suprema

BioStar 2.7.12

INSTALLATION GUIDE

Version 1.00
English

Contents

Getting Started 3

System Requirements 3

BioStar 2 Video Extension 3

Installing BioStar 2 4

Login 9

Changing port of BioStar 2 10

Changing with BioStar Setting (HTTPS port) 10

Changing database of BioStar 2 11

Getting Started

Before using BioStar 2 to implement an access control system, the BioStar 2 server must be installed on the administrator PC. The BioStar 2 server receives event logs, user information, etc. from connected devices and stores them.

BioStar 2 can be installed easily. Before installation, please check the System Requirements.
The BioStar 2 installation file can be found on the Suprema's home page(www.supremainc.com).

System Requirements

Item		Small	Medium	Enterprise
Environment	Total Devices	1 to 50	51 to 100	101 to 1,000
System requirement (Server)	OS	• Windows 7 Home Basic 64bit SP1 or later • Windows 7 Home Basic 32bit SP1 or later	• Windows Server 2008 R2 Standard 64bit SP2 or later • Windows 7 SP1 Home Premium 64bit SP1 or later	• Windows Server 2008 R2 Standard 64bit SP2 or later • Windows 7 SP1 Home Premium 64bit SP1 or later
	Database	MariaDB 10.1.10, MS SQL Server 2012, MS SQL Server 2014 SP2, MS SQL Server 2016 SP1		
	CPU	2 GHz Dual Core	4 GHz Quad Core	4 GHz Quad Core
	RAM	6 GB	10 GB	16 GB
	HDD	500 GB	1 TB	4 TB
	Others	Java 1.8.0_201		
System requirement (Client)	CPU	1 GHz	1 GHz	1 GHz
	RAM	4 GB	4 GB	4 GB
	Web Browser	Google Chrome 75 or later		

BioStar 2 Video Extension

Item	Minimum	Recommended
CPU	4 GHz Quad Core	4 GHz Quad Core
RAM	8 GB	16 GB
HDD	2 TB	4 TB

NOTE

- For the best performance, use only the 64-bit operating system.
- BioStar 2 is optimized for Google Chrome.
- To use the Video menu, use MariaDB for the database and 64-bit operating system for the operating system.
- If you are using Windows 8.1 or Windows Server 2012 R2, install the KB2919355 update by referring to the following web page. https://support.microsoft.com/en-us/help/2919355/windows-rt-8-1--windows-8-1--and-windows-server-2012-r2-update-april-2
- If MS SQL Server and BioStar 2 are installed on different PCs, you should install the Native Client on a PC with BioStar 2 installed. https://www.microsoft.com/en-us/download/details.aspx?id=50402
- Oracle Database is no longer supported. For details, please contact the Suprema Technical Support.

Installing BioStar 2

BioStar 2 supports a 32-bit operating system and a 64-bit operating system. Check the system type of your PC where BioStar 2 is to be installed and carry out its installation accordingly.

NOTE

- Do not install BioStar 2 on a PC where BioStar 1 is installed. This may cause performance problems.
- If BioStar 2.3.0 is installed on top of a BioStar 2.2.1 or 2.2.2 installation, all information stored in the SQLite database is migrated to a new MariaDB database.
- To upgrade BioStar 2.5.0 or less versions of BioStar 2 to the latest version, you must install all versions of BioStar 2.5.0 or less. For example, to upgrade from BioStar 2.3.0 to BioStar 2.7.12, you need to install the all of BioStar 2.5.0 or less version. BioStar 2.5.0 or later can upgrade to the latest version immediately.If you are using Windows 8.1 or Windows Server 2012 R2, install the KB2919355 update by referring to the following web page.
  https://support.microsoft.com/en-us/help/2919355/windows-rt-8-1--windows-8-1--and-windows-server-2012-r2-update-april-2
- If MS SQL Server and BioStar 2 are installed on different PCs, you should install the Native Client on a PC with BioStar 2 installed.
  https://www.microsoft.com/en-us/download/details.aspx?id=50402
- When backing up a database from an older version of BioStar 2, disable all services and procedures. Furthermore, if you do not backup and restore the AC database and the TA database together, you will not be able to use the TA database.
- If you want to back up the database of BioStar 2.7.12, be sure to also back up the **enckey** in the **\Program Files\BioStar 2 (x64)\util** folder. Otherwise, the database will be unavailable.

