.
Blue circle superimposed on purple icon	The desktop agent is running a job in interactive mode.
Red circle superimposed on purple icon	The job failed.
Red circle superimposed on gray icon	An error occurred.
Orange circle superimposed on gray or purple icon	A warning about the job was issued during the connection phase.

#### → Tip

You can read error and warning messages in the [About](#) window.

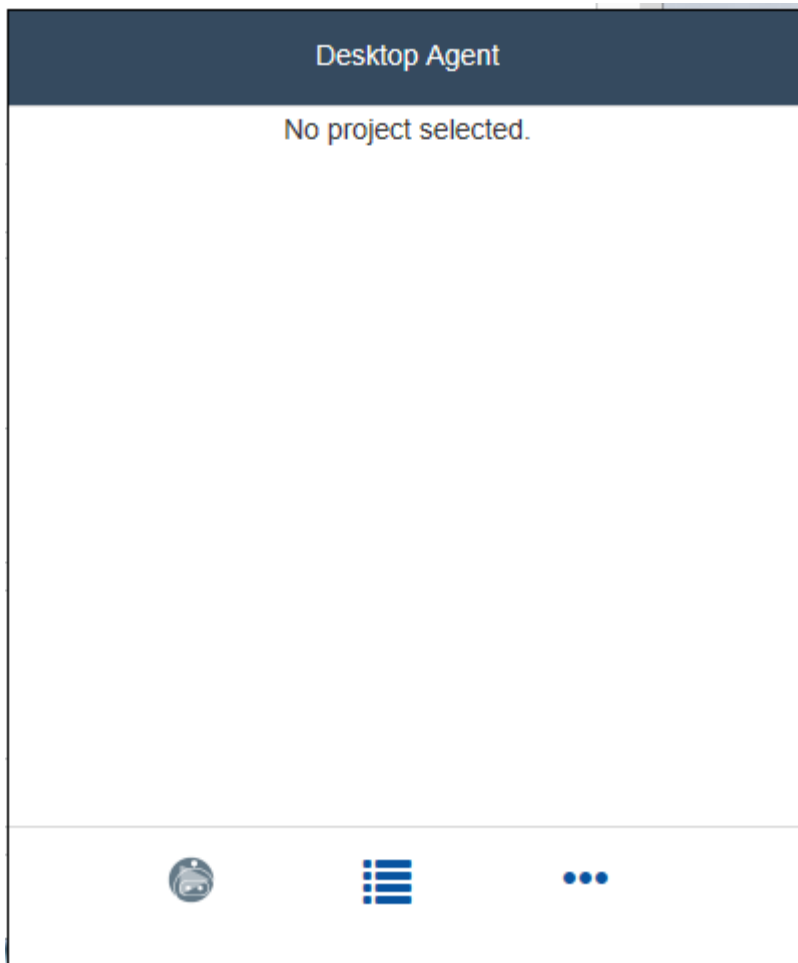
## Related Information


[The About Window \[page 39\]](#)

### 1.2.2 The System Tray

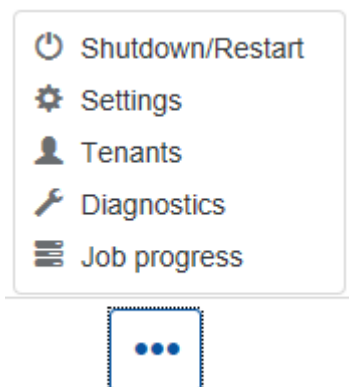
The system tray (systray) gives you access to the desktop agent.

When no project is selected, the desktop agent window looks like this:



- Choose the desktop agent icon to open the [About window](#).
- Choose the projects icon  to open the projects window.
- Choose the three dots for more actions.

The following list appears:



When a project starts, the desktop agent window displays project-specific menus to run jobs.

## Related Information

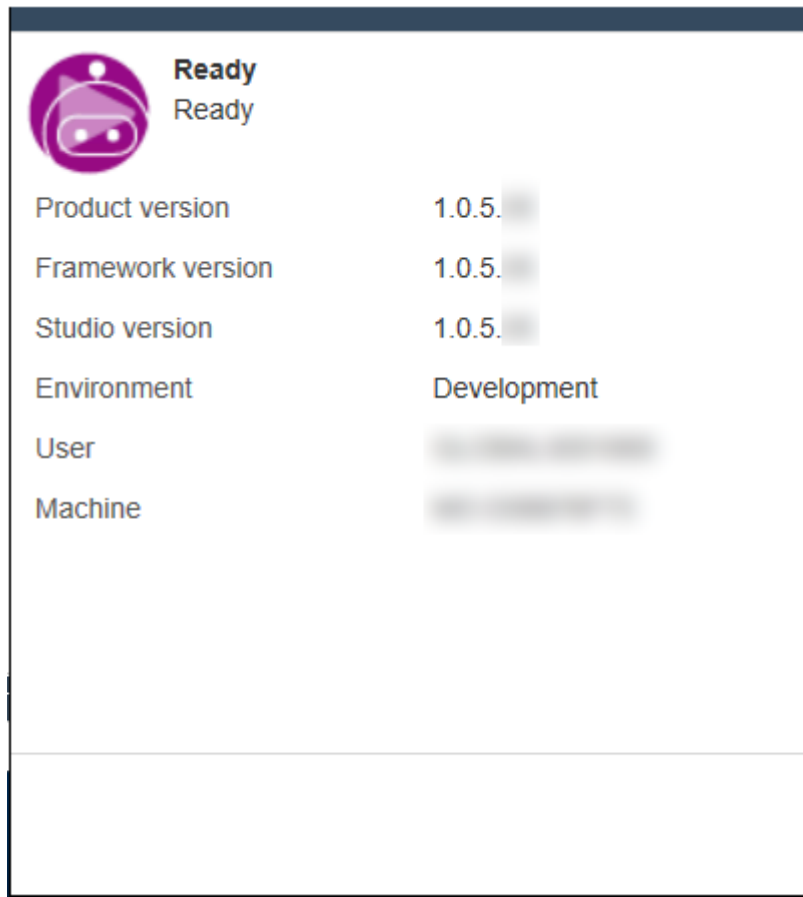
[The About Window \[page 39\]](#)

[The Projects Window \[page 41\]](#)

[More Actions \[page 42\]](#)

