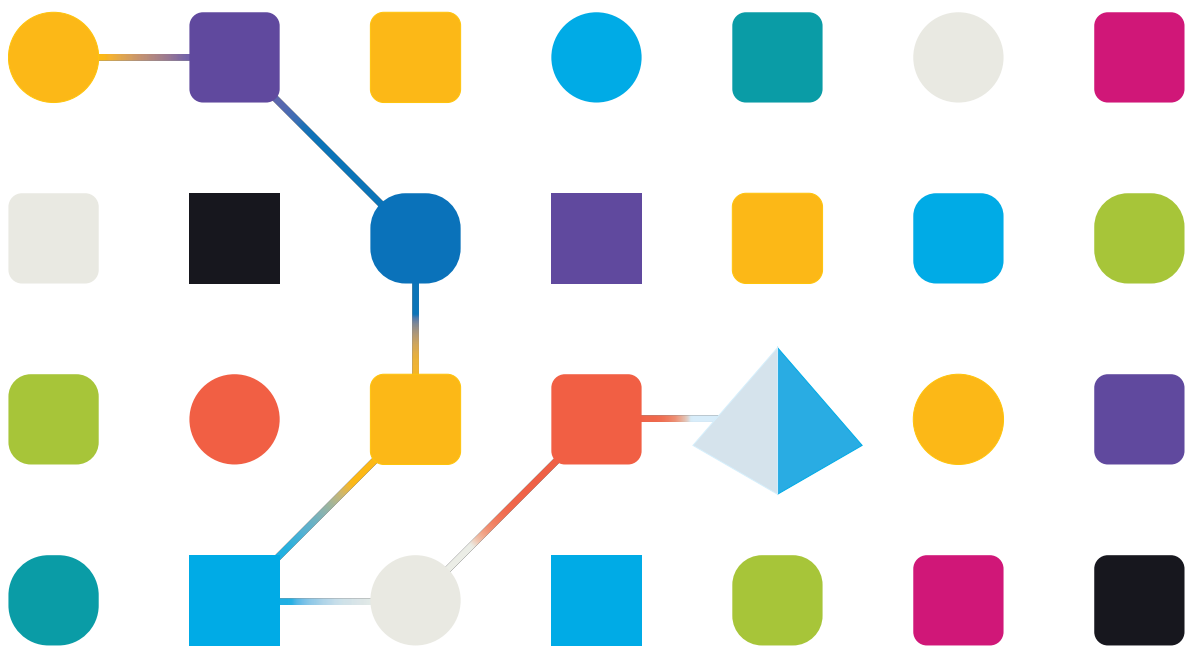




Hub 4.7

Silent Install Guide

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Blue Prism Limited, 2 Cinnamon Park, Crab Lane, Warrington, WA2 0XP, United Kingdom.
Registered in England: Reg. No. 4260035. Tel: +44 370 879 3000. Web: www.blueprism.com

Contents


- Silent installation** 4
 - Intended audience 4
 - Prerequisites 4
- Edit the Silent-Install-Hub.ps1 script file** 5
 - Change the default Hub install destination (optional) 5
 - Change the SQL authentication mode (optional) 5
 - Edit the Hostname 6
 - Get SSL Certificates with PowerShell 7
 - Get SSL Certificates with Microsoft Management Console 7
 - Select and deselect check boxes 8
 - Check RabbitMQ 8
 - Check Customer ID 8
- Start silent install** 9
- Silent uninstall** 10
- Set up the Decision API outside of the Blue Prism Hub silent install process** 11

Silent installation

The silent install process requires the editing and running of the Silent-Install-Hub-4.7.ps1 script in PowerShell to install Hub without the use of the Hub installer wizard.

The Silent-Install-Hub-4.7.ps1 script is available to download from the [Blue Prism Portal](#).

To perform a regular install using the Hub installer wizard, see [Install and configure the web server](#).

 When using the Hub installer wizard there are opportunities to validate information that you have entered into text fields by clicking buttons in the wizard. There is no validation when performing a silent install. Entering any incorrect parameters could result in a broken web server. It is recommended that you take a snapshot of the machine before running the script as a backup.

