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# Introduction

The SupportCenter Plus installation Guide provides the necessary details to install and maintain the software in your system. Informations 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.

Support Rep Login	Processor Type	Processor Speed	RAM	Free Hard Disk
5-20		1.7 GHz	1GB	20GB
20-50		3.4 GHz	2GB	40GB
50-100	Intel Core Duo	2*3.4 GHz	4GB	40GB
100-500		4*3.4 GHz	8GB	80GB

# **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

# 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).
- 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,

Unpacking Jar File	es. This will take a few minutes. Please	e wait
Account & Contact Management		
Reports & Dashboards	-	
Activities		
Timesheets		
© Copyright © 2011 Zoho Corp. All rights res	erved.	www.manageengine.com

5. On successful installation, the InstallShield Wizard Complete window pops up,

ManageEngine SupportCenterP	Plus 7.9 Setup
	InstallShield Wizard Complete         Setup has finished installing ManageEngine SupportCenterPlus         7.9 on your computer.         ✓ Yes, I want to view readme file         ✓ Start Server now         Technical support: support@supportcenterplus.com
	< <u>B</u> ack <b>Finish</b> Cancel

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.
- 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.

License Agreement			
Please read the following license agree	ment carefully.		
Press the PAGE DOWN key to see the	rest of the agreement.		
This License Agreement details the pol SupportCenter Plus ("Licensed Softwar	icy for license of Advent re'') on the following top	tNet ManageEn; ics:	gine
Evaluation License Commercial License Technical Support			
Please read the following license carefu or download of the Licensed Software Licensed Software from media that was	ully, before either (i) com from an authorised web: s delivered after being o	pleting the elect site, or (ii) installin rdered by alterna	tronic order ng the ative order 🚽
Do you accept all the terms of the prece setup will close. To install ManageEngi agreement.	eding License Agreemer ne SupportCenterPlus 7	nt? If you choos .9, you must acc	e No, the cept this
tallShield			

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



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.

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 login and creation/tracking of 25 accounts/contacts. However, multiple support representative can be added without login access. The free edition never expires.

di	dition Selection Panel		
	Select the Edition to install		
e	Enterprise Edition		
C	C Professional Edition		
С	Standard Edition		
С	C Free Edition		
	Installing Enterprise Edition of SupportCenter Plus allows login creation of ten business units and creation/tracking of unlimite However, multiple technicians can be added without login acc receive email and SMS notification. The Trial edition expires al Enterprise Edition has the following features : Request manage management, account contact management, knowledge bas Customer Portal, Contract Management, Product Catalog, Acti CSV-based customer information synchronization, customer su and API.	access to two t d accounts/col cess who can cl fter 30 days, ement,email resy e SLA manage ve Directory Int irveys, Dashboa	rechnicians, ntacts. hoose to ponse ment, egration, ard Analytics
allS	IShield		

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:WanageEngine\SupportCenter* directory.

Destination Folder	
C:\ManageEngine\SupportCenter	Browse
	72

Click **Browse** to change the installation directory. Choose the directory of your choice and click **Ok**. Click **Next** to proceed.

hoose Dest	Choose Folder	
Select folde	Please choose the installation folder.	
Setup will in	Path:	
T a install to	C: \ManageEngine \SupportCenter	l la la se
another fold	Directories:	elect
	🚺 cm-server 🔺	
	> 🍌 dell	
	🛛 🕞 Intel 🗐	
	a 🃗 ManageEngine	
	ServiceDesk	
	SupportCenter	
– Destinatio	🍌 bin	
C114	MSOCache	
C:\Manag		Dwsc
tallShield		
	OK Cancel	
		Cancel



**Warning:** The installation directory or its parent directories must not have any space character in its name.

 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.

Web Server Port Selection	
The default Web Sever port, used by SupportCenter is 8080. different port, enter the port number here	To run SupportCenter on a
8080	

7. Choose the Database between POSTGRESQL and MSSQL. By default, SupportCenter Plus supports **POSTGRESQL database**.

ManageEngine SupportCenterPlus 7.9 Setup		<u> </u>
Database Selection Panel	Ń	1E)
POSTGRESQL		
C MSSQL		
InstallShield	< Back Next > Cance	el
·		

- 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.

