

drops

Installation Guide

DROPS

Version 24.0



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Table 1: Contact DROPS Software

Preface

Document Purpose

This document is intended to guide users through the manual and remote installation processes for all of the entities required for the DROPS environment.

This document does not cover the SYSchange or ARCAD installation processes.

This document lists the prerequisite and recommended software and hardware for all of the operating systems the various DROPS applications run on.

This document is intended to guide DROPS Server Administrators through admin-level server management procedures.

Intended Audience

This document is intended for System Admins, DROPS Administrators and/or the person in charge of installing DROPS software managing the DROPS Server.

This document is intended for the following DROPS users, among others:

- administrators
- system architects
- network admins

Related Documentation

Related Documentation
ARCAD SSL Configuration Guide
DROPS Configuration Guide
DROPS Datasheet
DROPS Installation Guide
DROPS Release Notes
DROPS Script Reference Guide
DROPS User Guide
DROPS' Public REST API Operational Guide
SYSchange User's Guide
ARCAD Installation Documentation

Table 2: Related Documentation

Publication Record

Unless stated otherwise, all content is valid for the most current version of DROPS listed as well as every subsequent version.

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Table 3: DROPS Installation Guide Publication Record

Contents

Contact DROPS Software	3
Preface	4
Contents	6

Installation

1 Installing the DROPS Server	11
1.1 Prerequisites.....	11
1.2 Windows.....	11
1.2.1 Install.....	11
1.2.2 Update.....	13
1.2.3 Uninstall.....	14
1.3 Linux.....	14
1.3.1 Install.....	15
1.3.2 Update.....	16
1.3.3 Uninstall.....	17
1.4 IBM i.....	18
1.4.1 Install.....	18
1.4.2 Update.....	19
1.4.3 Uninstall.....	21
2 Installing the DROPS Studio	22
2.1 Prerequisites.....	22
2.2 Windows.....	22
2.2.1 Install.....	22
2.2.2 Update.....	23
2.2.3 Uninstall.....	24
2.3 Linux.....	24
2.3.1 Install.....	25
2.3.2 Update.....	25
2.3.3 Uninstall.....	25
3 Installing the DROPS Web Server	26
3.1 Prerequisites.....	26
3.2 Windows.....	26
3.2.1 Install.....	26
3.2.2 Update.....	28
3.2.3 Uninstall.....	28
3.3 Linux.....	29
3.3.1 Install.....	29
3.3.2 Update.....	30

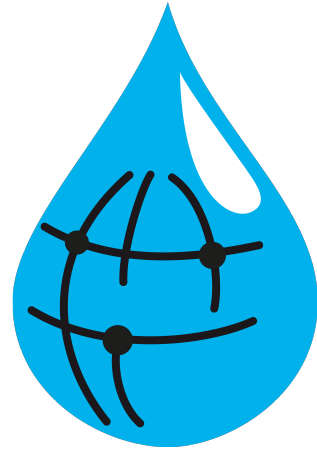
3.3.3 Uninstall	30
3.4 IBM i	31
3.4.1 Install	31
3.4.2 Update	32
3.4.3 Uninstall	32
4 Installing the DROPS Agent	34
4.1 Prerequisites	34
4.2 Managing the DROPS Agent manually	34
4.2.1 Windows	34
4.2.1.1 Install	35
4.2.1.2 Update	36
4.2.1.3 Uninstall	37
4.2.2 Linux	37
4.2.2.1 Install	37
4.2.2.2 Update	39
4.2.2.3 Uninstall	39
4.2.3 IBM i	40
4.2.3.1 Install	40
4.2.3.2 Update	41
4.2.3.3 Uninstall	42
4.3 Managing the DROPS Agent remotely from the DROPS Studio	43
4.3.1 Prerequisites	43
4.3.2 Install and Update	44
4.3.3 Viewing the remote management logs	46
4.3.4 Uninstall	47
4.3.4.1 Uninstalling from multiple target systems	47
4.3.4.2 Uninstalling from one target system	48
5 Installing the DROPS for Jenkins plug-in	49
5.1 Prerequisites	49
5.2 Install the DROPS for Jenkins plug-in	49
5.3 Uninstall the DROPS for Jenkins plug-in	49
6 Installing the DROPS for JIRA add-on	50
6.1 Prerequisites	50
6.2 Install the DROPS for JIRA add-on	50
6.3 Uninstall the DROPS for JIRA add-on	51

System Requirements

7 System requirements for the DROPS Server	53
7.1 Windows	53
7.1.1 Hardware requirements	53
7.1.2 Software requirements	53

7.1.3 Remote Desktop Services	54
7.1.4 Host name resolution	54
7.1.5 Users, Groups and Environments for the DROPS Server	54
7.2 Linux	55
7.2.1 Hardware requirements	55
7.2.2 Software requirements	55
7.2.3 Host name resolution	56
7.2.4 Users, Groups and Environments for the DROPS Server	56
7.3 IBM i	56
7.3.1 Hardware requirements	56
7.3.2 Software requirements	57
7.3.3 Host name resolution	57
7.3.4 Users for the	57
8 System requirements for the DROPS Agent	59
8.1 Windows	59
8.1.1 Hardware requirements	59
8.1.2 Software requirements	59
8.1.3 Remote Desktop Services	61
8.1.4 Host name resolution	61
8.1.5 Users, Groups and Environments for the DROPS Agent	61
8.2 Linux	61
8.2.1 Hardware requirements	61
8.2.2 Software requirements	62
8.2.3 Host name resolution	62
8.2.4 Users, Groups and Environments for the DROPS Agent	63
8.3 IBM i	63
8.3.1 Hardware requirements	63
8.3.2 Software requirements	63
8.3.3 Host name resolution	64
8.3.4 Users for the	64
9 System requirements for the DROPS Studio	65
9.1 Windows	65
9.1.1 Hardware requirements	65
9.1.2 Software requirements	65
9.1.3 Remote Desktop Services	66
9.1.4 Users, Groups and Environments for the DROPS Studio	66
9.2 Linux	66
9.2.1 Hardware requirements	67
9.2.2 Software requirements	67
9.2.3 Remote Desktop Services	67
9.2.4 Users, Groups and Environments for the DROPS Studio	67

10 System requirements for the DROPS web app	69
11 Other system requirements	70
11.1 DROPS for ARCAD.....	70
12 Disk space requirements	71
12.1 DROPS Server.....	71
12.2 DROPS Agent.....	72



drops

Installation

1 Installing the DROPS Server

The DROPS Server is an independent AFS server on which DROPS creates and stores specialized repositories to be used in your deployment process. It is an OSGi™ application server which hosts your references on an H2 database by default. The server's default port number is 5254.

It exploits REST web services in order to communicate with other applications in the system, for instance to create a continuous deployment process with Jenkins, and can be installed on Linux, Windows and IBM i. A scheduler is incorporated for planning and orchestrating the deployments.

The DROPS Server conforms to your company's security policies, authentication and delegation mechanisms and to your method(s) of assigning roles. It delegates process execution to the DROPS Agent which actually performs the action(s) requested on your target machine(s) while respecting the project architecture you describe.



Reference

For more information about configuring the DROPS Server, refer to the *DROPS Configuration Guide*.

1.1 Prerequisites



Reference

For complete details about the technical prerequisites for DROPS, refer to the *DROPS System Requirements*.

1.2 Windows

The DROPS Server runs as a Windows service.

1.2.1 Install

The installation process takes approximately 5 minutes. It is a simple procedure similar to most other Windows applications. For trouble-free installation, it is recommended that you close all active Windows applications before beginning the installation.



Note

If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

Follow the subsequent steps to install the DROPS Server on Windows.

Step 1 Copy the .exe file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Confirm the installation location.

The **Select Destination Location** screen displays the default location where DROPS Software elements will be installed. If you prefer to install the software elements in a different location, either type in the location, or click **Browse...** to navigate to and select the alternate location.

The default root location is `C:\Program files\DROPS Solutions\`.

A sub-folder for each DROPS Software application you install will be created at this location.

 **Warning!**

The access rights to this folder can then be restricted to the user used to run the Server's Windows service.

Step 5 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 6 Define the TCP ports to use. **Important!**

The ports defined here will be used to configure the connection.

Press **Enter/Next** to use the default ports.

The DROPS Server is an independent AFS server with an embedded H2 database.

The DROPS Server's default HTTP port is 5254, and the default HTTPS port is 52540.

To disable a port, enter 0 (zero) when asked for the port number.

 **Important!**

If you are using other ARCAD Group products on the same host, it is recommended to use the default ports to avoid any conflicts with other servers.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 7 Select the Windows user account.

The DROPS Server runs as a Windows service. Select the user account that will be used to manage the service.

By default, the local system account is selected. If you do not want to use that account, you can select any user account with enough privileges to run a Windows service, and have a read and write access to the folder where DROPS is installed.

Step 8 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.**Step 9** Verify the Windows Service is running.

The final screen of the installation process enables you to automatically open the Local Services Management Console. If the **Open Windows service** checkbox is selected, the **Services** window opens after clicking **Finish**. This window enables you to verify that its status is set to "Started".

Result The DROPS Server is installed and available for use.

1.2.2 Update

Warning!

If you are upgrading from v2 or v3 to v4.0, there are additional steps to take. [Contact DROPS Software](#)

Updating the DROPS Server is similar to the installation process in that it is launched via the installation .exe. However, after the update is complete, the database must also be updated.

Note

If you are updating without uninstalling, the majority of the installation preferences are saved and automatically reused.

To change the saved values, uninstall completely and define new values by reinstalling from scratch.

Follow the subsequent steps to update the DROPS Server on Windows.

Step 1 Copy the .exe file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click < **Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.


Step 5 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.

Step 6 Verify the Windows Service is running.

The final screen of the installation process enables you to automatically open the Local Services Management Console. If the **Open Windows service** checkbox is selected, the **Services** window opens after clicking **Finish**. This window enables you to verify that its status is set to "Started".

Result The DROPS Server is updated and available for use.

After any server update, you need to update the server's integrated database, to ensure that the database is fully compatible with the updated server.

 **Important!**
This step must be done **before starting the server service**.

To update the database, run the database update script supplied with the installation. The **dbupdate** file located in the **.\tools** folder.

1.2.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Server from Windows.

Step 1 Log into the system with an administrator account.

Step 2 Either launch the *uninstall.exe* located in the installation directory

- or -

Open **Add or Remove Programs** (*Start > Control Panel*), find the module in the list of installed software and select **Uninstall**.

Step 3 Remove any remaining files in the installation path and remove any remaining configuration files in the user directory.

Result The DROPS Server is completely uninstalled.


1.3 Linux


1.3.1 Install

Follow the subsequent steps to install the DROPS Server on Linux.

Step 1 Transfer the `.tar.gz` to the `/tmp` directory on the target system.

Step 2 Open a terminal session and go to the installation directory.

 **Example**
`cd /opt`

 **Note**
By default, the server is intended to be installed in the `/opt` directory. If you install it in a different directory, you will have to update the server's scripts (see [Step 7 Edit the scripts.](#)).

Step 3 Execute the following command to extract the `tar.gz` archive into the current directory:


```
tar xzf DROPS-Server-[version number]_Linux.tar.gz
```

Step 4 [Optional] If you need to change the listening port(s) for the server, you must do so now.

The DROPS Server is an independent AFS server with an embedded H2 database.

The DROPS Server's default HTTP port is 5254, and the default HTTPS port is 52540.

To disable a port, enter 0 (zero) when asked for the port number.

 **Important!**
If you are using other ARCAD Group products on the same host, it is recommended to use the default ports to avoid any conflicts with other servers.