If you use a database configured by the user directly, check the following items before installing BioStar 2.

MariaDB

- Open the **my.cnf** file and then change some configurations under [mysqld] as shown below.

```
character-set-server=utf8
collation-server=utf8_unicode_ci
max_connections = 600
```

- Open the **my.cnf** file and then add some configurations under [mysqld] as shown below.

```
log_bin_trust_function_creators = 1
group_concat_max_len = 102400
```

- Access MariaDB with the root permission and execute the following command.

```
> GRANT SUPER ON . TO user_id@'localhost' IDENTIFIED BY "password";
> GRANT SUPER ON . TO user_id@'%' IDENTIFIED BY "password";
```

MS SQL Server

Setting the port

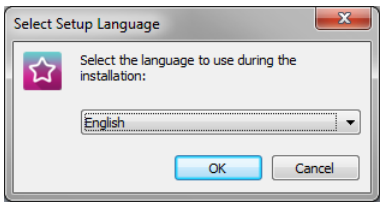
a) Run **SQL Server Configuration Manager** and set **TCP/IP Protocol** for **Protocols for SQLEXPRESS** to the desired port number.
b) Restart **SQL Server Services** to apply the settings.

Creating the user and database

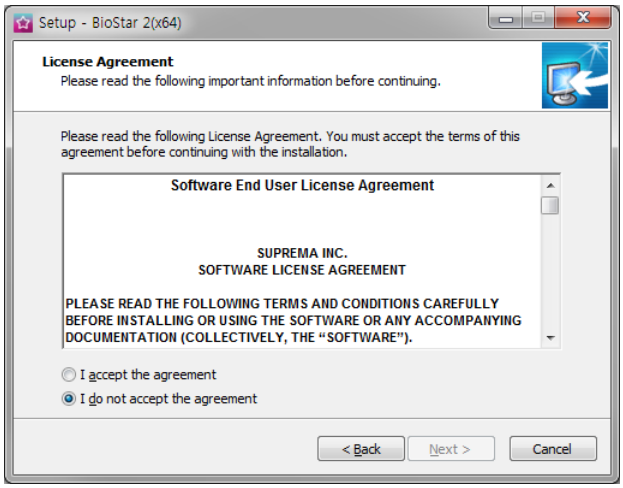
a) Log in to the **sa** account using **SQL Server Authentication** in **SQL Server Management Studio**.
b) Right-click on **Security** and click **New Login**.
c) Enter the desired name in the **Login Name** field and select **SQL Server Authentication**.
d) Enter the desired password in the **Password** and **Confirm password** field, and then uncheck the **Enforce password policy**.
e) Click **OK** to save the settings.
f) Right-click on **Database** and click **New Database**.
g) Enter the desired name in the **Database Name** field.
h) Enter the login name in the **Owner** field. Use the login name set in step c).
i) In the **Database Files** section, we recommend that set the **Initial Size (MB)** to **3000** and set the **Autogrowth/Maxsize** to **By 10 MB, Unlimited**.

