ManageEngine SupportCenter Plus
Installation Guide

ManageEngine SupportCenter Plus

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Introduction

The SupportCenter Plus installation Guide provides the necessary details to install and maintain the software in your system. Information such as system requirements, hosting the software, configuring the database, performing a manual backup, restoration of the backup data, upgrading the software, licensing and installing SSL Certificate are included in this guide.

After installing SupportCenter Plus, the Administrator Guide helps you configure SupportCenter Plus to make it available for real time usage.
System Requirements

Hardware
The following table lists the hardware installation according to the number of Support Rep login.

<table>
<thead>
<tr>
<th>Support Rep Login</th>
<th>Processor Type</th>
<th>Processor Speed</th>
<th>RAM</th>
<th>Free Hard Disk</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-20</td>
<td>Intel Core Duo</td>
<td>1.7 GHz</td>
<td>1GB</td>
<td>20GB</td>
</tr>
<tr>
<td>20-50</td>
<td>Intel Core Duo</td>
<td>3.4 GHz</td>
<td>2GB</td>
<td>40GB</td>
</tr>
<tr>
<td>50-100</td>
<td></td>
<td>2*3.4 GHz</td>
<td>4GB</td>
<td>40GB</td>
</tr>
<tr>
<td>100-500</td>
<td></td>
<td>4*3.4 GHz</td>
<td>8GB</td>
<td>80GB</td>
</tr>
</tbody>
</table>

Operating System

Windows
- Windows 2000 + SP4
- Windows 2000 / 2003 / 2008 R2 (32 bit, 64 bit) Server
- Windows XP Professional
- Windows 2008 Server
- Windows Vista
- Windows7

Linux
- Red Hat Linux 7.2 and above
- Linux Debian 3.0

Supported Database
- PostgreSQL 9.2
- MS SQL 2000, MS SQL 2005, MS SQL 2008
- MySQL 4.0

Supported Browsers
- Internet Explorer: v7 and above
- Firefox: v3 and above
- Google Chrome

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Installation

Installing SupportCenter Plus

- In Windows
- In Linux

In Windows

- One-Click Install
- Advance Install

One-Click Install

Follow the steps given below to install and set up the ManageEngine SupportCenter Plus application with One-Click Install.

1. Download the `ManageEngine_SupportCenter_Plus.exe` file.

2. Click the exe file to start the installation. The SupportCenter Plus installation wizard appears. Choose between One-Click Install and Advanced Install (custom settings).

3. In One-Click Install, SupportCenter is installed in a single step with default specifications,
   - **Installation Directory:** C:\ManageEngine\SupportCenter
   - **Edition:** Enterprise Edition
   - **WebServer Port:** 8080
   - **Database:** POSTGRESQL

4. Click One-Click Install.
4. The application begins to get installed as shown below,
5. On successful installation, the InstallShield Wizard Complete window pops up,

![InstallShield Wizard Complete](image)

When you choose to start the SupportCenter Service, the SupportCenter Server is started automatically and the client window opens with the login page. If you do not wish to view the readme file or start SupportCenter as a windows service, de-select the options provided.

6. Click **Finish** to complete the installation.

**Advanced Install**

Follow the steps given below to install and set up the ManageEngine SupportCenter Plus application with Advance Install.

1. Download the **ManageEngine_SupportCenter_Plus.exe** file.
2. Click the exe file to start the installation. The SupportCenter Plus installation wizard appears. Choose between **One-Click Install** and **Advanced Install** (custom settings). Click **Advanced Install**.
3. Review the **License Agreement** and click **Yes** to proceed with the installation.

If you choose to exit the setup then click **No**. The **Exit Setup** pop up window appears,

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4. On accepting the license agreement, choose the Edition to install from the **Edition Selection Panel**.

**Enterprise Edition**: The Trial Enterprise Edition is valid for 30 days and allows login access to two technicians, creation of ten business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access.


**Professional Edition**: The Trial Professional Edition is valid for 30 days and allows access to two technicians, creation of three business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access.


**Standard Edition**: The Trial Standard Edition is valid for 30 days and allows access to two technicians, creation of three business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access. The features in standard edition are, Request Management, Email Response Management, Account/Contact Management, Knowledge Base and SLA Management.
**Free Edition:** Free Edition is restricted to a single Support Representative login and creation/tracking of 25 accounts/contacts. However, multiple support representatives can be added without login access. The free edition never expires.

Choose the appropriate edition for your need and click **Next**.

5. The next step is choosing the installation directory. By default, the application is installed in `C:\ManageEngine\SupportCenter` directory.

Click **Browse** to change the installation directory. Choose the directory of your choice and click **Ok**. Click **Next** to proceed.
Warning: The installation directory or its parent directories must not have any space character in its name.

6. Enter the port number to run the web server. If any application is running in the default port (8080) then, enter the number of the port that is free to run the SupportCenter Plus application server. Click Next.

7. Choose the Database between POSTGRESQL and MSSQL. By default, SupportCenter Plus supports POSTGRESQL database.
9. To switch over to MSSQL database, configure SQL server to establish connection and start the server. Enter the following details,

1. **Host Name**: The IP Address/host name in which the database is available. The default host name is 'localhost'.
2. **Port**: The default value is 1433.
3. **Database**: The database name is supportcenter in non-editable format, by default.
4. **User Name**: The user name to login to the server.
5. **Password**: The password for the username. Click **Next** to continue.
Note: Need to enable SQL authentication as Windows authentication will not work.

10. Provide a name to appear in the Programs folder. By default, it is ManageEngine SupportCenter.

![Program Folder](image)

Click Next. The application begins to get installed.

11. On successful installation, the Registration for Technical Support form is displayed. It is an optional form and enables you to register for technical assistance. By registering, the technical support team are better informed about your organization and its specific needs thus providing a more focused support.

![Registration for Technical Support](image)

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Enter the details such as **Name**, **contact E-mail ID**, **Phone Number** (helps in making calls for immediate support), **Company Name**, and **Country**. Click **Next**. The following screen is displayed.