To change the ports, open the `configuration/com.arcadsoftware.server.restful.cfg` in a text editor and change the following properties:

- `port=<new HTTP port number> -or- <0>` (zero) to disable the HTTP port
- `portssl=<new HTTPS port number> -or- <0>` (zero) to disable the HTTPS port

Step 5 Create a specific user and group to run the server's process with the command:

```
adduser --system --no-create-home --group name
```

Step 6 Change the ownership of the installation directory to give it to the user and group that will run DROPS Server:

```
chown username:groupname -R /opt/DROPS-Server
```

Step 7 Edit the scripts.

Open the following scripts in a text editor to set the variables to match your execution environment:

- *bin/DROPS-Server*
 - Line 8: set **AFS_HOME** to the installation directory if it was not installed in */opt/...* by default.
 - Line 12: set **AFS_USER** to the new user.
- *bin/DROPS-Server.service*
 - Lines 8-14: update the paths so they match the installation directory.
 - Line 16: set the user to the new user.
 - Line 17: set the group to be the new user's or any group of your choice.
- configuration files in the *configuration* folder

Step 8 [*Optional*] Execute the following commands to install DROPS Server as a systemd service:

```
cd /etc/systemd/system
systemctl link /opt/DROPS-Server/bin/DROPS-Server.service
systemctl enable DROPS-Server
systemctl start DROPS-Server
```

Result DROPS Server is installed and available for use.

Note

The DROPS Server embeds, in the Linux packaging, the runtime of an open-source version of Java (OpenJDK 1.8). Depending on the needs of the host machine, this runtime can be replaced by an equivalent version managed by the operating system. To do so, delete the **jre** folder located in the server installation folder.

1.3.2 Update

Warning!

If you are upgrading from v2 or v3 to v4.0, there are additional steps to take. [Contact DROPS Software](#)

After the DROPS Server is updated, the database must also be updated.

Follow the subsequent steps to update the DROPS Server on Linux.

Step 1 Transfer the updated *DROPS-Server.tar.gz* and the *DROPS-Server-[version number]_Linux_Update.sh* script to the */tmp* directory on the target system.

Step 2 Open a terminal session and go into the */tmp* directory: `cd /tmp`

Step 3 Mark the *_Update.sh* as being executable:

```
chmod +x DROPS-Server-[version number]_Linux_Update.sh
```

Step 4 Open the *_Update.sh* with a text editor and make the following changes:

- Line 9: uncomment and set the **AFS_HOME** variable to the installation directory.
- Line 10: change the **AFS_URL** to match the address and port the server is listening on.
- Line 12: change the **AFS_OSUSER** to the user running the server.
- Line 13: change the **AFS_OSGROUP** to the group running the server.
- Lines 16-19: uncomment the line corresponding to the way the server must be started.
- Lines 22-25: uncomment the line corresponding to the way the server must be stopped.

Step 5 Run the `_Update.sh`:

```
./DROPS-Server-[version number]_Linux_Update.sh
```

Note

You can keep the `_Update.sh` for future updates, unless stated otherwise in the release notes.

Result DROPS Server is updated and available for use.

After any server update, you need to update the server's integrated database, to ensure that the database is fully compatible with the updated server.

Important!

This step must be done **before starting the server service**.

To update the database, run the database update script supplied with the installation. The **dbupdate** file located in the `.\tools` folder.

1.3.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Server on Linux.

Step 1 Stop the service using the service manager of your Linux distribution or use the script provided.

Example

Service command:

```
systemctl stop DROPS-Server
```

Script command:

```
/opt/DROPS-Server/bin/DROPS-Server stop
```

Step 2 Uninstall the service, if any, using the tools from your Linux distribution.

Example


```
systemctl disable DROPS-Server
```

```
rm /etc/systemd/system/DROPS-Server.service
```

```
systemctl daemon-reload
```

```
systemctl reset-failed
```

Step 3 Remove the software from the installation directory.


 **Example**
`rm -rf /opt/DROPS-Server`

Step 4 Remove any remaining files based on the server's configuration.

Result The DROPS Server is completely uninstalled.

1.4 IBM i

The DROPS Server can be installed and updated manually on IBM i or, depending on your security policy, remotely from any machine running Java.

 **Note**
If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

1.4.1 Install


Follow the subsequent steps to install the DROPS Server on IBM i.

Step 1 Copy the installation *jar* file to any directory (such as the */tmp*) on the target IBM i IFS or the machine that will orchestrate the remote installation.

Step 2 Launch the installation setup.

If you are installing manually on IBM i:

1. Open a session on the target IBM i using the QSECOFR profile or an equivalent.
2. Open a command line interpreter using the command QSH. Reach the location where you have copied your installation file.
3. In the command line interpreter, launch the setup using the installation command.

 **Example**
`java -jar Setup_DROPS-Server-x.x.x._IBM i.jar`

If you are installing remotely from Windows or Linux:

1. Launch the setup from the location on the machine orchestrating the installation using the command above. This will open a prompt asking for the **Remote IBM i name/address**.
2. Enter the name/address of the target IBM i.
3. Login using the QSECOFR profile or an equivalent.


Step 3 Define the **AFS Starter Installation library** and iASP which will contain the AFS Starter (a utility program used to start the DROPS Server on IBM i).

By default they are **AFSSTARTER** and ***SYSBAS**.

Step 4 Define the installation location.

 **Example**
/HOME/...

Step 5 Define the TCP ports to use.


 **Important!**
The ports defined here will be used to configure the connection.

Press **Enter/Next** to use the default ports.

The DROPS Server is an independent AFS server with an embedded H2 database.

The DROPS Server's default HTTP port is 5254, and the default HTTPS port is 52540.


To disable a port, enter 0 (zero) when asked for the port number.

 **Important!**
If you are using other ARCAD Group products on the same host, it is recommended to use the default ports to avoid any conflicts with other servers.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 6 Define the **Job user** that will run the DROPS Server.

Step 7 Define the job queue library (***LIBL**) then the job queue (**JOBQ**) in which the job will be submitted.


 **Example**
Job queue library [ARCAD_SYS]
Job queue [ARCAD_CTL]

Step 8 Define the name of the AFS instance to register in the AFSSTARTER.

By default it is **PRODUCT-AFS-ID**.

Result The DROPS Server is installed and available for use.

1.4.2 Update

 **Warning!**
If you are upgrading from v2 or v3 to v4.0, there are additional steps to take. [Contact DROPS Software](#)

Updating the DROPS Server is similar to the installation process in that it is launched via the installation *.jar* file. However, after the update is complete, the database must also be updated.

Note

If you are updating without uninstalling, the majority of the installation preferences are saved and automatically reused.

To change the saved values, uninstall completely and define new values by reinstalling from scratch.

Follow the subsequent steps to update the DROPS Server on IBM i.

Step 1 Copy the installation *jar* file to any directory (such as the */tmp*) on the target IBM i IFS or the machine that will orchestrate the remote installation.

Step 2 Launch the installation setup.

If you are installing manually on IBM i:

1. Open a session on the target IBM i using the QSECOFR profile or an equivalent.
2. Open a command line interpreter using the command QSH. Reach the location where you have copied your installation file.
3. In the command line interpreter, launch the setup using the installation command.

Example

```
java -jar Setup_DROPS-Server-x.x.x._IBM i.jar
```

If you are installing remotely from Windows or Linux:

1. Launch the setup from the location on the machine orchestrating the installation using the command above. This will open a prompt asking for the **Remote IBM i name/address**.
2. Enter the name/address of the target IBM i.
3. Login using the QSECOFR profile or an equivalent.

Step 3 Define the installation location.

Example

```
/HOME/...
```

Point to original installation location to use the same settings defined for the original installation (ports, installation location, service user).

Result The DROPS Server is updated and available for use.

After any server update, you need to update the server's integrated database, to ensure that the database is fully compatible with the updated server.

Important!

This step must be done **before starting the server service**.

To update the database, run the database update script supplied with the installation. The **dbupdate** file located in the **.\tools** folder.

1.4.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Server on IBM i.

Step 1 Open a session on the IBM i where the server is installed, using the QSECOFR profile or an equivalent.

Step 2 Stop and delete the service using the following commands:

```
ADDLIB <AFSSTARTER LIBRARY NAME>  
ENDAFSSVR DROPSRM  
DLTAFSSVR DROPSRM DELETE(*YES)
```

Result The DROPS Server is completely uninstalled.

2 Installing the DROPS Studio

The DROPS Studio can be installed on Windows or Linux.



Reference

For more information about managing the high-level configuration for the DROPS Studio, refer to the *DROPS Configuration Guide*.

For more information about using the DROPS Studio, refer to the *DROPS User Guide*.

2.1 Prerequisites



Reference

For complete details about the technical prerequisites for DROPS, refer to the *DROPS System Requirements*.

2.2 Windows

2.2.1 Install

The installation process takes approximately 5 minutes. It is a simple procedure similar to most other Windows applications. For trouble-free installation, it is recommended that you close all active Windows applications before beginning the installation.



Note

If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

Follow the subsequent steps to install the DROPS Studio on Windows.

Step 1 Copy the .exe file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Confirm the installation location.

The **Select Destination Location** screen displays the default location where DROPS Software elements will be installed. If you prefer to install the software elements in a different location, either type in the location, or click **Browse...** to navigate to and select the alternate location.

The default root location is `C:\Program files\DROPS Solutions\`.

A sub-folder for each DROPS Software application you install will be created at this location.

Warning!

The access rights to this folder can then be restricted to the user used to run the Server's Windows service.

Step 5 Confirm the program's shortcut location.

The **Select Start Menu Folder** screen displays the default location where a shortcut will be created in your computer's Start menu. If you prefer to install the shortcut under a different group, either type the location here, or click **Browse...** to navigate to and select the alternate location.

The default root folder is `DROPS Solutions\`.

If you do not want to create a start menu folder, select the **Don't create a Start Menu folder** checkbox.

Step 6 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 7 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.

Check the **Launch** check box to automatically open the DROPS Studio.

Result The DROPS Studio is installed and available for use.

2.2.2 Update

Updating the DROPS Studio is similar to the installation process in that it is launched via the installation `.exe`.

Note

If you are updating without uninstalling, the majority of the user-defined configurations in the studio are saved in the user directory (the default is: `C:\Users\<user>\arcad\<module>`).

Follow the subsequent steps to update the DROPS Studio on Windows.

Step 1 Copy the `.exe` file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 5 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.

Check the **Launch** check box to automatically open the DROPS Studio.

Result The DROPS Studio is updated and available for use.

2.2.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Studio on Windows.

Step 1 Log into the system with an administrator account.

Step 2 Either launch the `uninstall.exe` located in the installation directory

- or -

Open **Add or Remove Programs** (*Start > Control Panel*), find the module in the list of installed software and select **Uninstall**.

Step 3 Remove any remaining files in the installation path and remove any remaining configuration files in the user directory.

Result The DROPS Studio is completely uninstalled.

2.3 Linux

2.3.1 Install

Follow the subsequent steps to install the DROPS Studio on Linux.

Step 1 Transfer the `.tar.gz` to the `/tmp` directory on the target system.

Step 2 Open a terminal session and go to the installation directory: `cd /opt`

Step 3 Execute the following command to extract the `tar.gz` archive into the current directory:

```
tar xzf Drops-Studio.tar.gz
```

Step 4 Change the ownership of the installation directory to give it to the user and group that will run the DROPS Studio:

```
chown username:groupname -R /opt/Drops-Studio
```

Result The DROPS Studio is installed and available for use.

2.3.2 Update

Follow the subsequent steps to update the DROPS Studio on Linux.

