FORTRA

beSOURCE 5.2

Enterprise Edition Installation Guide

202307200129

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Before You Begin

Read this section before you install, update, or upgrade beSOURCE Enterprise Edition.

System requirements

To install beSOURCE Enterprise Edition, make sure your server and client computer heave the following minimum requirements:

- Server hardware
  - Processor: 4~8 cores
  - Memory: 8GB (16GB or more is recommended)
  - Hard drive: 500GB or more

  > **NOTE:** Larger applications will require more RAM, hard drive space, and a more powerful processor.

- Server software
  - Operating system: Windows/Redhat or CentOS Linux - (recommendation: 64-bit OS)
  - JDK 1.7 or higher
  - DBMS: Oracle 11g standard, MS SQL Server 2012 or higher, Maria DB 10.0 or higher, MySQL 5.6 or higher

  > **NOTE:** DBMS is used for application analysis repository. One of the above DBs can be selected. For better performance and stability, Oracle database is recommended. Beyond Security does not provide a database license. It is your responsibility to acquire a licensed database from the list above.

- Client PC hardware
  - Processor: Dual core or higher
  - Memory: 4GB
  - Hard drive: 10GB or more
- Client PC software
  - Windows 7 64-bit or Windows 10 64-bit
  - .NET Framework 4.5 or higher

- Eclipse 3.4 or higher and JDK 1.6 or higher (if want to use Eclipse plugin)
- Operating system account (administrator is recommended)

> **NOTE:** beSOURCE Enterprise edition supports both 32-bit and 64-bit operating systems. The default JDK type (32- bit or 64-bit) is also determined based on your operating system type.

Installation Preparation

Database

Install the database before installing beSOURCE Enterprise Edition. You can use one of following databases:

- Oracle 11g standard or higher
- MS SQL Server 2012 or higher
- MariaDB 10.0 or higher
- MySQL 5.6 or higher

NOTE:

- To install Oracle or MS SQL Server, refer to official installation guide form each vendor.
- To install MariaDB, refer to MariaDB installation information at https://mariadb.com/kb/en/getting-installing-and-upgrading-mariadb/.
- To install MySQL, refer to MySQL installation information at https://dev.mysql.com/doc/.

JDBC connection driver

While installing beSOURCE Enterprise edition, the installer needs JDBC driver to connect to a database. Because of the unique distribution license policy of each vendor, you have to follow their specific instructions.

Based on your database type, you can download the JDBC drivers as recommended below:

Database	Download URL	Recommended file
Oracle 11g	http://www.oracle.com/technetwork/database/enterprise-edition/jdbc-112010-090769.html	ojdbc6.jar (Compatible with JDK 1.7)
MS SQL Server	https://docs.microsoft.com/en-us/sql/connect/jdbc/microsoft-jdbc-driver-for-sql-server	sqljdbc_4.2.8112.100_enu (Compatible with JDK 1.7)

Database	Download URL	Recommended file
MariaDB	https://downloads.mariadb.org/connector-java/	• mariaDB Connector/J 1.1 (mariadb-java-client-1.1.9.jar) (More stable) • mariaDB Connector/J 1.7 (mariadb-java-client-1.7.1.jar) (Compatible with JDK 1.7)
MySQL	https://dev.mysql.com/downloads/connector/j/	mysql-connector-java-5.1.45 (Compatible with JDK 1.7)

NOTE: Download a JDBC driver file and save it on which beSOURCE Enterprise edition installer will be run. The installer will ask you to input the location of the JDBC driver file.

JDK

The beSOURCE server programs run in JDK environment, therefore JDK is required to be installed first on the server computer. beSOURCE supports JDK versions 1.6 or later.

NOTE:
- JDK 1.7 or JDK 1.8 is recommended. If you want to use Web UI Client, JDK 1.8 is required.
- It is strongly recommended that the JDK installation path doesn't include blank or space.

Preparation for Oracle tablespace

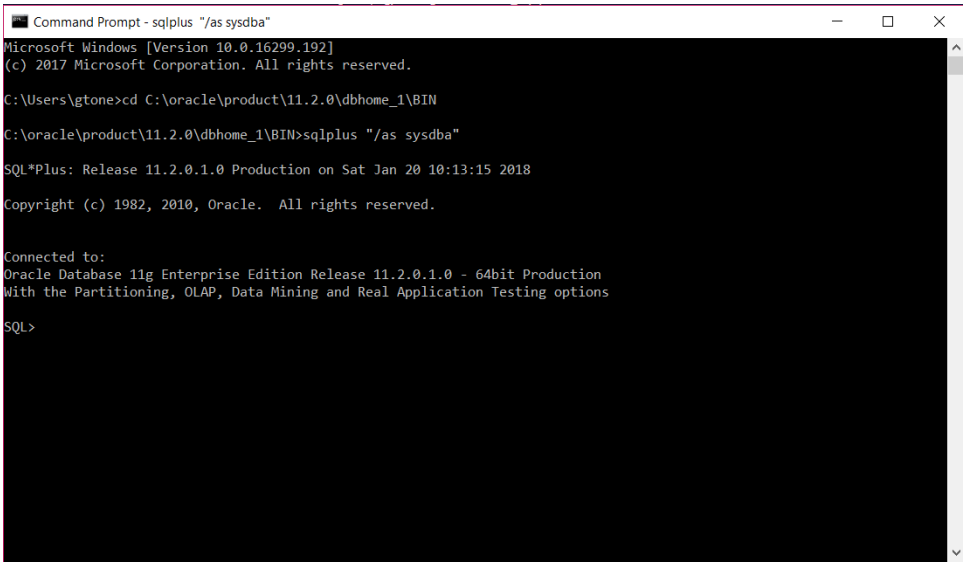
In the case of using Oracle database as your repository, tablespace for beSOURCE server must be created first and the size must be more than 2 GB. We recommend that you set the tablespace's 'Auto Extend' option value to 'True'.

The beSOURCE server repository can be split into tablespace for general data and tablespace for index. Each tablespace is divided into 2 categories by allowed extents size in the point view of data operation. When installing, the user can select each tablespace.

Each tablespace should be created in the Oracle database before installing beSOURCE. The separation of tablespace is simply suggestion against the large volumes of data. Note that it is not a mandatory.

To create a tablespace, do the following:

1. In Windows, open **Command Prompt**.
2. Move to Oracle sqlplus tool directory (for example, `CD C:\oracle\product\11.2.0\dbhome_1\bin`).
3. Access the Oracle DB with the appropriate privilege (for example, `C:\oracle\product\11.2.0\dbhome_1\bin> sqlplus "/as sysdba"`).

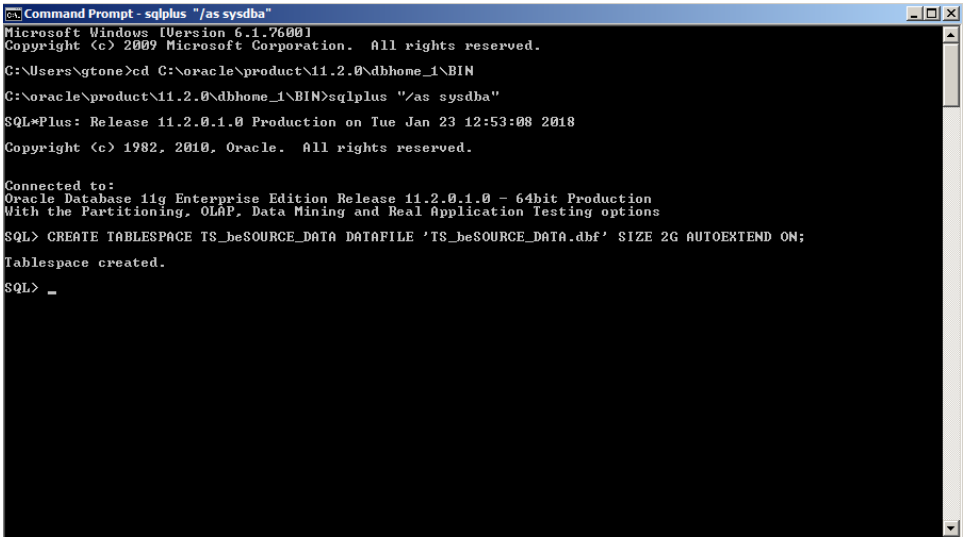


4. Run the following SQL query to create a tablespace:

   ```
   CREATE TABLESAPCE [BESOURCE_TABLESPACE_DATA] DATAFILE '[TS_beSOURCE_DATA]' SIZE 2G AUTOEXTEND ON;
   ```

   > **NOTE:** `[BESOURCE_TABLESPACE_DATA]` refers to your tablespace name and

> `[TS_beSOURCE_DATA]` refers to your data file name.



User account

Create a user account for Oracle before you install beSOURCE. The database administrator will need to create the user account and grant it DBA privileges. Otherwise, following privileges should be granted to the account.

- Resource privilege
- Connect privilege
- Create Any View privilege

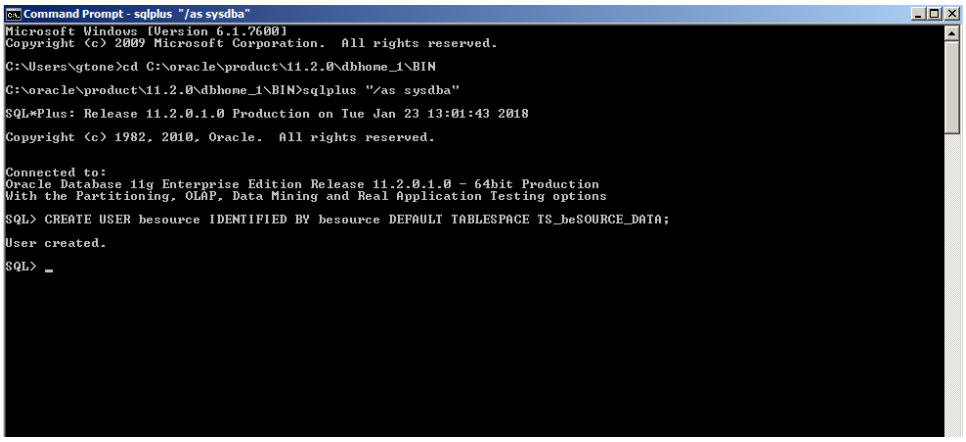
> **NOTE:** Few Oracle versions prevent the default tablespace capacity from being used fully. In such case, the tablespace should be set as 'unlimited' for its usage.

To create a user account, do the following:

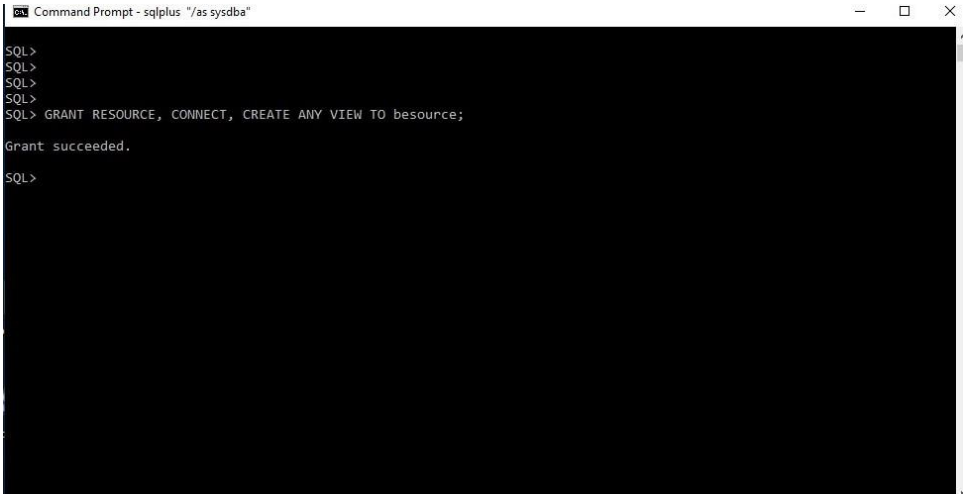
1. In Windows, open Command Prompt..
2. Move to Oracle sqlplus tool directory (for example, `CD C:\oracle\product\11.2.0\dbhome_1\bin`).
3. Access the Oracle DB with the appropriate privilege (for example, `C:\oracle\product\11.2.0\dbhome_1\bin> sqlplus "/as sysdba"`).
4. Run the following SQL command to create a user:

   ```
   CREATE USER [BESOURCE_DB_USER] IDENTIFIED BY [BESOURCE_DB_PWD]
   DEFAULT TABLESPACE [BESOURCE _TABLESPACE];
   ```

> **NOTE:** `[BESOURCE_DB_USER]` refers to your database user name for beSOURCE and `[BESOURCE_DB_PWD]` refers to your database user password.



5. Run the following SQL command to grant a privilege to the new created user:
   GRANT RESOURCE, CONNECT, CREATE ANY VIEW TO [BESOURCE_DB_USER];

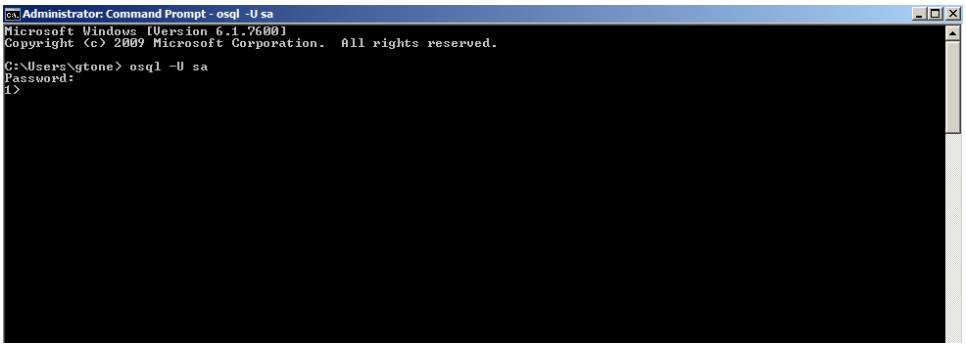


Preparation for MS SQL Server database

We recommend that you create a database in MS SQL Server with command line window or GUI tool. It will be used for beSOURCE server repository.

To create the database with command line window, do the following:

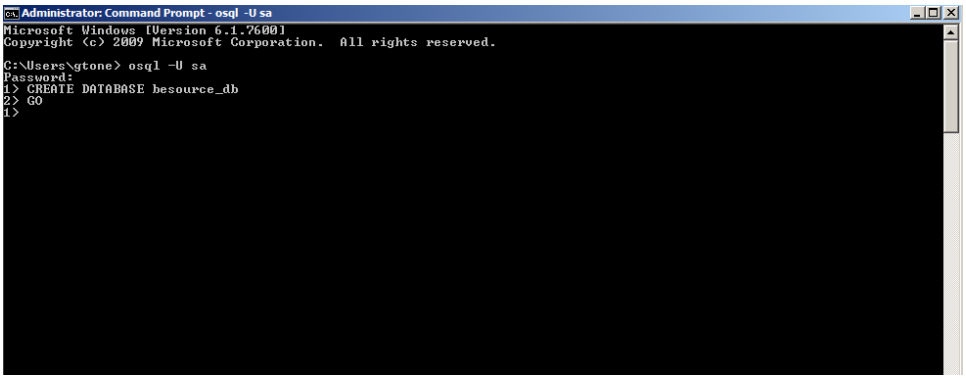
1. Run your command line window and Access to the MS SQL Server with appropriate privilege. e x) C:\Users\gtone> osql -U sa
2. Enter your password of sa user.



3. Run the following SQL command to create a database:

   ```
   CREATE DATABASE [BESOURCE_DB] GO
   ```

   > **NOTE:** `[BESOURCE_DB]` refers to your database name.



User account

Create a user account for MS SQL Server before you install beSOURCE. The database administrator will need to create the user account and grant it DBA privileges. Otherwise, following privileges should be granted to the account.