1 Double-click the downloaded setup program. (ex. 'BioStar 2 Setup.x.x.x.xxx.exe')

2 Select a language and click **OK**.

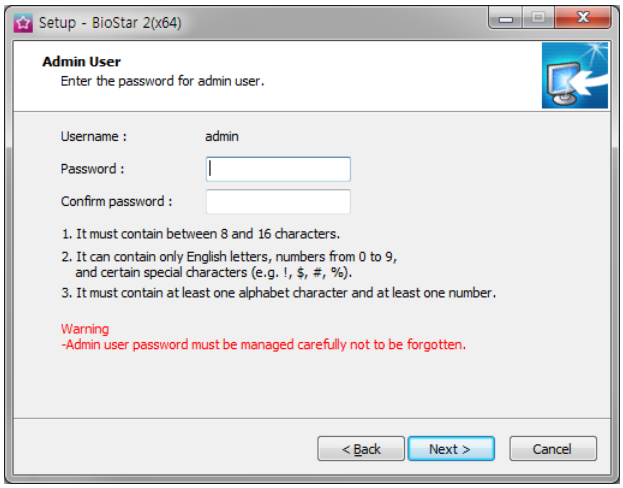


3 To continue the installation, select **I accept the agreement** and click **Next**.

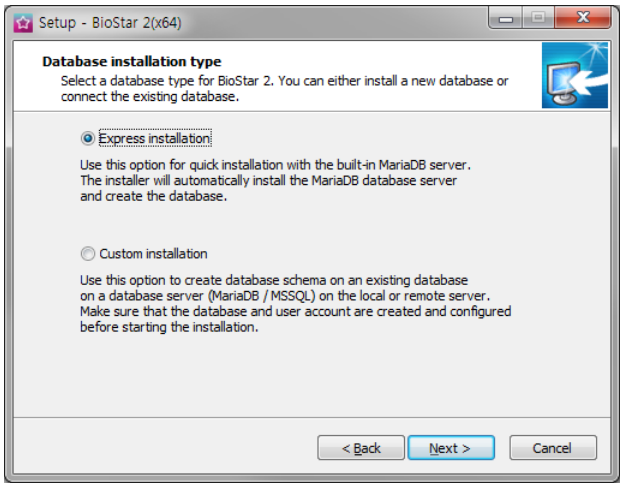


4 Enter the password for admin account and click **Next**.

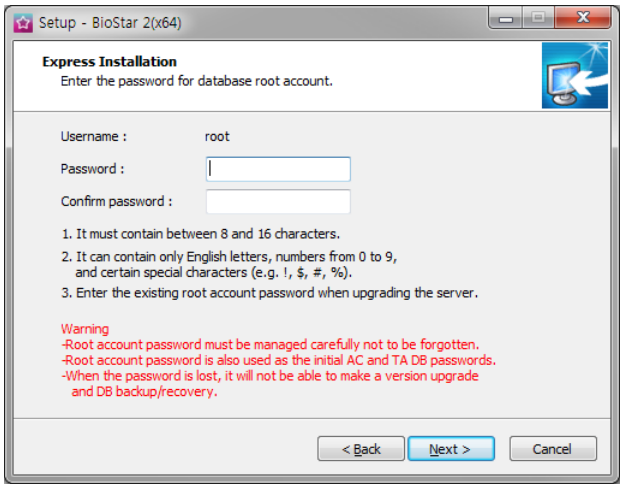
The password set in this step will be used when you log in to BioStar 2.

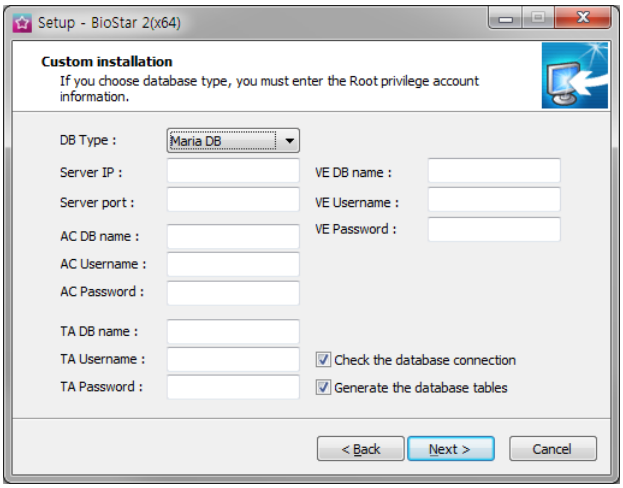


5 Install the database to be used in BioStar 2. You can install a new MariaDB or connect it to the already-installed MariaDB. Installing BioStar 2 for the first time, please select **Express Installation** and click **Next**.



6 If **Express Installation** has been selected from **Database Installation Type,** enter the database manager's account password and click **Next**. If **Custom Installation** has been selected from **Database Installation Type**, enter the detailed information on the already-configured database and click **Next**.