When you choose to start the SupportCenter Service, the SupportCenter Server is started automatically and the client window opens. If you do not wish to view the readme file or start SupportCenter as a windows service, de-select the options provided.

12. Click **Finish** to complete the installation.

**Installing SupportCenter Plus in Linux console mode**

To install the product in Linux console mode, follow the steps give below:

1. Download the `ManageEngine_SupportCenter_Plus_7_Linux.bin` file.
2. Change the mode to linux executable in your command prompt using the below command:
   \[ \text{chmod 755 ManageEngine_SupportCenter_Plus_Linux.bin} \]
3. Execute the .bin as given below, in your command prompt to install the product in the console mode:
   \[ \text{./ManageEngine_SupportCenter_Plus_7_Linux.bin -console} \]
4. Follow the displayed steps to proceed with the installation.
In Linux

- One-Click Install
- Advance Install
- Install SupportCenter Plus on a Linux machine without GUI

One-Click Install

Follow the steps given below to install and setup the ManageEngine SupportCenter Plus application:
1. Download the ManageEngine_SupportCenter_Plus_7_Linux.bin file.
2. Execute the .bin as given below, in your command prompt:

```
./ManageEngine_SupportCenter_Plus_7_Linux.bin
```

Note: You need to have execute permissions for executing the .bin type files.

3. The installation wizard appears. Choose between One-Click Install and Advanced Install (custom settings).
4. In One-Click Install, SupportCenter Plus is installed in a single step with the default specifications,

   **Installation Directory**: /ManageEngine/SupportCenter
   **Edition**: Enterprise Edition
   **WebServer Port**: 8080
   **Database**: POSTGRESQL

   If you do not wish to view the Readme file, de-select the check box.
5. Click Finish to complete the installation.

Advanced Installation

Follow the steps given below to install and setup the ManageEngine SupportCenter Plus application:
1. Download the ManageEngine_SupportCenter_Plus_7_Linux.bin file.
   ManageEngine_SupportCenter_Plus_7_Linux_console.bin file.
2. Execute the .bin as given below, in your command prompt:

```
./ManageEngine_SupportCenter_Plus_7_Linux.bin
```

Note: You need to have execute permissions for executing the .bin type files.
3. The installation wizard appears. Choose between One-Click Install and Next (custom settings). Click Next to proceed with the advance installation.

4. The License Agreement is displayed. Please read the license agreement carefully. You need to accept the license agreement to proceed with the installation. Click Next.

5. On accepting the license agreement, choose the Edition to install from the Edition Selection Panel.

**Enterprise Edition:** The Trial Enterprise Edition is valid for 30 days and allows login access to two technicians, creation of ten business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access. The features in enterprise edition are, Request Management, Email Response Management, Account/Contact Management, Knowledge Base, SLA Management, Customer Portal, Contract Management, Product Catalog, AD Integration, API, Customer Survey, CSV based customer information synchronization and Dashboard Analytic.

**Professional Edition:** The Trial Professional Edition is valid for 30 days and allows access to two technicians, creation of three business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access. The features in professional edition are, Request Management, Email Response Management, Account/Contact Management, Knowledge Base, SLA Management, Customer Portal, Contract Management, Product Catalog, AD Integration, Customer Survey, CSV based customer information synchronization and Dashboard Analytic.

**Standard Edition:** The Trial Standard Edition is valid for 30 days and allows access to two technicians, creation of three business units and creation/tracking of unlimited accounts/contacts. However, multiple technicians can be added without login access. The features in standard edition are, Request Management, Email Response Management, Account/Contact Management, Knowledge Base and SLA Management.

**Free Edition:** Free Edition is restricted to a single Support Representative with creation/tracking of 25 accounts/contracts. However, multiple support representatives can be added without login access. The free edition never expires.

Choose the appropriate edition for your need and click Next.

6. Click Browse to choose the installation directory. Click Next to continue.

7. Enter the port number to run the web server. If any application is running in the default port (8080) then, enter the number of the port that is free to run the SupportCenter Plus application server and click Next.
Warning: If you wish to provide a port number lesser than 1024 as the web server port, then you need to be the super-user of the system to successfully install and run SupportCenter Plus application.

8. Choose the **Database** between POSTGRES and MSSQL. By default SupportCenter Plus supports POSTGRES database.

9. Click **Next**.

10. The details provided till now is displayed for your confirmation:

   **Details of Installation**

   *Installation Directory: home/<user>/ManageEngine/SupportCenter*
   
   *Product Size: 128.1 MB.*

   If the information displayed is correct, click **Next**, else click **Back** to make the necessary changes and proceed with the installation.

11. The **Registration for Technical Support** form is for acquiring technical assistance from our support team. By registering for technical support, our support team will be better informed about your organization and its specific needs, and hence provide a more focused support. Enter your details such as **Name**, contact **Email Address**, **Phone Number** (helps in making calls for immediate support), **Company Name** and **Country**.

12. Click **Next**.

13. The application is installed. If you do not wish to view the Readme file, de-select the check box.

14. Click **Finish** to complete the installation.

**Install SupportCenter Plus on a Linux machine without GUI**

1. Download ManageEngine _SupportCenter_Plus.bin_ file.

2. To execute .bin type files, you require the execute permission. Enter the command as given below in your command prompt.

   `#chmod +xManageEngine_SupportCenter_Plus_x_Linux.bin`

3. Execute the .bin file.

   `./ManageEngine_SupportCenter_Plus.bin --console`

---

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4. Follow with the on-screen instructions to proceed with the installation.
Start and Shutdown SupportCenter Plus

In Windows

- Starting the application
- Shutdown the application

In Linux

- Starting the application
- Shutdown the application

In Windows

Starting the application

Warning: Windows Security Alert!

By default, the following processes are started along with the SupportCenter Plus for PostgreSQL server.