Otherwise, the following privileges should be granted to the account:

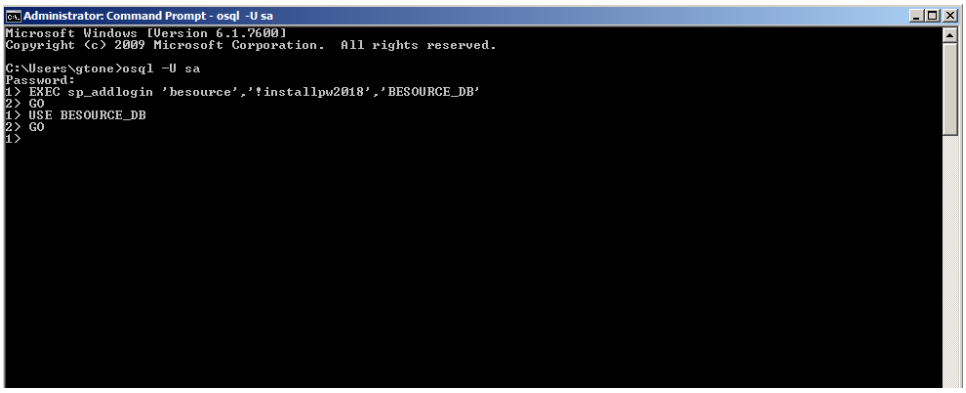
- db_datawriter Role
- db_datareader Role
- db_ddladmin Role

To create a user account, do the following:

1. Run your command line window and Access to the MS SQL Server with appropriate privilege. e x) C:\Users\gtone> osql -U sa
2. Enter your password of sa user.
3. Enter the following SQL command to create a user:

```
EXEC sp_addlogin '[BESOURCE_DB_USER]','[BESOURCE_DB_PWD]','
[BESOURCE_DB]'
GO
USE [BESOURCE_DB]
GO
```

> **NOTE:** `[BESOURCE_DB_USER]` means your database username for beSOURCE and `[BESOURCE_DB_PWD]` means your database user password.



4. Enter the following SQL command to grant a privilage to the newly created database:

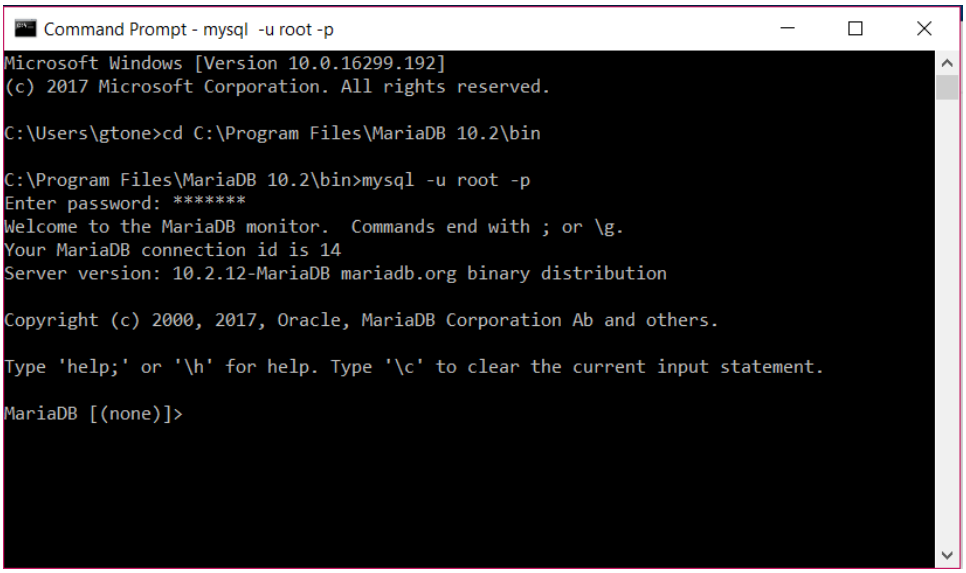
   ```
   EXEC sp_adduser '[BESOURCE_DB_USER]','db_datawriter, db_
   datareader, db_ddladmin' GO
   ```

Preparation for MariaDB database

We recommend that you create a database in MariaDB with command line window or GUI tool. It will be used for beSOURCE server repository.

To create the database with command line window, do the following:

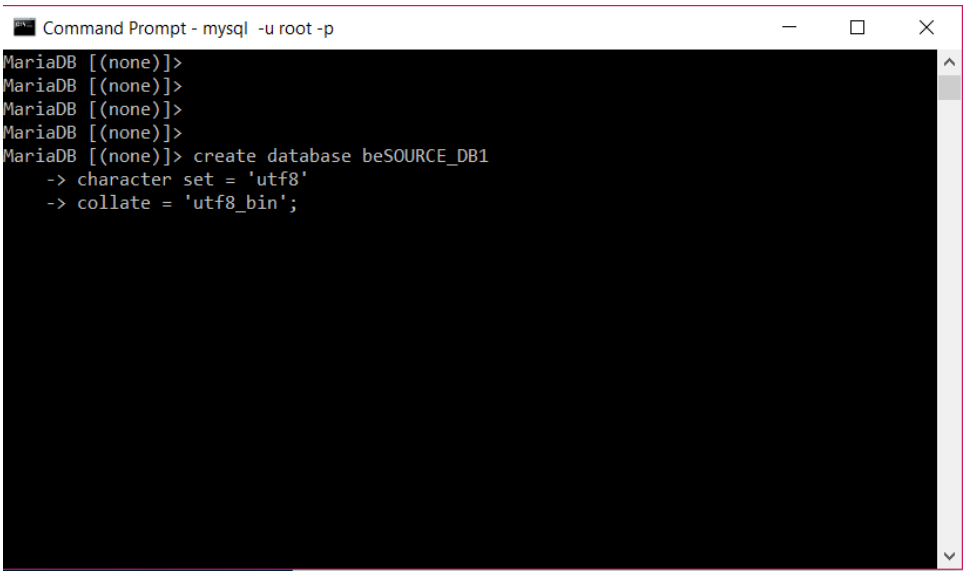
1. Run your command line window and move to MariaDB's bin directory.ex) CD C:\Program Files\MariaDB 10.2\bin
2. Access the MariaDB with appropriate privilege. ex) C:\Program Files\MariaDB 10.2\bin>mysql –u root –p
3. Enter your root user password.



4. Enter the following SQL command to create a database:

```
CREATE DATABASE [BESOURCE_DB]
CHARACTER SET = 'UTF8'
COLLATE = 'utf8_bin';
```

> **NOTE:** `[BESOURCE_DB]` refers to your database name.



User account

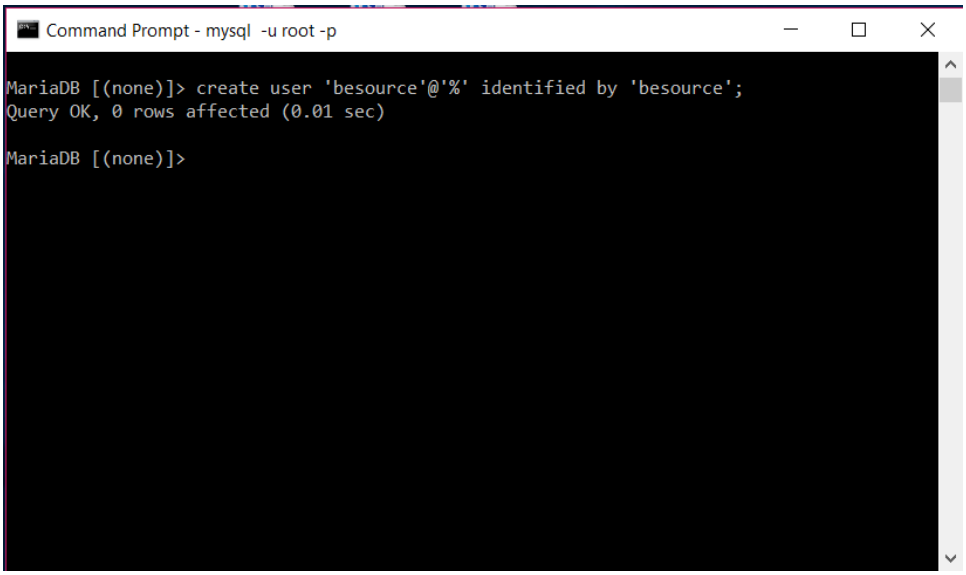
Create a user account for MariaDB before you install beSOURCE. The database administrator will need to create the user account and grant it DBManager Role privileges.

To create a user account, do the following:

1. In Windows, open **Command Prompt**.
2. Move to MariaDB's bin directory (for example, `CD C:\Program Files\MariaDB 10.2\bin`)
3. Access the MariaDB with the appropriate privilege (for example, `C:\Program Files\MariaDB 10.2\bin>mysql –u root –p`)
4. Enter your root user password.
5. Enter the following SQL command to create a user:

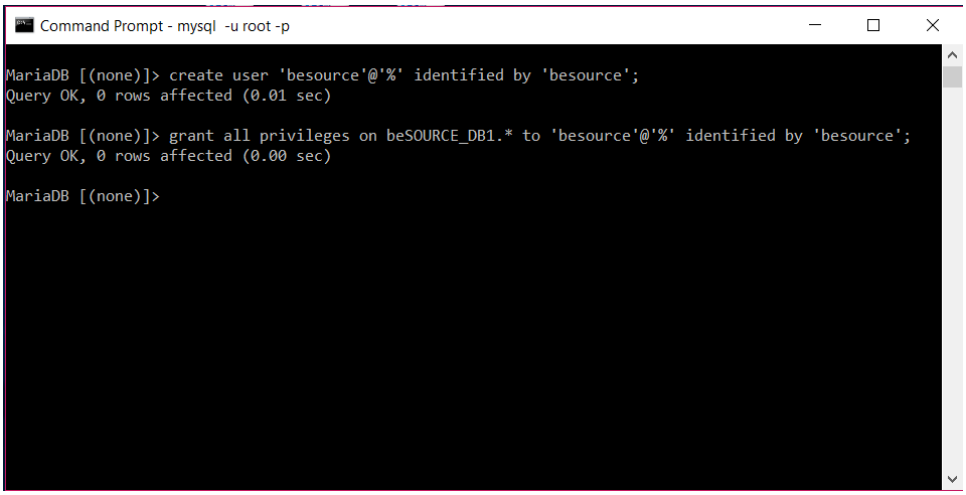
   ```
   CREATE USER '[BESOURCE_DB_USER]'@'%' IDENTIFIED BY '[BESOURCE_DB_PWD]';
   ```

   > **NOTE:** `[BESOURCE_DB_USER]` refers to your database user name for beSOURCE and `[BESOURCE_DB_PWD]` refers to your database user password.



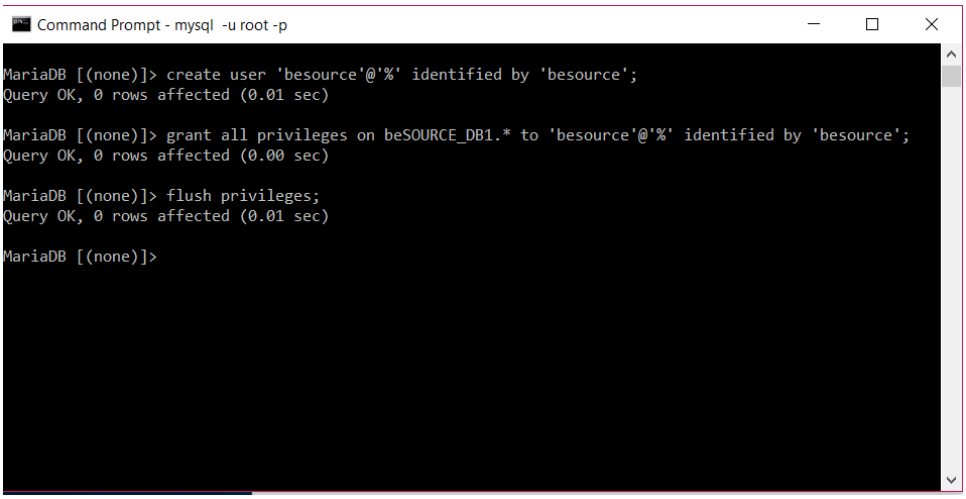
6. Enter the following SQL command to grant privileges to the newly created database:

   ```
   GRANT ALL PRIVILEGES ON [BESOURCE_DB].* TO '[BESOURCE_DB_USER]'@'%' IDENTIFIED BY '[BESOURCE_DB_PWD]';
   ```



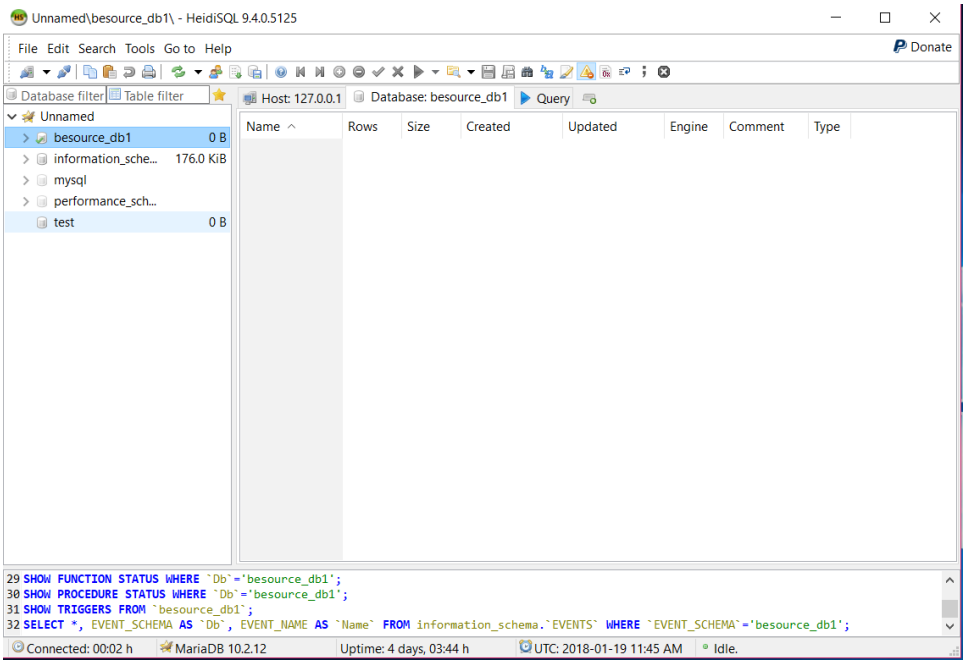
7. Enter the following SQL command to apply the privileges:

   ```
   FLUSH PRIVILEGES;
   ```



> **NOTE:** You can also use MariaDB's GUI tool, HeidiSQL to execute the above SQL statements.

You can see the new database in the GUI tool after completing the above SQL statements.



NOTE: While installing beSOURCE Enterprise edition, you could encounter bad performance of MariaDB due to its default log setting. You can avoid this issue by setting 'innodb_flush_log_at_trx_commit' options value to zero temporary.

C:\MaraiDB 10.1\bin>mysql – u root – p[passwrod]MariaDB [(none)]> set global innodb_flush_log_at_trx_commit=0; MariaDB [(none)]> show variables like 'innodb_flush_log_at_trx_commit';

If you have performance issues while operating the beSOURCE server with MariaDB, you may consider setting the 'innodb_flush_log_at_trx_commit'option value to 0 permanently in MariaDB's configuration file. The configuration file is my.cnf or my.ini. For the detail information, refer to MariaDB's manual.

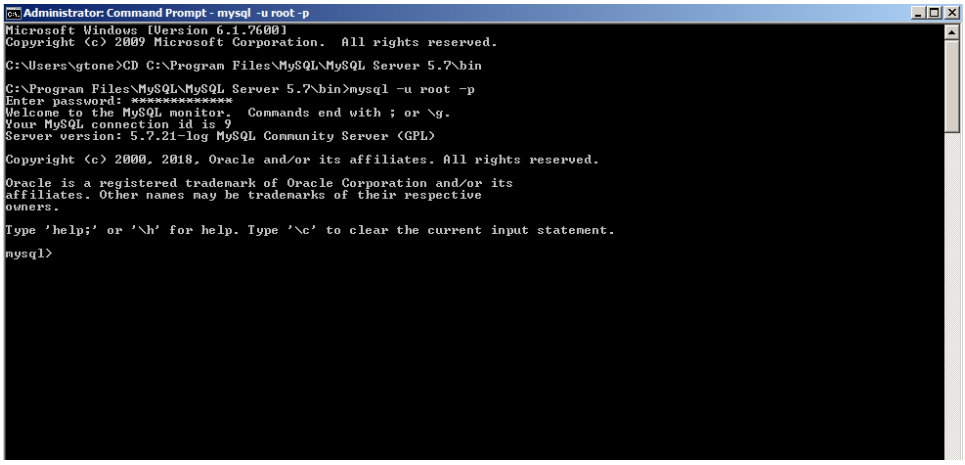
Preparation for MySQL database

We recommend that you create a database in MySQL with command line window or GUI tool. It will be used for beSOURCE server repository.