Step 1 Completely delete the Drops-Studio directory:

```
rm -rf /opt/Drops-Studio
```

Step 2 Install the DROPS Studio from scratch following the installation instructions.

Result The DROPS Studio is updated and available for use.

2.3.3 Uninstall

To uninstall the DROPS Studio on Linux, remove the software from the installation directory.

```
rm -rf /opt/Drops-Studio
```

The DROPS Studio is completely uninstalled.

3 Installing the DROPS Web Server

The web server is a Web Application Container (Jetty) (*IBM i, Windows and Linux*), which is a J2EE Application Server. It grants access to the web application. The web server can be added to an existing internal web server you may have, such as Tomcat, or you can use the lightweight jetty that DROPS Software delivers to install autonomously.

Important!

If you already have a Web Application Container running on the machine (a Jetty or Tomcat), it is not necessary to install the DROPS Web Server to access the DROPS web app. You can install the for the DROPS web app manually using your current Web Application Container. To do this, copy the `.war` into the folder `C:\Program Files\ARCAD Solutions\Jetty\webapps`.

3.1 Prerequisites

Reference

For complete details about the technical prerequisites for DROPS, refer to the *DROPS System Requirements*.

3.2 Windows

The DROPS Web Server runs as a Windows service.

3.2.1 Install

The installation process takes approximately 5 minutes. It is a simple procedure similar to most other Windows applications. For trouble-free installation, it is recommended that you close all active Windows applications before beginning the installation.

Note

If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

Follow the subsequent steps to install the DROPS Web Server on Windows.

- Step 1** Copy the `.exe` file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.
- Step 2** From the **Select Setup Language** window, select the language for the installation.
- Step 3** Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Confirm the installation location.

The **Select Destination Location** screen displays the default location where DROPS Software elements will be installed. If you prefer to install the software elements in a different location, either type in the location, or click **Browse...** to navigate to and select the alternate location.

The default root location is `C:\Program files\ARCAD Solutions\Jetty`.

A sub-folder for each DROPS Software application you install will be created at this location.

 **Warning!**

The access rights to this folder can then be restricted to the user used to run the Server's Windows service.

Step 5 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 6 Define the TCP ports to use.

 **Important!**

The ports defined here will be part of the URL in your browser when connecting to the DROPS web app.

 **Note**

If the DROPS Web Server is behind a proxy or a load balancer, the **Virtual Host URL** field will set the value of the "X-Forwarded-Host" HTTP header, enabling you to identify the original host requested by the client.

Press **Enter/Next** to use the default ports.

The DROPS Web Server's default HTTP port is 8080, and the default HTTPS port is 8443.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 7 Select the Windows user account.

The DROPS Web Server runs as a Windows service. Select the user account that will be used to manage the service.

By default, the local system account is selected. If you do not want to use that account, you can select any user account with enough privileges to run a Windows service, and have a read and write access to the folder where DROPS is installed.

Step 8 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.

Step 9 Verify the Windows Service is running.

The final screen of the installation process enables you to automatically open the Local Services Management Console. If the **Open Windows service** checkbox is selected, the **Services** window opens after clicking **Finish**. This window enables you to verify that its status is set to "Started".

Result The DROPS Web Server is installed and available for use.



Reference

For more information about managing the DROPS web app, refer to the *DROPS Configuration Guide*.

3.2.2 Update

The Jetty that runs the DROPS Web Server can be updated in two ways. You can manually replace the *.war* file or launch an updated installation package. All of the steps below are handled automatically if you update the DROPS Web Server by reinstalling it.

Follow the subsequent steps to manually update the DROPS Web Server on Windows.

Step 1 Stop the Jetty.

Step 2 Replace the exiting *.war* in the Jetty's **/webapps** folder. The replacement *.war* can be found in the installation package.

Step 3 Clean the Jetty work directory from older installed version.

Step 4 Restart the Jetty.

Result The DROPS Web Server is updated and ready for use.

3.2.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Web Server from Windows.

Step 1 Log into the system with an administrator account.

Step 2 Either launch the *uninstall.exe* located in the installation directory

- or -

Open **Add or Remove Programs** (*Start > Control Panel*), find the module in the list of installed software and select **Uninstall**.

Step 3 Remove any remaining files in the installation path and remove any remaining configuration files in the user directory.

Result The DROPS Web Server is completely uninstalled.

3.3 Linux


3.3.1 Install

Follow the subsequent steps to install DROPS Web Server on Linux.

Step 1 Transfer the `.tar.gz` to the `/tmp` directory on the target system.

Step 2 Open a terminal session and go to the installation directory.

 **Example**
`cd /opt`

 **Note**
By default, the server is intended to be installed in the `/opt` directory. If you install it in a different directory, you will have to update the server's scripts (see [Step 7 Edit the scripts.](#)).

Step 3 Execute the following command to extract the `tar.gz` archive into the current directory:

```
tar xzf jettyJettyWebServer-[version number].tar.gz
```

Step 4 [*Optional*] If you need to change the listening port(s) for the server, you must do so now.

The DROPS Web Server's default HTTP port is 8080, and the default HTTPS port is 8443.

To change the ports, open the `start.d/http.ini` and the `/https.ini` files in a text editor and change the following properties:

- **jetty.http.port=**<new HTTP port number>
- both the **jetty.httpConfig.securePort=** and the **jetty.ssl.port=** must be changed to the <new HTTPS port number>.

To disable the ports, rename the `.ini` file(s).

Step 5 Create a specific user and group to run the server's process with the command:

```
adduser --system --no-create-home --group name
```

Step 6 Change the ownership of the installation directory to give it to the user and group that will run DROPS Web Server:

```
chown username:groupname -R /opt/jettyJettyWebServer
```

Step 7 Edit the scripts.

Open the following scripts in a text editor to set the variables to match your execution environment:

- configuration files in the *configuration* folder

Step 8 [*Optional*] Execute the following commands to install DROPS Web Server as a systemd service:

```
cd /etc/systemd/system
systemctl link /opt/jetty/JettyWebServer/jettyjetty.service
systemctl enable jettyjetty
systemctl start jettyjetty
```

Result DROPS Web Server is installed and available for use.

3.3.2 Update

Follow the subsequent steps to update the DROPS Web Server on Linux.

Step 1 Stop the Jetty.

Step 2 Replace the product's *.war* file found under */opt/JettyWebServer/webapps* with the new one.

Step 3 Clean the Jetty work directory from older installed version.

Step 4 Restart the Jetty.

Result The DROPS Web Server is updated and available for use.

3.3.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Web Server on Linux.

Step 1 Stop the service using the service manager of your Linux distribution or use the script provided.


```
Example
Service command:
systemctl stop jetty

Script command:
/opt/jetty/bin/jetty stop
```

Step 2 Uninstall the service, if any, using the tools from your Linux distribution.

```
Example
systemctl disable jetty
rm /etc/systemd/system/jetty.service
systemctl daemon-reload
systemctl reset-failed
```

Step 3 Remove the software from the installation directory.


 **Example**
`rm -rf /opt/jetty`

Step 4 Remove any remaining files based on the server's configuration.

Result The DROPS Web Server is completely uninstalled.

3.4 IBM i

The DROPS Web Server can be installed and updated manually on IBM i or, depending on your security policy, remotely from any machine running Java.

 **Note**
If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.


3.4.1 Install

Step 1 Copy the installation *.jar* file to any directory (such as the */tmp*) on the target IBM i IFS or the machine that will orchestrate the remote installation.

Step 2 Launch the installation setup.

If you are installing manually on IBM i:

1. Open a session on the target IBM i using the QSECOFR profile or an equivalent.
2. Open a command line interpreter using the command QSH. Reach the location where you have copied your installation file.
3. In the command line interpreter, launch the setup using the installation command.

 **Example**
`java -jar Setup_jetty-x.x.x._IBM i.jar`

If you are installing remotely from Windows or Linux:

1. Launch the setup from the location on the machine orchestrating the installation using the command above. This will open a prompt asking for the **Remote IBM i name/address**.
2. Enter the name/address of the target IBM i.
3. Login using the QSECOFR profile or an equivalent.

Step 3 Define the user that will run the jetty. If it doesn't already exist, the installer will attempt to create it. By default the user is **jetty**.

Step 4 Define the **Jetty Installation library** which will contain the wrapper used to start jetty servers on IBM i. By default the library is **JETTY**.

Step 5 Define the installation path for the jetty on the IFS. By default the path is `/home/jetty`.

Step 6 Define the TCP ports to use.

 **Important!**

The ports defined here will be part of the URL in your browser when connecting to the DROPS web app.

 **Note**


If the DROPS Web Server is behind a proxy or a load balancer, the **Virtual Host URL** field will set the value of the "X-Forwarded-Host" HTTP header, enabling you to identify the original host requested by the client.

Press **Enter/Next** to use the default ports.

The DROPS Web Server's default HTTP port is 8080, and the default HTTPS port is 8443.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 7 Connect to the remote IBM i and start the Jetty subsystem using the installation location.

 **Example**

```
STRSBS SBS(JETTY/JETTY).
```

Result The DROPS Web Server is installed and available for use.

3.4.2 Update

Follow the subsequent steps to update the DROPS Web Server on IBM i.

Step 1 Stop the Jetty: JETTY/ENDJTYSVR.

Step 2 Replace the exiting `.war` in the Jetty's `/webapps` folder. The replacement `.war` can be found in the installation package.

Step 3 Clean the Jetty work directory from older installed version.

Step 4 Restart the Jetty: JETTY/STRJTYSVR.

Result The DROPS Web Server is updated and available for use.

3.4.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Web Server on IBM i.

Step 1 Open a session on the IBM i where the server is installed, using the QSECOFR profile or an equivalent.

Step 2 Stop and delete the service using the following commands:

```
JETTY/ENDJTYSVR  
DLTLIB JETTY
```

Step 3 Remove the server using the following command:

```
rm -rf /home/jetty
```

Result The DROPS Web Server is completely uninstalled.

4 Installing the DROPS Agent

The DROPS Agent is a module that must be installed on every target system to which you intend to deploy that is incompatible with the agentless solution. It contains and relies on the Ant engine which actively contributes to the mechanical orchestration of the DROPS solution. It includes a library with over 300 built-in scripts which can be expanded with your own personalized scripts. The DROPS Agent is the remote administration engine used by the DROPS Server and from where all the deployment actions are started. In other words the DROPS Server orchestrates all deployment actions through the DROPS Agent and by using the capabilities of the agent on the target system, it also means that the server's action field on the target system depends the agent's process owner on this target system.

The DROPS Agent runs as a service. Although multiple services can run on the same target system, and therefore multiple infrastructure items can point to the same system, only one DROPS Agent needs to be installed on each system.

The DROPS Agent uses a local repository to temporarily store the files to be installed on the target system.

Unless they are compatible with the agentless solution from DROPS Software, is important to install the DROPS Agent on all of your target systems (which are directly related to the infrastructure items you create) because it creates the connection required to communicate with the DROPS Server. The agent can be installed on Windows, IBM i or any Unix-like OS (Linux, Aix).

Note

It is recommended to install and manage the DROPS Agent remotely, which is done via the DROPS Studio. The remote process is less complex and does not require you to physically be with the target system to install. Also, the remote agent manager enables you to install and update multiple agents on multiple target systems at the same time.

4.1 Prerequisites

Reference

For complete details about the technical prerequisites for DROPS, refer to the *DROPS System Requirements*.

4.2 Managing the DROPS Agent manually

The DROPS Agent can be installed, updated and uninstalled manually on Windows, Linux and IBM i.

4.2.1 Windows

The DROPS Agent runs as a service.

4.2.1.1 Install

The installation process takes approximately 5 minutes. It is a simple procedure similar to most other Windows applications. For trouble-free installation, it is recommended that you close all active Windows applications before beginning the installation.