Intended audience

This guide is for IT professionals competent in:

- Editing and running scripts
- Using PowerShell
- Debugging

Prerequisites

All of the [prerequisites](#) for a regular Blue Prism Hub install are also applicable to a Blue Prism Hub silent install.

For information on installing the required software, see [Install and configure the web server](#).

Edit the Silent-Install-Hub.ps1 script file


The following sections describe how to prepare the Silent-Install-Hub-4.7.ps1 script file for a silent install of Blue Prism Hub.

The Silent-Install-Hub-4.7.ps1 can be opened and edited in an editor such as Notepad or Visual Studio Code. Each section of code in the file contains information that corresponds with a screen on the Hub install wizard.

Most parameters in the Silent-Install-Hub-4.7.ps1 file are straightforward to populate or edit. Each parameter has a name and value, and is displayed in the following format:

```
$msi_params = $msi_params + "NAME=`"Value`" "
```

To edit a parameter, overtype the **value**. It is recommended that you do not change any of the parameter names.

 Remember to save the Silent-Install-Hub-4.7.ps1 after making any changes.

Change the default Hub install destination (optional)

1. To change the default location, enter the following line into the `if (-not $Uninstall) {` section of the silent install script:

```
msi_params = $msi_params + "INSTALLDIR=`"C:\Your folder path\`" "
```

The example below shows this line as the third line in the `if (-not $Uninstall) function:`

```
if (-not $Uninstall) {  
    $msi_params = ""  
  
    $msi_params += "ALLUSERS=`"1`" "  
  
    $msi_params = $msi_params + "INSTALLDIR=`"C:\Your folder path\`" "  
  
    $msi_params = $msi_params + "RMQ_USERNAME=`"rabbituser`" "  
    $msi_params = $msi_params + "RMQ_PASSWORD=`"rabbitpass`" "  
    $msi_params = $msi_params + "RMQ_HOST_NAME=`"localhost`" "
```

2. Change the path (shown as C:\Your folder path\ in the example above) to the required installation location.
3. Save the script.

Change the SQL authentication mode (optional)

The authentication mode can be edited for the following databases:

- Authentication Server (IMS_SQL_SERVER)
- Hub (HUB_SQL_SERVER)
- Audit (AUDIT_SQL_SERVER)
- File (FILE_SQL_SERVER)
- Notification Center (NOTIFICATION_CENTER_SQL_SERVER)
- License Manager (LICENSE_MANAGER_SQL_SERVER)
- Email Service (EMAIL_SERVICE_SQL_SERVER)


Each database section corresponds with a screen of the Hub install wizard.

The following instructions use the Authentication Server database as an example (IMS is a legacy name for Authentication Server).


The following line of code corresponds with the **Authentication Mode** panel in the **Configure Authentication Server SQL connection** screen of the Hub install wizard:

```
$msi_params = $msi_params + "IMS_SQL_SERVER='.'`" `"  
$msi_params = $msi_params + "IMS_SQL_DATABASE_NAME='TmsDB45`" `"  
$msi_params = $msi_params + "IMS_SQL_AUTH_MODE='S`" `" # T  
$msi_params = $msi_params + "IMS_SQL_USERNAME='sa`" `"  
$msi_params = $msi_params + "IMS_SQL_PASSWORD='Pass1234Qq`" `"
```


- To set the authentication mode to **Trusted (Windows Authentication)**, overwrite the value with a **T**.

 If you input **T** for the IMS_SQL_AUTH_MODE value, remove any values for IMS_SQL_USERNAME and IMS_SQL_PASSWORD.

- To set the authentication mode to **Specify username and password (SQL Authentication)**, overwrite the value with an **S**.

 If you input **S** for the IMS_SQL_AUTH_MODE value, populate the IMS_SQL_USERNAME and IMS_SQL_PASSWORD values.

Edit the Hostname

 The default host names provided in script are examples only. Your organization's DNS and Domain structures must be considered when choosing host names in your installation.