To create the database with command line window, do the following:

1. In Windows, open **Command Prompt**.
2. Move to MySQL's bin directory (for example, `CD C:\Program Files\MySQL\MySQL Server 5.7\bin`).
3. Access to the MySQL with appropriate privilege (for example, `C:\Program Files\MySQL\MySQL Server 5.7\bin> mysql -u root -p`).

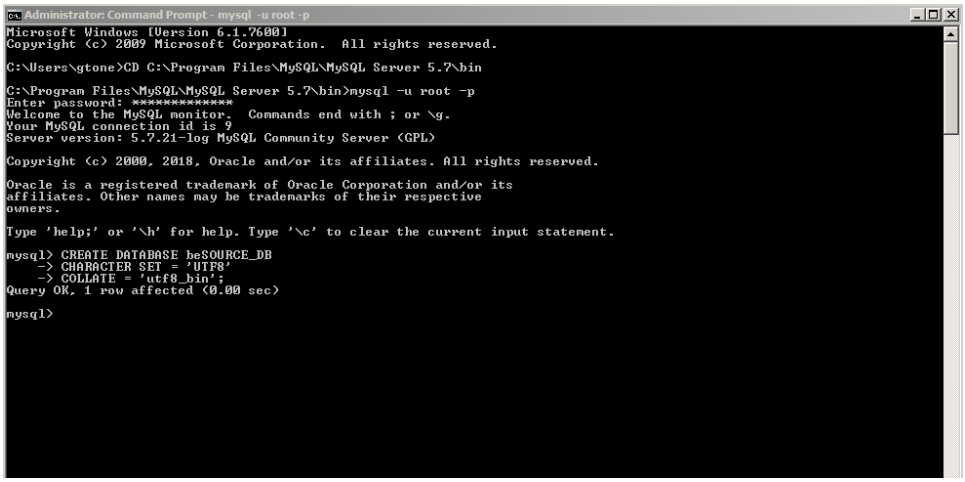
4. Enter your password of root user.



5. Enter the following SQL command to create a database:

```
CREATE DATABASE [BESOURCE_DB]
CHARACTER SET = 'UTF8'
COLLATE = 'utf8_bin';
```

> **NOTE:** `[BESOURCE_DB]` refers to your database name.



User account

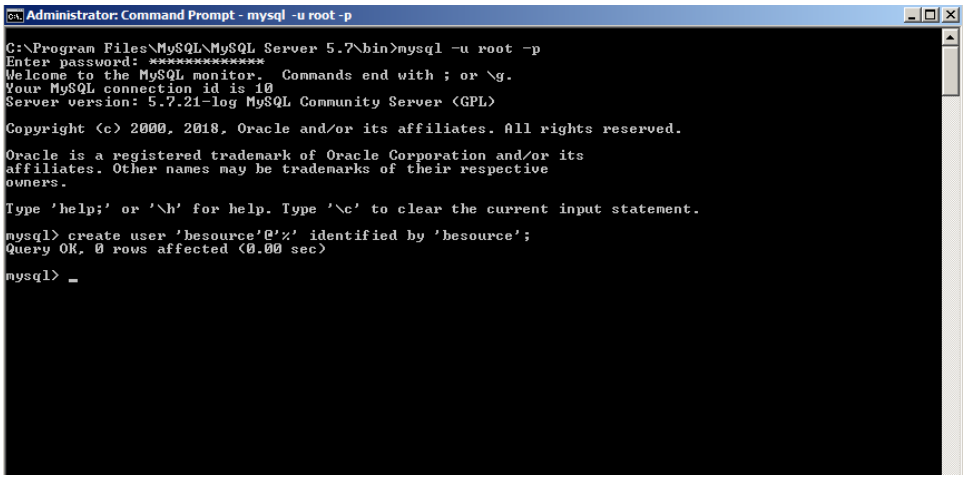
Create a user account for MySQL before you install beSOURCE. The database administrator will need to create the user account and grant it DBManager Role privileges.

To create a user account, do the following:

1. In Windows, open Command Prompt.
2. Move to MySQL's bin directory (for example, `CD C:\Program Files\MySQL\MySQL Server 5.7\bin`).
3. Access to the MySQL with appropriate privilege (for example, `C:\Program Files\MySQL\MySQL Server 5.7\bin >mysql –u root –p`).
4. Enter the root user password.
5. Enter the following SQL command to create a user:

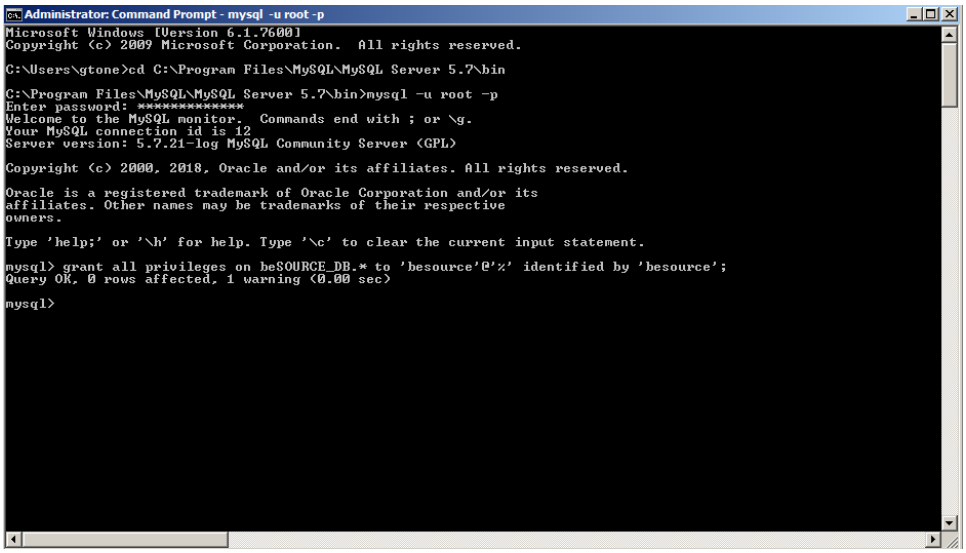
   ```
   CREATE USER '[BESOURCE_DB_USER]'@'%' IDENTIFIED BY ' [BESOURCE_DB_PWD]';
   ```

   > **NOTE:** `[BESOURCE_DB_USER]` refers to your database user name for beSOURCE and `[BESOURCE_DB_PWD]` refers to your database user password.



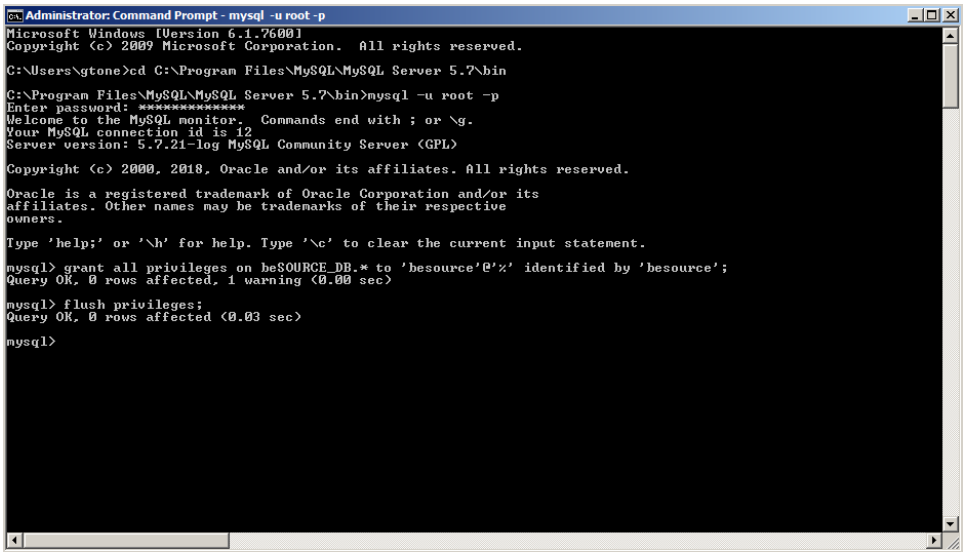
6. Enter the following SQL command to grant a privilege to the new created database:

   ```
   GRANT ALL PRIVILEGES ON '[BESOURCE_DB]'.* TO '[BESOURCE_DB_USER]'@'%' IDENTIFIED BY '[BESOURCE_DB_PWD]';
   ```



7. Enter the following SQL command to apply the privilege:

   ```
   FLUSH PRIVILEGES;
   ```



System

Note the below requirements for the server computer system:

- Disk space: at least 3 GB of disk space (more space would be required depending on the analysis size).
- System user account for beSOURCE server: user account which has installation privilege (Admin privilege is recommended).

Installing the beSOURCE Server

You can install the beSOURCE Enterprise Edition's server using an installer. The installer name is `besource_v5.0_Enterprise_Edition.exe`.

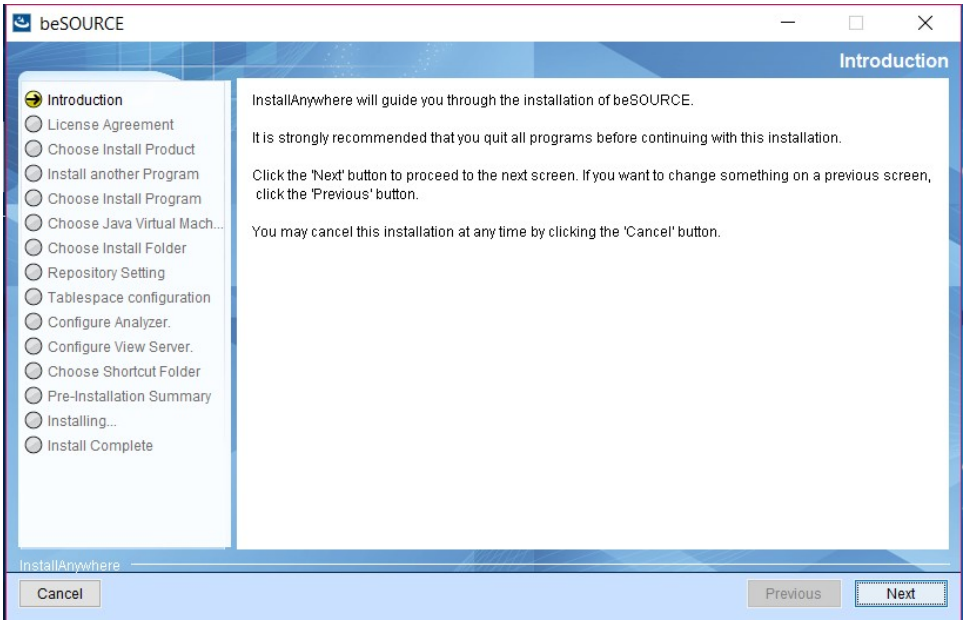
You can copy the installer program to hard disk or insert installation CD to your CD-ROM drive. Follow the steps below.

1. Copy the `besource_v5.0_Enterprise_Edition.exe` installer file to your computer or insert your installation CD.
2. Run the installer file.

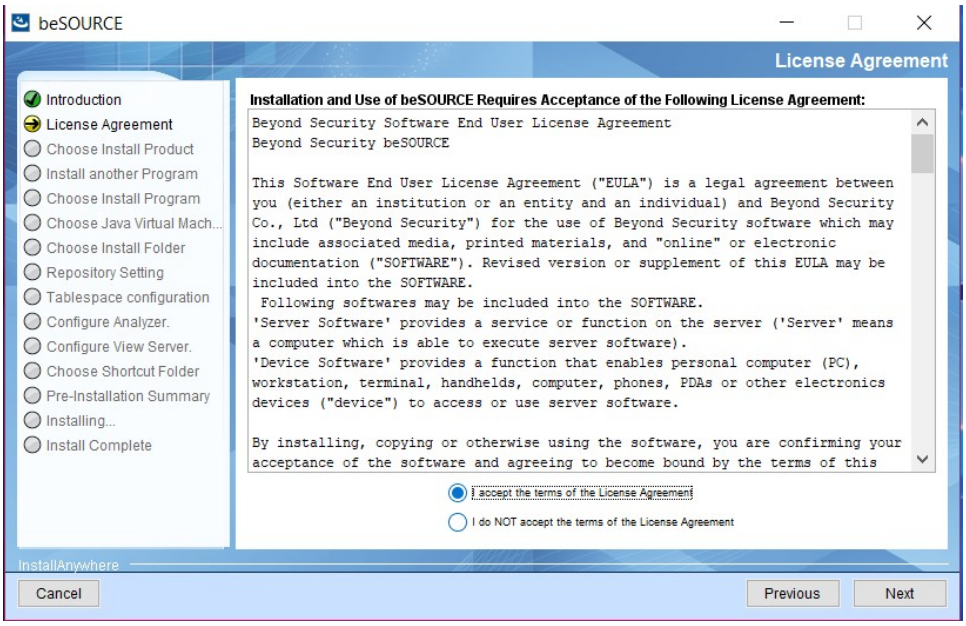
> **NOTE:** If a JVM loading error with JDK 1.8 appears while running the installer, try the LAX_VM option in command-line window:
> `C:\>besource_v5.0_Enterprise_Edition.exe LAX_VM [java_home/bin/java.exe]`
> Change `[java_home/bin/java.exe]` to fit your environment. The JDK path cannot contain blank or space.

3. On the **Welcome** page of the installer, select **English**.

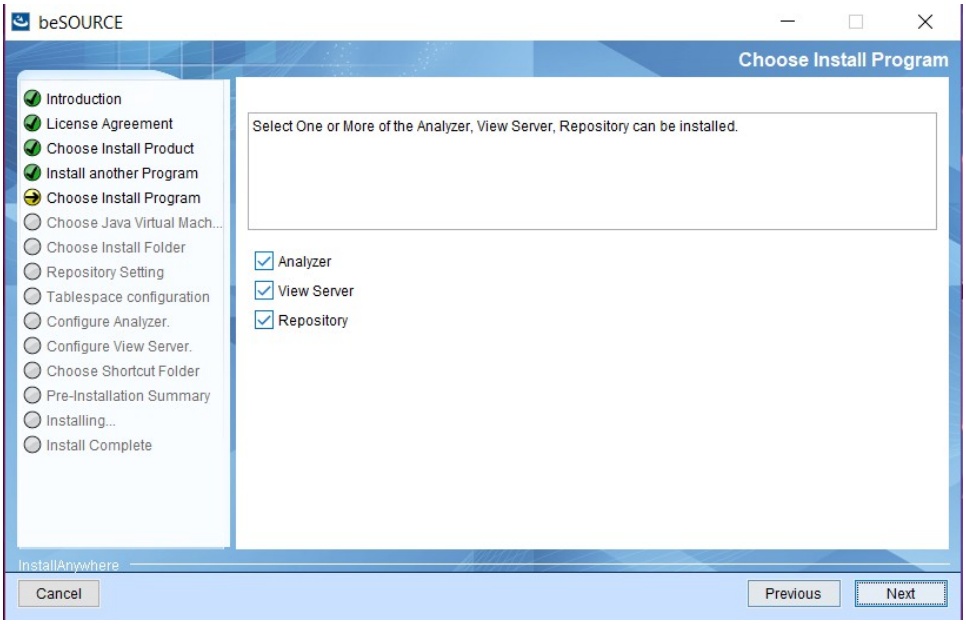
4. Select **OK**.
5. On the **Introduction** page, select **Next**.