ManageEngine SupportCenterPlu	us 7.9 Setup	23
Database Configuration Panel		
Enter the details below		
Host Name	localhost	
Port	1433	
Database	supportcenter	
User Name		
Password		
InstallShield		
	< Back Next > Car	



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		
Setup will add program icons to the Pro name, or select one from the existing fo	ogram Folder listed below. You may olders list. Click Next to continue.	type a new folder
Program Folders:		
ManageEngine SupportCenter		
Existing Folders:		
ManageEngine ServiceDesk Plus		
Microsoft Office Microsoft Office Microsoft Silverlight MySQL NetBeans NVIDIA Corporation OpenOffice.org 3.3		E
tallShield		_

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.

ManageEngine SupportCen Registration for Techni Enter Your Details below	cal Support (Optional)	
Name	Jake Thomas	
E-mail Id *	jake@acme.com	
Phone	+6134008793	
Company Name	Acme	
Country *	USA	<b>_</b>
ristalioniëlo	< <u>B</u> ack	Next > Skip

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.

ManageEngine SupportCenterPlus 7.9 Setup				
	InstallShield Wizard Complete         Setup has finished installing ManageEngine SupportCenterPlus         7.9 on your computer.         ✓ Yes, I want to view readme file         ✓ Start Server now         Technical support: support@supportcenterplus.com			
	< <u>B</u> ack <b>Finish</b> Cancel			

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 excecutable in your command prompt using the below command: 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:

./ManageEngine\_SupportCenter\_Plus\_7\_Linux.bin -console

4. Follow the displayed steps to procede 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.

- 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:

- 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.
- 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.

- 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

Execute the .bin file.
 ./ManageEngine\_SupportCenter\_Plus.bin -console

```
ManageEngine_SupportCenter_Plus.bin
abdul-0436@abdul-0436:~/Test_Install$ ./ManageEngine_SupportCenter_Plus.bin -console
InstallShield Wizard
Initializing InstallShield Wizard...
Searching for Java(tm) Virtual Machine...
Preparing Java(tm) Virtual Machine...
Welcome to the InstallShield Wizard for ManageEngine SupportCenterPlus 7.9
ManageEngine SupportCenter Plus is a web-based, easy-to-use, customizable
customer support software that enables you to track customer queries.
SupportCenter Plus provides a self service portal that enables customers to
login and search solutions to frequently occuring problems, raise requests and
also check the status of the requests raised. It also helps the technicians to
track and manage the entire history of customer details.
The InstallShield Wizard will install ManageEngine SupportCenterPlus 7.9 on
your computer. To continue, click Next.
One click install will install the product in
Installation Directory :
/home/local/ZOHOCORP/abdul-0436/ManageEngine/SupportCenter
Webserver Port No : 8080
Database Selection : POSTGRES
Edition : Enterprise Edition
[ ] 1 - One Click Install
[X] 2 - Normal Install
To select an item enter its number, or 0 when you are finished: [0]
```

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 jave.exe is started along with SupportCenter Plus.

#### As Service

To manually start the SupportCenter Plus as service,

- 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.
- 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.

- 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.
- Enter your user name "administrator" and password "administrator" to log in to SupportCenter Plus as shown below.

ManageEngine SupportCenter <sup>plus</sup>	
	Login Username administrator Password •••••••• Cogin Forgot password?
Copyright @ 2010 ZOHO Corporation. All rights reserved.	

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.

 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**

- 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.

Server Type	PostgreSQL Server
	MY SQL Server
Host Name	MS SQL Server PostgreSQL Server
Port	65432
Database	supportcenter
User Name	postgres
Password	

- 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.

# 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\SupporCenter\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] \ pgsql \ bin in the command prompt.

# cd [SupportCenter Plus Home]/pgsql/bin

1. Enter the command: # ./psql -U postgres -h localhost -p 65432 supportcenter

```
[root@scp-centos5-3 bin]# ./psql -U postgres -h localhost -p 65432 supportcenter
psql.bin (9.2.1)
Type "help" for help.
```

# **Troubleshooting Tips**

#### PostgreSQL Connection Resolution

Verify the following,

- o Check if PostgreSQL server is running.
- o 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.

#### **MY SQL Connection Resolution**

Verify the following,

- o Check if MY SQL server is running.
- o Check if the server name or the port number is misspelled or incorrect.
- If MY SQL 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,

- o 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\"\n to confirm the block.
- You can connect to SQL Server named instantly if you know the machine name and port number.

