



LINUX DS-Client Installation Guide



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Before you install

Verify the installation computer meets the following requirements:

I) Hardware & Software Minimum Requirements

You should use the best hardware possible to maximize Asigra Cloud Backup™ performance. If applicable, it is strongly recommended that you use the fastest brand-name components available.

Hardware	x64 (64-bit) Architecture
CPU (1 or 2)	2 GHz or greater
RAM	4 GB RAM or more
Free disk space for app. and buffer	2 GB or more
Connection to DS-System	LAN, Internet, WAN

Software	Version
PostgreSQL Server (For dsclient database)	<ul style="list-style-type: none"> For the official list of this product's supported Databases and versions, refer to the Installation and Support Matrix. 9.4 (embedded, no separate installation required) 9.3 (new installations - external database)

For the official list of this product's supported operating systems and versions, refer to the **Installation and Support Matrix**. This can be found on the Installation DVD in the following path:

- \Documentation\Release_Information

UNIX Platform	Version
Novell	Open Enterprise Server 11 SP2 (x64)
Red Hat Linux	CentOS 6.6 & 6.7 (x64) CentOS 7.1 (x64) <ul style="list-style-type: none"> see Linux library requirements for Linux 7.1 (CentOS and RedHat) RedHat Enterprise Linux 5.10 & 5.11 - ES/AS (x64) RedHat Enterprise Linux 6.6 & 6.7 - ES/AS (x64) RedHat Enterprise Linux 7.1 - ES/AS (x64) <ul style="list-style-type: none"> see Linux library requirements for Linux 7.1 (CentOS and RedHat)
SUSE Linux	SUSE Linux Enterprise Server 11 SP3 / 4 (x64) <ul style="list-style-type: none"> see Linux library requirements for SUSE

Linux library requirements for Linux 7.1 (CentOS and RedHat)

- It is recommended that you use the *Installation Center* on the DVD (with the command `setup_lin.sh`), because that method will automatically install these required Linux Operating System libraries.
- If you use a downloaded or copied installation package, you must make sure these required libraries are on the target computer. The prerequisite check verifies what libraries are on the target computer during the installation.
- If you need to manually install or update any libraries, use the following table, which lists each required library and the corresponding RPM package that installs it. These RPM packages can be found on the installation DVD in the `/bin` folder, where you can use the `rpm_launcher.sh` command to manually run all the rpm packages.

Required Linux Library	RPM package that installs this library on Linux 7.1
libboost_date_time.so.1.53.0	boost-date-time-1.53.0-23.el7.x86_64.rpm
libboost_filesystem.so.1.53.0	boost-filesystem-1.53.0-23.el7.x86_64.rpm
libboost_program_options.so.1.53.0	boost-program-options-1.53.0-23.el7.x86_64.rpm
libboost_regex.so.1.53.0	boost-regex-1.53.0-23.el7.x86_64.rpm
libboost_system-mt.so.1.53.0	boost-system-1.53.0-23.el7.x86_64.rpm
libboost_system.so.1.53.0	boost-system-1.53.0-23.el7.x86_64.rpm
libboost_thread-mt.so.1.53.0	boost-thread-1.53.0-23.el7.x86_64.rpm
libicudata.so.50	libicu-50.1.2-11.el7.x86_64.rpm
libicui18n.so.50	libicu-50.1.2-11.el7.x86_64.rpm
libicuuc.so.50	libicu-50.1.2-11.el7.x86_64.rpm
libxerces-c-3.1.so	xerces-c-3.1.1-6.el7.x86_64.rpm
libxmlrpc_client.so.3	xmlrpc-c-client-1.32.5-1905.svn2451.el7.x86_64.rpm
libxmlrpc.so.3	xmlrpc-c-1.32.5-1905.svn2451.el7.x86_64.rpm
libxmlrpc_util.so.3	xmlrpc-c-1.32.5-1905.svn2451.el7.x86_64.rpm
libQtCore.so.4	qt-4.8.5-8.el7.x86_64.rpm
libQtGui.so.4	qt-x11-4.8.5-8.el7.x86_64.rpm
libQtNetwork.so.4	qt-4.8.5-8.el7.x86_64.rpm
libQtXml.so.4	qt-4.8.5-8.el7.x86_64.rpm