Note

If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

Follow the subsequent steps to install the DROPS Agent on Windows.

Step 1 Copy the .exe file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Confirm the installation location.

The **Select Destination Location** screen displays the default location where DROPS Software elements will be installed. If you prefer to install the software elements in a different location, either type in the location, or click **Browse...** to navigate to and select the alternate location.

The default root location is *C:\Program files\ Solutions*.

A sub-folder for each DROPS Software application you install will be created at this location.

Warning!

The access rights to this folder can then be restricted to the user used to run the Server's Windows service.

Step 5 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 6 Define the TCP ports to use.

**Important!**

The ports defined here will be used to configure the connection.

Press **Enter/Next** to use the default ports.

The DROPS Agent's default HTTP port is 8230, and the default HTTPS port is 8235.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 7 Select the Windows user account.

The DROPS Agent runs as a Windows service. Select the user account that will be used to manage the service.

By default, the local system account is selected. If you do not want to use that account, you can select any user account with enough privileges to run a Windows service, and have a read and write access to the folder where DROPS is installed.

Step 8 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.**Step 9** Verify the Windows Service is running.

The final screen of the installation process enables you to automatically open the Local Services Management Console. If the **Open Windows service** checkbox is selected, the **Services** window opens after clicking **Finish**. This window enables you to verify that its status is set to "Started".

Result The DROPS Agent is installed and available for use.

4.2.1.2 Update

Updating the DROPS Agent is similar to the installation process in that it is launched via the installation `.exe`.

**Note**

If you are updating without uninstalling, the majority of the installation preferences are saved and automatically reused.

To change the saved values, uninstall completely and define new values by reinstalling from scratch.

Follow the subsequent steps to update the DROPS Agent on Windows.

Step 1 Copy the `.exe` file to your machine and execute it to launch the wizard. Your profile must have administrator privileges to run the execution file.

Step 2 From the **Select Setup Language** window, select the language for the installation.

Step 3 Review and accept the license agreement.

The **License Agreement** page presents the DROPS Software license agreement for you to review. Please read it carefully. When you have reviewed the agreement, select **I accept the agreement**.

Step 4 Install.

The **Ready to Install** screen enables you to review and change or confirm the setup parameters provided and to launch the installation.

To change a setup parameter, click **< Back** and return to the necessary screen.

If you agree with the installation parameters displayed, click **Install** to start the copy phase of the installation process. The process may take a moment while the windows services are launched.

As the installation proceeds, a status bar displays its progress. Each element copied appears above the status bar. Click **Cancel** to interrupt the installation.

Step 5 Complete the setup process. The final page of the wizard displays confirmation that the setup was a success. Click **Finish** to close the setup wizard.

Step 6 Verify the Windows Service is running.

The final screen of the installation process enables you to automatically open the Local Services Management Console. If the **Open Windows service** checkbox is selected, the **Services** window opens after clicking **Finish**. This window enables you to verify that its status is set to "Started".

Result The DROPS Agent is updated and available for use.

4.2.1.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Agent from Windows.

Step 1 Log into the system with an administrator account.

Step 2 Either launch the *uninstall.exe* located in the installation directory

- or -

Open **Add or Remove Programs** (*Start > Control Panel*), find the module in the list of installed software and select **Uninstall**.

Step 3 Remove any remaining files in the installation path and remove any remaining configuration files in the user directory.

Result The DROPS Agent is completely uninstalled.


4.2.2 Linux


4.2.2.1 Install

Follow the subsequent steps to install DROPS Agent on Linux.

Step 1 Transfer the *.tar.gz* to the */tmp* directory on the target system.

Step 2 Open a terminal session and go to the installation directory.

 **Example**
cd /opt

 **Note**
By default, the server is intended to be installed in the `/opt` directory. If you install it in a different directory, you will have to update the server's scripts (see [Step 7 Edit the scripts.](#)).

Step 3 Execute the following command to extract the `tar.gz` archive into the current directory:

```
tar xzf Drops-Agent-[version number].tar.gz
```

Step 4 [*Optional*] If you need to change the listening port(s) for the server, you must do so now.

The DROPS Agent's default HTTP port is 8230, and the default HTTPS port is 8235.

Step 5 Create a specific user and group to run the server's process with the command:

```
adduser --system --no-create-home --group name
```

Step 6 Change the ownership of the installation directory to give it to the user and group that will run DROPS Agent:

```
chown username:groupname -R /opt/Drops-Agent
```

Step 7 Edit the scripts.

Open the following scripts in a text editor to set the variables to match your execution environment:

- `bin/Drops-Agent`
 - Line 8: set **AFS_HOME** to the installation directory if it was not installed in `/opt/...` by default.
 - Line 12: set **AFS_USER** to the new user.
- `bin/Drops-Agent.service`
 - Lines 8-14: update the paths so they match the installation directory.
 - Line 16: set the user to the new user.
 - Line 17: set the group to be the new user's or any group of your choice.
- configuration files in the `configuration` folder

Step 8 [*Optional*] Execute the following commands to install DROPS Agent as a systemd service:

```
cd /etc/systemd/system
systemctl link /opt/Drops-Agent/bin/Drops-Agent.service
systemctl enable Drops-Agent
systemctl start Drops-Agent
```

Result DROPS Agent is installed and available for use.

4.2.2.2 Update

Follow the subsequent steps to update DROPS Agent on Linux.

Step 1 Transfer the updated `Drops-Agent.tar.gz` and the `Drops-Agent-[version number]_Update.sh` script to the `/tmp` directory on the target system.

Step 2 Open a terminal session and go into the `/tmp` directory: `cd /tmp`

Step 3 Mark the `_Update.sh` as being executable:

```
chmod +x Drops-Agent-[version number]_Update.sh
```

Step 4 Open the `_Update.sh` with a text editor and make the following changes:

- Line 9: uncomment and set the **AFS_HOME** variable to the installation directory.
- Line 10: change the **AFS_URL** to match the address and port the server is listening on.
- Line 12: change the **AFS_OSUSER** to the user running the server.
- Line 13: change the **AFS_OSGROUP** to the group running the server.
- Lines 16-19: uncomment the line corresponding to the way the server must be started.
- Lines 22-25: uncomment the line corresponding to the way the server must be stopped.

Step 5 Run the `_Update.sh`:

```
./Drops-Agent-[version number]_Update.sh
```

Note

You can keep the `_Update.sh` for future updates, unless stated otherwise in the release notes.

Result DROPS Agent is updated and available for use.

4.2.2.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Agent on Linux.

Step 1 Stop the service using the service manager of your Linux distribution or use the script provided.

Example


Service command:

```
systemctl stop Drops-Agent
```

Script command:

```
/opt/Drops-Agent/bin/Drops-Agent stop
```

Step 2 Uninstall the service, if any, using the tools from your Linux distribution.

 **Example**

```
systemctl disable Drops-Agent
rm /etc/systemd/system/Drops-Agent.service
systemctl daemon-reload
systemctl reset-failed
```

Step 3 Remove the software from the installation directory.

 **Example**

```
rm -rf /opt/Drops-Agent
```

Step 4 Remove any remaining files based on the server's configuration.

Result The DROPS Agent is completely uninstalled.

4.2.3 IBM i

The DROPS Agent can be installed and updated manually on IBM i or, depending on your security policy, remotely from any machine running Java.

 **Note**

If the tool is already installed on your computer, reinstalling it will update it to the new version automatically.

4.2.3.1 Install


Follow the subsequent steps to install the DROPS Agent on IBM i.

Step 1 Copy the installation *.jar* file to any directory (such as the */tmp*) on the target IBM i IFS or the machine that will orchestrate the remote installation.

Step 2 Launch the installation setup.

If you are installing manually on IBM i:

1. Open a session on the target IBM i using the QSECOFR profile or an equivalent.
2. Open a command line interpreter using the command QSH. Reach the location where you have copied your installation file.
3. In the command line interpreter, launch the setup using the installation command.

 **Example**

```
java -jar Setup_Drops-Agent-x.x.x._IBM i.jar
```

If you are installing remotely from Windows or Linux:

1. Launch the setup from the location on the machine orchestrating the installation using the command above. This will open a prompt asking for the **Remote IBM i name/address**.

2. Enter the name/address of the target IBM i.
3. Login using the QSECOFR profile or an equivalent.


Step 3 Define the **AFS Starter Installation library** and iASP which will contain the AFS Starter (a utility program used to start the DROPS Agent on IBM i).

By default they are **AFSSTARTER** and ***SYSBAS**.

Step 4 Define the installation location.

 **Example**
/HOME/...

Step 5 Define the TCP ports to use.

 **Important!**
The ports defined here will be used to configure the connection.


Press **Enter/Next** to use the default ports.

The DROPS Agent's default HTTP port is 8230, and the default HTTPS port is 8235.

If an application is already using it, the default port number is incremented until a free port number is found. It is possible to manually change the port after installation.

Step 6 Define the **Job user** that will run the DROPS Agent.

Step 7 Define the job queue library (***LIBL**) then the job queue (**JOBQ**) in which the job will be submitted.

 **Example**
Job queue library [ARCAD_SYS]
Job queue [ARCAD_CTL]

Step 8 Define the name of the AFS instance to register in the AFSSTARTER.

By default it is **PRODUCT-AFS-ID**.

Result The DROPS Agent is installed and available for use.

4.2.3.2 Update

Updating the DROPS Agent is similar to the installation process in that it is launched via the installation *.jar* file.

Note

If you are updating without uninstalling, the majority of the installation preferences are saved and automatically reused.

To change the saved values, uninstall completely and define new values by reinstalling from scratch.

Follow the subsequent steps to update the DROPS Agent on IBM i.

Step 1 Copy the installation *jar* file to any directory (such as the */tmp*) on the target IBM i IFS or the machine that will orchestrate the remote installation.

Step 2 Launch the installation setup.

If you are installing manually on IBM i:

1. Open a session on the target IBM i using the QSECOFR profile or an equivalent.
2. Open a command line interpreter using the command QSH. Reach the location where you have copied your installation file.
3. In the command line interpreter, launch the setup using the installation command.

**Example**

```
java -jar Setup_Drops-Agent-x.x.x._IBM i.jar
```

If you are installing remotely from Windows or Linux:

1. Launch the setup from the location on the machine orchestrating the installation using the command above. This will open a prompt asking for the **Remote IBM i name/address**.
2. Enter the name/address of the target IBM i.
3. Login using the QSECOFR profile or an equivalent.

Step 3 Define the installation location.

**Example**

```
/HOME/...
```

Point to original installation location to use the same settings defined for the original installation (ports, installation location, service user).

Result The DROPS Agent is updated and available for use.

4.2.3.3 Uninstall

Follow the subsequent steps to uninstall the DROPS Agent on IBM i.

Step 1 Open a session on the IBM i where the server is installed, using the QSECOFR profile or an equivalent.

Step 2 Stop and delete the service using the following commands:

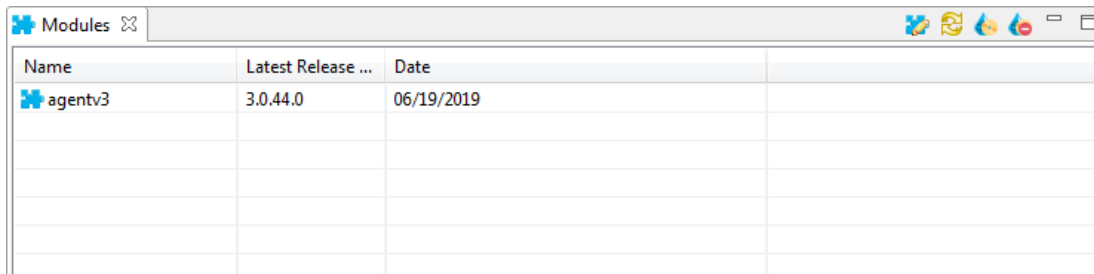
```
ADDLIBLE <AFSSTARTER LIBRARY NAME>  
ENDAFSSVR DROPSAGENT  
DLTAFSSVR DROPSAGENT DELETE(*YES)
```

Result The DROPS Agent is completely uninstalled.