The Hostname must be edited for the following websites:

- Authentication Server (IMS_SITE_NAME)
- Hub (HUB_SITE_NAME)
- Audit (AUDIT_SITE_NAME)
- Email Service (EMAIL_SERVICE_SITE_NAME)
- File (FILE_SITE_NAME)
- SignalR (SIGNALR_SITE_NAME)
- License Manager (LICENSE_MANAGER_SITE_NAME)
- Notification Center (NOTIFICATION_CENTER_SITE_NAME)

Each website section corresponds with a screen of the Hub install wizard.

The following instructions use the Authentication Server website as an example (IMS is a legacy name for Authentication Server).

The IMS_HOSTNAME corresponds to the **Authentication Server IIS Setup** screen of the Hub installer wizard.

```
$msi_params = $msi_params + "IMS_SITE_NAME='Blue-Prism-IMS`" `"  
$msi_params = $msi_params + "IMS_HOSTNAME='ims.local`" `"  
$msi_params = $msi_params + "IMS_IIS_PORT='443`" `"  
$msi_params = $msi_params + "IMS_SSL_CERTIFICATE_ID='FD8535F0A0982F68594B4A9`" `"  
$msi_params = $msi_params + "IMS_START_ON_INSTALL='true`" `"
```

To edit the Hostname:

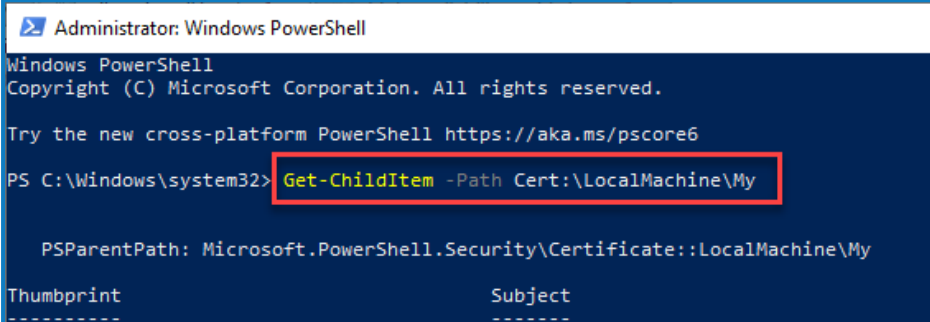
1. Find each `_HOSTNAME` reference in turn and type your hostname in the value. You must enter the hostname in lowercase.

Get SSL Certificates with PowerShell

You can use PowerShell as a fast method of displaying the thumbprints of all certificates in a particular store.

1. Open PowerShell as administrator.
2. Type the following line after `PS C:\Windows\system32>`:

```
Get-ChildItem -Path Cert:\LocalMachine\My
```



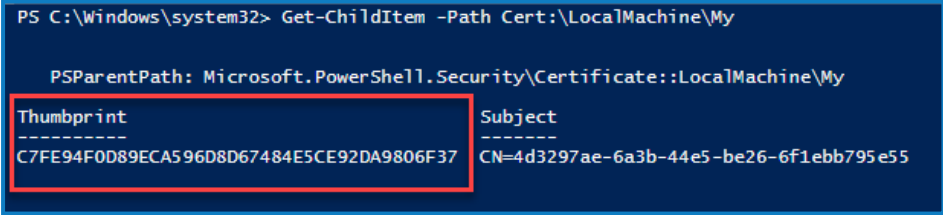
```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6
PS C:\Windows\system32> Get-ChildItem -Path Cert:\LocalMachine\My

PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\My
Thumbprint           Subject
-----
-----
```

3. Press Enter.

The certificate thumbprints display in uppercase with no spaces.



```
PS C:\Windows\system32> Get-ChildItem -Path Cert:\LocalMachine\My

PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\My
Thumbprint           Subject
-----
-----
C7FE94F0D89ECA596D8D67484E5CE92DA9806F37 CN=4d3297ae-6a3b-44e5-be26-6f1ebb795e55
```