Troubleshooting:

The installation may fail to launch and you may not reach the prerequisites check if the target Linux computer has only a minimal operating system installation. When this occurs, run the following RPM packages:

- `bzip2-1.0.6-12.el7.x86_64.rpm`
- `bzip2-libs-1.0.6-12.el7.x86_64.rpm`
- `libjpeg-turbo-1.2.90-5.el7.x86_64.rpm`

Linux library requirements for SUSE

- The following may not come with some minimal Linux operating system installations. However, they are located on the corresponding operating system installation DVD in the listed RPM file.

Required Linux Library	RPM package that installs this library on SUSE 11 SP3
libstdc++.so.6 (the 64-bit version)	<code>libstdc++43-32bit-4.6.9-0.11.38.x86_64.rpm</code>
	RPM package that installs this library on SUSE 11 SP4
	<code>libstdc++6-32bit-4.8.3+r212056-2.17.x86_64.rpm</code>

II) Obtain the DS-Client Installation Program

Contact your Asigra Cloud Backup™ Service Provider to register. You will be provided with:

- Installation Disc (or download from Service Provider Website);
- Your Customer Account number: _____;
- Your DS-Client number: _____;
- The DS-System IP address: _____;

Write these numbers down (a space is provided for each above). They are required when you first connect to the DS-Client. (See “Step 5. Connect to DS-Client and perform initial configuration” on page 8.)

- Alternatively, your Service Provider can provide you with a .CRI (Customer Registration Information) file. This file contains your customer account and DS-Client number, along with the DS-System IP address.

III) Select your encryption key(s)

- Data backed up through the DS-Client is encrypted using the encryption key(s) you specify.
- Encryption keys are set once. You cannot change the key(s) once set. The DS-Client service will not be allowed to start.
- You must select the type of encryption key (DES, AES 128-bit, AES 192-bit, AES 256-bit). Stronger encryption requires longer keys (8, 16, 24, or 32 characters).
- **Private key:** You must set this key.
- **Account key:** If you only have one DS-Client, you do not need to set this key. When you have more than one DS-Client, you must specify an Account key. This must be the same for every DS-Client that is registered under this same customer account on the DS-System. Common data from your DS-Clients will be encrypted using the Account key.

IV) Backup your existing DS-Client database

If you are upgrading an existing DS-Client installation, it is strongly recommended that you back up the existing DS-Client database before proceeding.

- For an external PostgreSQL database, use the command:

```
# pg_dump -U postgres dsclient > /<installation_path>/dsclient.dmp
```
- For an embedded PostgreSQL database, use the command:

```
/<installation_path>/db/pgsql/bin/pg_dump -U dsclient dsclient -h  
<installation_path>/db/pgsql > /<installation_path>/dsclient.dmp
```

Install or upgrade DS-Client

Step 1. Log in to target installation computer

- Logon as root

Step 2. Run Installation Package

Depending on your selections, some different screens will appear. These differences are noted below.

1. **[Option I]** Run the *Installation Center for Linux Products* (**setup_lin.sh**) located in the root directory of the installation DVD.

- The *Installation Center* is a common launcher for all Linux-platform installations. It allows you to choose the specific installation package you want, without the need to browse the installation DVD.

[Option II] Run the installation program from the download directory or from the corresponding folder on the installation DVD:

```
/Software/DS-Client/Linux_64_bit/setuplinuxclient.bin
```

Note: If you install on RedHat Enterprise Linux 7.1 using Option II, you are required to manually install the required Linux operating system libraries on the target installation computer. The prerequisite check will tell you if any libraries are missing or need to be updated.

2. The Installation starts. Follow the GUI to install DS-Client.
3. Choose the *Setup Language* (English / German / Simplified Chinese) and click **Install**.