4.3 Managing the DROPS Agent remotely from the DROPS Studio

The DROPS Agent can be installed, updated and uninstalled remotely on IBM i and Linux via the DROPS Studio.

The DROPS Agent and any other module is managed remotely from the **Modules** view. To open it, select **Modules** from the **Updater** node in **Configuration Explorer**.



Name	Latest Release ...	Date
agentv3	3.0.44.0	06/19/2019

Reference
 For more information about DROPS modules and how to access and/or configure them, refer to the *DROPS Configuration Guide*.

Below are the steps taken by the remote installer:

1. Agent module *.jar* archives are transferred on the remote host, in a directory named as follows: `<agent_installation_path>_AGT_trf_<module_version>`
2. The content of the *.jar* is restored in the agent's installation directory's path.
3. The following values, set in the remote installation wizard, are replaced in the agent's configuration file:
 - Storage path
 - Agent's version
 - Port number
 - Artifacts' retention days

Once these steps are done, the specific process for each target platform is executed. These are the same processes followed during the agent's manual installation.

4.3.1 Prerequisites

1. The DROPS user must have Module Updater and Remote Installation rights to manage DROPS modules.
2. In order to install or update a DROPS Agent remotely, it is required to first create the infrastructure item that connects to the target system successfully. The following fields are required in an infrastructure item.
 - The item's **Protocol, Host name and (sometimes) the Port, Login and Password** fields must be filled in accurately and give access to the target system and the port the agent will listen to.

- The item's **Remote Agent Type** must be the same type as the agent being installed. This ensures that the type of agent that the item will use to communicate with the DROPS Server corresponds to the agent being installed.
- The item's **Technical Platform** must correspond to the type of target system. This ensures the item's technical platform corresponds to the target system's OS, which permits the installer to use the correct installation method.
- The item's **Installation Properties** must define the Installation Path and Local Storage Area as well as the user profiles that will install and run the agent.

 **Reference**

For more information about creating infrastructure items, refer to the *DROPS User Guide*.

3. The DROPS Server must have access to an update server. An update server is simply a web server which hosts the new files required to update. It can be any web server as long as the DROPS Server can download files from it through an HTTP request.

Configuring access to the update server allows you to define from where the files are retrieved and how often the DROPS Server checks for new updates for each module.

Today, you must host your own update server.


 **Reference**

For more information about configuring the remote install/update processes refer to the *DROPS Configuration Guide*.

4.3.2 Install and Update

Follow the subsequent steps to install a DROPS Agent remotely from the DROPS Studio or update an existing DROPS Agent on one or multiple target system(s).

 **Note**

The installation process described here also updates any existing DROPS Agent. It is recommended to verify the version currently installed on the target system before taking action to ensure that the correct evolutions are being applied. To see the list of infrastructure items that each version of an agent is installed on, select it, then click the  edit icon.

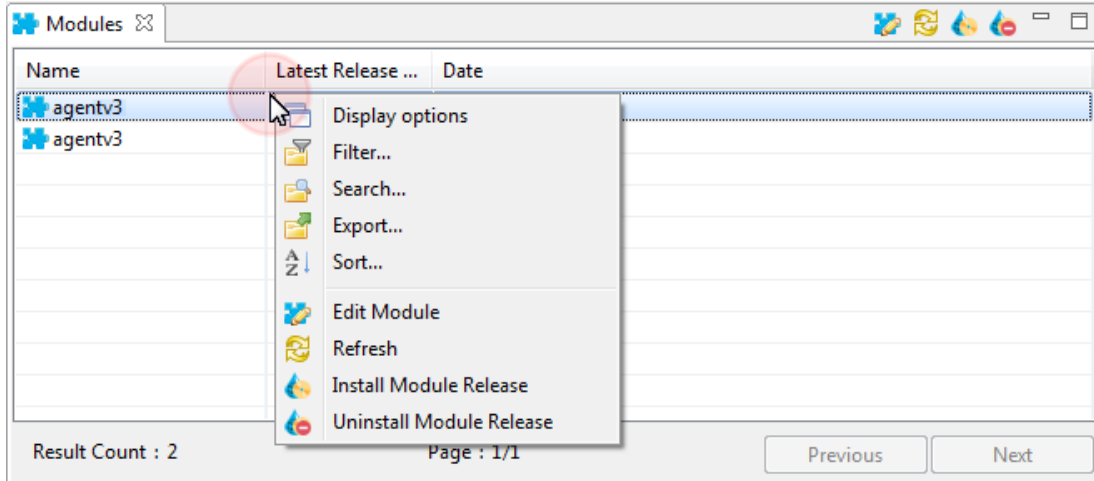


Figure 1: Installing the DROPS Agent remotely

Step 1 Select the agent to install.

The **Modules** view displays all of the agents available on the current DROPS Server. These are the agents that you can install on your target machine. Selecting an agent will install it on all of the target systems selected later. To install different agents on one or more systems, repeat these instructions for each type of agent.



Important!

You *must* select the agent that corresponds to the Remote Agent Type selected in the target systems' corresponding infrastructure item(s). If you are installing the agent on multiple systems, all of the items that point to it must have the same Remote Agent Type defined.

The **Name** column displays the module's name.

The **Last Release Number** column displays the module's most recent version number.

The **Date** column displays the date the version was downloaded from DROPS to the local repository.

Step 2 Click the  install icon, or right-click on the agent and select  **Install Module Release** to launch the installation of the selected agent.

Result The **Install** wizard opens.

Step 3 Select the version of the agent to install. Ctrl+click to select multiple versions.

Click **Next >** to continue.

Step 4 If you are in multi-client mode, select the  client(s) for which the infrastructure item(s) that correspond to the target system are created. Ctrl+click to select multiple clients.

Click **Next >** to continue.

Step 5 Select the infrastructure item(s) that correspond to the target system(s) on which you want to install the DROPS Agent. Ctrl+click to select multiple items.

Note

If you select multiple items that each point to the same target system, DROPS will filter the doubled addresses to assure that only one instance of the agent is installed on each target system.

Step 6 Click **Finish** to launch the installation.

Result After the agent is installed, it is available on the target system and deployments can be made.

4.3.3 Viewing the remote management logs

Double-click on a remote installation instance to open the log. Each instance's log lists the module that's been installed, its corresponding infrastructure item and the date on which it was installed.

Filter the logs by severity (error, warning, information and debug) and use the text field next to the severity filter to show only the lines containing the text of the text field.

To export the content of one or more entries in the log, select the line(s) then right-click. Copy the content of the entry to the clipboard to paste it into an external text editor.

By default, the content will follow this pattern: [Timestamp] [Severity] Text

Example

```
[2017/02/09 02:49:28][INFO]test -d /usr/lib/systemd/system
[2017/02/09 02:49:28][INFO]Run command test -d
/usr/lib/systemd/system
[2017/02/09 02:49:28][DEBUG]Exit code 0
[2017/02/09 02:49:28][INFO]Command successful
[2017/02/09 02:49:28][DEBUG]Init system is systemd.
[2017/02/09 02:49:28][INFO]Checking connection to remote host
192.168.1.203 on port 22 using profile drops
```

If you copy the content in JSON format, it will follow this pattern:

```
{"time":timestamp,"level":severity,"text":"text"}
```

Example

```
{"time":1486648168892,"level":2,"text":"test -d
VusrVlibVsystemdVsystem"}
{"time":1486648168892,"level":2,"text":"Run command test -d
VusrVlibVsystemdVsystem"}
{"time":1486648168994,"level":3,"text":"Exit code 0"}
{"time":1486648168994,"level":2,"text":"Command successful"}
{"time":1486648168994,"level":3,"text":"Init system is systemd."}
{"time":1486648168994,"level":2,"text":"Checking connection to remote
host 192.168.1.203 on port 22 using profile drops"}
```

4.3.4 Uninstall

The uninstallation process completely removes any existing DROPS Agent from the infrastructure item(s) on which it is currently installed.

4.3.4.1 Uninstalling from multiple target systems

Follow the subsequent steps to remotely uninstall a DROPS Agent from multiple target systems.

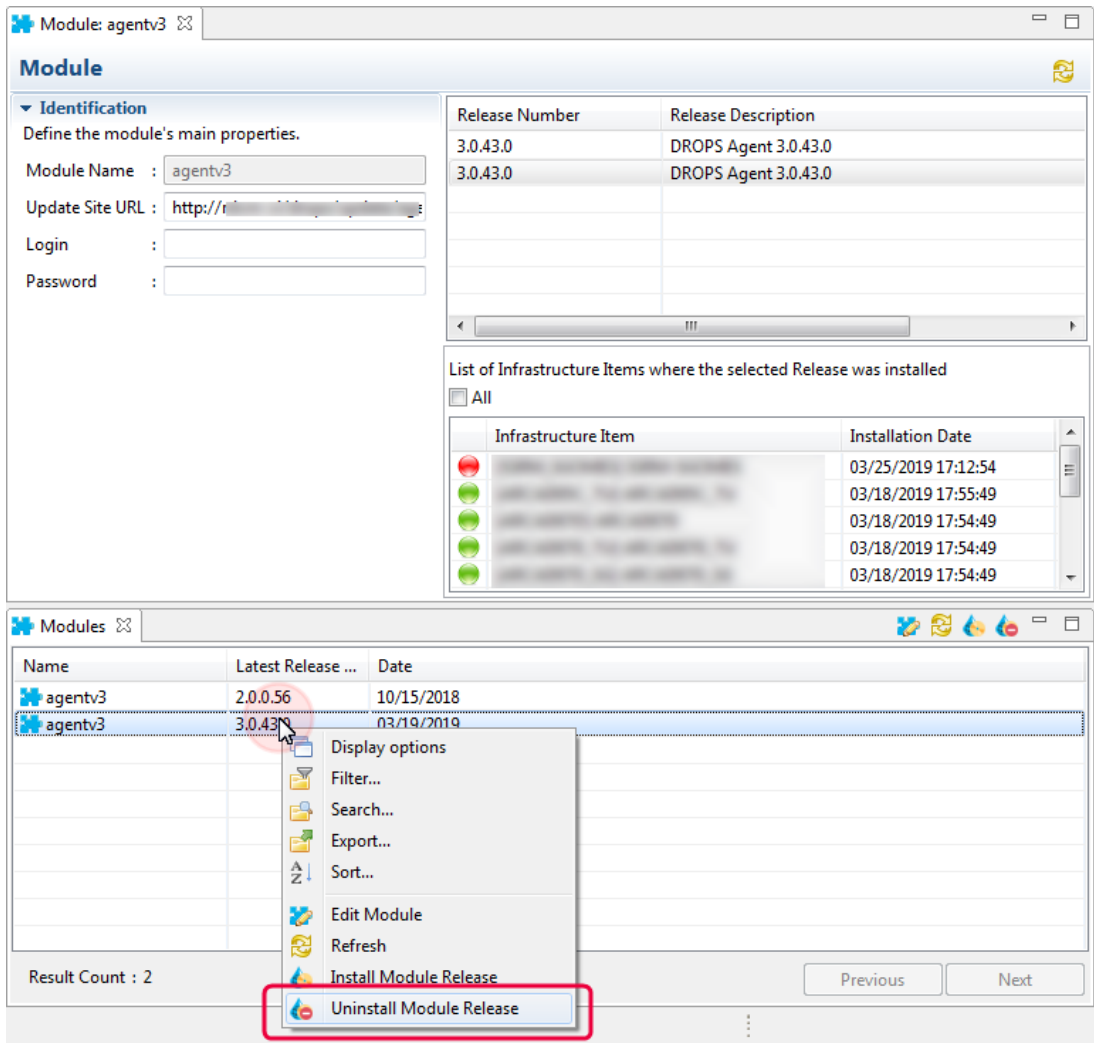





Figure 2: Uninstall the DROPS Agent from multiple infrastructure items

Step 1 Select the agent(s) to uninstall. Ctrl+click to select multiple agents.