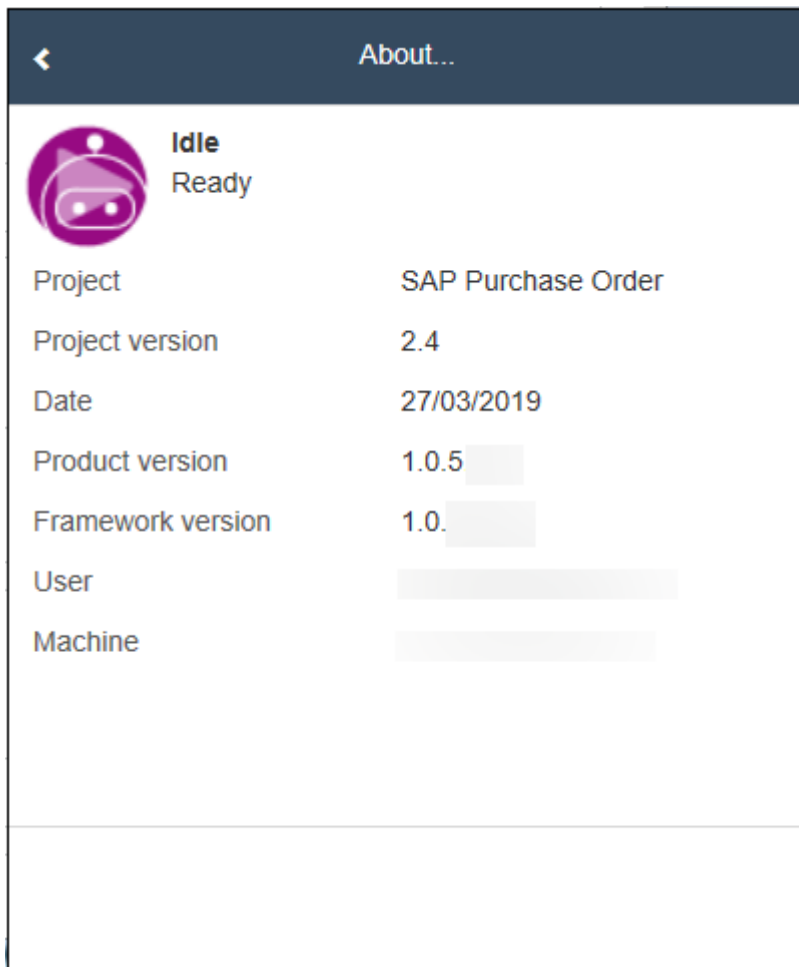
## 1.2.2.1 The About Window

If no project has been started, the About Window looks something like this:



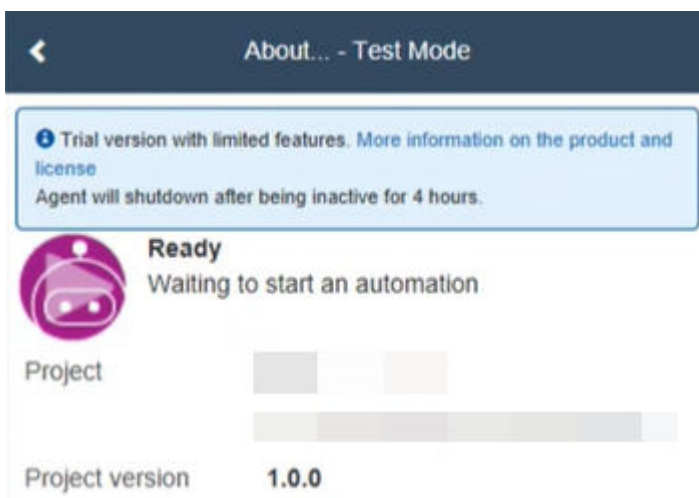
The icon's color indicates the status of the desktop agent, which is also displayed at the top of the window next to the icon (for example, Paused or Ready).

When a project has been started but no jobs are currently running, the About window looks like this:



During or after jobs are executed, error or warning messages are displayed in the About window. If a warning occurs, an orange circle appears superimposed on the desktop agent icon. If there's an error, the circle is red.

If your desktop agent (from version 2108) is running, it automatically shuts down after 4 hours of inactivity. If the desktop agent is running jobs, the agent will shut down after the end of the last job. A message strip is displayed at the top of the systray to explain that the desktop agent will shut down after 4 hours of inactivity.





If the desktop agent (from version 2108) can't disconnect from the Cloud Factory, the Cloud Factory tries to disconnect it.

Desktop agents whose version is older than 2108 gets disconnected by the Cloud Factory after 4 hours of inactivity. However, you must manually restart them.

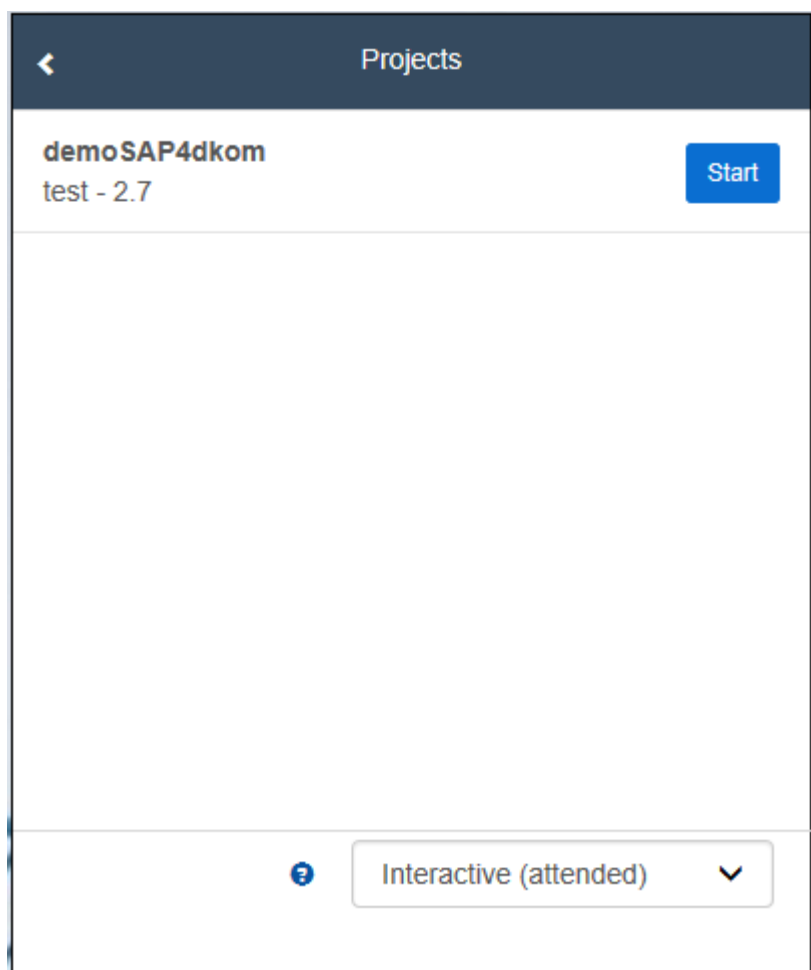
## Related Information

[Status of the Desktop Agent \[page 36\]](#)

[Running Projects \[page 54\]](#)

### 1.2.2.2 The Projects Window

If one or more projects are available, the Projects window looks like this:



Press the [Start](#) button next to the project you want to start.