- java.exe - SupportCenter Server
- pg_ctl.exe - Database Server

Note: For MY SQL and MS SQL server, only java.exe is started along with SupportCenter Plus.

As Service

To manually start the SupportCenter Plus as service,

1. Click Start -> Programs -> ManageEngine SupportCenter -> SupportCenter Server to start the web server. It takes approximately 2 minutes in a Windows XP, 512 MB RAM, and 1.0 GHZ processor. Generally, the server is started and the web client is launched in the default browser.

2. If the web client is not launched automatically, then click Start -> Programs -> ManageEngine SupportCenter -> SupportCenter Web Client to start the web client. The application opens the login page in your default web browser.

From Command Prompt

To manually start the SupportCenter application from the command prompt,

1. Click Start -> Run -> cmd to go to the command prompt.

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2. Move to the bin directory on entering the command
   C:\>cd ManageEngine\SupportCenter\bin
3. Execute run.bat file to start the server.
4. Connect your client at http://localhost:8080 in your web browser. Here you need to replace
   the localhost with the corresponding server name where the SupportCenter Plus web server
   is running and the port number 8080 should be replaced with the actual port where the server
   is running.
5. The application opens the login page in your default web browser.
6. Enter your **user name** "administrator" and **password** "administrator" to log in to
   SupportCenter Plus as shown below.

   ![Login Page]

   As soon as you login the **configuration wizard** home page is displayed. Follow the
   instructions provided in the wizard and click the **Next** button. To configure your application
   settings, refer to the **Configurations** in admin guide.

   **Note:** If you wish to start SupportCenter Plus manually then change the Startup Type
   as Manual under Services.
Shutdown the Server

As Service

To shutdown the SupportCenter Plus application as service,

Click Start -> Programs -> ManageEngine SupportCenter -> Shutdown SupportCenter. A confirmation message appears. Click OK to proceed with the shut down.

[OR]
Right-click on the system tray icon and choose Shut down Server. A confirmation message appears. Click OK to shut down the application.

From Command Prompt

To shutdown SupportCenter Plus application from the command prompt,

1. Click Start -> Run -> cmd to go to the command prompt.
2. Click Ctrl+c to stop the server.
3. Enter 'y' to specify terminate operation. The server is shutdown.

In Linux

Starting the application

To manually start the SupportCenter Plus application,

1. Go to <SupportCenter Plus>/bin directory and execute the run.sh file as given below:

   $ sh run.sh

2. To start the web client, open a web browser and type the following in the address field:

   http://localhost:8080

   Here, you need to replace the localhost with the corresponding server name where the SupportCenter Plus web server is running and the port number 8080 must be replaced with the actual port where the server is running. The application opens to the login page in your default web browser.

3. Enter user name as "administrator" and password as "administrator" to log in to SupportCenter Plus. The Configuration Wizard home page is displayed. Follow the instructions provided in the wizard and click the Next button.

   To configure your application settings, refer to Configurations in admin guide.
Shutdown the application

To shutdown the SupportCenter Plus application, execute `shutdown.sh` file from the `bin` directory as below:

```
sh shutdown.sh -S
```
Database Configurations

- Configure the Database
  - Configuring PostgreSQL Server
  - Configuring MS SQL Server
  - Configuring MY SQL Server
- Non GUI Users
- Connect to PostgreSQL Server
- Troubleshooting Tips

Configure the Database

SupportCenter Plus supports PostgreSQL database, by default. To switch over to SQL database you need to configure SQL server to establish connection and start the server.

Configuring PostgreSQL Server

1. Go to <SupportCenter>/bin directory from the command prompt. Execute the changeDBServer.bat [changeDBServer.sh for Linux] file.

2. This opens the Database Setup Wizard page. Fill in the following details to configure sql server.

   1. **Server Type**: Select the server type from the combo box. Say PostgreSQL, MS SQL, and MY SQL.
   2. **Host Name**: The IP Address/host name in which the database is available. The default host name is 'localhost'.
   3. **Port**: The default port value is 1433.
   4. **Database**: The database name is supportcenter in non-editable format, by default.
   5. **User Name**: The user name to login to the server.
   6. **Password**: The password for the username provided.
3. Check the availability of connection by clicking the Test button. A pop up window showing 'Connection Established' message appears.

4. Click OK to proceed.

5. Click Save button to save the SQL server settings.

**Configuring MSSQL Server**

If you are using a remote MSSQL server and do not wish to use the in-built server then,

1. Select Server Type as MSSQL server. This opens the database wizard page.
2. Specify the Host Name, Port, User Name & Password.
3. Click Test button and check the availability of the connection.
4. Once the connection is established, Save the details and start the server.

**Configuring MY SQL Server**

If you are using MY SQL server,

1. Select Server Type as MY SQL server. This opens the database wizard page.
2. Specify the Host Name, Port, User Name & Password.
3. Click Test button and check the availability of the connection.
4. Once the connection is established, Save the details and start the server.

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Non GUI Users

Run the `changeDBServer.bat` [changeDBServer.sh for Linux] under command prompt by passing parameter as given below,

```
C:\[SupportCenter Plus Home]\bin>changeDBServer.bat --console
```

It will get the DB Server necessary information from the console.

Connect to PostgreSQL Server

SupportCenter Plus uses PostgreSQL as its default database.

Connect to PostgreSQL Server in Windows

1. Go to `[SupportCenter Plus Home]\pgsql\bin` in the command prompt.
   
   ```
   C:\> cd ManageEngine\SupportCenter\pgsql\bin
   ```

2. Enter the command: `psql.exe -U postgres -p 65432 supportcenter`

   ```
   C:\> cd ManageEngine\SupportCenter\pgsql\bin>psql.exe -U postgres -p 65432 supportcenter
   ```

`SupportCenter` is the name of the database. **65432** is the port on which SupportCenter Plus database runs. SupportCenter Plus uses postgres account to connect to the database and does not use any password. You can connect to PostgreSQL database only from the server console.
Connect to PostgreSQL Server in Linux

1. Install the PostgreSQL client which supports your Linux version.
2. Once this is accomplished, make sure that the command "psql" is in path. (Most often, psql should be under path, if not, you may add the complete path to psql command under PATH variable in the bashrc file.
3. Go to [SupportCenter Plus Home] \ psql \ bin in the command prompt.
   