The  **Modules** view displays all of the agents available on the current DROPS Server. These are the agents that available to install on the target machine.

Step 2 Click the  uninstall icon, or right-click on the agent and select  **Uninstall Module Release**.

Result The **Uninstall** wizard opens.

Step 3 Select the version of the agent to uninstall. Ctrl+click to select multiple versions.

Click **Next >** to continue.

Step 4 If you are in multi-client mode, select the  client(s) for which the infrastructure item(s) that correspond to the target system are created. Ctrl+click to select multiple clients.

Click **Next >** to continue.

Step 5 Select the infrastructure item(s) that correspond to the target system(s) from which you want to uninstall the DROPS Agent. Ctrl+click to select multiple items.

Step 6 Click **Finish**.

4.3.4.2 Uninstalling from one target system

The steps in the section above enable you to uninstall one or multiple agents. However, you can also follow the subsequent steps to remotely uninstall a DROPS Agent from one target system.

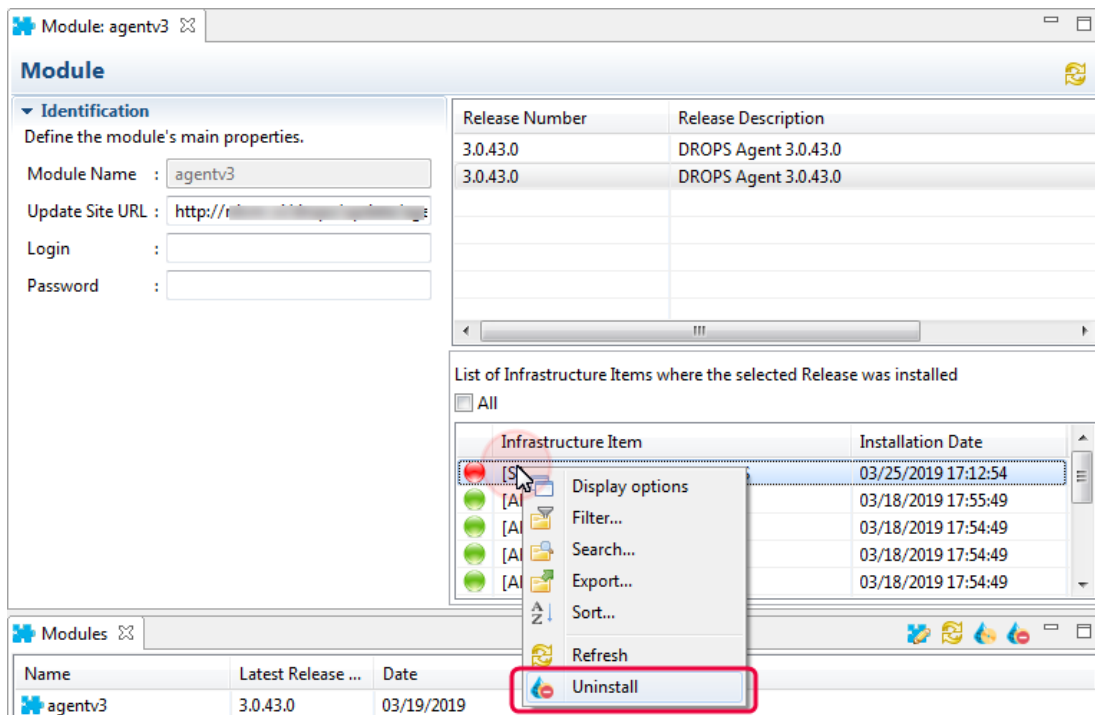





Figure 3: Uninstall the DROPS Agent from individual infrastructure items

Step 1 Select the agent to uninstall and either right-click then select  **Edit Module**, select the item then click the  edit selected module icon or double-click it.

Step 2 In the agent's  **Module** editor, select the version to uninstall from the list on the right.

Step 3 Right-click on the infrastructure items from which to uninstall the version then select **Uninstall**.

5 Installing the DROPS for Jenkins plug-in

5.1 Prerequisites

1. Jenkins must be installed. The plug-in is compatible with Jenkins \geq v2.176.3.



Reference

For more information about installing Jenkins, refer to the [Jenkins Installation Guide](#).

2. The ARCAD-Commons plug-in must be installed on Jenkins. This plug-in, common to many ARCAD products on Jenkins, only needs to be installed once, no matter how many ARCAD product plug-ins are installed on Jenkins. To install the ARCAD-Commons plug-in, click **Manage Jenkins** in the left menu of the dashboard, then click **Manage Plugins** and open the **Advanced** tab. In the **Upload Plugin** section, click **Choose File...** and navigate to the location where the file is stored. Select the *arcad-commons.hpi* file and click **Open**. Click **Upload**.

5.2 Install the DROPS for Jenkins plug-in

Follow the subsequent steps to install an ARCAD plug-in on Jenkins.

Step 1 Open Jenkins in a navigator.

Step 2 To access the plug-in install page, click **Manage Jenkins** in the left menu of the dashboard, then click **Manage Plugins** and open the **Advanced** tab.

Step 3 In the **Upload Plugin** section, click **Choose File...** and navigate to the location where the installation file is stored. Select the *.hpi* file that corresponds to the product and click **Open**.

Step 4 Click **Upload**.

Step 5 To complete the installation, check **Restart Jenkins when installation is complete and no jobs are running**, and wait for Jenkins to restart.

Result The plug-in is installed and available for use.

5.3 Uninstall the DROPS for Jenkins plug-in

Follow the subsequent steps to uninstall an ARCAD plug-in from Jenkins.

Step 1 To access the plug-in uninstall page, click **Manage Jenkins** in the left menu of the home page, then click **Manage Plugins** and open the **Installed** tab.

Step 2 Click **Uninstall** for the individual plug-in, then click **Yes** to confirm.

Result The plug-in is now uninstalled.

6 Installing the DROPS for JIRA add-on

6.1 Prerequisites

1. JRE/JDK v8
2. JIRA must be installed on a server. The add-on is compatible with JIRA $\geq 7.2.2$. For lower versions, the interface may be a little different.

Reference

For more information about installing JIRA, refer to the [JIRA installation instructions](#) and [JIRA requirements](#).

6.2 Install the DROPS for JIRA add-on

Follow the subsequent steps to install an ARCAD add-on in JIRA.

Step 1 Open JIRA in a navigator and login as the administrator.

Step 2 To access the add-on install page, select the settings menu, then **Add-ons**.

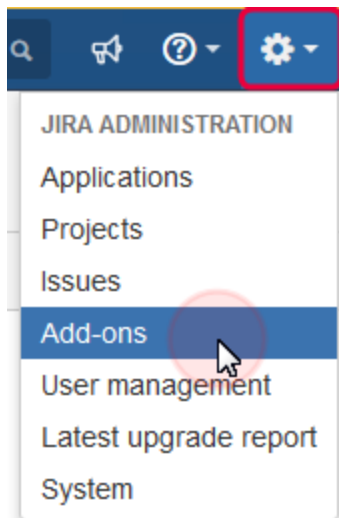


Figure 4: The JIRA settings menu: Add-ons

Step 3 Click on **Manage apps** then upload an external plug-in.

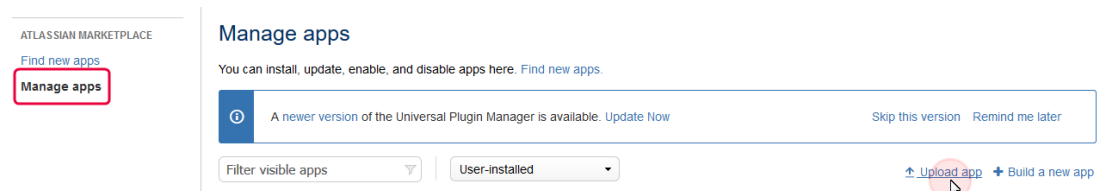


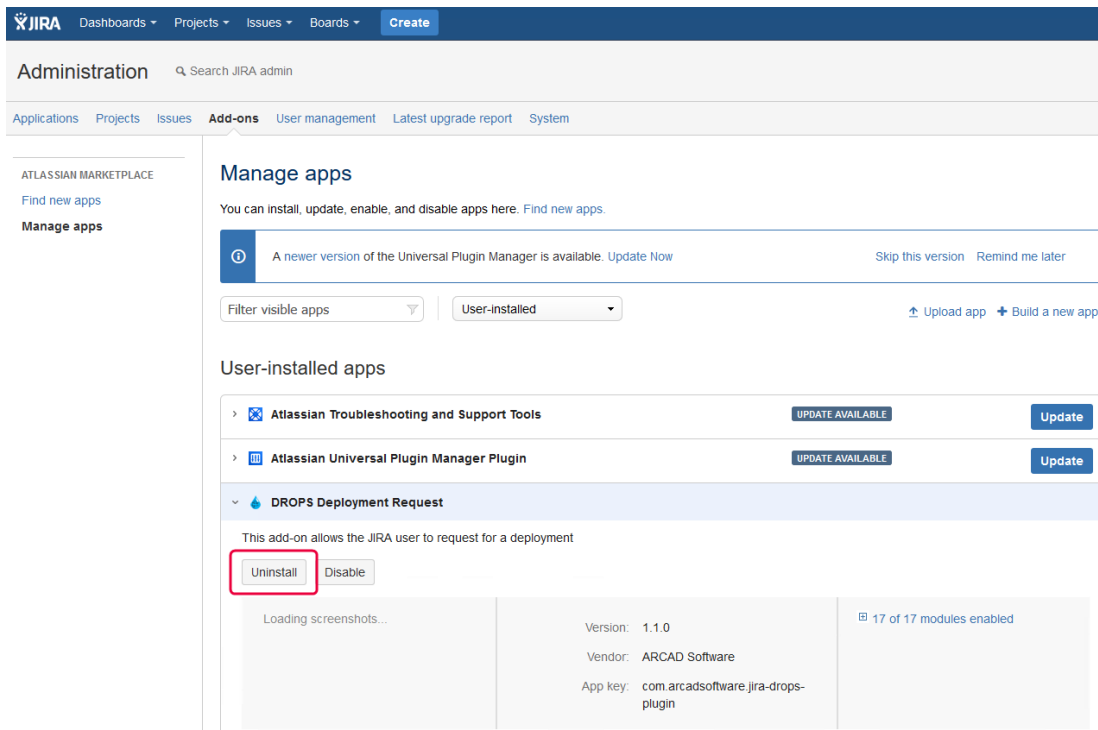
Figure 5: Upload external app to JIRA

Step 4 Navigate to the location where the installation file is stored. Select the *.jar* file that corresponds to the product and click **Open**. This installation file can be found in the root of the installation materials.

Result Refresh the page or your connection to see that the add-on is installed and ready to be configured.