Note: The selected language will be installed for the DS-Client daemon. Once set, the DS-Client Service language cannot be changed (for logs and popup messages). The DS-User GUI language can be changed from the Initialization screen (if the required language components have been installed). The DS-Client can be installed on English or German operating systems.

- You must accept the terms of the *Software License Agreement* by selecting that radio button.

A prerequisite check is performed on the installation machine. This scans the hardware and operating system for compatibility (see “**I) Hardware & Software Minimum Requirements**” on page 4).

Note: If a critical error is detected, the installation will exit.

4. Click **Next**.

Step 3. Choose Setup Type and Installation Location

1. The *Choose Setup Type and Installation Location* screen appears.
2. Three setup type options are available:

Type	Description
DS-Client	Installs the DS-Client daemon (service) components.
Classic DS-User	Installs the Classic DS-User GUI components. Starting in v13, the Java DS-User is renamed to Classic DS-User. This option is for end-user workstations. You can install DS-User on any network computer, so end users can access the DS-Client and specify their own backup sets.
DS-User	Installs the DS-User GUI components. This is a redesigned DS-User interface. This option is for end-user workstations. You can install DS-User on any network computer, so end users can access the DS-Client and specify their own backup sets.

3. By default, **DS-Client** and **Classic DS-User** are selected.
4. In the *Directory Name* field, select the destination folder where the installation will copy the program files. The default destination folder is:


```
/opt/CloudBackup/DS-Client
```
5. To specify a different destination folder, click **Browse**.
 - The *Choose Directory* screen appears.
 - Specify a new directory path
 - Click **OK**.
6. Click **Install**.

Step 4. Finish Installation

1. The *Setup Complete* screen appears once all files are copied.
 - You can select to start the DS-User and DS-Client upon exiting the Installation.
 - **Start DS-Client at boot time (run-level 3):** Select to configure the DS-Client to automatically start each time the installation computer boots.
2. Click **Done** to complete the installation.
3. You can manually start and stop the DS-Client service (daemon) with the following commands:

```
Start DS-Client: /etc/init.d/dsclient start
Stop DS-Client: /etc/init.d/dsclient stop
```

4. Start the DS-Client daemon.

Step 5. Connect to DS-Client and perform initial configuration

On connection to a Linux DS-Client that has not registered with the DS-System, you will encounter an *Initial DS-Client Configuration* screen where you must enter this information.

1. **Application > Asigra DS-Client > Classic DS-User.**
2. A DS-Client List appears on the left-side of the GUI. From the DS-Client List, select the DS-Client you want (unregistered DS-Clients appear in green).
3. The *Connect to DS-Client Service* screen appears. Enter your Credentials and click **Connect**.

4. After you successfully connect to the DS-Client, the *Initial DS-Client Configuration* screen appears.

5. In the *Customer Registration Info* section, enter the following:

Customer Name	Enter a descriptive name for this DS-Client. <ul style="list-style-type: none"> This name appears in brackets after the computer name in the Java DS-User GUI's list of available DS-Client computers (when sorted by Name).
Account #	Enter your Account number. This number is provided to you by your Service Provider.
DS-Client #	Enter your DS-Client number. This number is provided to you by your Service Provider.

- Browse:** An alternative to manually entering the above information is to use a .CRI file supplied by your Service Provider. Click **Browse** to search for this file on your network.
6. In the *DS-System Info* section, specify the DS-System connection information. You received the IP address of the DS-System from your Service Provider. The DS-Client requires this address in order for it to connect to the DS-System. In the *Address* field:
- Enter the IP address of the DS-System your DS-Client will be using and click **Add**.
 - Your Service Provider may have more than one IP address for the DS-System, if this is the case you can specify any or all of them.