   # cd [SupportCenter Plus Home]/pgsql/bin

   1. Enter the command: 
   
   # ./psql -U postgres -h localhost -p 64532 supportcenter

Troubleshooting Tips

PostgreSQL Connection Resolution
Verify the following,

- Check if PostgreSQL server is running.
- Check if the server name or the port number is misspelled or incorrect.
- If PostgreSQL server is running in a remote machine then there may be a firewall blocking the port number you have entered.
- If none of the above mentioned issues matches then contact your system administrator.

MySQL Connection Resolution
Verify the following,

- Check if MySQL server is running.
- Check if the server name or the port number is misspelled or incorrect.
- If MySQL server is running in a remote machine then there may be a firewall blocking the port number you have entered.
If none of the above mentioned issues matches then contact your system administrator.

**MS SQL Connection Resolution**

If a connection is refused and an exception is thrown by SQL Server as 'Unable to connect the server' then the reason for this could be,

- The server name is misspelled or the port number is incorrect.
- The SQL server was not configured to use TCP/IP. In this case, enable TCP/IP from SQL servers network utility application.
- If there is a firewall blocking the port 1433 on the server then you will not be able to connect to the server.
- To confirm the firewall block connect to TCP/IP use `telnet<server_host>1433` to confirm the block.
- You can connect to SQL Server named instantly if you know the machine name and port number.
- Create new user with full privileges as shown below,
While configuring SQL server properties select the authentication type as SQL server as shown below. Windows authentication is not supported by SupportCenter currently.

![SQL Server Properties Configuration](image)

**Security**

SQL Server provides authentication based on Windows accounts and a named SQL Server login ID and password.

- Authentication:
  - SQL Server and Windows
  - Windows only

- Audit level:
  - None
  - Failure
  - Success
  - All

**Startup service account**

Start and run SQL Server in the following account:

- System account
- This account

Password:
Changing Web Server Port

- In Windows
- In Linux

In Windows

Follow the steps given below, to change the web server port of SupportCenter Plus server:

1. Go to <SupportCenter>\bin directory.
2. Execute the file changeWebServerPort.bat at command prompt as shown below:
   ```cmd
   C:\[SupportCenter Plus Home]\bin>changeWebServerPort.bat <new port number> <http or https>
   ```
3. The web server port will be reset to the new port number that you have specified.
   1. HTTPS - To start the SupportCenter Plus server in HTTPS mode.
   2. HTTP - To start the SupportCenter Plus server in HTTP mode. By default, executing the file as changeWebServerPort.bat <new port number> will start the server in HTTP mode.
4. If the port number is occupied, you will be prompted to enter a different port number. If you do not wish to enter a different port number then press N on your keyboard to exit the application. Else press Y and enter a different port number that is unoccupied.

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This change is effected only when you restart the server. Connect to the SupportCenter Plus server after restarting with the new port number.

**In Linux**

Follow the steps given below to change the web server port where the SupportCenter Plus server is running:

1. Go to `<SupportCenter>/bin` directory.
2. Execute the file `changeWebServerPort.sh` at command prompt as shown below:

```
$ sh changeWebServerPort.sh <new port number> <http or https>
```
3. The web server port will be reset to the new port number that you have specified.
   1. HTTPS - To start SupportCenter Plus server in HTTPS mode.
   2. HTTP  - To start SupportCenter Plus server in HTTP mode. By default, executing the file as `changeWebServerPort.bat <new port number>` will start the server in HTTP mode.
4. If the port number is occupied, you will be prompted to enter a different port number. If you do not wish to enter a different port number then press `N` on your keyboard to exit the application. Else press `Y` and enter a different port number that is unoccupied.
   This change is effected only when you restart the server. Connect to the SupportCenter Plus server after restarting with the new port number.
Hosting SupportCenter Plus

SupportCenter Plus can be accessed within your network by typing the url, provided the IP address of the installed software server is registered. This url can be made available to users over the internet on exposing the url to the public. On hosting the product over the internet, SupportCenter Plus can be accessed directly by typing the url.

Requirements for hosting SupportCenter Plus

- **Optimum Server Configuration:** 2 GHz Processor, 2GB RAM, 20GB HDD
- **Database:** PostgreSQL 9.2, MY SQL (out-of-the-box), MS SQL 2000/2005/2008
- **Network:** Internet (WAN) or Intranet (LAN)
- **Browser Requirements:** IE 7.0 and above, Mozilla Firefox 2.0 & above, Mozilla.

Hosting Procedure

a) Intranet:

1. Install Supportcenter Plus on a box. Configure the hostname and IP address for this box, so that it can be accessed across the LAN. This hostname needs to be configured in your DNS against the IP address of the box.
2. The SupportCenter Plus application can be accessed through http://<servername-or-ipaddress>:<portnumber>/

   where, <servername-or-ipaddress> is the name of the server where SupportCenter Plus is installed and <portnumber> is the port where the application is running. The default port on which Supportcenter Plus installs is 8080.
3. In case you do not wish to change the port but still access Supportcenter Plus on port 80 then, you should follow the port forwarding rule as given below,

   Request on 80 be forwarded to 8080 on the host "servername-or-ipaddress"

   Port forwarding can be achieved through,
   1. Firewall
   2. Apache (Redirection rule)
   3. IIS (Redirection rule)
b) Internet:

On the DMZ:

1. Install SupportCenter Plus on a box in the DMZ zone.
2. If mobile users need to access SupportCenter Plus through a hostname then, you may need to register this hostname on the DNS. (Service Providers can help you register the DNS against its IP address)
3. If SupportCenter Plus is installed on the default port 8080 but you want the users to access it as http://hostname/ (ie., on Port 80) then, a port forwarding rule should be configured in the firewall as stated below,