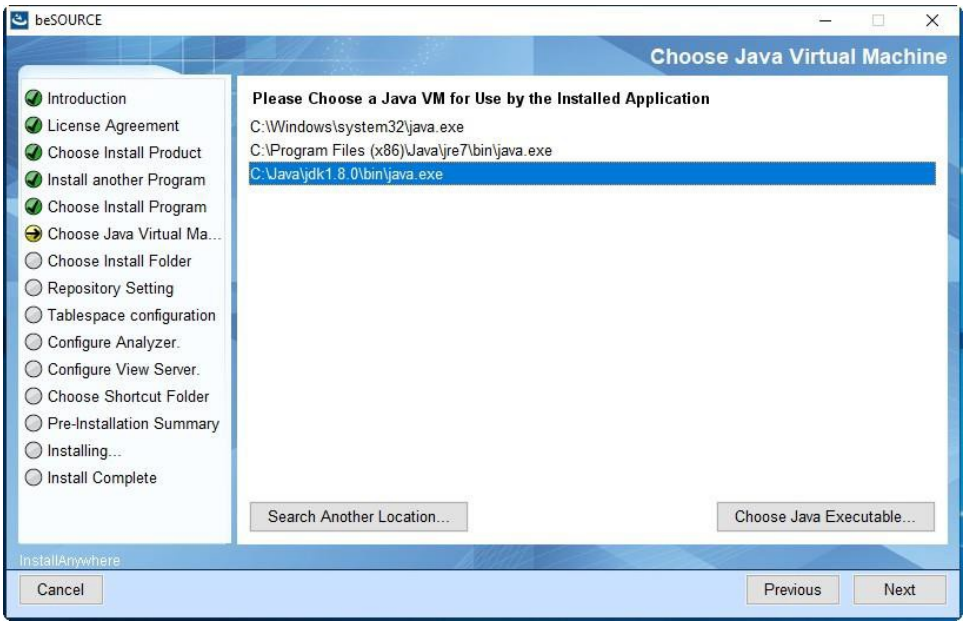
6. On the **License Agreement** page, read over the license agreement and if you agree to the terms, select **I accept the terms of the License Agreement**.



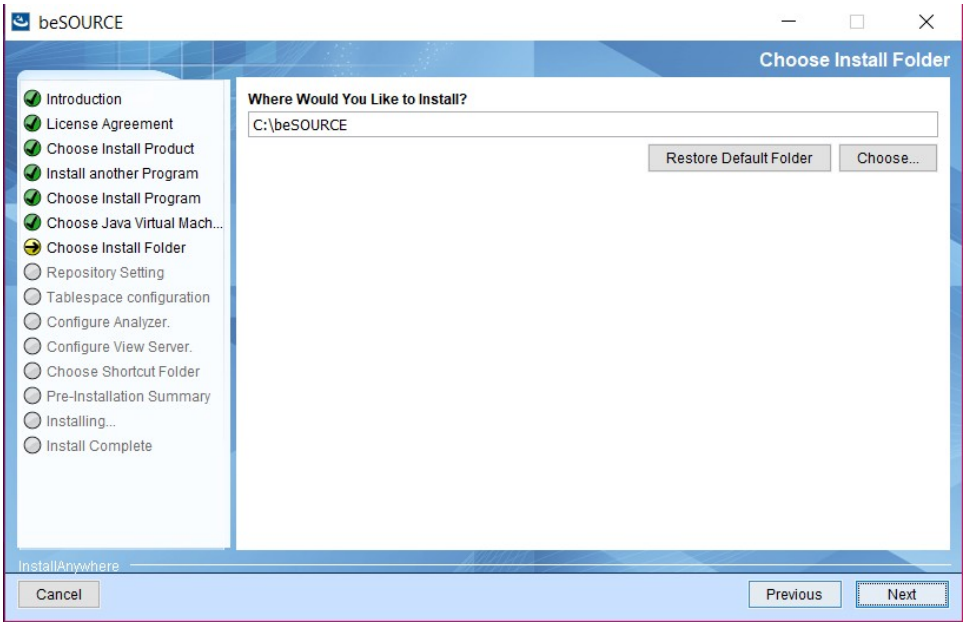
7. Select **Next**.
8. On the **Choose Install Program** page, select the sub-components ofbeSOURCE Enterprise Edition you want to install (this guide selects all sub-components in this step).



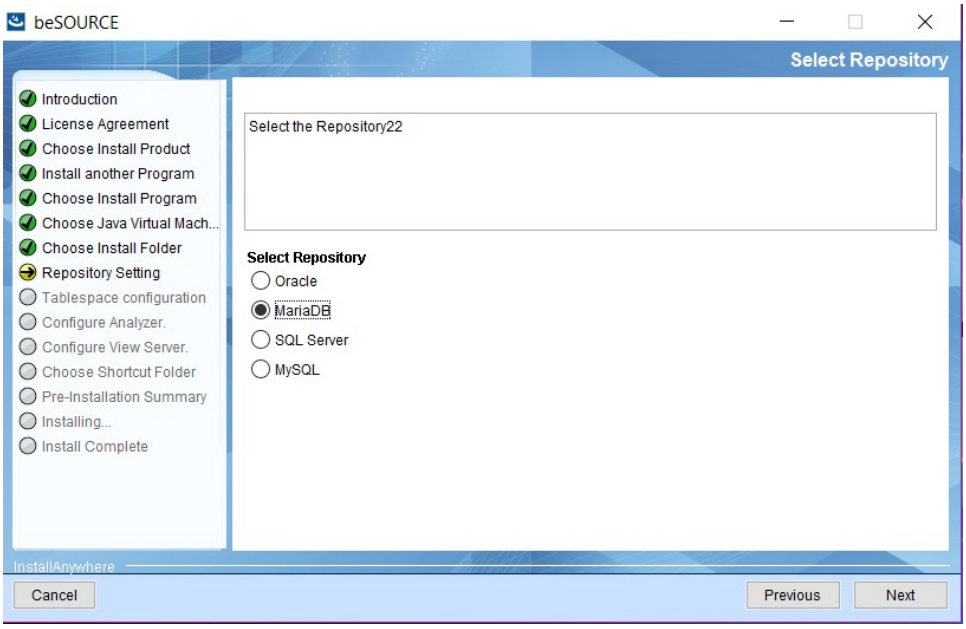
9. Select **Next**.
10. On the **Choose Java Virtual Machine** page, select a Java Virtual Machine or JDK for beSOURCE server.



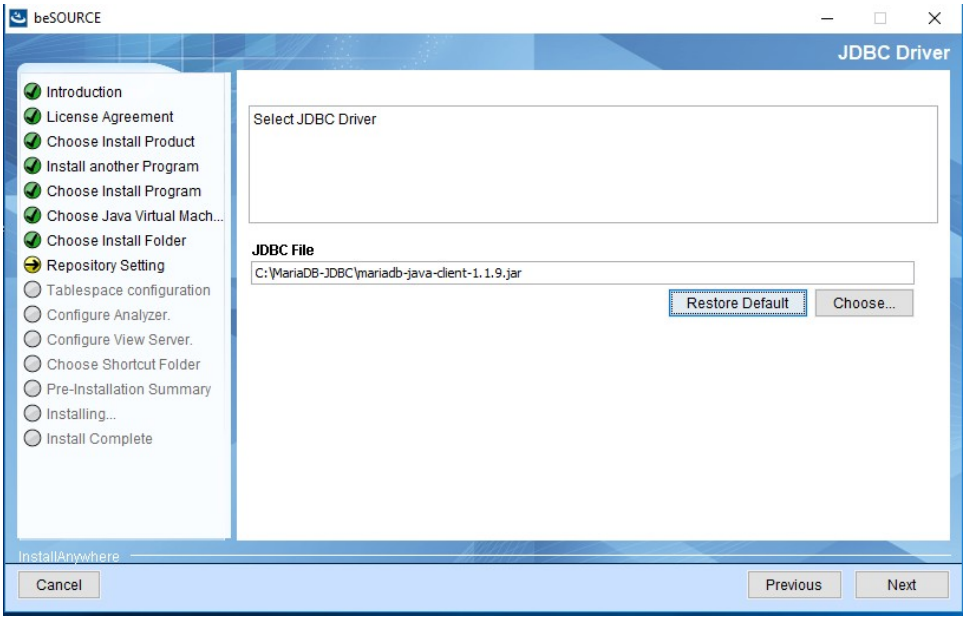
11. Select **Next**.
12. On the **Choose Install Folder** page, use the default install location or select **Choose** to select your own.



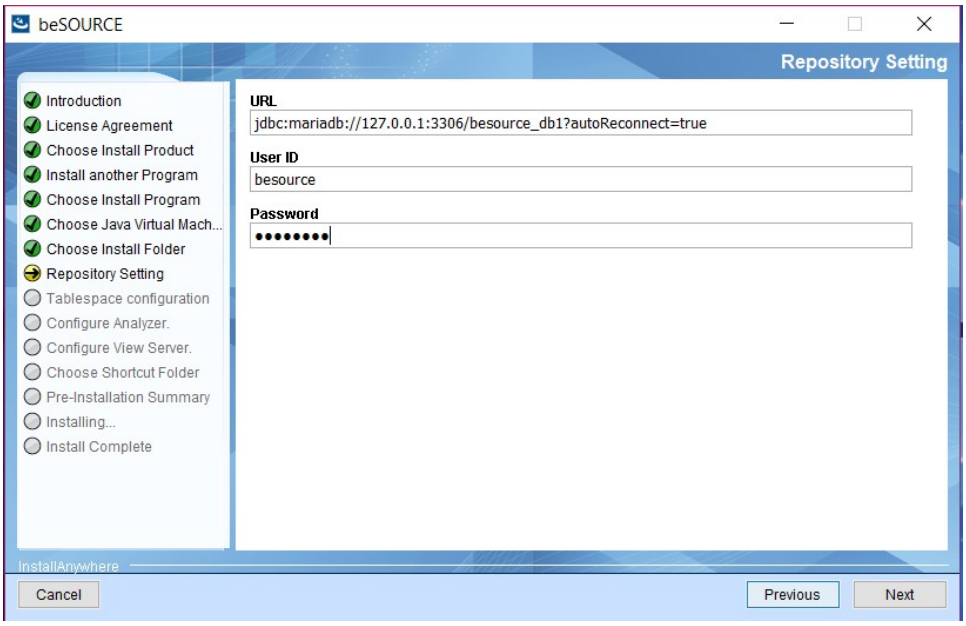
13. Select **Next**.
14. On the **Select Repository** page, select a database for repository. This guide uses MariaDB. To use another database type, refer to the ***Appendix* on page 46**.



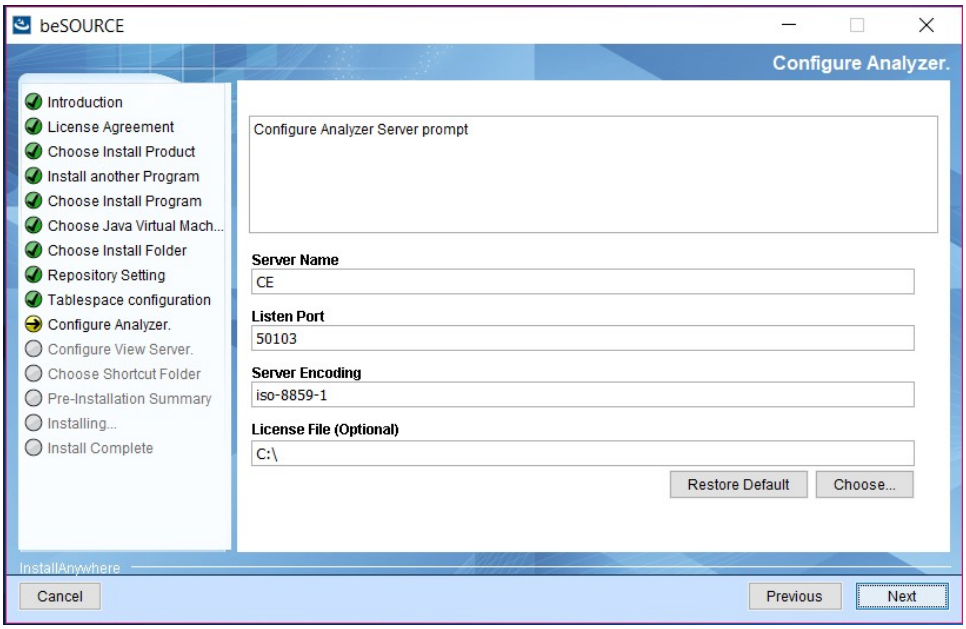
15. Select **Next**.
16. On the **JDBC Driver** page, select the location of JDBC driver file for your repository database connection. Select a different JDBC file based on your database type.



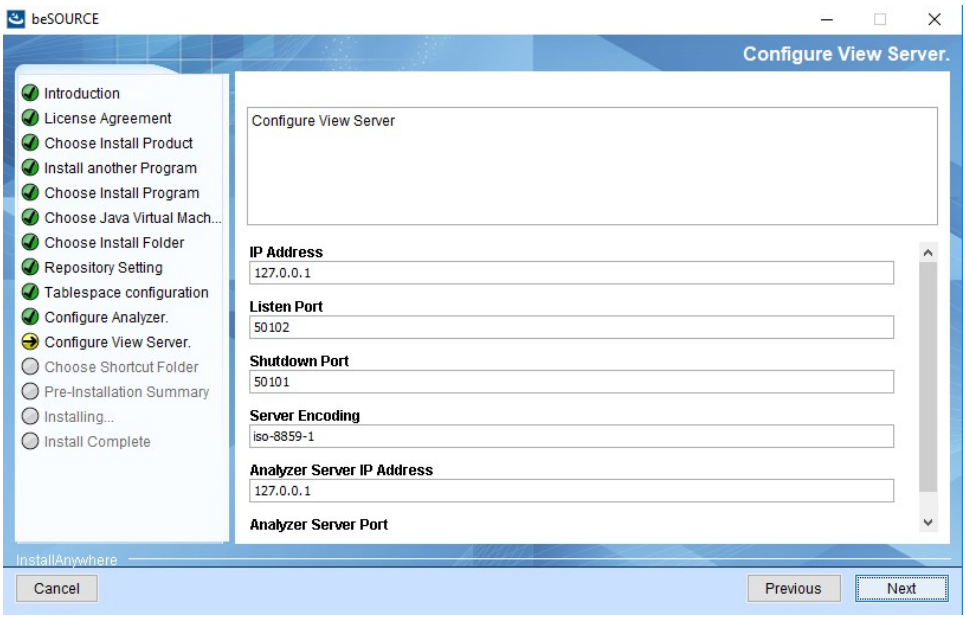
17. Select **Next**.
18. On the **Repository Settings** page, enter your database connection information in the **URL**, **User ID**, and **Password** boxes. You must change the IP address and database name in the **URL** box, corresponding to your MariaDB installation.



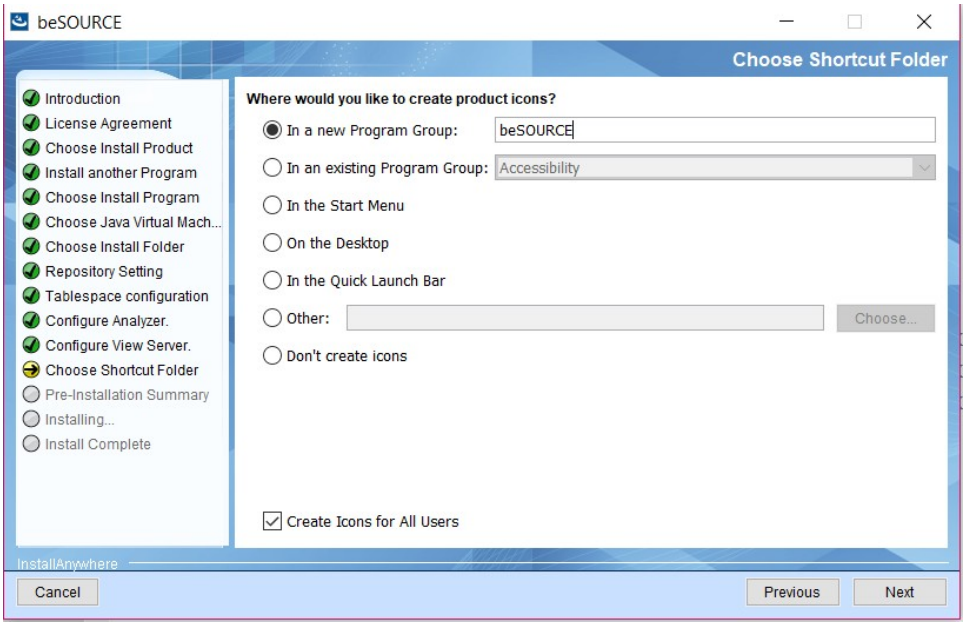
19. Select **Next**. The installer will now test the database connection. If a connection error message appears, recheck your **URL**, **User ID**, and **Password** values.
20. On the **Configure Analyzer** page, set the options for the Analysis Server (a Java application that is responsible for source file analysis). It is recommended to use the default values for the following:
    - **Server Name** - The name of the Analysis Server (do not include spaces).
    - **Listen Port** - The port number of the Analysis Server.
    - **Server Encoding** - The encoder to use with the Analysis Server.
    - **License File (Optional)** - Select your license file for the Analysis Server. To apply your license after installation, see ***Applying Your License* on page 26**.