7. In the *Encryption Keys* section, you must set the encryption key(s) that the DS-Client will use.

<p>Encryption Keys</p> <ul style="list-style-type: none"> • An encryption key is case sensitive. Its length (in characters) depends on the type and level of encryption selected. DES requires 8 characters, AES-128 requires 16 characters, AES-192 requires 24 characters, and AES-256 requires 32 characters. For better security, do not use dictionary words or proper names, and try to randomly mix numbers in with the letters. • Auto-complete feature: If you do not specify the full amount of characters in the Key field, the GUI will fill in the remainder by repeating the string of characters you have entered. (e.g. entering “123” with AES-128 will generate an encryption key of “1231231231231231”, or entering “a” for DES will generate the encryption key “aaaaaaaa”). • Keep the key(s) in a secure location. Your ability to select the same encryption type and re-enter the same key is necessary if you ever need to reinstall your DS-Client to a new computer (e.g. if the computer is destroyed in a disaster). 	
Private Key	<p>You must set a private key for this DS-Client. Backup data from your DS-Client installation will be encrypted with this key.</p> <ul style="list-style-type: none"> • Type: Select from the available types. Stronger encryption requires longer keys. • Key: Enter the key. • Confirm: Re-enter the key to verify the string is correct. You cannot change this key once it is set.
Account Key	<p>You must set an account key if more than one DS-Client belongs to your customer account. Common backup data from all your DS-Client installations will be encrypted with this key. Once the account key is set, all DS-Clients from this customer must be configured with that same account key.</p> <ul style="list-style-type: none"> • Type: Select from the available types. Stronger encryption requires longer keys. • Key: Enter the key. • Confirm: Re-enter the key to verify the string is correct. You cannot change this key once it is set.
<p>Allow encryption key forwarding to DS-System</p> <ul style="list-style-type: none"> • Check to have DS-Client forward the encryption key(s) to the DS-System the first time it connects with DS-System. <p>NOTE: If you forward the keys, they will remain encrypted on the DS-System. However, your Service Provider will be able to create a valid .CRI file containing the encrypted keys. This file will be able to recreate a working version of this DS-Client. Make sure this conforms to your security policies before enabling this option.</p>	
<p>Connect to DS-System and verify information</p> <ul style="list-style-type: none"> • Check to have DS-Client verify the configured information when you click “Save”. A popup will appear explaining the results. 	

8. In the *User Info* section, supply the requested information about your organization by choosing from the drop-down list options.
9. Once you have made all the initial DS-Client configurations, click **Save** to register with the DS-System.
- If registration is successful, you will be able to use DS-Client immediately. Refer to the DS-Client User Guide for more information.

DS-Client Upgrade

Before upgrading, read the new version's Release Notes for any special steps you need to perform.

Normally, the DS-Client should be the same version / Service Pack as the DS-System.

- An "incompatible version" error message appears in the DS-Client Event Log whenever the DS-Client must be upgraded.

Linux DS-Client can be upgraded either manually or automatically (if DS-System is configured):

- See ["Manual Upgrade" on page 11.](#)
- See ["Auto-Upgrade" on page 12.](#)

Manual Upgrade

If the DS-System is not configured for "Auto Upgrade", you must perform a manual upgrade of the DS-Client.

To manually upgrade a DS-Client from one version / Service Pack to the next, do the following:

1. Make sure the DS-Client is not running backup/restore activities that are of critical importance for your customers.
2. Stop the DS-Client daemon.
3. Run the new DS-Client Release / Service Pack installation on the machine where the DS-Client software is installed.
 - The installation will detect the existing DS-Client database and will apply the database patches.
 - The installation will also detect and upgrade the DS-Client components that are installed on the DS-Client machine.
4. Finish the installation.
5. Start the DS-Client daemon.
6. Check if you can connect to the DS-Client daemon using the same (upgraded) version of the DS-User GUI.
 - If the connection is successful, check the DS-Client Event Log for errors.
7. Run a Daily or Weekly Admin to see if the DS-Client can connect to the DS-System.
8. If there are any problems with the upgrade, contact your Service Provider.

Auto-Upgrade

If the DS-System is configured for “Auto Upgrade”, the DS-Client will automatically upgrade itself on the first connection to the upgraded DS-System.