### Note

You can switch modes using the dropdown list at the bottom of the window. By choosing the question mark icon to the left of the dropdown list, you can view details of the modes. For further information, see [Running Projects \[page 54\]](#).

Confirm that you want to switch to this project by choosing [OK](#) in the next window.

The desktop agent icon in the notification is of the Windows taskbar turns pink and its hover text is the name of the project.

To stop running a project, return to the Projects window and press the [Stop](#) button.

## 1.2.2.3 More Actions

Additional actions can be selected from the list displayed when you press the three dots at the bottom right of the main desktop agent window.

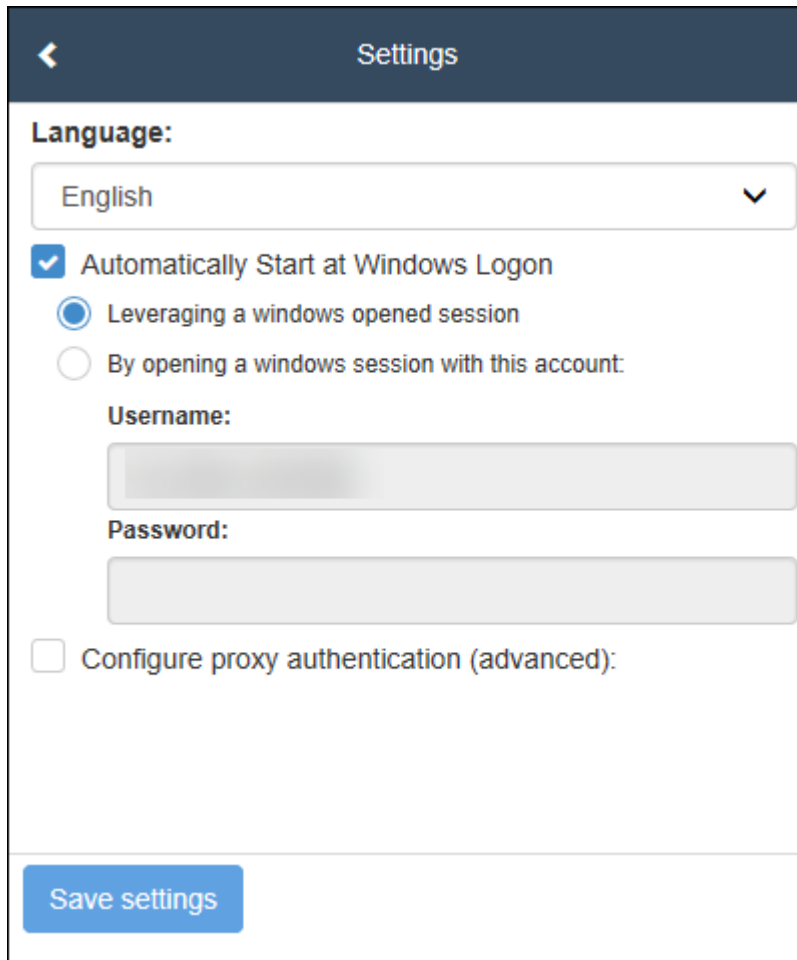
### Shutdown/Restart

If you choose this action, you can either shutdown or restart desktop agent, or press [Cancel](#) if you decide to do neither.

### Caution

To avoid data loss, stop the running project from the Projects window before shutting down or restarting desktop agent.

## Settings



Settings

Language:

English

☒ Automatically Start at Windows Logon

☒ Leveraging a windows opened session

☐ By opening a windows session with this account:

Username:

Password:

☐ Configure proxy authentication (advanced):

Save settings

In the [Settings](#) window, you can specify whether desktop agent should automatically start at Windows logon. You can also configure a proxy authentication.

### ⚠ Caution

Keep this setting checked if jobs will be run on your agent in background (unattended) mode.

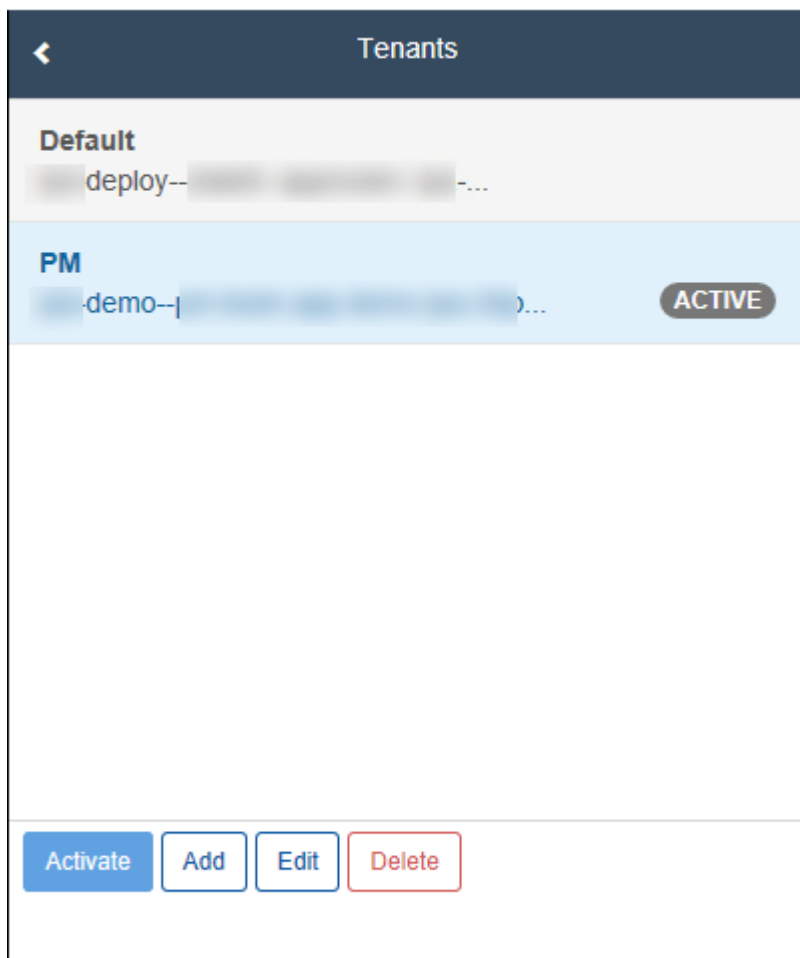
You can also select the language via the dropdown list.

When you change any settings, the [Save Settings](#) button is enabled so that you can save your preferences.