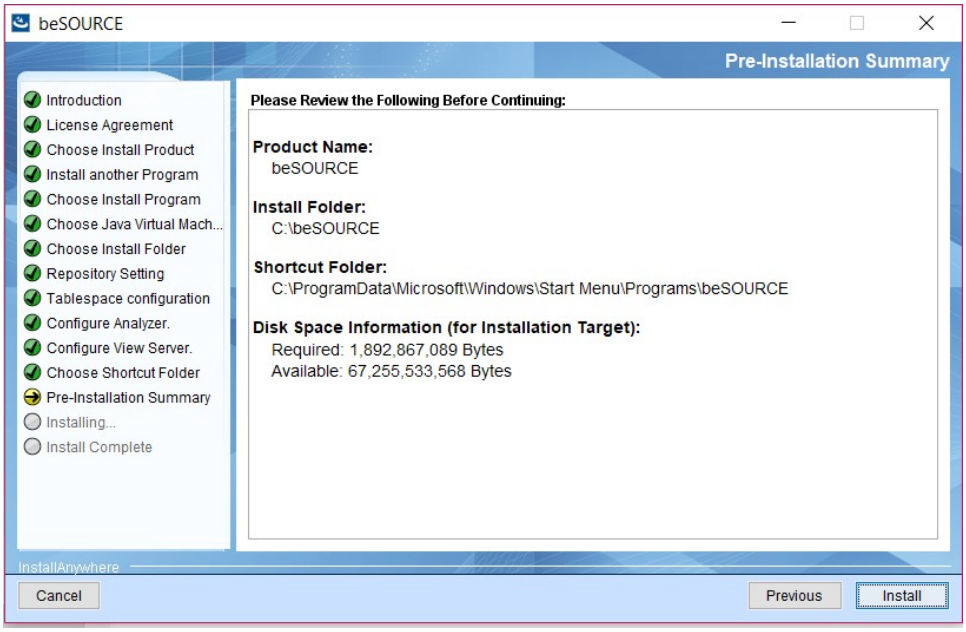
21. Select **Next**.
22. On the **Configure View Server** page, set the options for the View Server (a Java web application based on Tomcat that is responsible for administration). It is recommended to use the default values for the following (except IP Address):
    - **IP Address** - The IP address of your server computer.
    - **Listen Port** - The port number of the Tomcat web application server.
    - **Shutdown Port** - The shutdown port number of Tomcat web application server.
    - **Server Encoding** - The encoder for the View Server.
    - **Analyzer Server IP Address** - The IP address of the computer hosting the Analysis Server (typically your server computer).
    - **Analyzer Server Port** - The listening port of Analysis Server. If you did not change the default value for **Listen Port** on the **Configure Analyzer** page, you do not need to change this value.



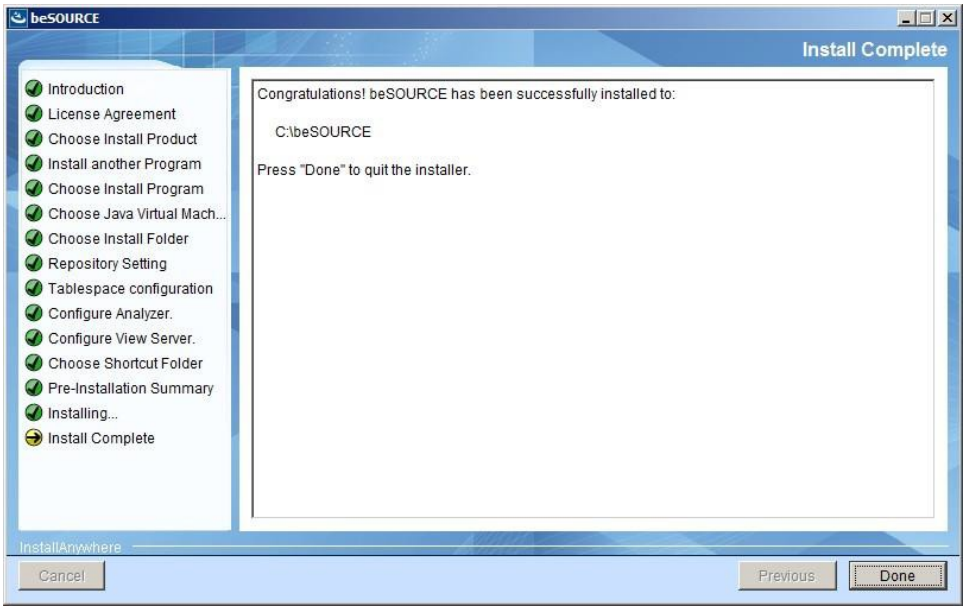
23. Select **Next**.
24. On the **Choose Shortcut Folder** page, select **In a new Program Group** and enter **beSOURCE**.



25. Select **Next**.
26. On the **Pre-Installation Summary** page, review installation information from the previous steps. Select **Previous** to make any necessary modifications to your settings.



27. Select **Install**.
28. Once the installation process is complete, select **Done**.


beSOURCE
Install Complete
Introduction
License Agreement
Choose Install Product
Install another Program
Choose Install Program
Choose Java Virtual Mach...
Choose Install Folder
Repository Setting
Tablespace configuration
Configure Analyzer.
Configure View Server.
Choose Shortcut Folder
Pre-Installation Summary
Installing...
Install Complete
Congratulations! beSOURCE has been successfully installed to:
C:\beSOURCE
Press "Done" to quit the installer.
InstallAnywhere
Cancel
Previous
Done

Applying Your License

If your license file (license.xml) was not applied during the installation process, you can do it manually.

To manually apply your license file for the Analysis Server, do the following:

1. Rename your license file to **license.xml** (if it is currently named something else).
2. Copy the license file to `$beSOURCE_HOME\analyzer\license` directory (replace the `$beSOURCE_HOME` portion of the path with your current installation location).

Starting and Stopping the beSOURCE Server

There are two types of beSOURCE servers; Analysis Server and View Server. Both are based on J2EE technology and can run on Linux and Windows-based environments. This section will explain how to start and stop the server in Windows.

beSOURCE uses the following environment variables:

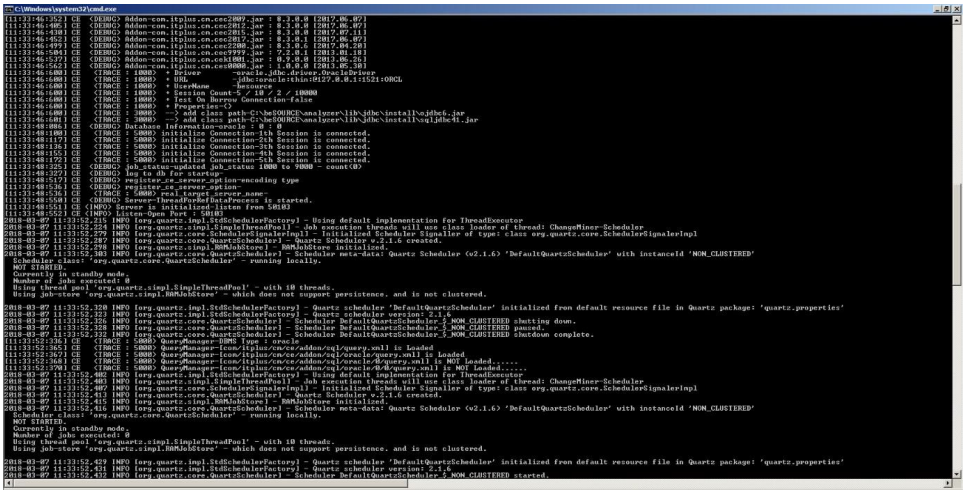
- **CM_HOME** - Directory of where beSOURCE is installed (for example, C:/beSOURCE).
- **CE_HOME** - Directory of where the beSOURCE Analysis Server is installed (for example, C:/beSOURCE/analyzer/server/CE).
- **VW_SERVER** - Directory of where the beSOURCE View Server is installed (for example, C:/beSOURCE/WAS).

> **NOTE:** It is recommended to start and verify the Analysis Server before launching the View Server.

Starting the beSOURCE Analysis Server

To start the beSOURCE Analysis Server in Windows, do one of the following:

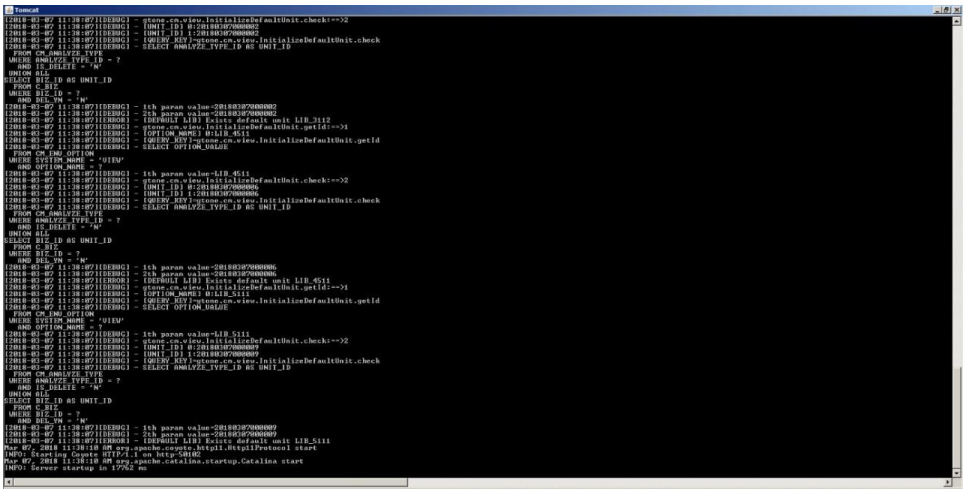
- From the Windows start menu, select **beSOURCE** > **Start {Name} Server**.
- Alternatively, you can open **Command Prompt**, go to the **`CE_HOME`** directory, and then execute the **`startServer.cmd`** file. Verify in the command window that Analysis Server has been successfully executed.



Starting the beSOURCE View Server

To start the beSOURCE View Server in Windows, do one of the following:

- From the Windows start menu, select **beSOURCE** > **Start View Server**.
- Alternatively, you can open **Command Prompt**, go to the **`VW_SERVER/bin`** directory, and then execute the **`startup.bat`** file. Verify the Analysis Server has been successfully executed.



Stopping the beSOURCE Analysis Server

To stop beSOURCE Analysis Server in Windows, do one of the following:

- From the Windows start menu, select **beSOURCE** > **Stop {Server Name}**.
- Alternatively, you can open **Command Prompt**, go to the **`CE_HOME`** directory, and then execute the **`stopServer.cmd`** file (you can also press CTRL+C in the command window). Verify the Analysis Server has been successfully executed.

Stopping the beSOURCE View Server

To stop beSOURCE View Server in Windows, do one of the following:

- From the Windows start menu, select **beSOURCE** > **Stop View Server**.
- Alternatively, you can open **Command Prompt**, go to the **`VW_SERVER/bin`** directory, and then execute the **`shutdown.bat`** file (you can also press CTRL+C in the command window). Verify the Analysis Server has been successfully executed.

Installing Client Programs

There are five types of beSOURCE client programs:

- **beSOURCE Admin Console**
- **beSOURCE View Client**
- **beSOURCE Developer**
- **beSOURCE Eclipse, IntelliJ, Android Studio Plugin**
- **beSOURCE Jenkins Plugin**

beSOURCE Admin Console is an administration tool used to conduct various management tasks. It adopts Microsoft .NET Framework as a technical basis for ensuring user convenience and a rich user interface. The administrator can access the server with this tool anytime and anywhere using internet connection.

All commands or operations in beSOURCE Admin Console are delivered to the beSOURCE View Server and required server-side jobs are executed on the server.

beSOURCE (View) Client is used to view and utilize the results of source code vulnerabilities inspection on the beSOURCE server. It adopts Microsoft .NET Framework as a technical basis for ensuring user convenience and rich user interface. Users can access the server with this tool anytime and anywhere using internet connection.

beSOURCE Developer is for developers to inspect local code while connected to the beSOURCE Server. Developers can analyze their own source files on the computer.

beSOURCE Eclipse Plugin is for developer to inspect local code while connected to the beSOURCE Server. Developers can analyze their own source files in the Eclipse IDE.

beSOURCE IntelliJ and Android Studio plugins are for developers to inspect local code while connected to the beSOURCE Server. Developers can analyze their own source files in the IntelliJ or Android Studio IDE.

beSOURCE Jenkins Plugin allows users to integrate the beSOURCE Server with Jenkins. Users can request source code inspection on the beSOURCE Server from Jenkins.

Installing and launching the beSOURCE Admin Console with a web browser

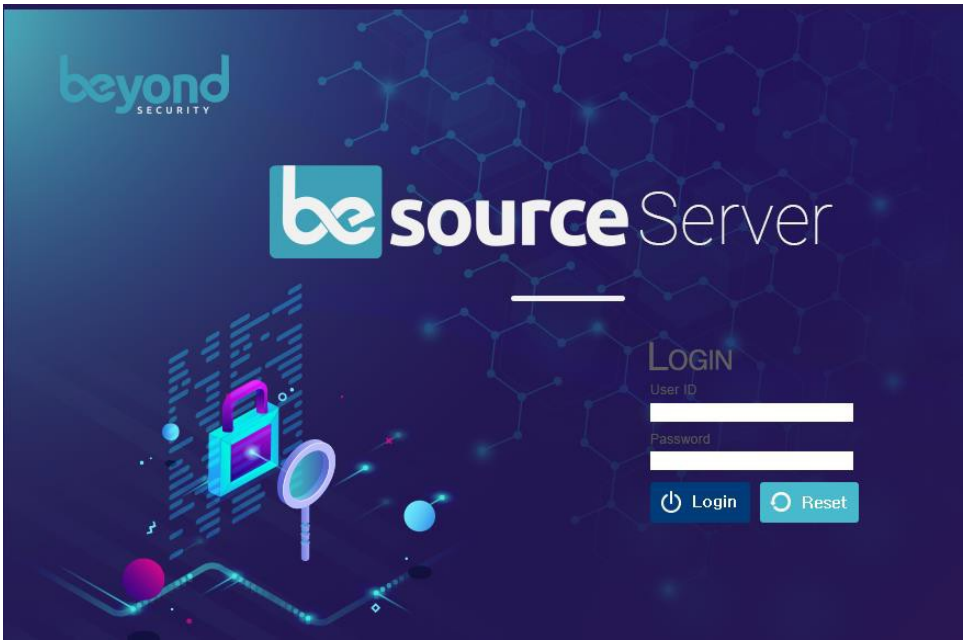
You can install and launch the beSOURCE Admin Console using a web browser.

To install beSOURCE Admin Console, do the following:

1. Verify the Analysis Server and View Server are running.
2. Open your web browser and go to `http://beSOURCE_View_IP:View_Port [Default:50102]` (for example, http://localhost:50102)

   > **NOTE:** **beSOURCE_View_IP** is the IP address of server computer where the View Server is installed and **View_Port** is the port number assigned during installation.

3. In the **User ID** box, enter your user ID.
4. In the **Password** box, enter your password.
5. Select **Login**.



> **NOTE:**
> - The default User ID and Password to login to beSOURCE Admin Console are **besource** and **besource**. When you deploy beSOURCE in a production environment, you should update the password.
> - Only users who have proper rights given to them by administrator can access the beSOURCE Admin Console. After five incorrect password entries, you will be blocked and your user account disabled.
> - Install Microsoft .NET framework 4.5 or later before installing beSOURCE Admin Console.

6. When you log in, move your pointer over each icon view a short description.

7. If you attempt to download one of beSOURCE client programs and a startup program does not automatically download, select **Setup Download** to download the setup.exe file.
8. Install the **setup.exe** file.
9. Select the **beSOURCE Admin Console** icon. It will start downloading and run automatically.

> **NOTE:** Execute the beSOURCE Admin Console through a web browser to automatically check for and download any available updates.