1. DS-Client will download the upgrade package from the DS-System.
 - A “silent” upgrade will be performed, meaning there is no requirement for user interaction.
2. Check if you can connect to the DS-Client daemon using the same (upgraded) version of the DS-User GUI.
 - If the connection is successful, check the DS-Client Event Log for errors.
3. Run a Daily or Weekly Admin to see if the DS-Client can connect to the DS-System.
4. If there are any problems with the upgrade, contact your Service Provider.

Note: You can also perform a manual upgrade of the DS-Client (provided that you have received the new DS-Client Release / Service Pack installation from your Service Provider).

DS-User Only Installation

You can install DS-User on any workstation that can see the DS-Client computer. (Starting from v13, there are two possible GUI-only installations: **Classic DS-User** and **DS-User**. This section applies to both.)

DS-User is the user interface to the DS-Client, and distributing it allows end-users to access the DS-Client and specify their own backup sets from their local computer. It can also be installed individually on network workstations, to allow remote management of the DS-Client.

Before Installing DS-User

Make sure that:

- You are logged in as the workstation's root user (or a user with equivalent privileges);
- The workstation is connected to a local/network printer (for Reports);
- The time on the computer is correct;
- The workstation is networked to a DS-Client;
- The installation is running one of the supported Operating Systems from section **"I) Hardware & Software Minimum Requirements"** on page 4.

Note: These are minimum requirements. Use the best hardware possible to maximize Asigra Cloud Backup™ performance.

Install DS-User only (for remote management)

DS-User GUI can be installed using the Full DS-Client installation package:

1. Follow the same steps from the section **"Install or upgrade DS-Client"** on page 7 until you reach the *Choose Setup Type and Installation Location* screen.
 - Select **Classic DS-User** or **DS-User**.
2. Click **Next** and continue clicking **Next** until the *Setup Complete* screen appears.
3. Click **Finish**.
4. You may start the program and connect to DS-Client.

DS-User Upgrade (Upgrading an existing installation)

To upgrade an existing DS-User installation, perform the following steps:

- Close all open DS-User GUIs on that machine.
- Run the latest DS-Client installation package and follow the same steps as in **"Install DS-User only (for remote management)"** on page 13.
- Open the DS-User and try to connect to a DS-Client that has the same version as the DS-User. Connection will be successful; otherwise, an error message will be reported.

Install or upgrade DS-Client (Command Line)

When you install the DS-Client from a command-line (without a GUI), you have the following command-line options after typing "setuptoolsclient.bin":

```
-i silent
-i console
-DINSTALL_FOLDER=/target/install/folder
-DCHOSEN_FEATURE_LIST="DS-C,DS-U"
-DXML=/source/path/config-update.xml
-l de or -l en
```

Option Descriptions

```
-i silent
```

Installs the application in silent mode (i.e without any interaction from the user's side). Parameters are taken from the same command line, otherwise default values are used. Default values are the ones used for the GUI mode (installation folder is /opt/CloudBackup, both DS-Client and DS-User are installed, and default language is English).

```
-i console
```

Starts the installation in console mode instead of Graphical User Interface (GUI) mode. This is intended to be used on machines where no GUI is installed.

```
-DINSTALL_FOLDER=/target/install/folder
```

Indicates the desired installation folder; if it does not exist, the folder is created by the installer application.

```
-DCHOSEN_FEATURE_LIST="DS-C,DS-U,DS-QU"
```

Sets which of the components are to be installed. Any combination of one, two or three of the following is possible: "DS-C" (DS-Client service), "DS-U" (Classic DS-User GUI), and "DS-QU" (DS-User GUI). Note there are no spaces after commas between the quotes in this string.

```
-DXML=/source/path/config-update.xml
```

Instructs the installer application to copy the file with an .xml extension from /source/path to the installation folder in /etc

```
-l de
```

Selects the language (for either Console Mode or GUI Mode installation) to be German (-l en is the default and can be omitted).

Examples

```
#!/setuptoolsclient.bin -i silent -l de -DINSTALL_FOLDER=/home/cloudbackup
```

```
#!/setuptoolsclient.bin -i silent -DCHOSEN_FEATURE_LIST="DS-C" -DXML=/scripts/xml/
config-update.xml
```

Install or upgrade DS-Client (Console Mode)

Console mode installation allows you to install the DS-Client from a command-line (without a GUI).

