EDB Postgres Slony Guide
Version 1.0

1   Installing Slony Replication

This section walks you through installing EDB Slony Replication on an RHEL/CentOS host, a Debian/Ubuntu host, and a Windows host.

The EDB Slony Replication version required by your EDB Postgres Advanced and PostgreSQL Server installation is version-specific, but the documented and supported functionality of each version is the same.

The following table lists the latest Slony Replication versions and their corresponding Postgres versions and platforms supported by Slony Replication. The information in this guide applies to each version listed in the table below.

Supported Slony Replication Version	Supported Postgres Version	Supported Platforms
`Slony Replication 2.2`	EDB Postgres Advanced and PostgreSQL Server 13	RHEL 7 - x86_64 and RHEL 8 - x86_64 RHEL 7 - ppc64le Debian 9x Stretch and Debian 10x Buster Ubuntu 18.04 Bionic Beaver and Ubuntu 20.04 LTS Focal Fossa Windows x86_64
`Slony Replication 2.2`	EDB Postgres Advanced and PostgreSQL Server 12	RHEL 7 - x86_64 and RHEL 8 - x86_64 RHEL 7 - ppc64le Debian 9x Stretch and Debian 10x Buster Ubuntu 18.04 Bionic Beaver Windows x86_64
`Slony Replication 2.2`	EDB Postgres Advanced and PostgreSQL Server 11	RHEL 7 - x86_64 and RHEL 8 - x86_64 RHEL 7 - ppc64le Debian 9x Stretch Ubuntu 18.04 Bionic Beaver Windows x86_64
`Slony Replication 2.2`	EDB Postgres Advanced and PostgreSQL Server 10 and 9.6	RHEL 7 - x86_64 RHEL 7 - ppc64le Windows x86_64 and Linux graphical installer

!!! Note Slony is no longer supported on CentOS/RHEL/OL 6.x platforms. It is strongly recommended to migrate all EDB products running on these platforms to a supported platform.

1.1   Installing Slony Replication on a CentOS Host

Before creating the repository configuration file, you must have credentials that allow access to the EnterpriseDB repository. If you need credentials, visit the EDB website.

Follow the steps given below to install Slony Replication:

1. To create the repository configuration file, assume superuser privileges and invoke one of the following platform-specific commands:

On CentOS 7:

```
yum -y install https://yum.enterprisedb.com/edbrepos/edb-repo-latest.noarch.rpm
```

On CentOS 8:

```
dnf -y install https://yum.enterprisedb.com/edbrepos/edb-repo-latest.noarch.rpm
```

2. Replace the `USERNAME:PASSWORD` variable in the following command with the username and password of a registered EnterpriseDB user:

```
sed -i "s@<username>:<password>@USERNAME:PASSWORD@" /etc/yum.repos.d/edb.repo
```

3. Before installing Slony, execute the following command to install the Extra Packages for Enterprise Linux (EPEL) release package:

On CentOS 7:

```
yum -y install https://dl.fedoraproject.org/pub/epel/epel-release-latest-
7.noarch.rpm
```

On CentOS 8:

```
dnf -y install epel-release
```

4. For CentOS 8, enable the PowerTools repository to satisfy package dependencies:

```
dnf config-manager --set-enabled PowerTools
```

5. For CentOS 8, disable the built-in PostgreSQL module:

```
dnf -qy module disable postgresql
```

6. Use the following platform-specific command to install Slony:

On CentOS 7:

```
yum -y install edb-as<xx>-slony-replication
```

Where <xx> is the Slony version you want to install.

On CentOS 8:

```
dnf -y install edb-as<xx>-slony-replication
```

Where <xx> is the Slony version you want to install.

To install Slony 2.2.10 on CentOS 8 for EDB Postgres Advanced Server version 13, the command is:

```
dnf -y install edb-as13-slony-replication
```

Installing Slony on an RHEL Host

Before installing the repository configuration file, you must have credentials that allow access to the EnterpriseDB

repository. For information about requesting credentials, visit the [EDB website](https://www.enterprisedb.com).