SQL Server Login P	roperties - murugesan	×
General Server R	oles Database Access	
Server Roles Server login.	oles are used to grant server-wide security privileges to a Role System Administrators Security Administrators Setup Administrators Process Administrators Disk Administrators Database Creators	
	iption	
	Properties	
	OK Cancel Help	

o 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.

Server F	Properties (Configure) - OPM-W2K	
Server	Settings Database Settings Re	plication
General	Memory Processor Security C	onnections
Security		
	SQL Server provides authentication based on Wind accounts and a named SQL Server login ID and pa	lows issword.
	Authentication:	
	SQL Server and Windows	
	◯ <u>W</u> indows only	
	Audit level:	
	O Success O All	
- Startup s	service account	
	Start and run SQL Server in the following account:	
100	System account	
	C <u>I</u> his account	
	Password:	
	OK Conset	Hale
		пыр

# **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: 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.
  - 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.



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.

### 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.
  - 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
- Operating System: Windows XP, Windows 2000/2003/2008 R2 (32 bit, 64 bit) Server, Windows 2002 Professional, Redhat Linux 7.2 & above, SuSE Linux, Redhat Enterprise/Advanced Server
- 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:

- 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.
- 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 *SupportCenterbin* 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.
- 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**

 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.

 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,

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.

C:\AdventNet\ME\SupportCen	ter\bin>cd\	
C:\>cd AdventNet\ME\Suppor	rtCenter\bin	
C:\AdventNet\ME\SupportCen	nter\bin>restoreData.bat	
**************************************	«*************************************	******
**************************************	estore Data	
Execute Restore DB Ut		
For Windows u: <mark>Pleas</mark> bin>r <sub>' Note :</sub>	e choose the data to be restored The existing data will be rewritten with the backup data	
For Linux use; bin]#:	_7013_fullbackup_12_18_2008_15_22.data	se
**************************************	OK Cancel	
You chose to open this fil center_7013_fullbackup_12_	le: U:\HdventNet\ME\SupportUenter\backup\back 18_2008_15_22.data	աք_Տաքքօ

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. 3.	The backup file name has to be a .data file. Click <b>Alt+Tab</b> to view the Restoring Data pop up if its not visible.

Execute Restore DB Utility f	rom command prompt	
For Windows users : bin≻restoreD	ata -c [backup file]	
For Linux users : bin]#sh rest	oreData.sh -c [backup file]	
******	**********************************	*****
¥ National contractions and a contraction and a set of the		
You chose to open thi	ore Data	X Prt
Center_7013_fullbacku		tal c
rile name is : C: Ho ullbackup_12_18_2008_ requestScheme is htt Restore	e data in progress	
Dec 18 2008 3:35:02 Note: The	existing data will be rewritten with the backup data	hac
top extract		- and
INFO: Extraction for		• 7
013 fullbackup 12 18		
Active DB Server = my	OK Cancel	
Database connectionPro		
characterEncoding=UTF-8		

4. **Close** on successful installation.