### → Tip

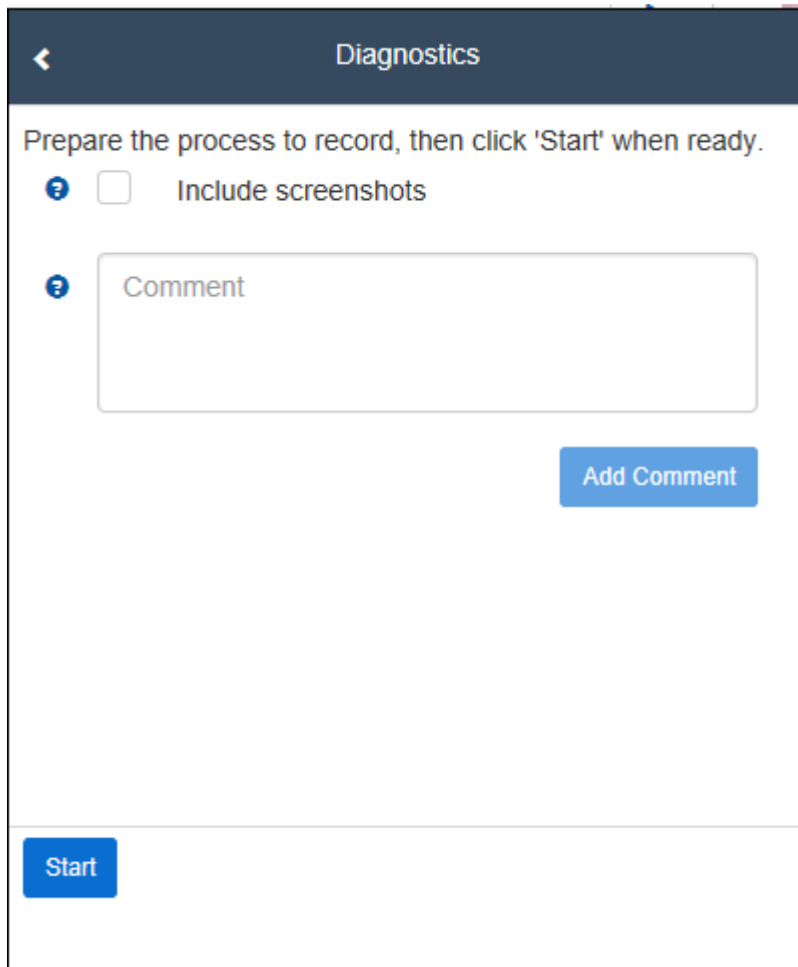
Press the arrow at the top left to leave the [Settings](#) window.

## Tenants



If there are multiple tenants associated with your desktop agent, you can activate, add, edit, or delete tenants in this window.

## Diagnostics



The screenshot shows a window titled "Diagnostics" with a dark blue header bar containing a back arrow icon on the left. Below the header, the text "Prepare the process to record, then click 'Start' when ready." is displayed. There is a checkbox labeled "Include screenshots" with a question mark icon to its left. Below this is a text input field with the placeholder text "Comment" and a question mark icon to its left. To the right of the input field is a blue button labeled "Add Comment". At the bottom left of the window is a blue button labeled "Start".

If a job isn't running correctly, you can record its execution from the [Diagnostics window](#). Press the [Start](#) button at the bottom to begin recording. The recording is saved to a diagnostics file that you can forward to the support team. You can include screenshots by choosing the corresponding checkbox, and add comments about the issues encountered in the box provided.

### → Tip

Press the arrow at the top left to leave the [Diagnostics window](#).

## Job Progress

Job Progress		
Status	Execution	Name
Failed	19:08:01	GLOBAL.createInvoiceFromMail

While a project is running, you can view the status of jobs in the [Job Progress window](#). The time of execution is shown in the column below the label [Execution](#). Name refers to the name of the job, which can be a scenario or a user task, for example.

### 1.2.2.3.1 Set Windows Password in Desktop Agent

You can set your Windows password in desktop agent.

To set your Windows password, the desktop agent must be configured to run in unattended mode. The Windows password set option is only available if the agent is configured in unattended mode.

< Settings

**Language:**

English ▼

☒ Automatically Start at Windows Logon

☒ Leveraging a windows opened session

☐ By opening a windows session with this account:

**Username:**

XXXXXXXXXX

**Password:**

XXXXXXXXXX

Save settings

#### i Note

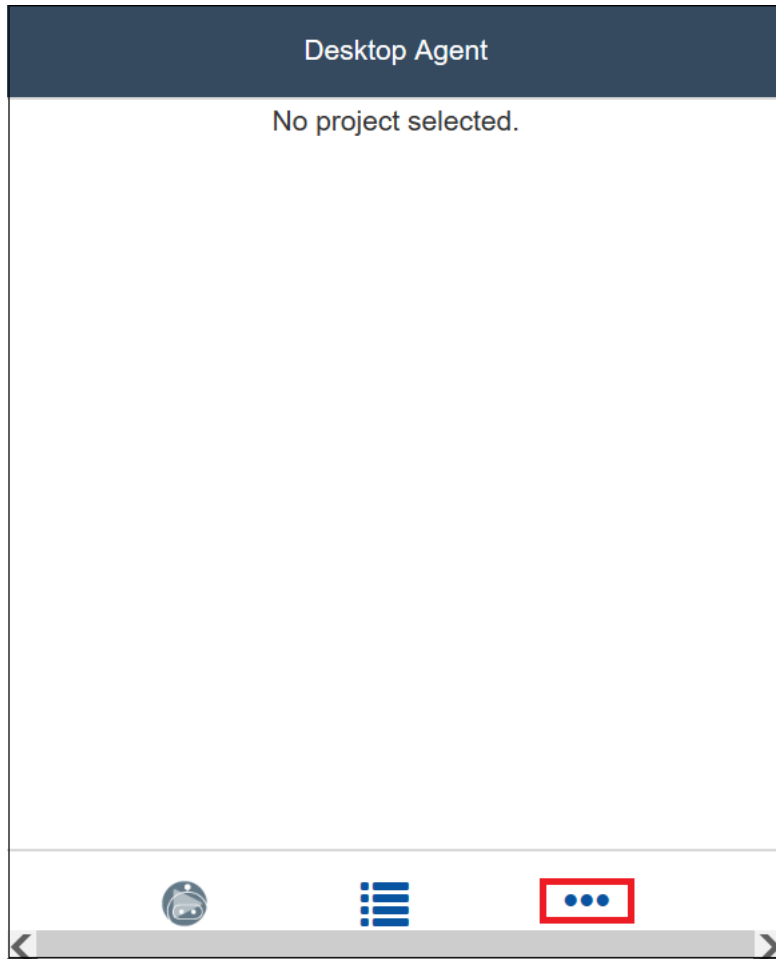
To configure unattended mode, on the [Projects](#) screen, select [Background \(unattended\)](#).

#### i Note

If the default option, leveraging a windows opened session, is selected, then you must open Windows manually for the desktop agent to start automatically.