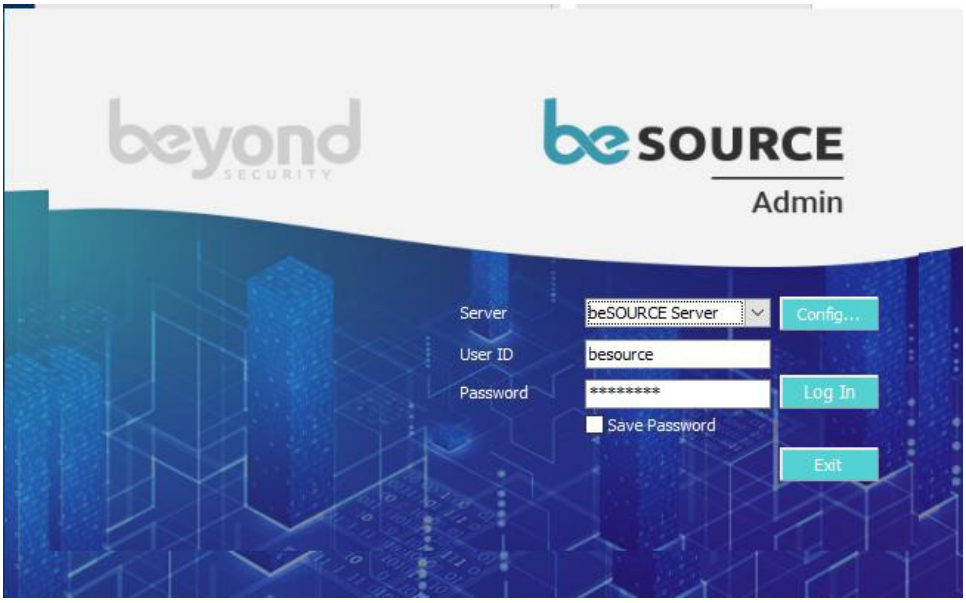
Launching the beSOURCE Admin Console

After you download the beSOURCE Admin Console with a web browser, you can launch it using the desktop shortcut icon.

To launch beSOURCE Admin Console using the desktop shortcut icon, do the following:

1. Double-click the **beSOURCE Management** shortcut icon.
2. In the **Server** box, select a registered server. To register a server, see ***Adding or changing the server connection setting of beSOURCE Admin Console* on page 32**.
3. In the **User ID** box, enter your user ID.

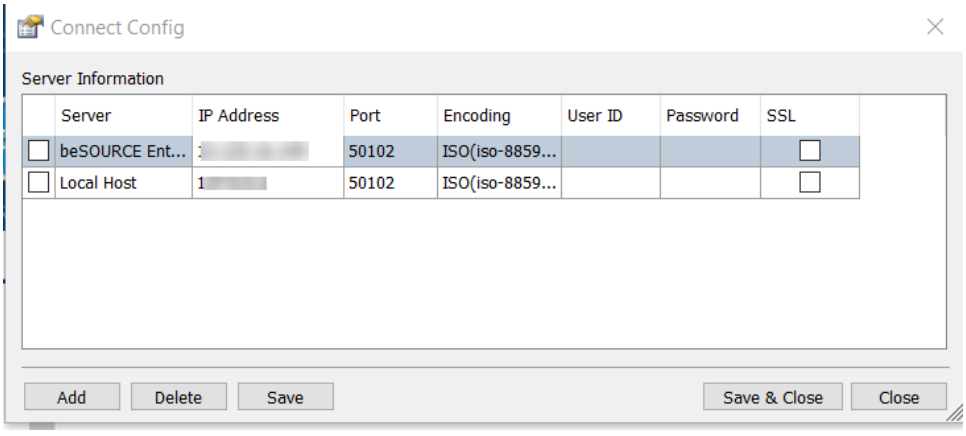
4. In the **Password** box, enter your password.
5. Select **Login**.



Adding or changing the server connection setting of beSOURCE Admin Console

To add or change the beSOURCE Server connection setting, do the following:

1. On the beSOURCE login window, select **Config**. The **Connect Config** dialog opens.
2. Select **Add**.
3. Enter the **Server** name, **IP Address**, and the **Port** number of your beSOURCE View Server.
4. Select **Save** or **Save & Close**.



> **NOTE:** You can also change server connection setting values in the Connect Config dialog.

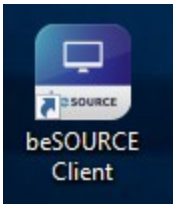
Installing the beSOURCE View Client

1. Open your web browser and go to `http://beSOURCE_View_IP:View_Port [Default:50102]` (for example, http://localhost:50102).
2. Log in using your user ID and password.
3. Select the **beSOURCE View Client** icon.

4. Select the **beSOURCE View Client** icon. It will start downloading and run automatically.

Launching the beSOURCE (View) Client

After you download the beSOURCE (View) Client using a web browser, you can launch it the .



The way to launch it and configure server connection setting is exactly same as the Admin Console. You can refer to the Admin Console section.

Installing beSOURCE Developer

To install and launch beSOURCE Developer, follow below instructions:

1. Log in to server with a web browser as explained in the above section.
2. Select the third icon to download the beSOURCE Developer.

3. On the first access, beSOURCE Developer program is downloaded and installed automatically from server.

Launching beSOURCE Developer

After you download the beSOURCE Developer with a web browser, you can launch it using the desktop shortcut icon.

To launch the beSOURCE Developer using the desktop shortcut icon, do the following:

1. Double-click the **beSOURCE Developer** shortcut icon on your desktop.
2. Select **File** > **Login**.

3. In the **Server** box, select a registered server. To register a server, see ***Adding or changing the server connection setting of beSOURCE Admin Console* on page 32**.
4. In the **User ID** box, enter your user ID.
5. In the **Password** box, enter your password.
6. Select **Login**.

> **NOTE:** You must log in to use beSOURCE Developer. Your license information is stored on the server and is applied when you sign in. To check your license, select **Tools** > **Options**… > **License Settings**.

Installing the beSOURCE IDE plugin

To use the beSOURCE Eclipse plugin, the following requirements must be met:

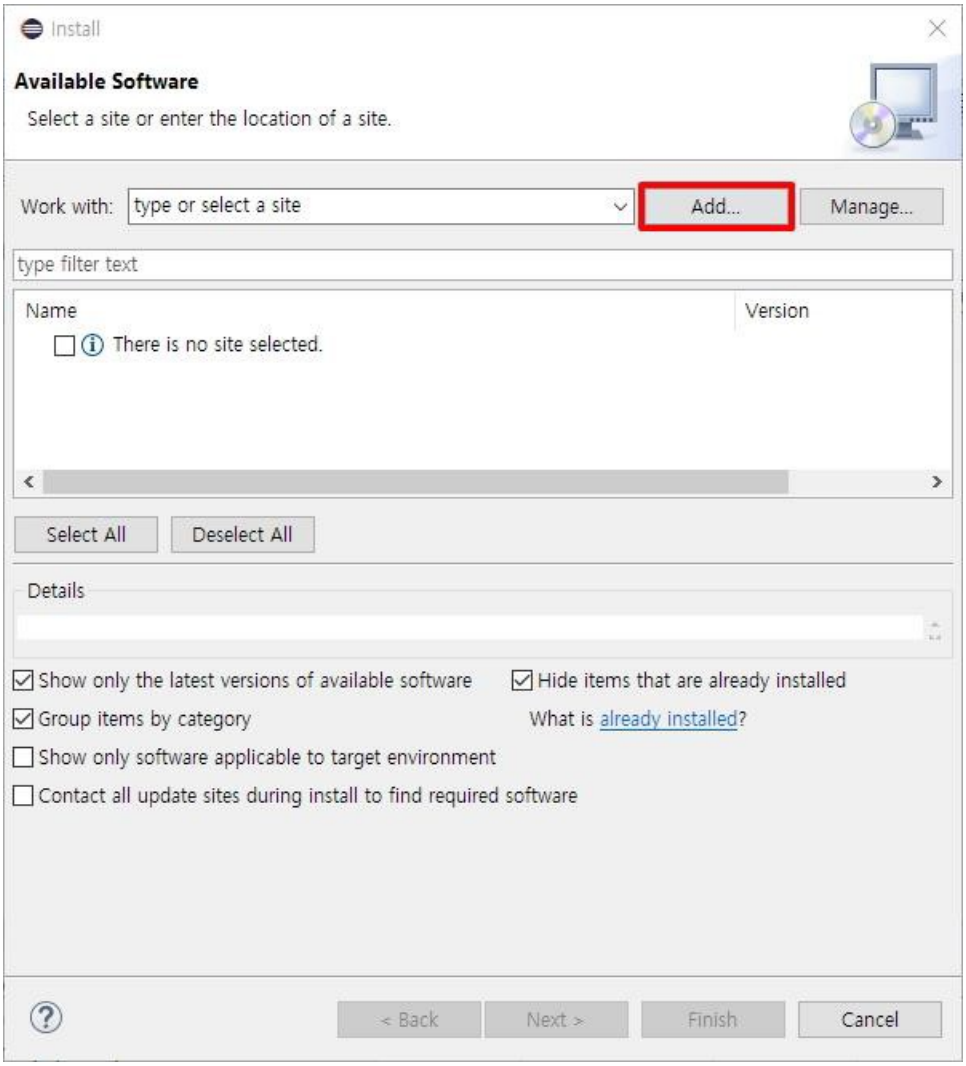
- Install Eclipse 3.4.0 or later before installing the plugin.
- Java 1.6 or later.
- To analyze C source files in the Eclipse, install the **Eclipse IDE for C/C++ Developers** or **Eclipse C/C++ Development** plugins first.

> **NOTE:** For more installation information, see ***Reference - Installing the Eclipse IDE for C/C++ Developers or Eclipse C/C++ Development plugins* on page 38**.

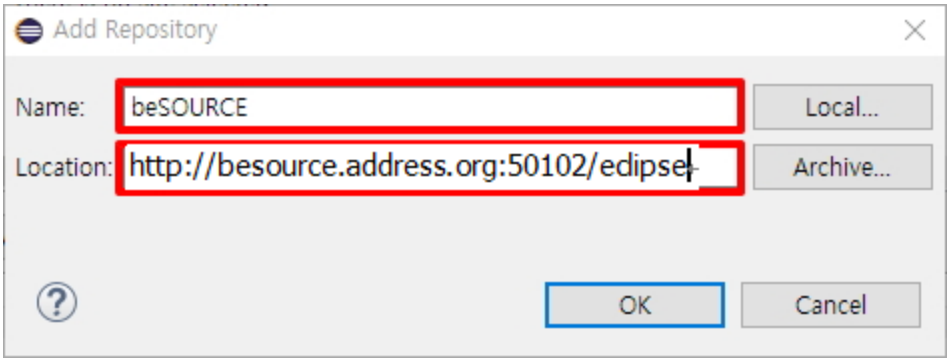
Installing beSOURCE Eclipse plugin

To install the plugin, do the following:

1. Select **Help** > **Install New Software**.
2. On the **Available Software** dialog, select **Add**.

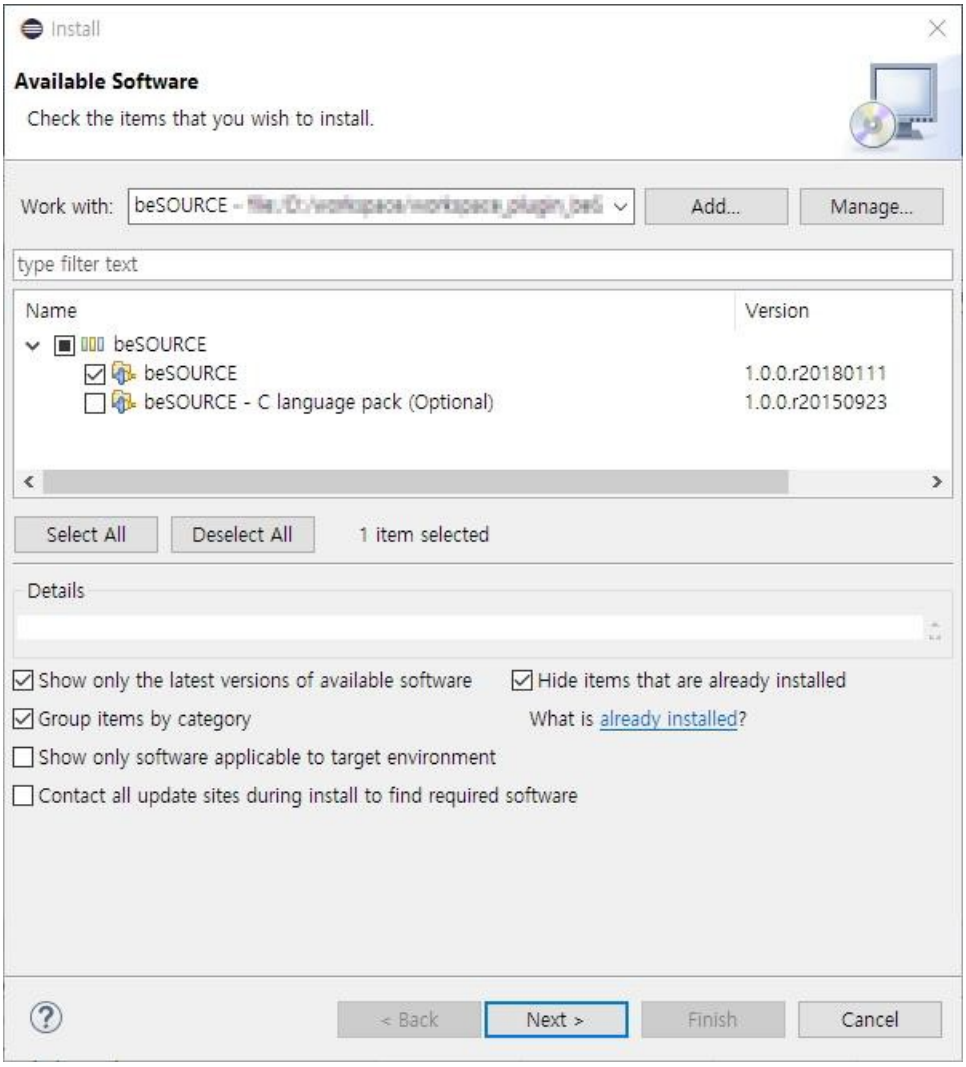


3. On the **Add Repository** dialog, enter the following:
   a. **Name** - beSOURCE
   b. **Location** - Enter the beSOURCE server's Eclipse plugin deployment address. For example, http://192.168.0.1:50102/eclipse where **192.168.0.1** is the IP address of the beSOURCE View Server and **50102** is its port number.

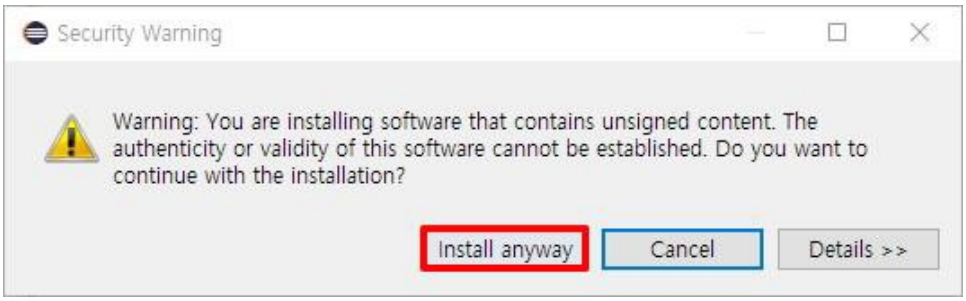


4. Select **OK**.

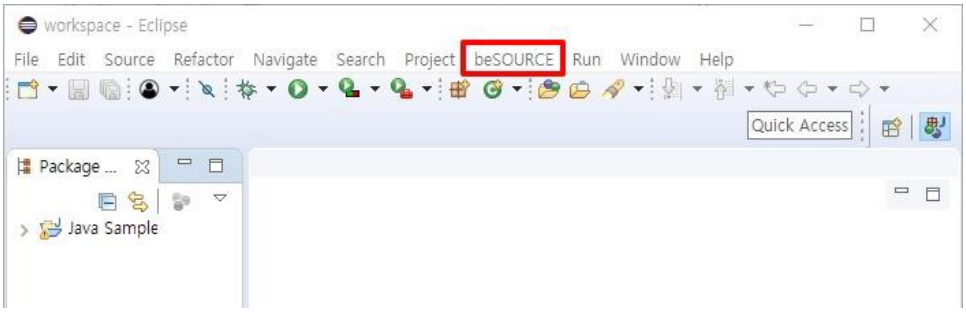
5. On the **Available Software** dialog, select the following:
    a. In the **Work with** box, select beSOURCE.
    b. Expand the **beSOURCE** category, and then select **'beSOURCE'**.
    c. Optionally, select **beSOURCE - C language pack (Optional)** to run a C language analysis.