Get SSL Certificates with Microsoft Management Console

Any screen in the Hub install wizard requiring a certificate displays a drop-down list for you to select from. When performing a silent install, certificates must be entered manually in a thumbnail format:

To access certificates:

1. In the Windows search bar, type "MMC" and select **MMC Run command**.
The Microsoft Management Console opens.
2. Click **File** then **Add/Remove Snap-ins**.
3. In the Add or Remove Snap-ins dialog, select **Certificates** and click **Add**.
4. In the Certificates snap-in dialog, click **Computer account** and click **Next**.
5. Click **Finish** and then **OK**.
6. Click **Certificates** in the tree view and select either the **Personal > Certificates** folder or the **Web Hosting > Certificates** folder to select the appropriate certificate in the main pane (look in the **Friendly Name** column).

7. Double-click your certificate and in the **Certificate** dialog select **Details** and then **Thumbprint**.

 The script will only work if the certificate thumbprints are uppercase and contain no spaces. Use a text editor to change them to uppercase and delete spaces before pasting into the script file.

8. Copy the thumbprint and paste into the relevant certificate values in the **Silent-Install-Hub-4.7.ps1** file.

Select and deselect check boxes

Values that correspond with check boxes accept “true” or “false” values.

Check RabbitMQ


Ensure the RMQ parameters contain the correct values for your organization. The RabbitMQ parameters are shown below with the default example values in the script.

```
$msi_params = $msi_params + "RMQ_USERNAME=`"rabbituser`" "  
$msi_params = $msi_params + "RMQ_PASSWORD=`"rabbitpass`" "  
$msi_params = $msi_params + "RMQ_HOST_NAME=`"localhost`" "  
$msi_params = $msi_params + "RMQ_PORT=`"5672`" "  
$msi_params = $msi_params + "RMQ_PROTOCOL=`"amqp`" "  
$msi_params = $msi_params + "RMQ_VIRTUAL_HOST=`"``" "  
$msi_params = $msi_params + "RMQ_CERTIFICATE_ID=`"``" "
```

Check Customer ID

Ensure the HUB_CUSTOMER_ID parameter contains the correct value. If this value is incorrect, you will not be able to license any plugins without some manual re-configuration.


Start silent install

 Remember to save the Silent-Install-Hub-4.7.ps1 after making any changes.

Before starting the install, ensure that the Silent-Install-Hub-4.7.ps1 script is in the same directory as the Blue Prism Hub.msi file, or you will need to specify the full path to the MSI in step three below.

1. In File Explorer, navigate to the location of the silent install script.
2. Click **File** and select **Open Windows PowerShell > Open Windows PowerShell as administrator**.
The PowerShell screen displays.
3. Type the required command:

- To install Hub including Decision, type `.\Silent-Install-Hub-4.7.ps1`
- To install Hub without Decision, type `.\Silent-Install-Hub-4.7.ps1 -SkipDecision`

 If the silent install script is in a different location to the MSI, also use the `-InstallerFolder` switch and enter the installer location, for example: `.\Silent-Install-Hub-4.7.ps1 -InstallerFolder C:\Downloads\`


4. Press Enter.
5. If a warning displays, type **R** for run once.

The Hub installer will run and Hub 4.7 will be available once installed. If the install fails an error code displays in PowerShell. It is recommended that you look in the log to find and fix the issue.

Silent uninstall


Before starting the uninstall, ensure that the Silent-Install-Hub-4.7.ps1 script is in the same directory as the Blue Prism Hub.msi file, or you will need to specify the full path to the MSI in step three below.

1. In File Explorer, navigate to the location of the silent install script.
2. Click **File** and select **Open Windows PowerShell > Open Windows PowerShell as administrator**.
The PowerShell screen displays.
3. Type `.\Silent-Install-Hub-4.7.ps1 -Uninstall` and press Enter.

 If the silent install script is in a different location to the msi, also use the `-InstallerFolder` switch and enter the installer location, for example: `.\Silent-Install-Hub-4.7.ps1 -Uninstall -InstallerFolder C:\Downloads\`

4. If a warning displays, type **R** for run once.

Hub will be uninstalled. If the uninstall fails an error code displays in PowerShell. It is recommended that you look in the log for more information.