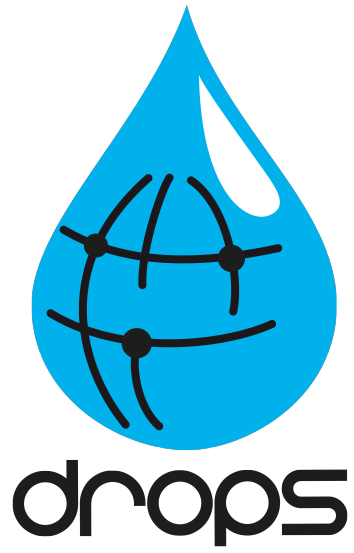
6.3 Uninstall the DROPS for JIRA add-on

To uninstall an add-on from JIRA, access the product's section in the **Manage apps** menu and click on **Uninstall**.



The screenshot shows the JIRA Administration interface. The top navigation bar includes 'Dashboards', 'Projects', 'Issues', 'Boards', and 'Create'. The main header is 'Administration' with a search bar. Below the header, there are tabs for 'Applications', 'Projects', 'Issues', 'Add-ons', 'User management', 'Latest upgrade report', and 'System'. The left sidebar shows 'ATLASSIAN MARKETPLACE' with options for 'Find new apps' and 'Manage apps'. The main content area is titled 'Manage apps' and contains a notification about a newer version of the Universal Plugin Manager. Below the notification, there are filters for 'Filter visible apps' and 'User-installed'. The 'User-installed apps' section lists three add-ons: 'Atlassian Troubleshooting and Support Tools', 'Atlassian Universal Plugin Manager Plugin', and 'DROPS Deployment Request'. The 'DROPS Deployment Request' add-on is expanded, showing a description: 'This add-on allows the JIRA user to request for a deployment'. Below the description, there are two buttons: 'Uninstall' (circled in red) and 'Disable'. At the bottom of the add-on card, there are details: 'Version: 1.1.0', 'Vendor: ARCAD Software', and 'App key: com.arcadsoftware.jira-drops-plugin'. A status indicator shows '17 of 17 modules enabled'.

Figure 6: Uninstall the DROPS for JIRA add-on



System Requirements

7 System requirements for the DROPS Server

7.1 Windows

7.1.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Server on Windows x64.

Requirement	Value
System Architecture	AMD64 and Intel EM64T
CPU	CPU: DUAL Core processor minimum
Physical memory	RAM: 2GB minimum physical memory (4GB recommended) ¹
Virtual memory	<ul style="list-style-type: none"> • If physical memory is between 2GB and 16GB, then set virtual memory to 1x the size of the RAM • If physical memory is more than 16GB, then set virtual memory to 16GB
Hard disk	RAID storage or any secured storage with redundancy, backup and monitoring
Disk Space	Typical Install Type total: 10GB ²
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 4: DROPS Server Hardware Requirements - Windows

7.1.2 Software requirements

The following table lists the software requirements for the DROPS Server on Windows x64.

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.

²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

Requirement	Value
Operating system	<ul style="list-style-type: none"> Windows 7 x64 - Professional, Enterprise, and Ultimate editions Windows 8 x64 and Windows 8.1 x64 - Pro and Enterprise editions Windows 10 x64 - Pro, Enterprise, and Education editions Windows Server 2008 x64 - Standard, Enterprise, DataCenter, and Web editions Windows Server 2008 R2 x64 - Standard, Enterprise, DataCenter, Web, and Foundation editions Windows Server 2012 x64 - Standard, DataCenter, Essentials, and Foundation editions Windows Server 2012 R2 x64 - Standard, DataCenter, Essentials, and Foundation editions
Network protocol	<ul style="list-style-type: none"> TCP/IPv4 TCP/IPv4 with SSL
Filesystem	NTFS or any journalized filesystem

Table 5: DROPS Server Software Requirements - Windows

7.1.3 Remote Desktop Services

DROPS Software supports installing, configuring, and running all of its software through Remote Desktop Services, formerly known as Terminal Services, on Windows. To install, DROPS Software recommends that you start all configuration tools from the Terminal Server console session of the server using `mstsc` or console.

7.1.4 Host name resolution

Typically, the computer on which you want to install the is connected to a network. Ensure that the computer host name is resolvable through a Domain Name System (DNS) or a centrally-maintained TCP/IP host file, such as `hosts`. Use the `ping` command to ensure that your computer host name is resolvable.

If your computer host name does not resolve, contact your system administrator.

7.1.5 Users, Groups and Environments for the DROPS Server

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as `JAVA_HOME`, `JDK_HOME`, `JRE_HOME`, `JAVA_OPTIONS`, `JAVA_OPTS`, `JVM_OPTS`, `CLASSPATH`, etc.

Important!
PATH must contain all java related binaries and tools.

TMP, TEMP, TMPDIR and TEMPDIR can be set to any desired temporary storage location.

7.2 Linux

7.2.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Server on Linux x64.

Requirement	Value
System Architecture	AMD64 and Intel EM64T
CPU	CPU: DUAL Core processor minimum
Physical memory	RAM: 2GB minimum physical memory (4GB recommended) ¹
Virtual memory	<ul style="list-style-type: none"> If physical memory is between 2GB and 16GB, then set virtual memory to 1x the size of the RAM If physical memory is more than 16GB, then set virtual memory to 16GB
Hard disk	RAID storage or any secured storage with redundancy, backup and monitoring
Disk Space	Typical Install Type total: 10GB ²
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 6: DROPS Server Hardware Requirements - Linux

7.2.2 Software requirements

The following table lists the software requirements for the DROPS Server on Linux x64.

Requirement	Value
Operating system	Linux 64bits with support for Java 8 64 bits

Table 7: DROPS Server Software Requirements - Linux

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.

²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

Requirement	Value
Runlevel	Server should be started in multi-user mode, commonly runlevel 3 or 5
Network protocol	<ul style="list-style-type: none">• TCP/IPv4• TCP/IPv4 with SSL
Filesystem	Ext3, ext4 or any journalized filesystem
SELINUX	Disabled

Table 7: DROPS Server Software Requirements - Linux

7.2.3 Host name resolution

Typically, the computer on which you want to install the is connected to a network. Ensure that the computer host name is resolvable through a Domain Name System (DNS) or a centrally-maintained TCP/IP host file, such as `/etc/hosts`. Use the `ping` command to ensure that your computer host name is resolvable.

If your computer host name does not resolve, contact your system administrator.

7.2.4 Users, Groups and Environments for the DROPS Server

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as `JAVA_HOME`, `JDK_HOME`, `JRE_HOME`, `JAVA_OPTIONS`, `JAVA_OPTS`, `JVM_OPTS`, `CLASSPATH`, etc.

Important!

`PATH` must contain all java related binaries and tools.

`TMP`, `TEMP`, `TMPDIR` and `TEMPDIR` can be set to any desired temporary storage location.

7.3 IBM i

7.3.1 Hardware requirements

The following table lists the hardware components that are required for the on IBM i.

Requirement	Value
Physical memory (RAM)	¹
Disk Space	Typical Install Type total: 1GB ²
Network	Any TCP/IP capable network interface

Table 8: Hardware Requirements - IBM i

7.3.2 Software requirements

The following table lists the software requirements for the on IBM i.


Requirement	Value
Operating system	IBM i ≥7.1
Network protocol	<ul style="list-style-type: none"> • TCP/IPv4 • TCP/IPv4 with SSL
Java JRE	JRE/JDK v8
At least one instance of the Remote Execution Server (REXEC) must be running.	

Table 9: Software Requirements - IBM i

7.3.3 Host name resolution

Typically, the partition on which you want to install the is connected to a network. Ensure that the partition host name is resolvable through a Domain Name System (DNS) or the centrally-maintained TCP/IP host table (go CFGTCP, option 10).

Use the PING command to ensure that your computer host name is resolvable.

 **Example**

```
PING RMTSYS(hostname)
Verifying connection to host system
hostname.domain.com at address 192.168.0.10.
PING reply 1 from 192.168.0.10 took 18 ms. 256 bytes. TTL 64.
```

If your computer host name does not resolve, contact your system administrator.

7.3.4 Users for the

Log into the system with a profile with the following special authorities:

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.
²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

- *ALLOBJ
- *JOBCTL

 **Important!**

These rights are required only when installing the product.

8 System requirements for the DROPS Agent

8.1 Windows

8.1.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Agent on Windows x64.

Requirement	Value
System Architecture	AMD64 and Intel EM64T
CPU	CPU: DUAL Core processor minimum
Physical memory (RAM)	1GB minimum, 2GB recommended ¹
Virtual memory	<ul style="list-style-type: none"> If physical memory is between 1GB and 16GB, then set virtual memory to 1x the size of the RAM If physical memory is more than 16GB, then set virtual memory to 16GB
Disk Space	Typical Install Type total: 1GB ²
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 10: DROPS Agent Hardware Requirements - Windows

8.1.2 Software requirements

The following table lists the software requirements for the DROPS Agent on Windows x64.

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.

²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

Requirement	Value
Operating system	<ul style="list-style-type: none"> Windows 7 x64 - Professional, Enterprise, and Ultimate editions Windows 8 x64 and Windows 8.1 x64 - Pro and Enterprise editions Windows 10 x64 - Pro, Enterprise, and Education editions Windows Server 2008 x64 - Standard, Enterprise, DataCenter, and Web editions Windows Server 2008 R2 x64 - Standard, Enterprise, DataCenter, Web, and Foundation editions Windows Server 2012 x64 - Standard, DataCenter, Essentials, and Foundation editions Windows Server 2012 R2 x64 - Standard, DataCenter, Essentials, and Foundation editions
Network protocol	<ul style="list-style-type: none"> TCP/IPv4 TCP/IPv4 with SSL
Filesystem	NTFS or any journalized filesystem
Java JRE	JRE/JDK v8
WinRM/Power Shell ≥ 4.0	<p>For Windows only, to remotely install the DROPS Agent, the WinRM/Power Shell ≥ 4.0 must be installed and WinRM must be activated on both the system hosting the DROPS Server and the system hosting the DROPS Agent.</p> <p>For complete Remote Shell installation instructions, connect to support.microsoft.com/en-us/kb/555966 and follow the steps provided. Doing this opens the required port (5985 or 5986 for secured) through the windows firewall. However, some firewalls may block SOAP traffic. If this is your case, you must open the port manually.</p> <p>To activate WinRM, issue the following commands on the system(s):</p> <ul style="list-style-type: none"> WinRM quickconfig Enable-PSRemoting -Force <div style="border: 1px dashed gray; padding: 10px; margin-top: 10px;"> <p>Note</p> <p>If the DROPS Server still cannot connect to the remote host via WinRM after running the commands above, you can run the following command:</p> <pre>Set-Item WSMAN:\localhost\Client\TrustedHosts -Value "*" -Force</pre> <p>This command may create a security breach.</p> </div>

Table 11: DROPS Agent Software Requirements - Windows

8.1.3 Remote Desktop Services

DROPS Software supports installing, configuring, and running all of its software through Remote Desktop Services, formerly known as Terminal Services, on Windows. To install, DROPS Software recommends that you start all configuration tools from the Terminal Server console session of the server using mstsc or console.

8.1.4 Host name resolution

Typically, the computer on which you want to install the is connected to a network. Ensure that the computer host name is resolvable through a Domain Name System (DNS) or a centrally-maintained TCP/IP host file, such as . Use the ping command to ensure that your computer host name is resolvable.

If your computer host name does not resolve, contact your system administrator.

8.1.5 Users, Groups and Environments for the DROPS Agent

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as JAVA_HOME, JDK_HOME, JRE_HOME, JAVA_OPTIONS, JAVA_OPTS, JVM_OPTS, CLASSPATH, etc.