6. Select **Next**.
7. Check your settings in **Install** dialog.
8. Select **Next**.
9. If you agree to the EULA terms, select **I accept**.
10. Select **Finish**.
11. On the **Security Warning** dialog, select **Stop**.



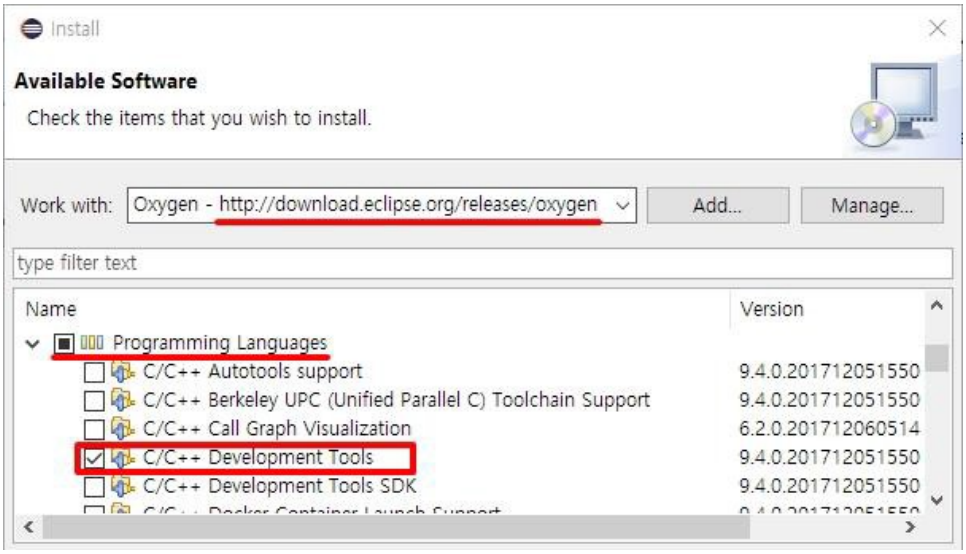
12. When prompted, select **Yes** to restart Eclipse.
13. **beSOURCE** will now appear in the Eclipse main menu.



Reference - Installing the Eclipse IDE for C/C++ Developers or Eclipse C/C++ Development plugins

1. Download **Eclipse IDE for C/C++ Developers** at https://www.eclipse.org/downloads/.
2. Install **Eclipse IDE for C/C++ Developers**.
3. Open **Eclipse IDE for C/C++ Developers**.
4. On the **Available Software** tab, select **Help** > **Software Updates**.
5. You will find installation sites registered by the Eclipse version. Access and install **C and C++ Development** for the following sites (if you are using Eclipse 3.5 or Eclipse 3.6, select **Eclipse C/C++ Development Tools** under **Programming Languages**):
    a. **Eclipse 3.4** - Ganymede Update Site
    b. **Eclipse 3.5** - 'Galileo - http://download.eclipse.org/releases/galileo

c. **Eclipse 3.6** - 'Helios - http://download.eclipse.org/releases/helios



Installing the beSOURCE IntelliJ/Android Studio plugin

beSOURCE IntelliJ/Android Studio plugin's supported environment:

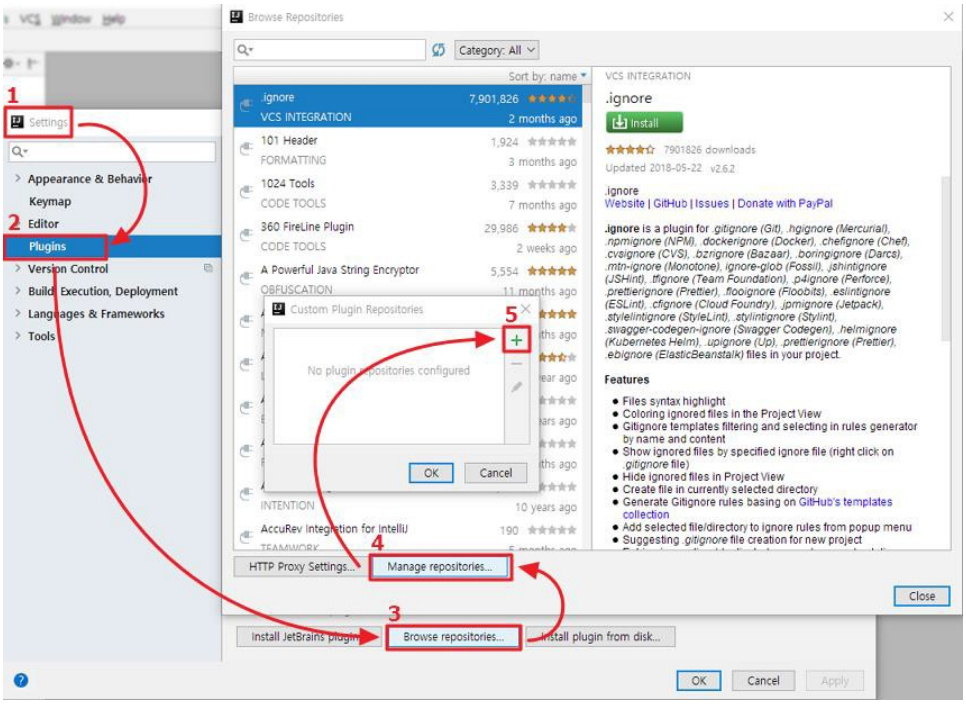
- Android Studio 1.0 or later
- IntelliJ IDEA 12 or later

NOTE:

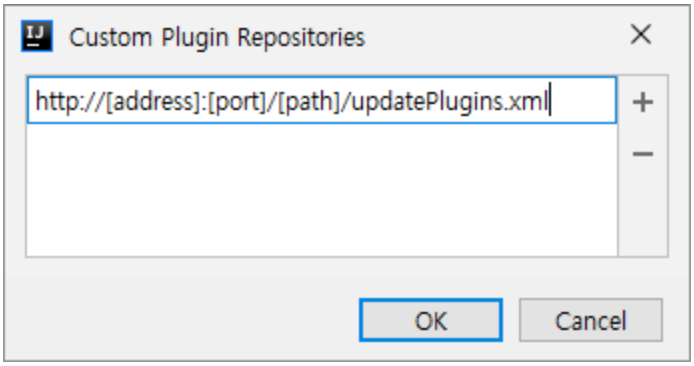
- Android Studio or IntelliJ IDEA's runtime environment must be Java 1.7 or later.
- The encoding value of each source file must be same as a project's encoding value.
- beSOURCE server's locale and the plugin's locale must be same.

To install the plugin, do the following:

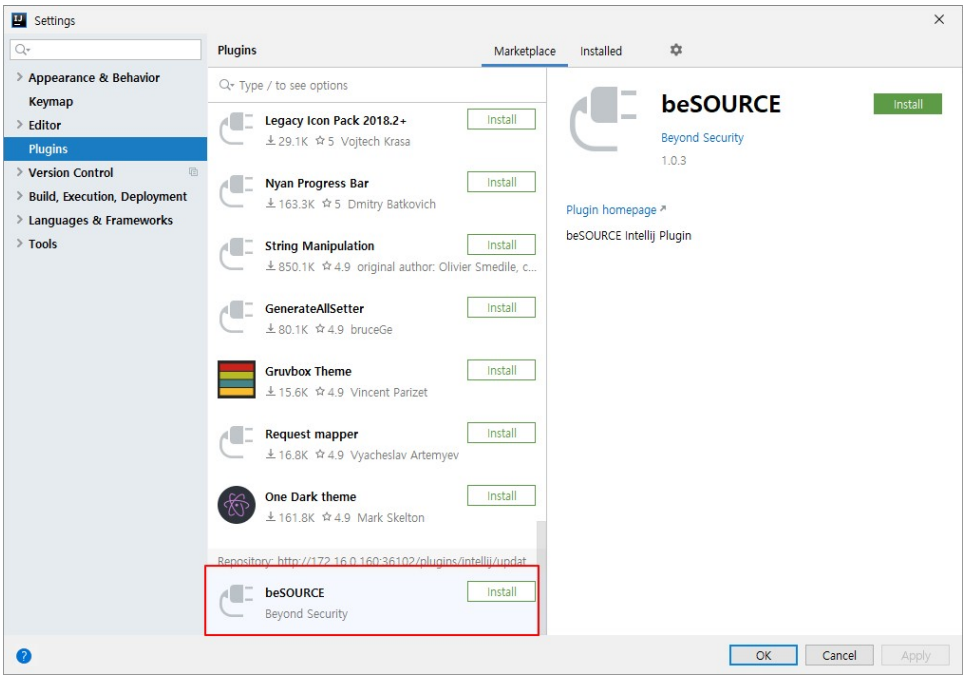
1. Select **File** > **Settings**.
2. Select **Plugins**.
3. On the **Plugins** window, select **Browse repositories**.
4. Select **Manage repositories**.
5. On the **Custom Plugin Repositories** window, select the **+** button.



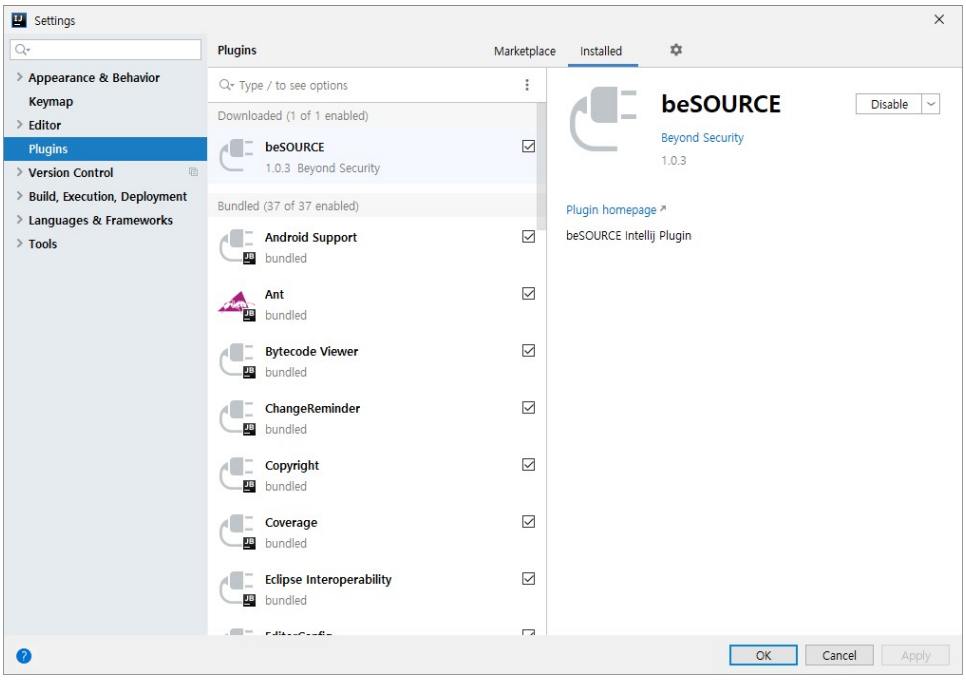
6. On the **Custom Plugin Repositories** dialog, enter the URL of the plugin repository (`http://[Server IP address]:[Port]/plugins/intellij/updatePlugins.xml`).



7. Select **OK**.
8. Select the URL you just added.
9. Select the **beSOURCE** plugin, and then select **Install**.



10. After the installing the plugin, restart the IDE.
11. You can reselect the beSOURCE plugin to view the currently installed version or to remove it.



Installing the beSOURCE Jenkins plugin

The Jenkins plugin allows users to request source code inspection on the beSOURCE server from Jenkins (continuous integration (CI) tool).

Prerequisites

The following requirements must be met to install and use the beSOURCE Jenkins plugin:

- Jenkins 1.625.3 or later
- A web browser that supports Jenkins or Hudson

Downloading the beSOURCE Jenkins plugin

To download the beSOURCE Jenkins plugin, do the following:

1. Open your web browser and go to `http://beSOURCE_View_IP:View_Port [Default:50102]` (for example, http://localhost:50102).
2. Log in using your user ID and password.
3. Select the icon farthest to the right.

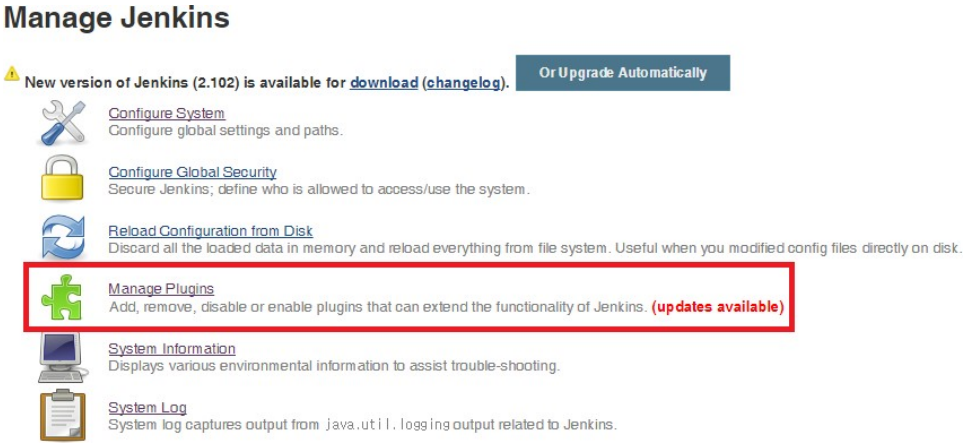
4. In your web browser, go to **`http://YourServer_IP:YourServerPort/plugins/jenkins/beSOURCE.hpi`**
5. The beSOURCE.hpi plugin file will download to your computer.

Installing beSOURCE Jenkins plugin

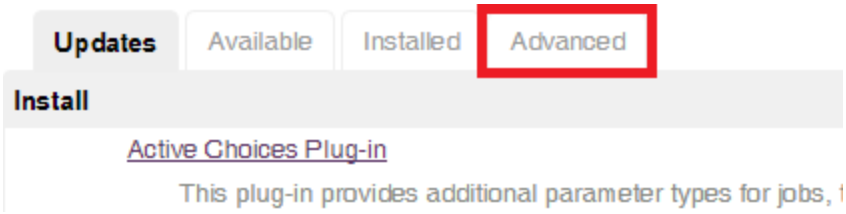
To install the beSOURCE Jenkins plugin, do the following:

1. Log in to the Jenkins server.
2. Select **Manage Jenkins**.

3. On the **Manage Jenkins** page, select **Manage Plugins**.

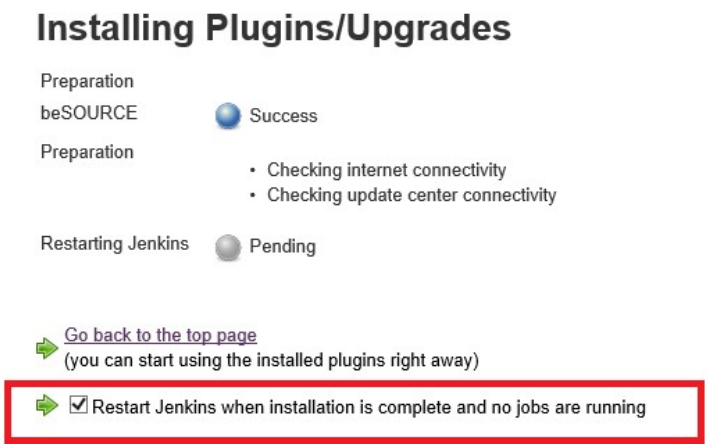


4. Select the **Advanced** tab.

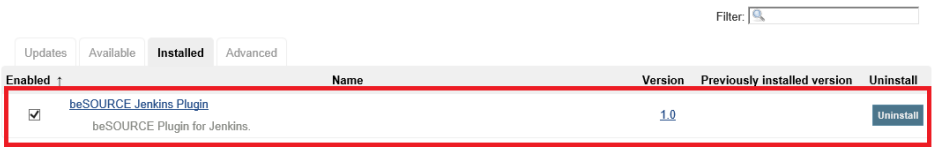


5. Select **Browse** to locate and select the **beSOURCE.hpi** file, and then select **Upload**.

6. On the **Installing Plugins/Upgrades** page, select **Restart Jenkins when installation is complete and no jobs are running**.