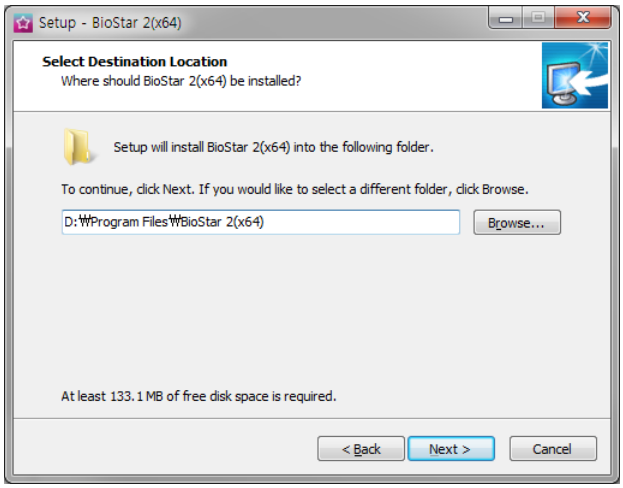




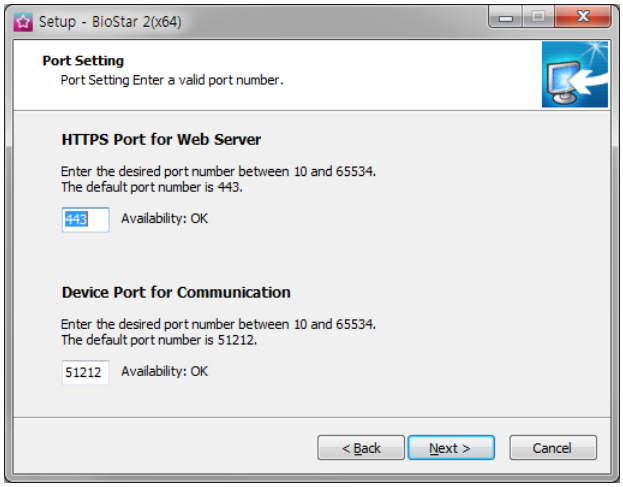
NOTE

- BioStar 2.7.12 supports the following databases.
  - MariaDB 10.1.10
  - MS SQL Server 2012
  - MS SQL Server 2014 SP2
  - MS SQL Server 2016 SP1
- If the database table creation fails when MS SQL Server is set as the Database Type, you can create the table by executing the script in **C:\Program Files\BioStar 2 (x64)\dbscript\mssql** folder.

7 Click **Next** after setting a path for BioStar 2 to be installed.



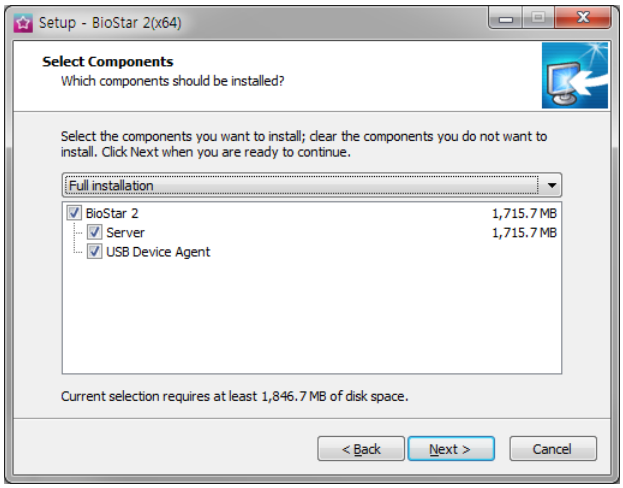
8 Enter the port number and click **Next**.