Note: To go back to the previous screen in Console Mode, type “back” and press Enter.

Step 1. Log in to target installation computer

1. Logon as **root**.

Step 2. Run Installation Package

Depending on your selections, some different screens will appear. These differences are noted below.

1. Open the command line and change directory to the root folder of the installation DVD.
2. Run the command:

```
./setup_lin.sh -console
```

The *Installation Center* starts.

3. Select the language and press **Enter**.
4. Select the product. Press **[1]** and **Enter** to install Linux DS-Client.

Console mode offers a command-line style interface that requires single-key input commands to change settings. The command prompt is pre-ceded by a default number in brackets (for example “[0]”). If you press the Enter key, the default number is input. For a different command, press another number from the menu on the screen.

5. Choose the Setup Language:
 - German: Press **[1]** and **Enter**
 - English: Press **[2]** and **Enter**
 - Simplified Chinese: Press **[3]** and **Enter**

Note: The selected language will be installed for the DS-Client service. Once set, the DS-Client Service language cannot be changed (for logs and popup messages). The DS-User GUI language can be changed from the Initialization screen (if the required language components have been installed).

6. The *Software License Agreement* appears. You must accept the terms of the license agreement to continue.
 - Keep pressing **Enter** until you reach the end of the license agreement
 - To accept: Press **[Y]** and **Enter**
7. A prerequisite check is performed on the installation machine. This scans the hardware and Operating System for compatibility (see “**1** [Hardware & Software Minimum Requirements](#)” on page 4).

Note: If a critical error is detected, the installation will exit.

Step 3. Choose Setup Type

1. Three *Setup* options are available:

Type	Description
DS-Client	Installs the DS-Client (service / daemon) components.
Classic DS-User	Installs the Classic DS-User (GUI) components. <ul style="list-style-type: none"> • This option is for end-user workstations. You can install Classic DS-User on any network computer, so end users can access the DS-Client and specify their own backup sets.
DS-User	Installs the DS-User (GUI) components. (This is the redesigned DS-User). <ul style="list-style-type: none"> • This option is for end-user workstations. You can install DS-User on any network computer, so end users can access the DS-Client and specify their own backup sets.

2. By default, both **DS-Client** and **Classic DS-User** are selected for setup.
 - To select only DS-Client: Press **[1]**
 - To select only Classic DS-User: Press **[2]**
 - To select only DS-User: Press **[3]**
3. To proceed, press **Enter**.

Step 4. Select Installation Location

1. Select the destination directory where DS-Client will be installed. The default destination folder is:

```

/opt/CloudBackup/DS-Client

```
2. To specify a different destination folder, type a valid path on the local computer and press **Enter**.

Step 5. Finish Installation

1. The *Setup Complete* screen appears once all files are copied.
2. By default, both the DS-User and DS-Client will be started upon exiting the Installation and the DS-Client will be configured to automatically start each time the installation computer boots.
 - To start only DS-User: Press **[1]**
 - To start only DS-Client: Press **[2]**
 - To only configure DS-Client to start at boot time: Press **[3]**
3. Press **Enter** to finish.

You can also manually start and stop the DS-Client service with the following commands:

```

Start DS-Client: /etc/init.d/dsclient start
Stop DS-Client: /etc/init.d/dsclient stop

```

Configure Linux DS-Client with an external PostgreSQL database

Creation Date: December 08, 2011

Revision Date: August 07, 2015

Product: DS-Client (Linux)

Summary

From v11.2, default installations of Linux DS-Client will come with an embedded PostgreSQL database (on the local machine). This article helps you to configure the Linux DS-Client to use an unembedded, external (remote or local) database.

IMPORTANT: The external PostgreSQL database must be the same version or higher than the embedded database (i.e. \geq PostgreSQL 9.4). If it is lower, the DS-Client will only run in standby mode due to incompatible database patches. (This is a PostgreSQL issue.)