   Request on 80 be forwarded to 8080 on the hostname.
4. In case, you have a NAT, then rule for port forwarding is given below,

   Requests on Port 80 on IP Address a.b.c.d should be forwarded to port 8080 on IPAddress x.y.z.w

On the WAN:

1. Install SupportCenter Plus on a box in the WAN.
2. Register the hostname of this box against its IP address. (Service Providers can help you do this)
3. If SupportCenter Plus is installed on port 8080, you should follow the port forwarding rule as given below,

   Request on 80 be forwarded to 8080 on the hostname.
Backup and Restore

In Windows

• Backup Process in Windows
  • Backup Process in Windows without file attachments
• Restore Process in Windows

In Linux

• Backup Process in Linux
  • Backup Process in Linux without file attachments
• Restore Process in Linux

In Windows

Backup Process in Windows

Follow the steps given below to take a backup of the ManageEngine SupportCenter Plus data,

1. Click Start -> Programs -> ManageEngine SupportCenter Plus -> Backup Data.
   [OR]
   Alternatively, take backup from <SupportCenter>\bin directory in the command prompt.
   Execute the backUpData.bat as shown below,

   C:\>cd ManageEngine\SupportCenter\bin\backUpData.bat

2. A backup of the data and the file attachments that have been added to the application is created in <SupportCenter>\backup directory.

3. The file name for the back up file is of the pattern BackUp_month_date_year_hr_min.data. An example of the backup file name:
   backup_supportcenter_7013_fullbackup_12_08_2008_15_22.data

Backup Process in Windows without file attachments

1. From command prompt, go to <SupportCenter Plus>\bin directory and execute
   backUpData.bat --trimmed command to start the database back up.
   C:\ManageEngine\SupportCenter\bin\backUpData.bat --trimmed

2. Once the back up is complete, a backup file with .data extension is placed in the Trimmed Backup folder under SupportCenter Plus Home directory.

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3. The backup file contains information such as, the Build number of SupportCenter Plus, and date and time when the back up was performed. Here is the format of the backup file.

backup_ supportcenter_ [build number] _database_month _date _year _hour _minutes.

For example, a trimmed backup taken in Version 7.0 of SupportCenter Plus looks like this, backup_supportcenter_7013_database_12_08_2008_15_22.data

**Restore Process in Windows**

To restore the backup data,

1. Click **Start -> Programs -> ManageEngine SupportCenter Plus -> Restore Data.**
   
   [OR]

   Go to `<SupportCenter>\bin` directory in the command prompt. Execute the file `restoreData.bat` as shown below,

   ```
   C:\>cd ManageEngine\SupportCenter\bin\restoreData.bat
   ```

2. The **Restore Data** pop up window appears. Browse the backed up file and click **OK.**

3. The data begins to restore. While restoring the existing data is rewritten with the backed up file.

   **Note:**
   
   1. The SupportCenter Plus server needs to be shut down before you restore the data.
   2. The backup file name has to be a .data file.
   3. Click **Alt+Tab** to view the Restoring Data pop up if its not visible.

**In Linux**

**Backup Process in Linux**

Follow the steps given below to take a back up of the ManageEngine SupportCenter Plus data,

1. Go to `<SupportCenter>/bin` directory from the command prompt.
2. Execute the `backUpData.sh` file as given below,

   ```
   $ sh backUpData.sh
   ```

   The back up file is created in the `<SupportCenter>/backup` directory.
3. The file name for the backup file is of the pattern BackUp_monthdate_year_hr_min.data. An example of the backup file name:

```
backup_supportcenter_7013_fullbackup_12_08_2008_15_22.data
```

**Backup Process in Linux without file attachments**

1. From command prompt, go to `<SupportCenter Plus>/bin` directory and execute `backUpData.sh --trimmed` command to start the database back up.

```
$ sh backUpData.sh --trimmed
```

2. Once the back up is complete, a backup file with .data extension is placed in the Trimmed Backup folder under SupportCenter Plus Home directory.

3. The backup file contains information such as, the Build number of SupportCenter Plus, and date and time when the back up was performed. Here is the format of the backup file:

```
backup_supportcenter_[build number]_database_month_date_year_hour_minutes.
```

For example, a trimmed backup taken in Version 7.0 of SupportCenter Plus looks like this,

```
backup_supportcenter_7013_database_12_08_2008_15_22.data
```

**Restore Process in Linux**

To restore the backup data,

1. Go to `<SupportCenter>/bin` directory from the command prompt.

2. Execute the file `restoreData.sh` at command prompt as shown below,

```
$ sh restoreData.sh <backup file name>
```

The backup file name has to be the .data file from which you wish to restore the data.

**Note:** The SupportCenter Plus server needs to be shut down before you restore the data.
Upgrade Service Pack

You can upgrade SupportCenter Plus application to a newer build. For ex, if you are currently running 7915 then you can upgrade to 7916 by following the procedure given below,

1. Shut down the SupportCenter Plus server, if necessary.
2. Take a Backup of Data to prevent any accidental loss.
3. Download the latest servicepack from our website


4. From the [SupportCenter Home]/bin directory in the command prompt, execute

UpdateManager.bat

ex : C:\ManageEngine\SupportCenter\bin>UpdateManager.bat

The Update Manager opens as shown below,
5. Click **Browse** to locate the downloaded .ppm file from **Select a File** pop up window. The path of the .ppm file is entered in the **File Name** text field.
5. Click **Install** to start the installation process. A backup message and recommended disk space alert message appears. To ensure there is enough disk space and continue the installation click 'Yes'. Do not disturb the system until the upgrade process is completed.

6. Click 'No' to stop the upgrade process.

7. On successful installation an "Installed" message appears. Exit from the window and start the service.

**Note:** It is advisable that if upgrade fails, let the uninstallation process complete and install .exe/bin again. Restore the data which has taken as backup. For more details, refer 'On Upgrade Failure'.