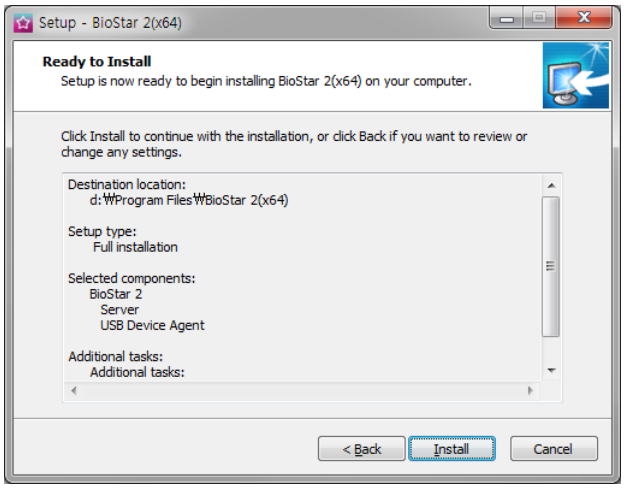
NOTE

- When you install BioStar 2 on a PC where BioStar 1 is installed, the device port (51212) is not available. In this case, we recommend that uninstall BioStar 1.

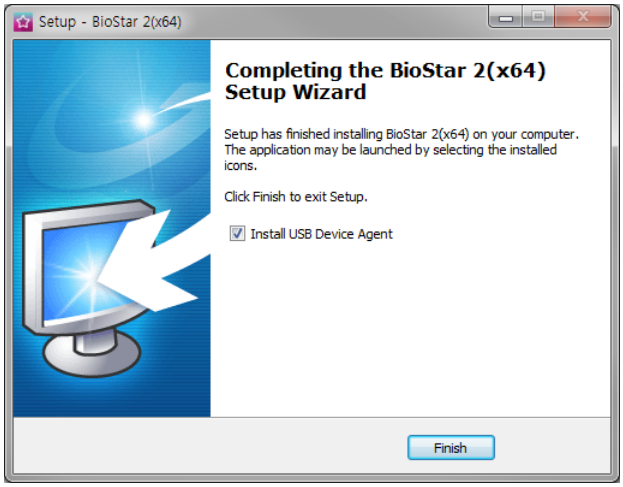
9 Select a component of BioStar 2 and click **Next**. If you select **USB Device Agent**, a USB-Agent and a driver for using BioMini, BioMini Plus 2, and DUALi DE-620 will be installed together.



10 If ready to install, click **Install**.



11 Select whether to install additional program and click **Finish**. Follow on screen instructions to complete.



NOTE

- The USB Device Agent Certificate provided can be applied to a local network only.
- When another program uses port 443, BioStar-Setting program will be launched automatically and then you can change the port number. For more information, see **Changing port of BioStar 2**.
- For more information on Database setting changes, see **BioStar 2 Database Change**.

Login

BioStar 2 is a web-based system which can be accessed from anywhere as long as you remember your login ID and password.

1 Run your web browser.
- We recommend that you use Google Chrome 75 or later.

2 Run BioStar 2.
- If running from the PC installed with BioStar 2, enter '*https://127.0.0.1*' in the address input field of the web browser.
- If BioStar 2 is installed on another PC, enter '*https://BioStar 2 server IP address*' in the address input field of the web browser.
- Do not use the 'Localhost' to access the BioStar 2.

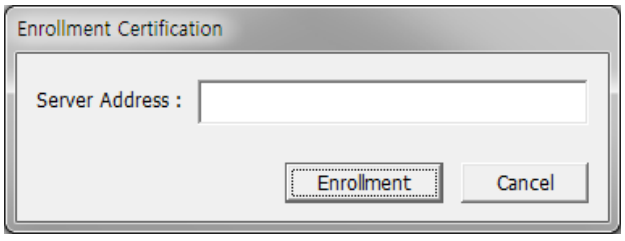
NOTE
- BioStar 2 uses port 443. If port 443 is used by a program, quit the program and try again. If the program cannot be closed, run 'BioStar Setting' to change the port number. For more information, see **Changing port of BioStar 2**.
- BioStar 2 uses Java version 1.8.0_201. If BioStar 2 does not run correctly, re-install Java version 1.8.0_201. http://www.oracle.com/technetwork/java/javase/downloads/java-archive-javase8-2177648.html

3 Log in with the administrator account. The administrator account ID is 'admin' and when you log in for the first time, **Not secure** warning will be displayed in the address bar.

4 To use HTTPS properly, register the IP address of the PC where BioStar 2 is installed. Click **Download https certification install program**.