7. After the beSOURCE Plugin finishes installing, you can select the **Installed** tab to manage it.



After You Are Done

Congratulations! beSOURCE Enterprise Edition is now installed. Read the following for additional information and your next steps.

Contacting us

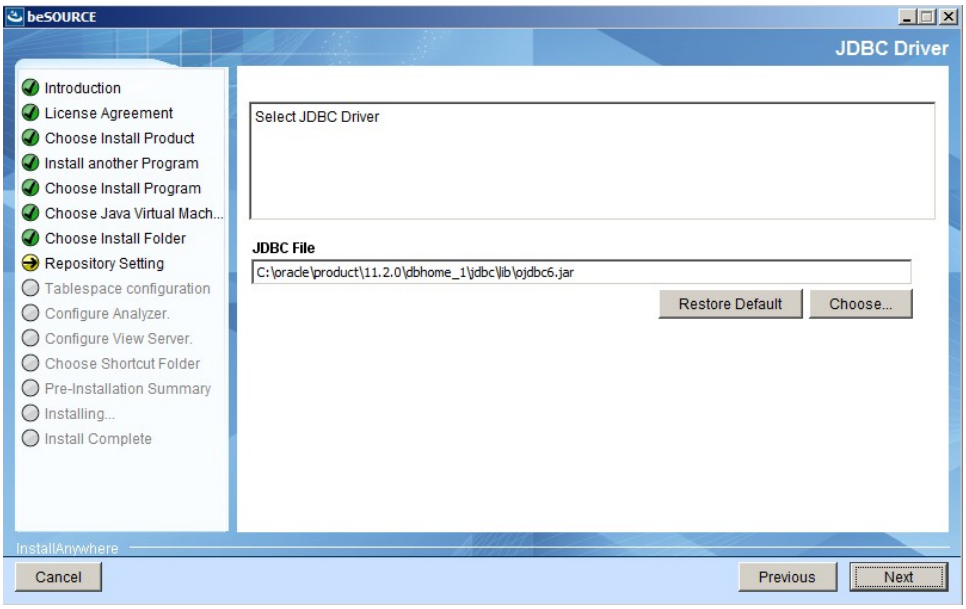
For additional resources, or to contact Technical Support, visit the Beyond Security Portal at https://beyondsecurity.freshdesk.com/support/home

Appendix

This section describes the installer setting by database type.

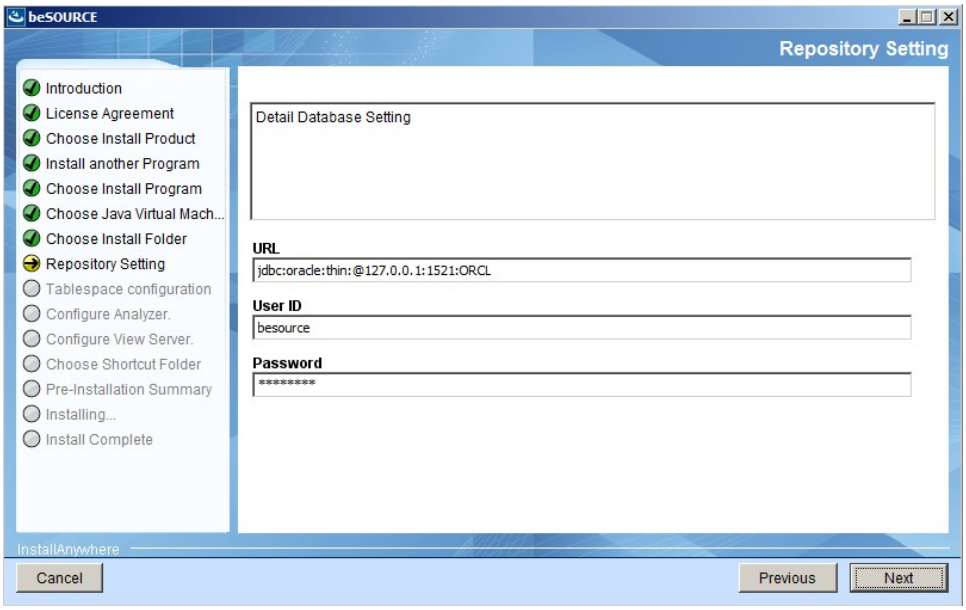
Setting for Oracle

1. Select a JDBC driver file location for your repository database connection.



2. Select **Next**.
3. Enter your connection information for the database such as JDBC URL, user ID, and password.

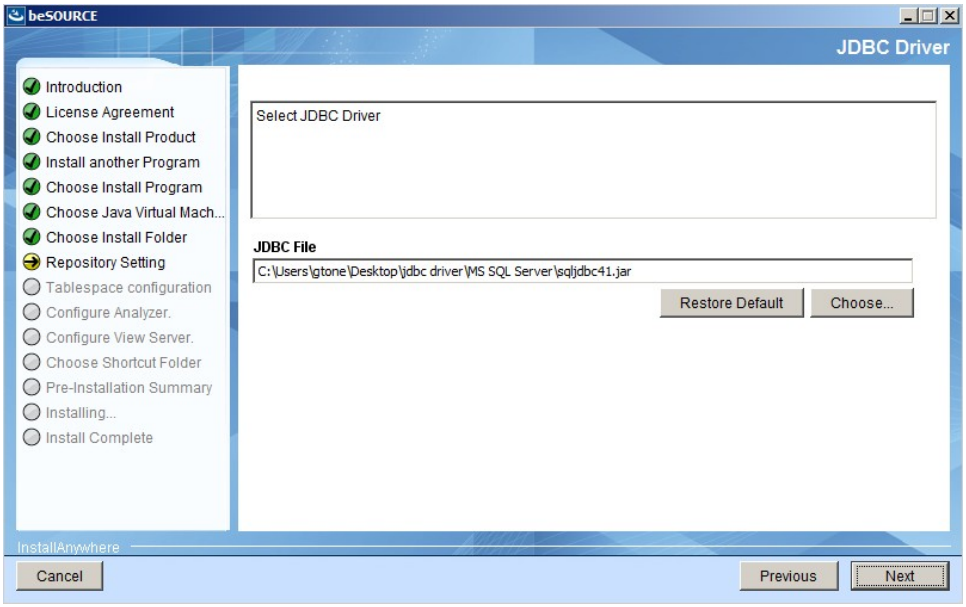
> **NOTE:** You must change the IP address (127.0.0.1), port (1521) and database name (ORCL) in the URL to correspond with your Oracle installation.



4. Select Next. The installer will now test the database connection. If you get connection error message, please check your setting values.

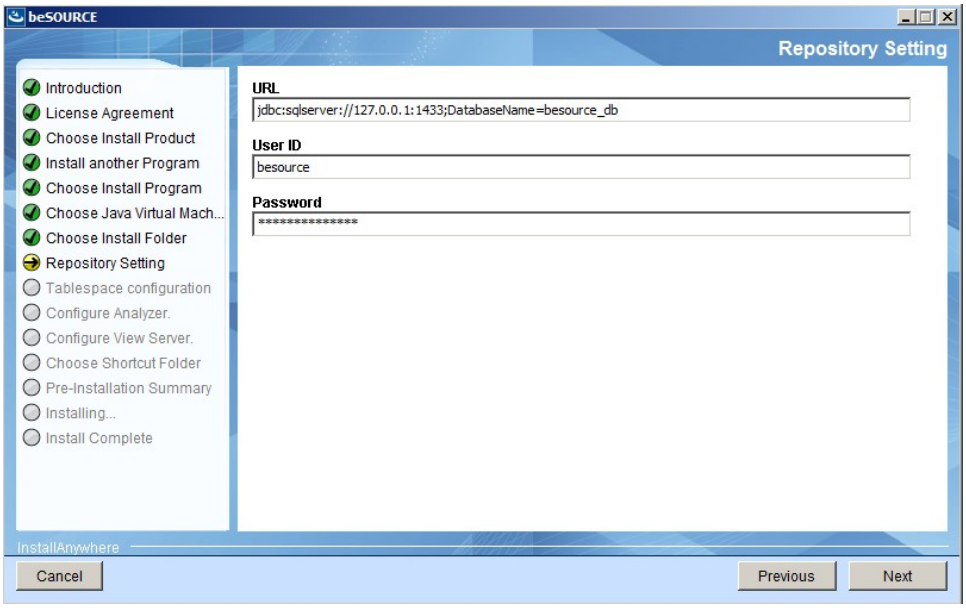
Setting for MS SQL Server

1. Select a JDBC driver file location for your repository database connection.



2. Select **Next**.
3. Enter your connection information for the database such as JDBC URL, database name, user ID and password.

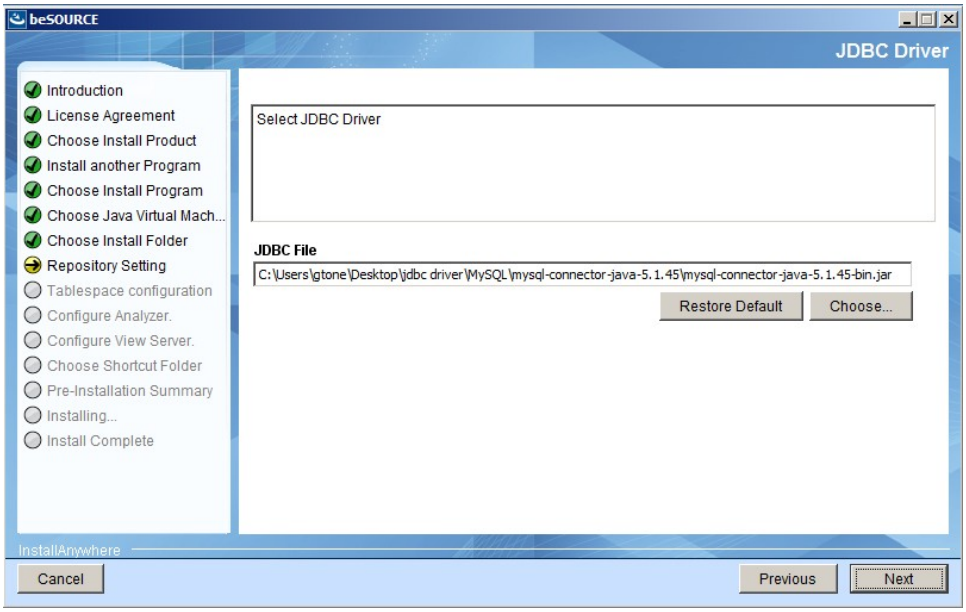
> **NOTE:** You must change the IP address, Port and database name in the URL, corresponding to your MS SQL Server installation.



4. Select Next. The installer will now test the database connection. If you get connection error message, please check your setting values.

Setting for MySQL

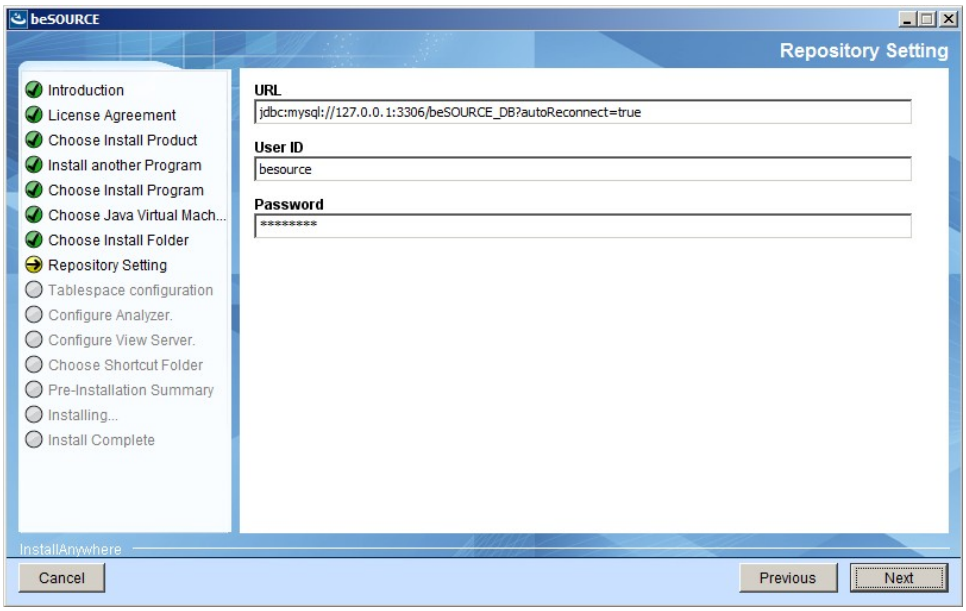
1. Select a JDBC driver file location for your repository database connection.



2. Select **Next**.

3. Enter your connection information for the database such as JDBC URL, database name, user ID and password.

> **NOTE:** You must change the IP address and database name in the URL, corresponding to your MySQL installation.



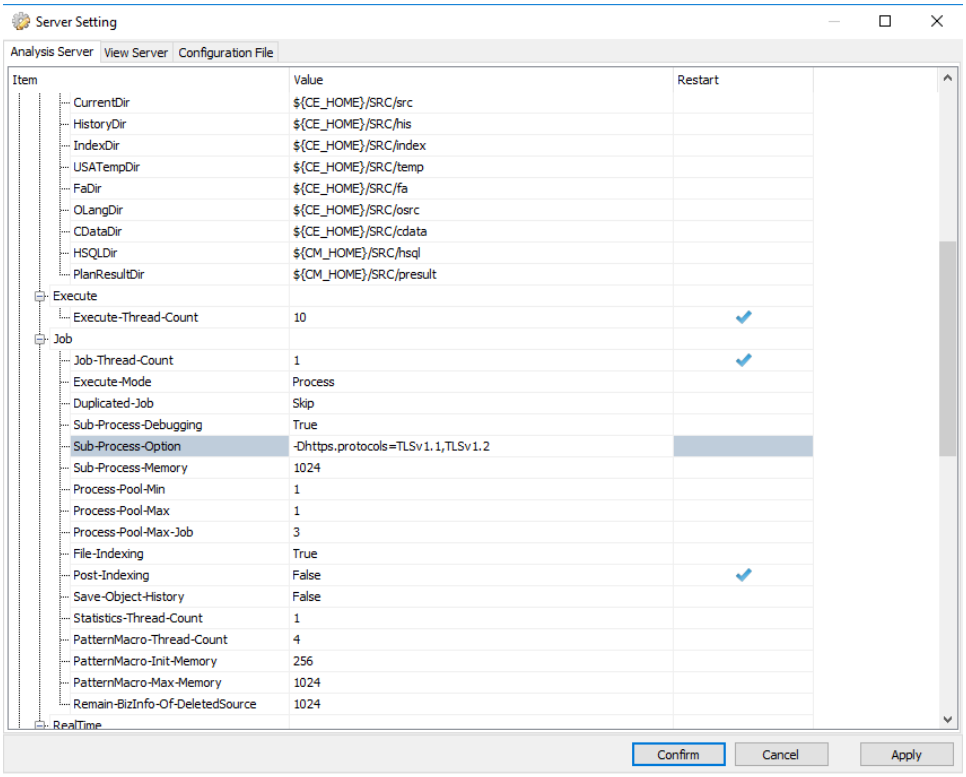
4. Select **Next**. The installer will test the database connection. If you get connection error message, please check your setting values.

Git and JDK Version issue

If you installed beSOURCE Server with Java 1.7 and run it on the Java version, importing source files from Git or Git Hub will fail due to security policies of Git. A workaround for this issue is setting the internal Sub-Process-Option of Analysis Server.

To set the internal Sub-Process-Option for Analysis Server, do the following

1. Open the **beSOURCE Admin Console**
2. Log in with your credentials.
3. Select **System** > **Server Setting**.
4. On the **Analysis Server** tab, expand **Job**.
5. In the **Value** box for **Sub-Process-Option**, enter the following value: `-Dhttps.protocols=TLSv1.1,TLSv1.2`.



6. Select **Confirm**.

> **NOTE:** You do not have to restart your server after applying this change.