Follow the steps given below to install Slony Replication:

1. To create the repository configuration file, assume superuser privileges and invoke one of the following platform-specific commands:

   On RHEL 7:

   ```
   yum -y install https://yum.enterprisedb.com/edbrepos/edb-repo-latest.noarch.rpm
   ```

   On RHEL 8:

   ```
   dnf -y install https://yum.enterprisedb.com/edbrepos/edb-repo-latest.noarch.rpm
   ```

2. Replace the `USERNAME:PASSWORD` variable in the following command with the username and password of a registered EnterpriseDB user:

   ```
   sed -i "s@<username>:<password>@USERNAME:PASSWORD@" /etc/yum.repos.d/edb.repo
   ```

3. Before installing Slony, execute the following command to install the Extra Packages for Enterprise Linux (EPEL) release package:

   On RHEL 7:

   ```
   yum -y install https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
   ```

   On RHEL 8:

   ```
   dnf -y install https://dl.fedoraproject.org/pub/epel/epel-release-latest-8.noarch.rpm
   ```

4. Enable the repository:

   On RHEL 7, enable the `optional, extras`, and `HA` repositories to satisfy package dependencies:

   ```
   subscription-manager repos --enable "rhel-*-optional-rpms" --enable "rhel-*-extras-rpms"  --enable "rhel-ha-for-rhel-*-server-rpms"
   ```

   On RHEL 8, enable the `codeready-builder-for-rhel-8-*-rpms` repository to satisfy package dependencies:

   ```
   ARCH=$( /bin/arch )
   ```

   ```
   subscription-manager repos --enable "codeready-builder-for-rhel-8-${ARCH}-rpms"
   ```

5. For RHEL 8, disable the built-in PostgreSQL module:

   ```
   dnf -qy module disable postgresql
   ```

6. Use the following platform-specific command to install Slony:

   On RHEL 7:

   ```
   yum -y install edb-as13-slony-replication
   ```

Where <xx> is the Slony version you want to install.

On RHEL 8:

```
dnf -y install edb-as13-slony-replication
```

Where <xx> is the Slony version you want to install.

To install Slony 2.2.10 on RHEL 8 for EDB Postgres Advanced Server version 13, use the following command:

```
dnf -y install edb-as13-slony-replication
```

The following table lists the path to the service, installation, and configuration file.

Platform	Service File Path	Installation File Path	Configuration File Path
RHEL/CentOS 7 and 8	`/usr/lib/systemd/system/edb-slony-replication-<xx>.service`	`/usr/edb/as<xx>`	The configuration file `slony-replication.ini` is located in `/etc/edb/slony-replication<xx>`

In the above table, <xx> represents the EDB Postgres Advanced Server version.

Installing Slony on an RHEL/CentOS 7 PPCLE Host

Before installing the repository configuration file, you must have credentials that allow access to the EnterpriseDB repository. For information about requesting credentials, visit the EDB website.

Perform the following steps to install Slony on an RHEL/CentOS 7 PPC64LE Host:

1. Install Advance Toolchain:

```
rpm --import
https://public.dhe.ibm.com/software/server/POWER/Linux/toolchain/at/redhat/RHEL7/g
-pubkey-6976a827-5164221b

cat > /etc/yum.repos.d/advance-toolchain.repo <<EOF

# Beginning of the configuration file
[advance-toolchain]
name=Advance Toolchain IBM FTP
baseurl=https://public.dhe.ibm.com/software/server/POWER/Linux/toolchain/at/redhat,
7
failovermethod=priority
enabled=1
gpgcheck=1
gpgkey=ftp://public.dhe.ibm.com/software/server/POWER/Linux/toolchain/at/redhat/RHI
-pubkey-6976a827-5164221b
# End of the configuration file
```

2. To create the repository configuration file, assume superuser privileges and invoke the following command:

```
yum -y install https://yum.enterprisedb.com/edbrepos/edb-repo-latest.noarch.rpm
```

3. Replace the `USERNAME:PASSWORD` variable in the following command with the username and password of a registered EnterpriseDB user:

```
sed -i "s@<username>:<password>@USERNAME:PASSWORD@" /etc/yum.repos.d/edb.repo
```

4. Before installing Slony, execute the following command to install the Extra Packages for Enterprise Linux (EPEL) release package:

```
yum -y install https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
```

5. On RHEL 7, enable the `optional, extras`, and `HA` repositories to satisfy additional package dependencies:

```
subscription-manager repos --enable "rhel-*-optional-rpms" --enable "rhel-*-extras-rpms"  --enable "rhel-ha-for-rhel-*-server-rpms"
```

6. Invoke the following command to install Slony:

```
yum -y install edb-as<xx>-slony-replication
```

Where <xx> is the Slony version you want to install.