5 Unzip the downloaded file and run **cert-register.exe** file. **Enrollment Certification** window will appears.

6 Enter the IP address of the PC where BioStar 2 is installed and click **Enrollment**.



7 Check the security warning message and click **Yes**.

8 When you restart the web browser and enter the registered IP address, **Secure** will appear on the address bar of the web browser.

Changing port of BioStar 2

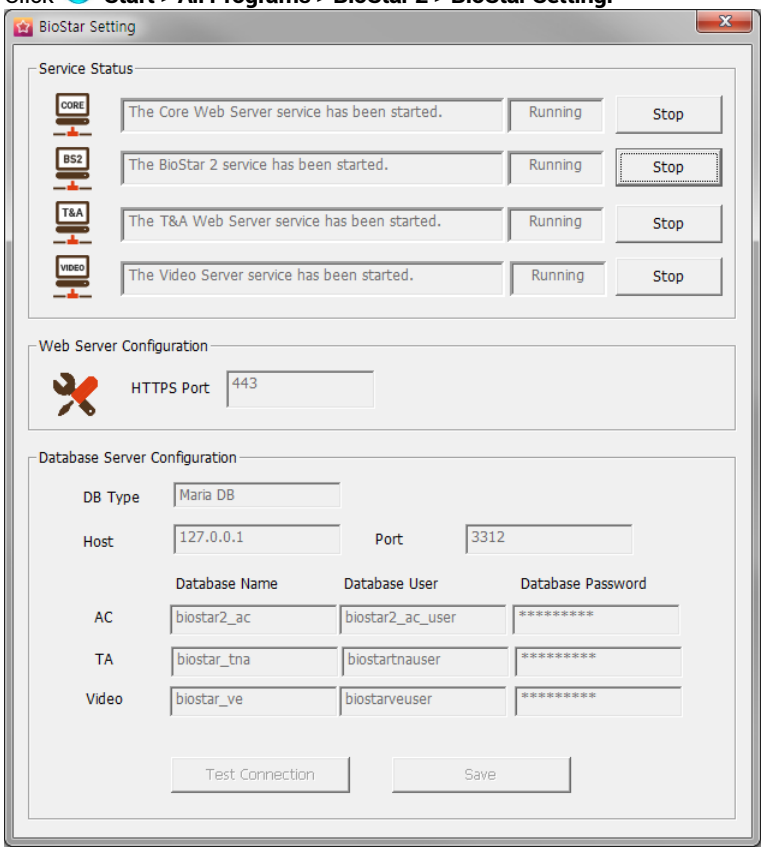
You can change the port used by BioStar 2.

NOTE

- If you use MS SQL as a database, when changes the port in BioStar 2, you must also change the port manually in the database. Otherwise, BioStar 2 may be disconnected from the database and may not work properly.

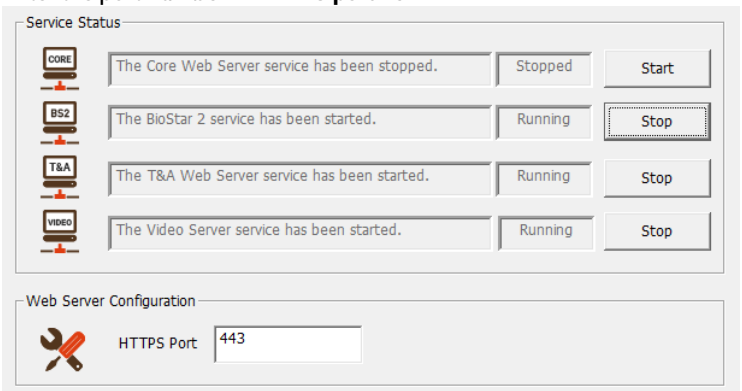
Changing with BioStar Setting (HTTPS port)