 Log files should be deleted after successfully uninstalling for security reasons.

Set up the Decision API outside of the Blue Prism Hub silent install process

The following information explains how to set up the API outside of the installer if Decision was not initially installed:

1. Open the Hub appsettings.json in an editor such as Notepad or Visual Studio Code.
2. Open the Silent-install-Hub-4.7.ps1 file and copy the BLUE_PRISM_DECISION_URL value.

```
Silent-Install-Hub-4.5.ps1 X
118
119 # new DECISION configs
120 if ($SkipDecision) {
121     $msi_params = $msi_params + "BLUE_PRISM_DECISION_SKIPPED='true' "
122 }
123 else {
124     $msi_params = $msi_params + "BLUE_PRISM_DECISION_SKIPPED='false' "
125
126     $msi_params = $msi_params + "BLUE_PRISM_DECISION_URL='https://localhost' "
127     $msi_params = $msi_params + "BLUE_PRISM_DECISION_CERTIFICATE_ID='FD8535F0A0982F68' "
128
129     $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_SERVER='.' "
130     $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_DATABASE_NAME='BluePrismDeci
131     $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_AUTH_MODE='s' "
```

3. Paste the BLUE_PRISM_DECISION_URL value over the "v1" value in the "DruidModelServices" section of the Hub appsettings.json file.

```
},
"BluePrismDecisionSettings": {
  "Certificate": {
    "CertificateThumbprint": "#{BluePrismDecision.CertificateThumbprint}#"
  },
  "DruidModelServices": {
    "v1": "#{BluePrismDecision.ServiceUrl}#"
  }
},
```

4. Copy the BLUE_PRISM_DECISION_CERTIFICATE_ID value from the Silent-Install-Hub-4.7.ps1

```
# new DECISION configs
if ($SkipDecision) {
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SKIPPED='true' "
}
else {
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SKIPPED='false' "

    $msi_params = $msi_params + "BLUE_PRISM_DECISION_URL='https://localhost' "
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_CERTIFICATE_ID='FD8535F0A0982F68594B4A' "

    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_SERVER='.' "
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_DATABASE_NAME='BluePrismDecisionDB4
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_AUTH_MODE='s' "
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_USERNAME='sa' "
    $msi_params = $msi_params + "BLUE_PRISM_DECISION_SQL_PASSWORD='Pass1234Qq' "
```

5. Paste the the BLUE_PRISM_DECISION_CERTIFICATE_ID value over the "CertificateThumbprint" value in the "BluePrismDecisionSettings" section of the Hub appsettings.json file.

```
},
"BluePrismDecisionSettings": {
  "Certificate": {
    "CertificateThumbprint": "#{BluePrismDecision.CertificateThumbprint}#"
  },
},
```

6. In the Hub appsettings.json file, if the "KeyStorageDirectory" value is not encrypted, update the filepath to the data protection keys. If this value is encrypted, use the [Blue Prism Protector Tool](#) to decrypt the value and update the filepath. Encrypt again if necessary.

```
},
"DataProtection": {
  "KeyStorageDirectory": "#{DataProtectionKeysPath}#"
},
```

7. In the Hub appsettings.json file, if the "ConnectionString" value is not encrypted (in the "BluePrismDecision" section), update the Blue Prism Decision connection string. If this value is encrypted, use the [Blue Prism Protector Tool](#) to decrypt the value and update the connection string. Encrypt again if necessary.

```
    },  
    "BluePrismDecision": {  
      "ConnectionName": "BluePrismDecision",  
      "ServerName": "",  
      "DatabaseName": "",  
      "ConnectionString": "#{DbConnectionString.BluePrismDecision}#",  
      "UserId": "",  
      "Password": "",  
      "Timeout": 90,  
      "AuthType": 0,  
      "CurrentPromotionEnvironments": []  
    }  
  }  
}
```

8. Save the appsettings.json file.

You can now [set up Decision](#) within Hub. The database is created upon installation.