1.2 Installing Slony Replication on a Debian or Ubuntu Host

You must install EDB Postgres Advanced Server before installing Slony Replication. For details about installing and configuring EDB Postgres Advanced Server, see the *EDB Postgres Advanced Server Installation Guide* available at the EDB website. To install Slony Replication on a Debian or Ubuntu host, you must have credentials to access the EnterpriseDB repository. If you need EnterpriseDB credentials, visit the EDB website.

The following steps will walk you through using the EnterpriseDB repository to install a DEB package. When using the commands, replace the `username` and `password` with the credentials provided by EnterpriseDB.

1. Assume superuser privileges:

```
sudo su -
```

2. Configure the EnterpriseDB repository:

On Debian 9, Ubuntu 18 and Ubuntu 20:

```
sh -c 'echo "deb https://username:password@apt.enterprisedb.com/$(lsb_release -cs)-edb/ $(lsb_release -cs) main" > /etc/apt/sources.list.d/edb-$(lsb_release -cs).list'
```

On Debian 10:

a. Set up the EnterpriseDB repository:

```
sh -c 'echo "deb [arch=amd64] https://apt.enterprisedb.com/$(lsb_release -cs)-edb/ $(lsb_release -cs) main" > /etc/apt/sources.list.d/edb-$(lsb_release -cs).list'
```

b. Substitute your EnterpriseDB credentials for the `username` and `password` placeholders in the following command:

```
sh -c 'echo "machine apt.enterprisedb.com login <username> password <password>" >
/etc/apt/auth.conf.d/edb.conf'
```

3. Add support to your system for secure APT repositories:

```
apt-get install apt-transport-https
```

4. Add the EDB signing key:

```
wget -q -O - https://apt.enterprisedb.com/edb-deb.gpg.key  | sudo apt-key add -
```

5. Update the repository metadata:

```
apt-get update
```

6. Install the Debian package:

```
apt-get -y install edb-as<xx>-slony-replication
```

where <xx> is the EDB Postgres Advanced Server version.

For example, to install Slony Replication for EDB Postgres Advanced Server version 13, execute the following command:

```
apt-get -y install edb-as13-slony-replication
```

The following table lists the path of the service, installation, and configuration path.

Service File Path	Installation File Path	Configuration File Path
`/lib/systemd/system/edb-as<xx>-slony-replication.service`	`/usr/lib/edb-as/<xx>`	The configuration file named `slony-replication.ini` is located in `/etc/edb/slony-replication<xx>`

Where <xx> represents the EDB Postgres Advanced Server version.

1.3   Installing Slony Replication on a Windows Host

Graphical installers for Slony Replication are available via StackBuilder Plus (for EDB Postgres Advanced Server hosts) or Stack Builder (on PostgreSQL hosts).

The following steps walk you through installing Slony Replication via StackBuilder Plus. You can access StackBuilder Plus through your Windows start menu.

1. Open StackBuilder Plus and select your EDB Postgres Advanced Server installation from the drop-down list on the `Welcome` window. Click `Next` to continue to the application selection page.

Fig. 1: The StackBuilder Plus Welcome window

2. Expand the `Replication Solutions` node, and check the box next to the Slony Replication version. Click `Next` to continue.

3. The selected packages and the default download directory are displayed. Change the download directory location if required. Click `Next`.

4. Once you have downloaded the installation files, a confirmation message is displayed. Click `Next` to start the Slony Replication installation.

Fig. 2: Installing Slony

5. Select an installation language and click `OK`.

6. The installer welcomes you to the setup wizard. Click `Next`.

Fig. 3: The Slony Welcome window

7. Use the `Installation Directory` field to specify the directory you wish to install Slony Replication. Then, click `Next` to continue.