## Procedure

1. Open a desktop agent [Systray \[page 37\]](#).
2. Choose the [More Actions \[page 42\]](#) button.



And then choose [Settings](#).

The [Settings](#) window is displayed and the system default option is preselected.



Settings

Language:

English

☒ Automatically Start at Windows Logon

☒ Leveraging a windows opened session

☐ By opening a windows session with this account:

Username:

Password:

Save settings

3. Select the *By opening a windows session with this account:* option.
4. Enter your Windows password in the *Password* field.

### i Note

Username and Password are the credentials of the Windows session. These credentials (username and password) are stored in a hidden catalog of the Windows Credential Manager.

For more details about your Windows password, contact your system administrator.

5. Choose [Save settings](#). The desktop agent window is displayed. For more details about the desktop agent window, see [The System Tray \[page 37\]](#) section.

### i Note

You can store Windows credentials for launching desktop agent in unattended mode using the following command line:

```
cxStoreCred.exe <yourUser> <youPassword>
```

For more details, see the SAP Note, [3010368](#).

## Remove Windows Password


1. Go to the [Desktop Agent Setting](#) screen.
2. Select [Leveraging a windows opened session](#).

3. Choose [Save settings](#). The Windows password will be removed from desktop agent.

#### i Note

You can also remove the password using the following command line:

```
CxStoreCred.exe /forget
```

For more details, see **To remove a user/password** section in the SAP Note, [3010368](#) .

## Related Information

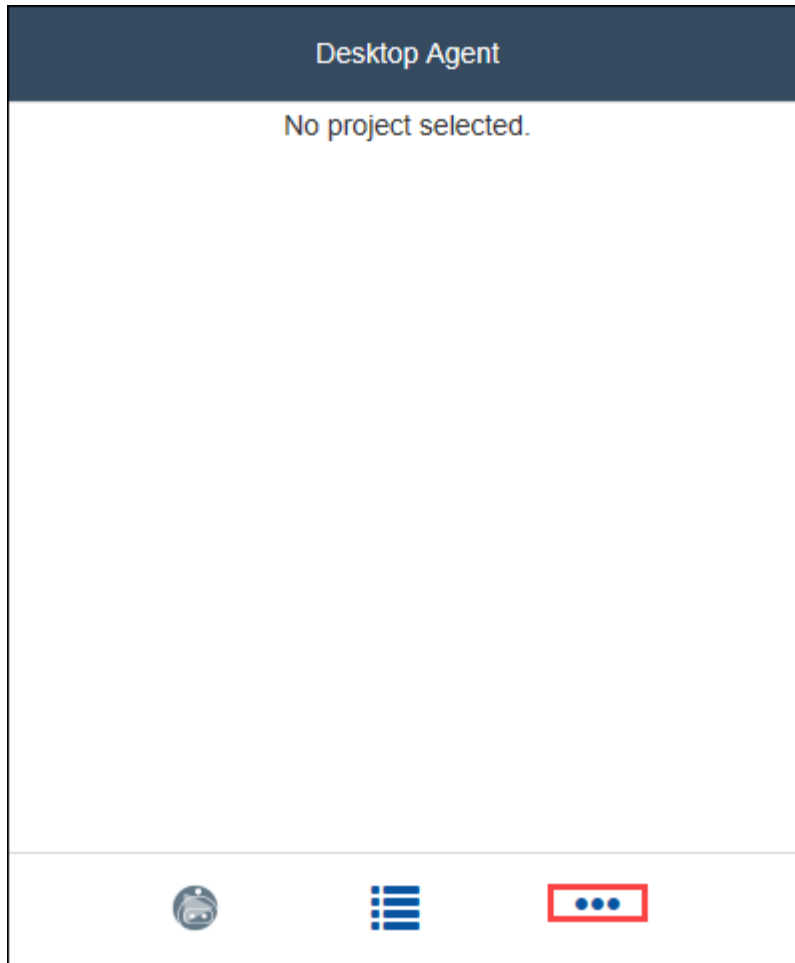
[How to Set Up an Unattended Bot \[page 56\]](#)

### 1.2.2.3.2 Configure Proxy Authentication in Desktop Agent

If you use a proxy that doesn't use your default Windows credentials, you can configure the proxy authentication in Desktop Agent. It allows you to log on to the Cloud Factory.

## Procedure

1. Open a desktop agent [Systray \[page 37\]](#).
2. Choose the [More Actions \[page 42\]](#) button.



And then choose [Settings](#).

3. Select the [Configure proxy authentication \(advanced\)](#): option.

< Settings

**Language:**

English

☒ Automatically Start at Windows Logon

☒ Leveraging a windows opened session

☐ By opening a windows session with this account:

**Username:**

**Password:**

☐ Configure proxy authentication (advanced):

Save settings


4. Enter your *Proxy username* and *Proxy password* in the fields that appear.

5. Choose *Save settings*.

## 1.2.3 Running Projects

The desktop agent runs in two different modes: *Interactive (attended)* and *Background (unattended)*.

### → Tip

To view or change the mode, press the Projects icon  to open the Projects window. At the bottom of this window, the current mode is shown in a dropdown list.

## Interactive Mode

In Interactive mode, you have to select a project and run the project's scenarios manually.


To select a project, simply press the *Start* button next to the project name in the Projects window. When you have confirmed that you want to switch to this project, the main window of the Agent systray will change to

display project-specific menus. There can be multiple menu items and sub menus from which you can run scenarios as jobs.

You can check the progress of a job by choosing *Job Progress* from the *More actions* menu (three dots). A window like this appears:

Job Progress		
Status	Execution	Name
Failed	19:08:01	GLOBAL.createInvoiceFromMail

In this window, *Name* refers to the name of the scenario being run and *Execution* refers to the time when the scenario was executed.

To stop a project, press the Projects icon  to open the Projects window and press the *Stop* button next to the current project.

## Background Mode

When the agent is in Background mode, projects will run automatically according to a defined schedule, and you don't have to take any action.

## Related Information

[The System Tray \[page 37\]](#)

### 1.2.4 Best Practices for the Desktop Agent

When a desktop agent is running on a system, it causes limitations.

Here is a list of these limitations and the solution to them::

- You may face some errors while you're using the desktop agent. For more information on these errors and how to solve them, see: [Desktop Agent](#).
- Within the desktop agent systray, error messages are reported in the About screen. For more information on these error messages, see: [Desktop Agent Error Messages](#).
- Sometimes, the agent systray appears blank. For more information on how to solve this error, see: [Desktop Agent Blank Systray](#).
- You may want to use your PC while a bot is running. For more information on how to do this, see: [Using the PC while a Bot is Running](#).
- The system may reboot while the desktop agent is in unattended mode. For more information on how to start the desktop agent immediately after the system reboot, see: [System Reboot during Unattended Mode](#).