**Eg:** If 7011 to 7012 upgrade fails, install 7011 again and restore 7011 data which has taken as backup before upgrading from 7011 to 7012

For any further assistance mail to supportcenterplus-support@manageengine.com

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Upgrade Service Pack on Linux

2. Take a backup of the existing build for security reasons. Refer Backup Process to know how to take a backup of your data.
3. Click here to download the latest hotfix or the .ppm file.
4. Run the script **UpdateManager.sh** in the `<SupportCenter_Plus_Home>/bin` folder.
5. From the Update Manager tool click **Browse** button to select the Service Pack file (ManageEngine_SupportCenter_Plus_7_9_0_SP-1_6_0.ppm) that you had downloaded.
6. Click **Install**. Follow the on-screen instructions to apply the Service Pack / Hotfix.
7. Once the upgrade is complete, start SupportCenter Plus Server.

**Apply patch from console or command line**

To install a patch from console or command line,

```
sh UpdateManager.sh -c
```

And it will guide the user through the steps.

```
[root@scp-centos3 bin]# sh UpdateManager.sh -c
Press 1 to Install
      u to Uninstall
      v to View installed ServicePack versions
      e to Exit
Choose an Option:1
Enter the patch file to install:/home/guest/ManageEngine_SupportCenter_Plus_7_9_0_SP-1_5_0.ppm
```
Installing SSL Certificate

- Introduction
- Steps to install SSL in SupportCenter Plus
- Install a .P7b Certificate
- Commands to install certificate of some common vendors

Introduction

SupportCenter Plus can run as a HTTPS service. But it requires a SSL (Secure Socket Layer) Certificate signed by a valid Certificate Authority (CA).

By default, on first time start-up, it creates a self-signed certificate. This self-signed certificate will not be trusted by the user browsers. Thus, while connecting to SupportCenter Plus, you need to manually verify the certificate information and the hostname of SupportCenter Plus server carefully and should force the browser to accept the certificate.

To make SupportCenter Plus server identify itself correctly to the web browser and the user, you need to obtain a new signed certificate from a CA for the SupportCenter Plus host. You can use keytool (bundled with Java) to create your certificates, get them signed by a CA and use them with SupportCenter Plus.

Steps to install SSL in SupportCenter Plus

The steps involved in configuring SupportCenter Plus to use the SSL are as given below.

1. **Step 1**: Create a Keystore file
2. **Step 2**: Create .CSR (Certificate Signing Request) file
3. **Step 3**: Install your SSL Certificate
4. **Step 4**: Configuring the Server

**NOTE**: In all the images, replace the highlighted text with the alias name you want to use for the SupportCenter Plus.

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Step 1: Create a Keystore file

Before requesting for a certificate from a CA, you need to create tomcat specific ".keystore" file and ".csr" file. The .keystore file and .csr file will include information provided by the individual who creates the .keystore and .csr files.

To create the .keystore file follow the below steps,

1. Open the Command Prompt.
2. From the location <installation directory> \\ jre \ bin execute the command
   ```
   keytool -genkey -alias <your_alias_name> or [Domain Name] -keyalg RSA -keystore scp.keystore
   ```

3. If your vendor requires a CSR of size 2048 please use the command given below.
   ```
   keytool -genkey -alias <your_alias_name> or [Domain Name] -keyalg RSA -keysize 2048 -keystore scp.keystore
   ```
4. You will then be prompted to choose a password for your keystore.

**NOTE:** Please note that the Password should not contain $ symbol.

5. When it asks for first and last name, this is NOT your first and last name, but rather it is your **Fully Qualified Domain Name** for the site you are securing.

6. If you are ordering a **Wildcard Certificate** this must begin with the * character.

7. On entering the required information, confirm that the information is correct by entering 'y' or 'yes' when prompted.
8. At the end of executing the above command, you will be prompted to enter keystore password. Try giving the password \textit{same as your key password}. Make sure to remember the password you choose.

9. Your keystore file named scp.keystore is now created in your current working directory.

\textbf{NOTE:} We request you to make a backup copy of the scp.keystore file before installing the Certs. This backed up keystore can be used if the certificate installation goes wrong or when you renew your certificates the next year.

\textbf{Step 2: Creating .CSR (Certificate Signing Request) file}

The .CSR (Certificate Signing Request) file is temporary and should be submitted to a CA to receive \textbf{CA-Signed Certificate} files.

Please follow the steps given below to create the CSR file.

1. Open the Command Prompt
2. From the location $<\text{installation directory}>/\text{jre}/\text{bin}$ execute the below command.

\texttt{keytool -certreq -alias <your_alias_name> -file key.csr -keystore scp.keystore}

In the above command $<\text{your_alias_name}>$ is the alias name provided when creating the keystore, $\text{key.csr}$ is the name of the CSR file that will be created after the command is executed.
Step 3: Install your SSL Certificate

Download the Certificate files received from the CA via e-mail to the directory where your keystore (scp.keystore) was saved during the CSR creation process. The certificates must be installed to this exact keystore. If you try to install it to a different keystore it will not work.

The certificates you had downloaded must be installed to your keystore in the correct order for your certificate to be trusted. If the certificates are not installed in the correct order, then the certificate will not authenticate properly. To find the correct order, double click on the domain certificate and then go to ‘Certification Path’.
These certificates are usually in the format .cer or .crt. If your certificate is with the extension .p7b please follow the instructions given in Installing a .P7b Certificate to export the certs to a .cer or .crt format.

Looking at the above certification path we can infer that we need to import two other certificates before the domain certificate. First is the Root, next the Intermediate and finally the Domain Certificate. Some CAs may also use another certificate called Cross Intermediate. These certificates can be downloaded from the Vendor’s website.