Important!

PATH must contain all java related binaries and tools.

TMP, TEMP, TMPDIR and TEMPDIR can be set to any desired temporary storage location.

8.2 Linux

8.2.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Agent on Linux x64.

Requirement	Value
System Architecture	AMD64 and Intel EM64T

Table 12: DROPS Agent Hardware Requirements - Linux

Requirement	Value
CPU	CPU: DUAL Core processor minimum
Physical memory (RAM)	1GB minimum, 2GB recommended ¹
Virtual memory	<ul style="list-style-type: none">• If physical memory is between 1GB and 16GB, then set virtual memory to 1x the size of the RAM• If physical memory is more than 16GB, then set virtual memory to 16GB
Disk Space	Typical Install Type total: 2GB ²
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 12: DROPS Agent Hardware Requirements - Linux

8.2.2 Software requirements

The following table lists the software requirements for the DROPS Agent on Linux x64.

Requirement	Value
Operating system	Linux 64bits with support for Java 8 64 bits
Runlevel	Server should be started in multi-user mode, commonly runlevel 3 or 5
Network protocol	<ul style="list-style-type: none">• TCP/IPv4• TCP/IPv4 with SSL
Filesystem	Openssh and sshd must be available for authenticating users
SELINUX	Disabled
SSH	Openssh and sshd must be available for authenticating users
Java JRE	Java runtime (6, 7 or 8)

Table 13: DROPS Agent Software Requirements - Linux

8.2.3 Host name resolution

Typically, the computer on which you want to install the is connected to a network. Ensure that the computer host name is resolvable through a Domain Name System (DNS) or a centrally-maintained TCP/IP host file, such as `/etc/hosts`. Use the `ping` command to ensure that your computer host name is resolvable.

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.

²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

If your computer host name does not resolve, contact your system administrator.

8.2.4 Users, Groups and Environments for the DROPS Agent

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as JAVA_HOME, JDK_HOME, JRE_HOME, JAVA_OPTIONS, JAVA_OPTS, JVM_OPTS, CLASSPATH, etc.

Important!

PATH must contain all java related binaries and tools.

TMP, TEMP, TMPDIR and TEMPDIR can be set to any desired temporary storage location.

8.3 IBM i

8.3.1 Hardware requirements

The following table lists the hardware components that are required for the on IBM i.

Requirement	Value
Physical memory (RAM)	¹
Disk Space	Typical Install Type total: 1GB ²
Network	Any TCP/IP capable network interface

Table 14: Hardware Requirements - IBM i

8.3.2 Software requirements

The following table lists the software requirements for the on IBM i.

Requirement	Value
Operating system	IBM i ≥7.1

Table 15: Software Requirements - IBM i

¹Physical memory is used by this entity and all subsequent processes, operating systems and any other software installed on the server. Please refer to additional software vendors for additional physical memory requirements.

²This size can be higher depending on the options selected and typical usage of the software, refer to Hard Disk Space requirement planning section to determine your needs.

Requirement	Value
Network protocol	<ul style="list-style-type: none">• TCP/IPv4• TCP/IPv4 with SSL
Java JRE	JRE/JDK v8
At least one instance of the Remote Execution Server (REXEC) must be running.	

Table 15: Software Requirements - IBM i

8.3.3 Host name resolution

Typically, the partition on which you want to install the is connected to a network. Ensure that the partition host name is resolvable through a Domain Name System (DNS) or the centrally-maintained TCP/IP host table (go CFGTCP, option 10).

Use the PING command to ensure that your computer host name is resolvable.

Example

```
PING RMTSYS(hostname)
Verifying connection to host system
hostname.domain.com at address 192.168.0.10.
PING reply 1 from 192.168.0.10 took 18 ms. 256 bytes. TTL 64.
```

If your computer host name does not resolve, contact your system administrator.

8.3.4 Users for the

Log into the system with a profile with the following special authorities:

- *ALLOBJ
- *JOBCTL

Important!

These rights are required only when installing the product.

9 System requirements for the DROPS Studio

9.1 Windows

9.1.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Studio on Windows x64.

Requirement	Value
System Architecture	AMD64 and Intel EM64T
CPU	CPU: DUAL Core processor minimum
Physical memory	RAM: 2GB minimum physical memory (4GB recommended)
Virtual memory	<ul style="list-style-type: none">• If physical memory is between 2GB and 16GB, then set virtual memory to 1x the size of the RAM• If physical memory is more than 16GB, then set virtual memory to 16GB
Disk Space	Typical Install Type total: 1GB
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 16: DROPS Studio Hardware Requirements - Windows

9.1.2 Software requirements

The following table lists the software requirements for the DROPS Studio on Windows x64.

Requirement	Value
Operating system	<ul style="list-style-type: none">• Windows 7 x64 - Professional, Enterprise, and Ultimate editions• Windows 8 x64 and Windows 8.1 x64 - Pro and Enterprise editions• Windows 10 x64 - Pro, Enterprise, and Education editions• Windows Server 2008 x64 - Standard, Enterprise, DataCenter, and Web editions• Windows Server 2008 R2 x64 - Standard, Enterprise, DataCenter, Web, and Foundation editions• Windows Server 2012 x64 - Standard, DataCenter, Essentials, and Foundation editions• Windows Server 2012 R2 x64 - Standard, DataCenter, Essentials, and Foundation editions
Network protocol	<ul style="list-style-type: none">• TCP/IPv4• TCP/IPv4 with SSL

Table 17: DROPS Studio Software Requirements - Windows

9.1.3 Remote Desktop Services

DROPS Software supports installing, configuring, and running all of its software through Remote Desktop Services, formerly known as Terminal Services, on Windows. To install, DROPS Software recommends that you start all configuration tools from the Terminal Server console session of the server using mstsc or console.

9.1.4 Users, Groups and Environments for the DROPS Studio

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as JAVA_HOME, JDK_HOME, JRE_HOME, JAVA_OPTIONS, JAVA_OPTS, JVM_OPTS, CLASSPATH, etc.

Important!

PATH must contain all java related binaries and tools.

TMP, TEMP, TMPDIR and TEMPDIR can be set to any desired temporary storage location.

9.2 Linux

9.2.1 Hardware requirements

The following table lists the hardware components that are required for the DROPS Studio on Linux.

Requirement	Value
System Architecture	AMD64 and Intel EM64T
CPU	CPU: DUAL Core processor minimum
Physical memory	RAM: 2GB minimum physical memory (4GB recommended)
Virtual memory	<ul style="list-style-type: none">• If physical memory is between 2GB and 16GB, then set virtual memory to 1x the size of the RAM• If physical memory is more than 16GB, then set virtual memory to 16GB
Disk Space	Typical Install Type total: 1GB
Video adapter	256 colors
Screen Resolution	1024x768 minimum
Network	Any TCP/IP capable network interface

Table 18: DROPS Studio Hardware Requirements - Linux

9.2.2 Software requirements

The following table lists the software requirements for the DROPS Studio on Linux.

Requirement	Value
Operating system	Linux 64bits with support for Java 64 bits
Network protocol	<ul style="list-style-type: none">• TCP/IPv4• TCP/IPv4 with SSL

Table 19: DROPS Studio Software Requirements - Linux

9.2.3 Remote Desktop Services

DROPS Software supports installing, configuring, and running all of its software through Remote Desktop Services, formerly known as Terminal Services, on Windows. To install, DROPS Software recommends that you start all configuration tools from the Terminal Server console session of the server using mstsc or console.

9.2.4 Users, Groups and Environments for the DROPS Studio

Note

Please refer to your OS and system administrator for common security practices.

The environment must be clean of variables which might affect java software such as JAVA_HOME, JDK_HOME, JRE_HOME, JAVA_OPTIONS, JAVA_OPTS, JVM_OPTS, CLASSPATH, etc.

**Important!**

PATH must contain all java related binaries and tools.

TMP, TEMP, TMPDIR and TEMPDIR can be set to any desired temporary storage location.

10 System requirements for the DROPS web app

Supported browsers:

- Internet Explorer 9+
- Google Chrome 29+
- Firefox 23+
- Safari 6+
- Opera 15+
- iOS 6+
- Android 4 (Limited)

Browser plug-ins are required by the default client; only JavaScript needs to be enabled.

Support on mobile browsers has some limitations.

11 Other system requirements

11.1 DROPS for ARCAD

DROPS for ARCAD requires \geq ARCAD v10.08.10.



Reference

For more information about DROPS for ARCAD, refer to the *DROPS User Guide*.

12 Disk space requirements

12.1 DROPS Server

A typical installation will need at least 10GB of hard disk space for the software, artifact storage and temporary space. Software installation only needs 300MB of hard disk space.

With extensive use of the software, the space required may grow according to the following rules and directories:

Directory	Content	Rule	Space Required
/	service wrapper and uninstall data	N/A	2MB
/bin	service management scripts	N/A	100KB
/configuration	configuration files	N/A	100MB
/database	database management	Up to 5MB per deployment instance, more depending log level Software update can use temporary database space	1GB for 250 deployment processes. To update, count on needing twice the size of the database in free space (this space is only used temporarily and can be recovered).
/deploymentprocess	deployment processes properties	Up to 100KB per deployment instance, more when using file attachments	25MB for 250 deployment processes. Add space for attachments (250MB for 250 deployment instance with 1MB file attachments).
/exec_agent	settings and properties	N/A	100KB
/files	scripts, diagrams and attachments	up to 10KB per diagram up to 10KB per script attachments depend on user scripts	5MB scripts and diagrams for average use. Add space for attachments (250MB for 250 deployment process instances with 1MB attachments).

Table 20: DROPS Server disk space requirements

Directory	Content	Rule	Space Required
/imports	temporary imports location and imported file lists	up to 100KB per imports for lists Temporary location depends on the size of the artifacts to import. Temporary space can be recovered after successful import.	5MB for 250 import lists. Add space for temporary import location (10GB for 100 imports of 100MB).
/info	third party tools information and licenses	N/A	100KB
/jvm	Java virtual machine	N/A	200MB
/lib	libraries	N/A	50MB
/logs	log files	depends on log configuration	200MB for 10 log files of 10MB
/plugins	libraries	N/A	50MB
/repository	internal artifact repository	Depends on the number of applications, releases and artifacts	10GB for 1 application, 100 releases with 100MB artifacts
/scripts	internal scripts	N/A	100KB
/templates	internal templates	N/A	10KB
/tmp	temporary space	temporary space for server use and scripts execution	1GB

Table 20: DROPS Server disk space requirements

In this example the software is configured with 1 application, 100 import instances of 100MB each, and 250 deployment instances. To run smoothly, 25GB of space is necessary.

After purging and archiving, more than 12GB of space can be recovered.

Please refer to the DROPS Installation and Configuration Guides for additional information about setting directories for temporary locations, the artifact repository and other settings.

12.2 DROPS Agent

A typical installation will need at least 1GB of hard disk space for the software, temporary artifact storage and temporary space. Software installation only needs 450MB of hard disk space.

With extensive use of the software, the space required may grow according to the following rules and directories:

Directory	Content	Rule	Space Required
/ant/context	service management scripts	Temporary space	10MB
/exec_agent	user script execution context	Temporary space	10MB
/database	database management	Up to 5MB per deployment instance, more depending log level	1GB for 250 deployment processes
/logs	log files	Depends on log configuration	200MB for 10 log files of 10MB
/storage	settings and properties	Depends on the components and releases to be deployed by this agent.	5 components, 5 release instances of 200MB each: $5 \times 5 \times 200\text{MB} = 5\text{GB}$
/tmp	temporary space	temporary space for server use and scripts execution	200MB

Table 21: DROPS Agent disk space requirements