Fig. 4: The Installation Directory window

8. The `Ready to Install` window notifies you when the installer has all of the information needed to install Slony Replication on your system. Click `Next` to install Slony Replication. Progress bars inform you as the installation progresses.
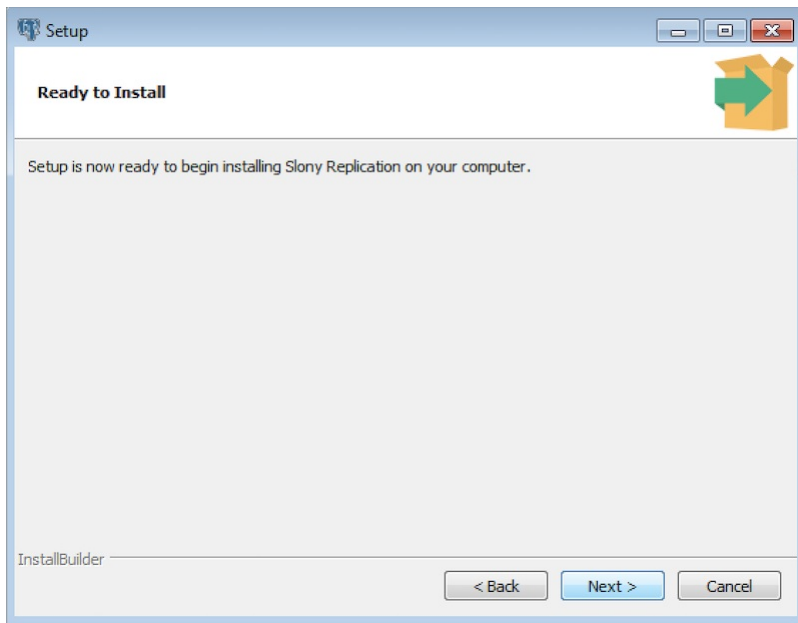
Fig. 5: The Ready to Install window

9. The installer notifies you when the setup wizard has completed the installation. Click `Finish` to exit the installer.

Fig. 6: The installation is complete

10. Click `Finish` to exit the StackBuilder Plus.

Fig. 7: Exit StackBuilder Plus

2   Configuring Slony Replication

On a CentOS and Debian host, the configuration file (`slony-replication.ini`) is located in the `/etc/edb/slony-replication<xx>` directory. Use the configuration file to specify connection information for the master and standby nodes.

On a Windows host, the configuration files are named `master.conf.sample` and `slave.conf.sample`. They are located in the `/etc` directory under the EDB Postgres Advanced Server installation. Before configuring Slony Replication, you must rename the configuration files to `master.conf` and `slave.conf`.

For information about configuring a Slony Replication environment, please refer to the Slony official project documentation.

After specifying configuration options, you must start the Slony Replication service on all nodes of the replication environment. For detailed information about controlling a service, see EDB Advanced Server Installation Guide at the EDB website.

After installing, configuring, and starting the Slony Replication on a Linux system, you must manually configure your system to autostart the service when your system reboots.

To configure a service to autostart on a Linux system, open a command line, assume superuser privileges, and enter the following command.

On a Redhat-compatible Linux system:

```
/sbin/chkconfig service_name on
```

Where `service_name` specifies the name of the service.

On a Debian-compatible Linux system, use the command:

```
/usr/sbin/update-rc.d service_name enable
```

Where `service_name` specifies the name of the service.

Please note that on a Windows system, the Slony Replication service is configured to autostart by default; you can use the `Service Properties` dialog to control the service startup type.

3   Upgrading Slony Replication

The following section outlines the process of upgrading Slony Replication.

Assume the identity of the root user and invoke the following command:

```
yum upgrade edb-as<xx>-slony-replication*
```

where <xx> is the EDB Postgres Advanced Server version.

For example, to upgrade Slony Replication for EDB Postgres Advanced Server version 9.6, you need to execute the command:

```
yum upgrade epas96-replication
```

4   Uninstalling Slony Replication

This section walks you through uninstalling Slony Replication.

Uninstalling Slony Replication on an RHEL/CentOS Host

To uninstall Slony Replication on an RHEL/CentOS host, assume the identity of the root user and invoke the following command:

On RHEL/CentOS 7:

```
yum remove edb-as<xx>-slony-replication*
```

where <xx> is the EDB Postgres Advanced Server version.

On RHEL/CentOS 8:

```
dnf remove edb-as<xx>-slony-replication*
```

Uninstalling Slony Replication on a Debian or Ubuntu Host

To uninstall Slony Replication on a Debian or Ubuntu host, invoke the following command:

```
apt-get remove edb-as<xx>-slony-replication*
```

where <xx> is the EDB Postgres Advanced Server version.

Uninstalling Slony Replication on a Windows Host

The Slony Replication graphical installer creates an uninstaller in the installation directory.

To uninstall Slony Replication on a Windows host:

1. Navigate into the installation directory that contains the uninstaller and assume superuser privileges. Open the uninstaller and click `Yes` to begin uninstalling Slony Replication:

Fig. 1: The Slony Replication Uninstaller

2. The uninstallation process begins. Click `OK` once the process completes.

Fig. 2: Uninstallation completes