Installing the Root Certificate file

Each time you install a certificate to your keystore you will be prompted for the keystore password, which you chose while generating your CSR. Type the following command to install the Root certificate file:

```
keytool -import -trustcacerts -alias root -file <File_Name>.crt -keystore scp.keystore
```

**NOTE:** Choose ‘Yes’ if you get prompted with a message that says "Certificate already exists in system-wide CA keystore under alias <Alias Name> Do you still want to add it to your own keystore? [no]:"

You will get a confirmation stating that the "Certificate was added to keystore".
Install the Intermediate Certificates and Cross Intermediate Certificates (if any).

Follow the instructions provided by the CA.

keytool -import -trustcacerts -alias intermediate -file <File_Name>.crt -keystore scp.keystore
keytool -import -trustcacerts -alias cross -file <File_Name>.crt -keystore scp.keystore

You will get a confirmation stating that the "Certificate was added to keystore".

Install the Primary or the Domain Certificate file

Type the following command to install the Primary certificate file:

keytool -import -trustcacerts -alias <your_alias_name or [Domain Name]> -file your_domain_name.crt -keystore scp.keystore

Please note that <your_alias_name or [Domain Name]> should be replaced with the alias name provided when creating the keystore (as discussed in Step 1). This time you will get a different confirmation stating that the "Certificate reply was installed in keystore".
If you want to trust the certificate, then choose y or yes. Your Certificates are now installed to your keystore file (scp.keystore).

**Step 4: Configuring the Server**

1. Copy the scp.keystore file from `<SupportCenter_Home>\jre\bin` to `<SupportCenter_Home>\server\default\conf`

2. From the command prompt, execute `changeWebServerPort.bat` script to change the connection mode to HTTPS.

```
Cmd>[SupportCenter Plus Home]\bin> changeWebServerPort.bat
<WEBSERVER_PORT> https
```

3. Finally, update the name of the keystore and the password, you gave in Step 1, while generating scp.keystore in the file server.xml present under `<SupportCenter_Home>\server\default\deploy\jbossweb-tomcat50.sar`

```
<!-- SSL/TLS Connector configuration using the admin devl guide keystore--->
<Connector URIEncoding="UTF-8"
address="$\{jboss.bind.address\}" clientAuth="false"
comressableMimeTypes="text/css, text/javascript, application/json, text/plain, text/html" compression="on"
compressionMinSize="2048"
keystoreFile="$\{jboss.server.home.dir\}/conf/scp.keystore"
keystorePass="zoho.com" maxPostSize="-1" maxSpareThreads="15"
maxThreads="100" minSpareThreads="5"
noCompressionUserAgents="gozilla, traviata" port="443"
scheme="https" secure="true" sslProtocol="TLS"/>
```

4. Restart the service ManageEngine SupportCenter Plus for the changes to take effect.

---

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Install a .P7b Certificate

Some CA will provide the certificates with an extension .p7b. In such a case you can double click on this file to open a console which will list all the required certificates. You can export these certificates to Base-64 encoded X.509 (.cer) files. *(Please refer to the Screenshots given below).*

These certs can then be installed onto the keystore file using the instructions given in Step 3.

To export the certificate,

1. Go to `[SupportCenter Plus Home]\ jre \ bin \ domain.P7B`.

2. Right click on the certificate and select **All Tasks -> Export** option.
3. The Certificate Export Wizard dialog pops up. Click **Next** button to proceed.

4. Select the export file format as **Base-64 encoded X.509 (.cer)**. Click **Next**.
5. Specify the name of the file you want to export. Click **Next**.

6. The certificate export wizard is completed successfully. You can check for the settings you have specified. Click **Finish**.

---

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7. A success message appears in a dialog box. Click OK.

Commands to install certificates of some common vendors

Please find below the commands you need to use to install certificates of some common vendors.

**NOTE:** These instructions might change depending on the Certificates issued by the CA.

**GoDaddy**
If your CA is "GoDaddy", then the steps to follow will be:

```
keytool -import -alias root -keystore <Keystore_Name>.keystore -trustcacerts -file gd_bundle.crt
keytool -import -alias cross -keystore <Keystore_Name>.keystore -trustcacerts -file gd_cross_intermediate.crt
keytool -import -alias intermediate -keystore <Keystore_Name>.keystore -trustcacerts -file gd_intermediate.crt
keytool -import -alias <Alias Specified when creating the Keystore> -keystore <Keystore_Name>.keystore -trustcacerts -file <CertificateName>.crt
```
Verisign
If your CA is "Verisign", then the steps to follow will be:

keytool -import -alias intermediateCA -keystore <Keystore_Name>.keystore -trustcacerts -file <your_intermediate_certificate_name>.cer
keytool -import -alias <Alias Specified when creating the Keystore> -keystore <Keystore_Name>.keystore -trustcacerts -file <CertificateName>.cer

Comodo
If your CA is "Comodo", then the steps to follow will be:

keytool -import -trustcacerts -alias root -file AddTrustExternalCARoot.crt -keystore <Keystore_Name>.keystore
keytool -import -trustcacerts -alias addtrust -file UTNAddTrustServerCA.crt -keystore <Keystore_Name>.keystore
keytool -import -trustcacerts -alias ComodoUTNServer -file ComodoUTNServerCA.crt -keystore <Keystore_Name>.keystore
keytool -import -trustcacerts -alias essentialSSL -file essentialSSLCA.crt -keystore <Keystore_Name>.keystore
keytool -import -trustcacerts -alias <Alias Specified when creating the Keystore> -file <Certificate-Name>.crt -keystore <Keystore_Name>.keystore

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Renew SSL Certificate

In order to use the renewed certificate, you need to have taken a backup of the existing keystore file (created while configuring the SSL), which was taken before the installation of any certs. If this file is present, then you can replace this file in the [SupportCenter Home]\jre\bin folder and follow the instructions from Step 3: Install your SSL Certificate.

If you do not have a backup of the keystore file, then you need to start from scratch i.e., from Step 1, and get the certificates reissued for the new CSR (Certificate Signing Request).

You can use the following command to get the list of certificates installed in the keystore.

```
Keytool.exe  -list  -keystore scp.keystore
```

Below is an example of how a keystore looks before installing any Certificates. It will only have the keyEntry.