#### 1.2.4.1 How to Set Up an Unattended Bot

In some cases, it is useful to send jobs to a remote machine, for example, virtual machines.

### Context

If so, the desktop agent requires an opened Windows session to work properly. The following procedure ensures that the agent is correctly set up to perform the jobs on a remote machine.

#### Caution

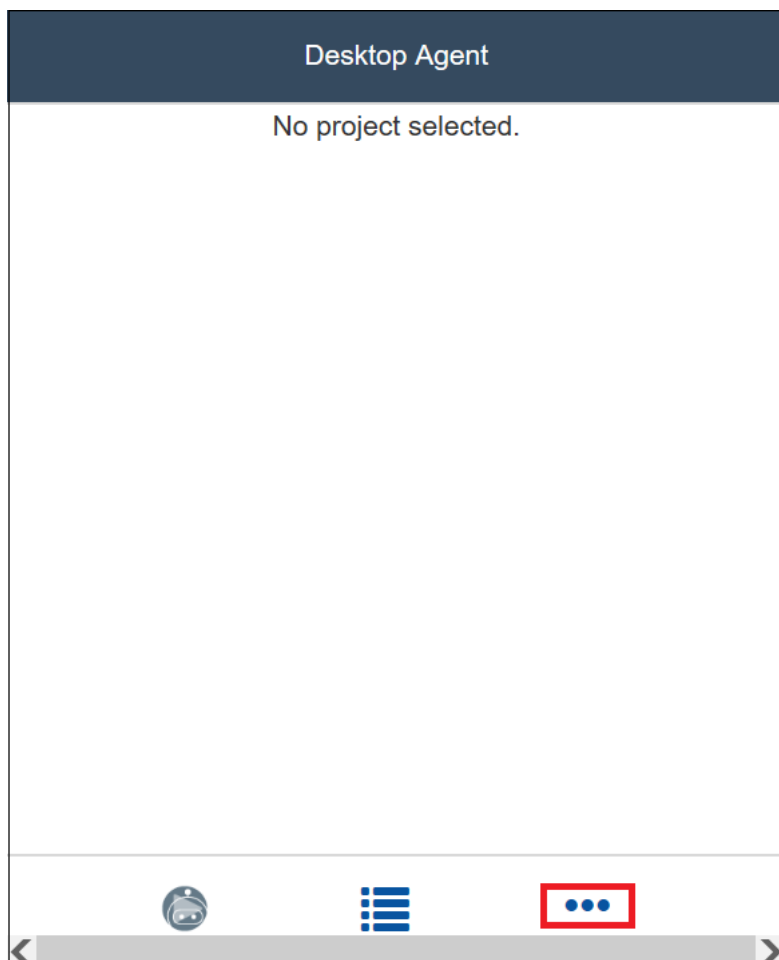
If the job to be executed contains some low-level actions, the agent must be able to unlock the Windows session. For more information, see SAP Note [3107785](#) .

### Procedure

1. Install the desktop agent on the remote machine. You can choose to install the components according to your needs. See [On-premise Components Setup](#).



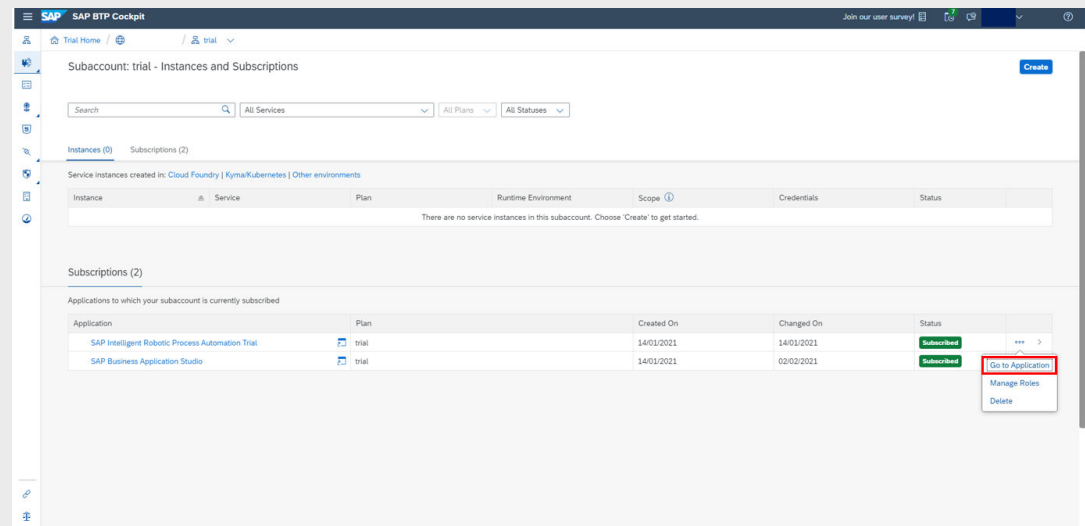
2. Configure the SAP Intelligent RPA Factory and register the desktop agent.
  - a. In the SAP Intelligent RPA Factory, create an Environment. See [Create an Environment](#).
  - b. In the SAP Intelligent RPA Factory, create an Agent Group. See [Create an Agent Group](#).
3. Register the agent and then add the agent to an Environment. Follow the procedure below to register and add agent to an Environment.
  - a. Open the desktop agent.
  - b. Choose [More Actions](#).



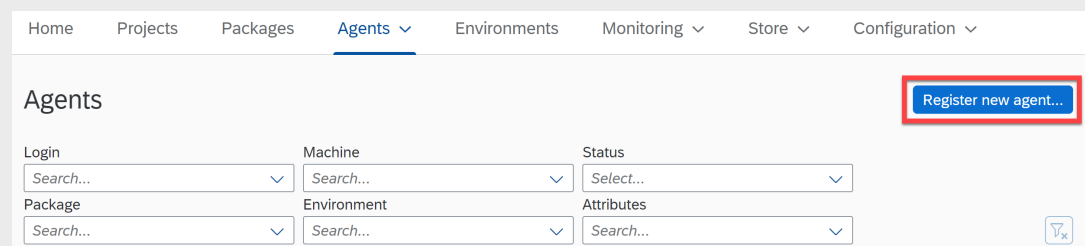
- c. Select [Tenants](#). The [Add](#) tenant screen is displayed.
- d. Provide the name of the tenant in the [Name](#) field and the tenant URL in the [Domain](#) field.