Install Linux DS-Client and configure it with an external PostgreSQL database

1. Install the Linux DS-Client on the target machine.
2. Follow the GUI to install DS-Client. **Do not start DS-Client Service or DS-User.**
3. Modify the dsclient.cfg at `<installation_path>/etc` to point to the external PostgreSQL.
 - Database Home: This is the directory where you can find "bin/psql".
 - Database Host: IP address or computer_name where the PostgreSQL instance resides.
 - Database Type: PostgreSQL
 - Database User: postgres
 - Database Password: This must be in encrypted format. Use the 'asigraenc' application in `<DS-Client_Installation_Path>/Tools` to generate an encrypted version of your postgres password. (For example: `./asigraenc mypassword`)
 - Database Port: 5432
4. Then you must create a new, empty external "dsclient" and "dslanfiles" database with the following 2 commands:

```
psql template1 -Upostgres
create database dsclient template=template0 encoding='UTF8';
create database dslanfiles template=template0 encoding='UTF8';
```

5. Find the following 2 files in the `<installation_path>/db/scripts` folder:

```
postgresdsclient.sql
postgresdslanfiles.sql
```

6. Run these scripts to initialize each database:

```
psql -d dsclient -Upostgres -f <path>/postgresdsclient.sql
psql -d dslanfiles -Upostgres -f <path>/postgresdslanfiles.sql
```

- If running PostgreSQL Server on the local (DS-Client) computer, `<path>` is the `<installation_path>/db/scripts` (default is usually `/opt/CloudBackup/DS-Client/db/scripts`).
- If running PostgreSQL Server on the a remote computer, `<path>` can be any location. Copy the `postgresdsclient.sql` and `postgresdslanfiles.sql` scripts to the PostgreSQL computer and run the above psql commands.

Note: The IP address of the local computer (DS-Client machine) must be added to the pg_hba.conf file located under <Postgres_Installation_Path>/data folder, in order to prevent connection problems between the DS-Client machine and the Postgres server.

7. Start the DS-Client service with the following command:

```
Start DS-Client: /etc/init.d/dsclient start
```

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Connecting to an embedded PostgreSQL database

Creation Date: December 22, 2011

Revision Date: December 22, 2011

Product: DS-Client (Linux)

Summary

From v11.2, default installations of Linux DS-Client will come with an embedded PostgreSQL database (on the local machine).

To connect to the embedded database instance that is installed with the Linux DS-Client, follow the steps below:

1. su to root user
2. In a command line type:

```
PATH_TO_PSQL/psql -h PATH_TO_EMBEDDED_PGSQL -U dsclient -d DATABASE_NAME
```

where:

- PATH_TO_PSQL is the path where psql command can be found. For DS-Client installed with embedded PostgreSQL database instance, by default, this path is:
`/opt/CloudBackup/DS-Client/db/pgsql/bin`
- PATH_TO_EMBEDDED_PGSQL is the path where the Embedded Database is installed. By default, this path is `/opt/CloudBackup/DS-Client/db/pgsql`. This path value can be found in the DS-Client installation directory, `/etc/dsclient.cfg` file, in the Database Host value.
- DATABASE_NAME is the database name to connect to, found in the Embedded PostgreSQL database instance.

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DS-Client Binary Version Check (--version)

You can view the DS-Client binary version by doing the following:

1. Through the DS-User GUI, when connected to the DS-Client (Help menu > About DS-User > DS-Client Info...).

-OR-

2. Via command line (also works if the daemon is not running):
 - 'CD' to the DS-Client installation directory's /bin folder. By default, this is:
`/opt/CloudBackup/DS-Client/bin`
 - Enter the command:
`./unixdsclient --version`

Uninstalling

You can uninstall the software with the following command lines:

GUI mode command:

```
<DSCLIENT FOLDER>\_DS-Client_installation\Uninstaller
```

Console mode command:

```
<DSCLIENT FOLDER>\_DS-Client_installation\Uninstaller -i console
```