1 Click **Start** > **All Programs** > **BioStar 2** > **BioStar Setting.**



2 Click **Stop** button of Core Web Server.

3 Enter the port number in **HTTPS port** field.



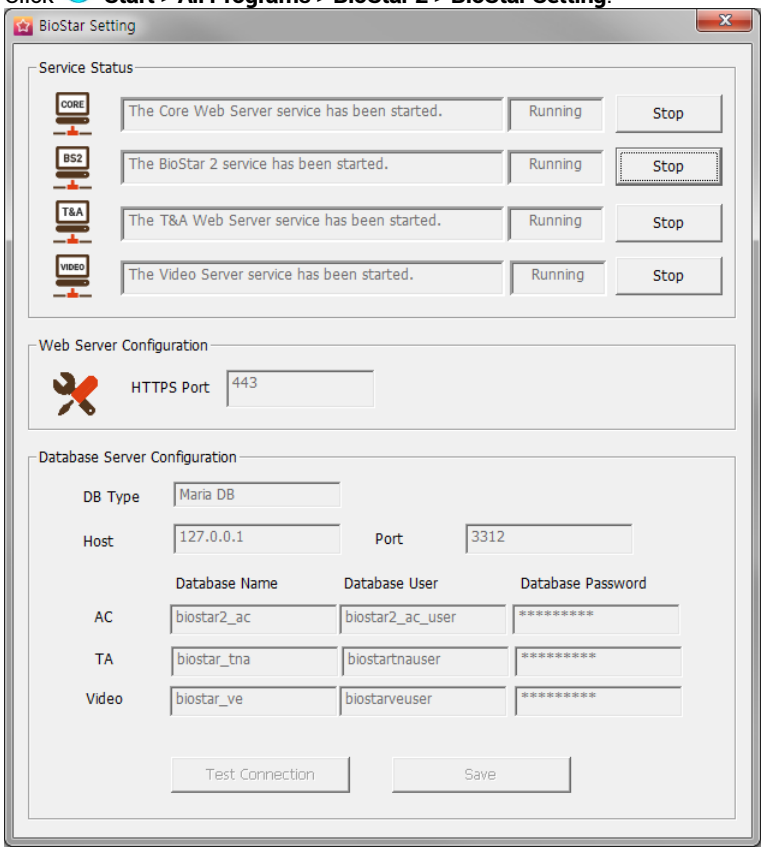
4 Click **Start** button of Core Web Server.

5 Run BioStar 2. If using port 450, enter '*IP address*:450'.

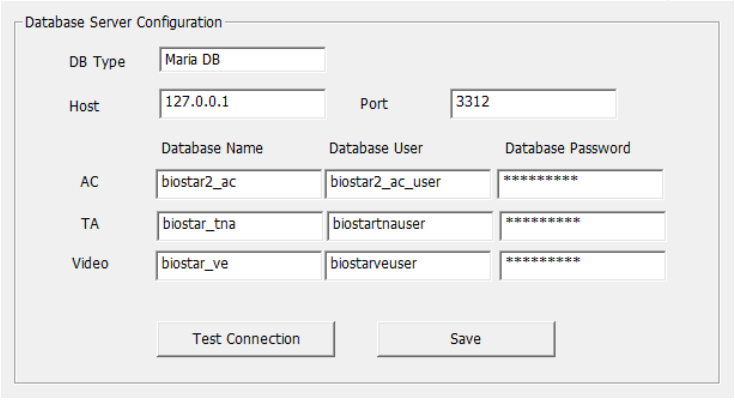
Changing database of BioStar 2

You can change the database of BioStar 2.

1 Click **Start** > **All Programs** > **BioStar 2** > **BioStar Setting**.



2 Click **Stop** button of all BioStar 2 services. **Database Server Configuration** will be enabled.



3 Edit the necessary fields. If you are not sure about the each information, contact your system administrator.

4 Click **Test Connection** to check if the database has been set properly.

5 Click **Save** to save the settings.

Suprema Inc.
17F Parkview Tower, 248, Jeongjail-ro, Bundang- gu, Seongnam-si, Gyeonggi-do, 13554, Rep. of KOREA
Tel: +82 31 783 4502 I Fax: +82 31 783 4503 I Inquiry: sales@supremainc.com

©2020 Suprema Inc. Suprema and identifying product names and numbers herein are registered trade marks of Suprema, Inc. All non-Suprema brands and product names are trademarks or registered trademarks of their respective companies. Product appearance, build status and/or specifications are subject to change without notice.