## → Tip

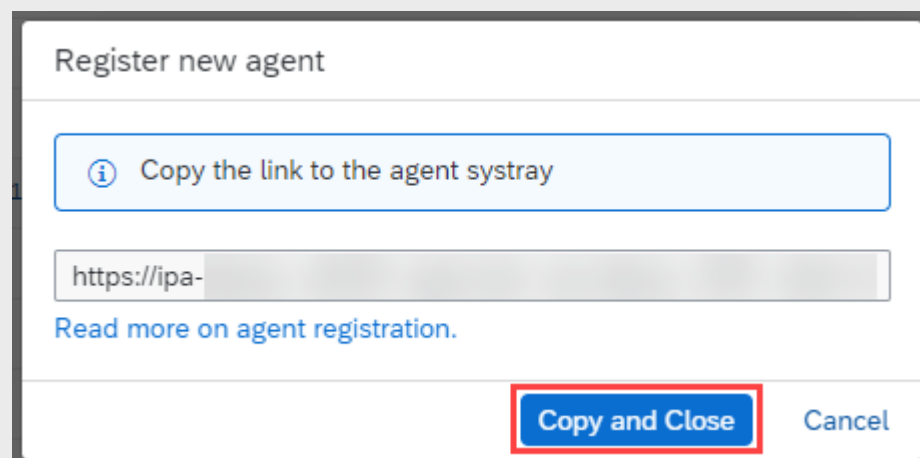
To find the SAP Intelligent Robotic Process Automation Factory tenant URL, select [Go to Application](#) in your SAP Intelligent Robotic Process Automation Factory account on the SAP BTP cockpit:



On the SAP Intelligent Robotic Process Automation Factory homepage, go to the [Agents](#) tab and then choose [Register New Agent](#) on the right-hand side of the screen.



When the pop-up opens, select [Copy and Close](#).



Choose [Save](#). The [Tenants](#) screen is displayed.

- e. Select [Tenants](#). The [Add](#) tenant screen is displayed.

- f. Select the tenant and then click [Activate](#). After successful processing, at the right side of the tenant, ACTIVE status is displayed

### Note

The registration can be done automatically using the mass registration token. For more information, see [Mass Agent Registration](#).

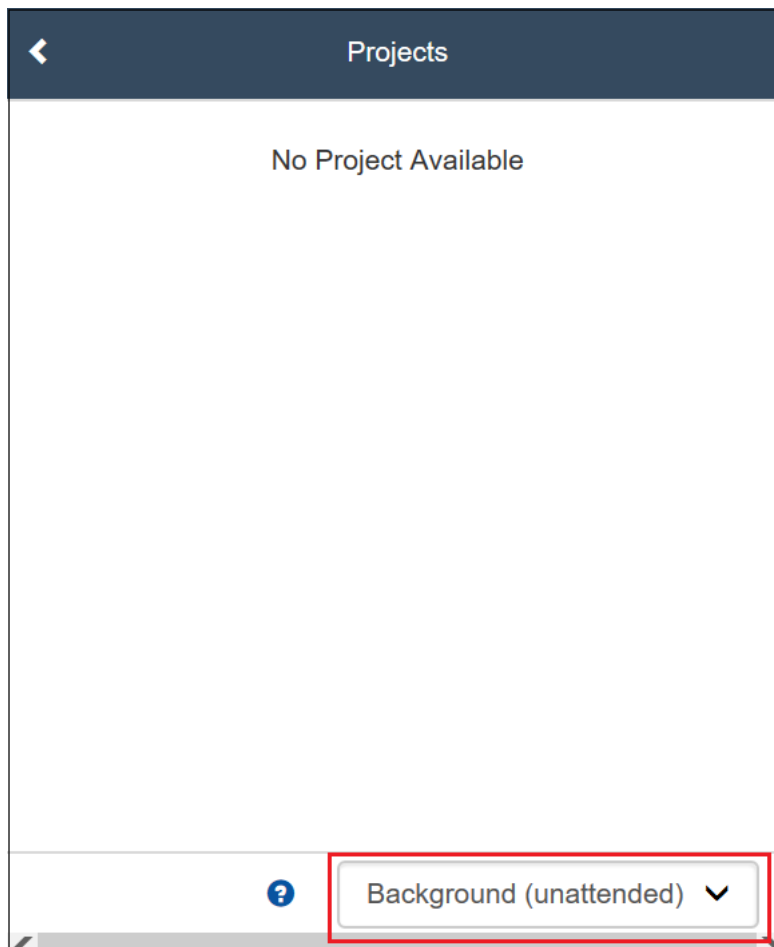
- g. Once the desktop agent is registered, it must be configured to automatically start at Windows logon. To configure, select [Automatically Start at Windows Logon](#) and choose [By opening a windows session with this account](#).

The screenshot shows the 'Settings' window for the Desktop Agent. The 'Language' is set to 'English'. The 'Automatically Start at Windows Logon' option is checked. Under this option, the radio button for 'By opening a windows session with this account:' is selected. Below this, there are input fields for 'Username:' and 'Password:'. At the bottom, there is an unchecked checkbox for 'Configure proxy authentication (advanced):' and a blue 'Save settings' button.

- h. If needed, define the credentials of the account:

- Using CxStoreCred
  - Go to "C:\Program Files (x86)\SAP\Intelligent RPA\Desktop Agent".
  - Launch **CxStoreCred.exe** `<user> <password>`.  
You don't require the domain as Windows Domain is implicit. The password won't be verified in this command-line, you must ensure that the password is properly defined. After one attempt, the machine gets rebooted.
  - If you want to remove use: **CxStoreCred.exe** `/forget`.
  - If you want to update an existing user password, simply enter again the command with the user and new password.

- If you need to set or update a user (or a password) including space, you can use double quote such as **CxStoreCred.exe** "My user" "My Password".  
OR
  - Using the settings from desktop agent. See [Set Windows Password in Desktop Agent \[page 46\]](#).
- Ensure the desktop agent is running in unattended mode:
    - Choose the [Desktop Agent Systray](#) icon.
    - Choose the middle button (projects list).
    - Select the option "[Background \(unattended\)](#)".
  - The desktop agent must be configured to run in unattended mode. To do so, on the [Projects](#) screen, select [Background \(unattended\)](#).



- Check the Windows Local Security Policy:
  - Open `secpol.msc` and check the [Security Options](#) in [Local Policies](#).
  - Interactive logon: [Do not require CTRL+ALT+DEL](#) should be [ENABLED](#).
  - Interactive logon: [Don't display last signed-in](#) should be [ENABLED](#).
- Check the registry.

While the Windows Local Security Policy should properly set up the machine, you can check the Windows registry too for the following values:

- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System]

- "DisableCAD"=dword:00000000
- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System]
  - "dontdisplaylastusername"=dword:00000001

Also, you may need to check whether a third-party software can use SAS (Secure Attention Sequence):

- [HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System]
  - "SoftwareSASGeneration"=dword:00000003

*The value 3 means that both Services and Ease of Access applications can simulate the SAS (Secure Attention Sequence).*

#### 6. **Optional:** Check Windows Settings.

This should apply for machines usually not connected to a domain. However, in some cases, this could happen.