![Keystore Example](image)
Installing .PFX Certificate

.PFX is an extension for security certificate. It defines a file format that stores private keys (generated by your server at the time the CSR was generated) and public key certificate (your SSL Certificate provided by the CA) in a single encrypted file.

To install a certificate with the extension .PFX,
2. Copy the .pfx file to the location C:\ManageEngine\SupportCenter\server\default\conf (where C: is the drive in which SupportCenter Plus is installed)
3. Change the web server port to 443 to run SupportCenter Plus on secure mode. To change the web server port, open the command prompt and go to [SupportCenter Plus Home]\bin.
   Enter the command as given below,
   [SupportCenter Plus Home]\bin> changewebserverport.bat 443 https

4. Go to the location [SupportCenter Plus Home]\server\default\deploy\jbossweb-tomcat50.sar and open the file 'server.xml' in a word pad.
5. Locate the below entries in the file.
   <!-- SSL/TLS Connector configuration using the admin devl guide keystore
   <Connector port="8443" address="${jboss.bind.address}"
       maxThreads="100" minSpareThreads="5"
       maxSpareThreads="15"
       scheme="https" secure="true"
       clientAuth="false"
keystoreFile="${jboss.server.home.dir}/conf/scp.keystore"
keystorePass="scpsecured"
sslProtocol = "TLS" />

6. Please replace the file name scp.keystore with the pfx file name (name.pfx) and enter the
keystoreType="pkcs12" after the file name. Also replace the 'scpsecured' with the password
for the .pfx file.

7. The entries should look like this,

    <!-- SSL/TLS Connector configuration using the
    admin devl guide keystore
    <Connector port="8443"
        address="${jboss.bind.address}"=
        maxThreads="100"
        minSpareThreads="5" maxSpareThreads="15"
        scheme="https" secure="true" clientAuth="false"
        keystoreFile="${jboss.server.home.dir}/conf/name.pfx"
        keystoreType="pkcs12" keystorePass="your
        password" sslProtocol = "TLS" />

Uninstalling SupportCenter Plus

- In Windows
- In Linux

In Windows

To uninstall SupportCenter Plus from Windows

In Linux

To uninstall SupportCenter Plus from Linux
1. Go to <SupportCenter>/_uninst directory.
2. Execute uninstaller.bin as below:

   $ ./uninstaller.bin
Registering SupportCenter Plus

Once your trial evaluation period is over or the registration period has expired, you need to apply a new license file to continue SupportCenter Plus application. To purchase the application, please contact sales@manageengine.com

To register SupportCenter Plus,

1. Log in to the SupportCenter Plus application using the user name and password of an admin user.
2. Click the **License** link available at the top right of the application. The **License** window is opened as shown,

3. Click **Browse** to locate the license file sent to you when you purchased the application.
4. From the file chooser window, select the license file and click **Open**.
5. Click **Apply**.
To apply the license file on expiry of the registration period,
1. Save the license file in the directories of the server machine.
2. Start the application server as service. (refer Start Application as service)
   [OR]
   Start the application from the command prompt. (refer Start Application from command prompt)
3. If the registration period of the license has expired then the system prompts an error message. Click **Ok** to proceed.

4. Browse the license file from the License Agreement page and click **Next**.
5. Select the **User Name** from the list with which you wish to register the installation copy.

6. Click **Finish** to complete the registration and start the server.
## Contacting ZOHO Corporation

- Contact Information
- Sales
- Technical Support

### Contact Information

<table>
<thead>
<tr>
<th>Web site</th>
<th><a href="http://www.zohocorp.com">www.zohocorp.com</a></th>
</tr>
</thead>
</table>
| **Zoho Corporation** | 4141, Hacienda Drive  
Pleasanton, CA 94588 USA  
Phone: +1-925-924-9500  
Fax: +1-925-924-9600  
E-mail: info@manageengine.com |
| **Zoho Corporation Private Limited** | DLF IT Park, Block 7, Ground floor, No. 1/124,  
Shivaji Garden, Nandambakkam Post,  
Mount PH Road, Ramapuram  
Chennai 600 089  
Phone: +91-44-22707070  
Fax: +91-44-22707172  
E-mail: info@manageengine.com |
| **Zoho Corporation Private Limited** | C/o Cananex Singapore Pte Ltd  
Block 1003 Bukit Merah Central #50-23  
Inno-Center, Singapore 159836  
Main Line : 63344486  
Fax : 62819188  
Mobile : 97552882  
Contact Person : Ong Yang Peng  
Email: yangpeng.ong@cananex.com.sg |

### Corporate Office

**Zoho Corporation**  
4141, Hacienda Drive  
Pleasanton, CA 94588 USA  
Phone: +1-925-924-9500  
Fax: +1-925-924-9600  
E-mail: info@manageengine.com

**Zoho Corporation Private Limited**  
DLF IT Park, Block 7, Ground floor, No. 1/124,  
Shivaji Garden, Nandambakkam Post,  
Mount PH Road, Ramapuram  
Chennai 600 089  
Phone: +91-44-22707070  
Fax: +91-44-22707172  
E-mail: info@manageengine.com

### Sales

For purchasing ManageEngine SupportCenter Plus from any part of the world, log onto www.supportcenterplus.com or you can also send a mail to sales@manageengine.com.
You can also call the Corporate office of Zoho Corporation in the following numbers:
Phone: +1-925-924-9500
Fax: +1-925-924-9600 and request for Sales

**Technical Support**

One of the value propositions of ZOHO Corporation to its customers is excellent support. During the evaluation phase, the support program is extended to users free of charge.

For support, please mail to supportcenterplus-support@manageengine.com.

Alternatively, you can submit your feedback from the SupportCenter Plus product by clicking the **Feedback** link at the top right corner just above the header tabs after logging into the application. Your feedback will be sent to the SupportCenter Plus Support Team and they will get in touch with you. Do not forget to provide your e-mail ID or your contact information for the team to get in touch with you.