- Go to [Windows Start](#) > [Settings](#).
- Go to [Accounts](#) > [Sign-in options](#).
- Scroll to the [Privacy](#) section and check the following option:  
Use my sign-in info to automatically finish setting up my device after an update or restart must be DISABLED.

#### 7. Your machine is properly set up for working in unattended mode and opens a session automatically.

- If the issue persists, set the agent in unattended mode. Run the automation and close all applications. Restart the remote machine.

If you get a warning blue screen when starting, see the following steps to remove this screen:

- Open the Registry editor in Virtual Machine.
  - Navigate to path  
Computer\HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System.
  - Remove [legalnoticecaption](#) and [legalnoticetext](#) keys.
- Store the Windows credentials for launching SAP Intelligent RPA desktop agent in unattended mode. For more information, see SAP Note [3010368](#).
  - Reboot the machine. Do NOT log into the session after the reboot.

#### Caution

If the Windows credentials are updated, then it is mandatory to manually update them in the Desktop Agent.

- If the administrator logs in the same Windows session for which the credentials are stored, you need to reboot the machine after the operation.
- If the administrator logs into another Windows session, and that the session for which the credentials are stored is closed, you need to reboot the machine after the operation.
- If the administrator logs into another Windows session but the session for which the credentials are stored is left opened, there is no need to reboot the machine.

## Related Information

[Run Unattended Jobs with Activities on Graphic Sessions \[page 24\]](#)

## 1.3 Best Practices when Migrating from Desktop Agent 2 to Desktop Agent 3



The following page will walk you through the steps required to use your Desktop Agent 2 projects with the Desktop Agent 3.

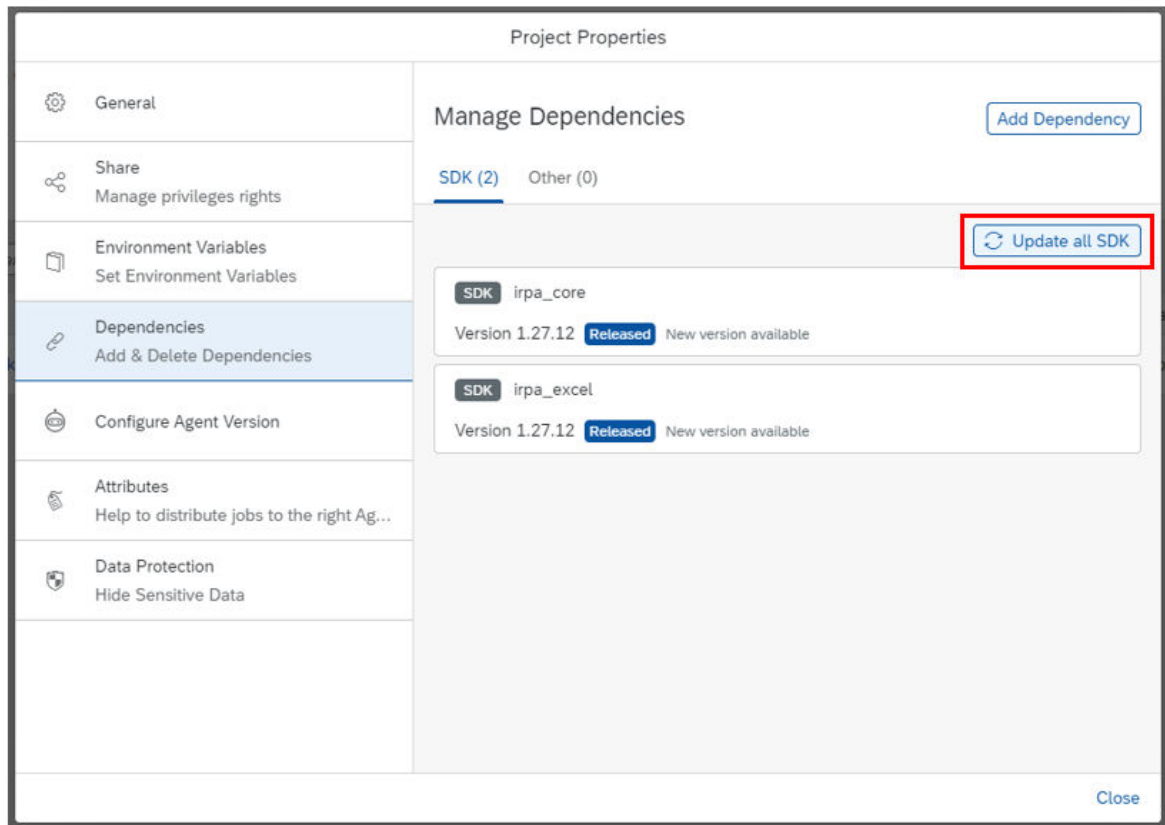
This applies when you have automations that run using the Desktop Agent 2 and you want to run them using the Desktop Agent 3.

### What are the prerequisites?

To use your automations with the Desktop Agent 3, you must update your Core SDK package to version 1.26 at least. If your project contains PDF or Documentation Information Extraction activities, you must update your PDF SDK version to version 1.26 at least as well.

To update your dependencies:

1. In the [Overview](#) page of your project, click  to open the [Project Properties](#).
2. Select the [Dependencies](#) tab.
3. Click  [Update all SDK](#) so that all of your SDK packages are updated to the latest version.
4. **If you're using an RPA tenant:** Generate a new package from your project. For more information, see [Generate a Package](#).  
**If you're using an SPA tenant:** Redeploy your project. For more information, see [Deploy an Automation Project without a Trigger](#).



You can use your project with the Agent 3. Note that even after doing this update your project will remain compatible with the Agent 2.

## Which projects are supported?

You will be able to use your project with the Agent 3 if it meets the following requirements:

- Your project must be a Cloud project.

### **i** Note

If you want to convert a Desktop Studio project to a Cloud project, see [Migrate From Desktop Studio to Cloud Studio](#).

- The Core SDK package version of your project must be updated to 1.26 or higher.
- If your project contains PDF or Document Information Extraction activities, its PDF SDK package must be updated to version 1.26 or higher.
- The Desktop Agent 2 must not be installed on your computer.

### **i** Note

We strongly recommend that you uninstall the Desktop Agent 2 from your computer before installing the Desktop Agent 3. However, if you want to have both Desktop Agents on your computer at the same time, for example if you are testing the migration from Desktop Agent 2 to Desktop Agent 3, note that there are some limitations. For more information about these limitations, see SAP Note [3238616](#).

## **How to know if your migration from the Desktop Agent 2 to the Desktop Agent 3 was successful?**

- Your existing projects continue to work as before.
- When errors occur, the traces are correctly generated and visible in the Cloud.





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