INFO: rootDir ::         Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager (in it)         INFO: netutilsData :: (RELEASE={version=7.0.0}, BUILD={number=7013})         Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager (in it)         INFO: rebrandData :: (OPMANAGER={name=0pManager}, PRODUCT={name=AdventNet Manage         Engine SupportCenter Plus}         Please wait ! Deletin         #         Please wait ! Restorie         Error Tables : wordma         #         eleting temp files.         topping DB Server >>         Dec 18, 2008 3:36:11 PT com.adventnet.db.adapter.PBinitializer stoppBServer	it>	
Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager (in it) INFO: netutilsData :: (RELEASE={version=7.0.0}, BUILD={number=7013}) Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager (in it) INFO: rebrandData :: (OPMANAGER={name=OpManager}, PRODUCT={name=AdventNet Manage Engine SupportCenter Plus}) Please wait ! Deletin Please wait ! Deletin Please wait ! Restori Error Tables : wordma deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer	INFV: rootDir ::	
<pre>it&gt; INFO: netutilsData :: {RELEASE={version=7.0.0}, BUILD={number=7013}} Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager {in it&gt; INFO: rebrandData :: {OPMANAGER={name=OpManager}, PRODUCT={name=AdventNet Manage Engine SupportCenter Plus}} Please wait ! Deletin Please wait ! Deletin Please wait ! Restori Fror Tables : wordma deleting temp files. topping DB Server &gt;&gt; Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer</pre>	Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk	.server.utils.SDDataManager <in< th=""></in<>
INFO: netutilsData :: {RELEASE={version=7.0.0}, BUILD={number=7013} Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager <in it&gt; INFO: rebrandData :: {OPMANAGER={name=OpManager}, PRODUCT={name=AdventNet Manage Engine SupportCenter Plus}} Please wait ! Deletin </in 	it>	
Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk.server.utils.SDDataManager <in it&gt; INFO: rebrandData :: {OPMANAGER={name=OpManager}, PRODUCT={name=AdventNet Manage Engine SupportCenter Plus}&gt; Please wait ! Deletin Please wait ! Restori Error Tables : wordma deleting temp files. topping DB Server &gt;&gt; Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer</in 	INFO: netutilsData :: {RELEASE={version=7.0.0}, B	UILD={number=7013}}
it> INFO: rebrandData :: {OPMANAGER={name=OpManager}, PRODUCT={name=AdventNet Manage Engine SupportCenter Plus}} Please wait ! Deletin Please wait ! Restorin Error Tables : wordma deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer	Dec 18, 2008 3:35:08 PM com.adventnet.servicedesk	.server.utils.SDDataManager <in< th=""></in<>
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Engine SupportCenter Plus>> Please wait ! Deletin Clease wait ! Restorid Close deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer	INFO: rebrandData :: {OPMANAGER={name=OpManager},	PRODUCT={name=AdventNet Manage
Please wait ! Deletin Please wait ! Restori Pror Tables : wordma deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 FM com.adventnet.db.adapter.UBInitializer stopUBServer	Engine SupportCenter Plus}}	
Please wait ! Deletin Please wait ! Restori Please wait ! Restori		
Please wait ! Deleting Restore Data Data restored successfully Please wait ! Restorin Error Tables : wordma deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBinitializer stopUBServer	A Destars Data	
Data restored successfully Please wait ! Restorid Error Tables : wordma deleting temp files. topping DB Server >> bec 18, 2008 3:36:11 PM com.adventnet.db.adapter.VBInitializer stopVBServer	Please wait ! Deletin 🗟 Restore Data	
Data restored successfully Please wait ! Restorin Error Tables : wordma deleting temp files. topping DB Server >> bec 18, 2008 3:36:11 PM com.adventnet.db.adapter.VBInitializer stopVBServer	0	
Data restored successfully Please wait ! Restorid Pror Tables : wordma deleting temp files. topping DB Server >> bec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer		
Data restored successfully Please wait ! Restorin Error Tables : wordma deleting temp files. topping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer		
Please wait ? Restori Error Tables : wordma deleting temp files. stopping DB Server >> bec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBinitializer stopUBServer	Data restored successfully	
deleting temp files. topping DB Server >> bec 18, 2008 3:36:11 PM com.adventnet.db.adapter.VBInitializer stopVBServer	Please wait ! Restori	
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deleting temp files. stopping DB Server >> Dec 18, 2008 3:36:11 PM com.adventnet.db.adapter.UBInitializer stopUBServer		Close
ctopping DB Server >> Dec 18, 2008 3:36:11 Pm com.adventnet.db.adapter.DBInitializer stopDBServer	deleting temp files.	ciose
Vec 18, 2008 3:36:11 PM com.adventnet.db.adapter.VBInitializer stopVBServer	stopping DB Server >>	
	Dec 18, 2008 3:35:11 PM com.adventnet.db.adapter.	UBInitializer stopUBServer
NFU: Command to stop DB server LCmd, /c,\bin\stopDB.bat, 33356, root]	INFV: Command to stop DB server Lond, /c,\bin\	stopDB.bat, 33356, root]

### 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.

 The file name for the back up file is of the pattern BackUp\_monthdate\_year\_hr\_min.data. An example of the back up file name: backup\_supportcenter\_7013\_fullbackup\_12\_08\_2008\_15\_22.data

### **Backup Process in Linux without file attachments**

- 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.
- 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 back up 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 back up 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

http://www.manageengine.com/products/support-center/service-packs.html

You have chosen to	open:
🍀 ManageEngin	e_SupportCenter_Plus_7_9_0_SP-1_6_0.ppm
which is a: Irfa	anView PPM File (6.1 MB)
from: http://ir	nteg-build7
What should Firefo	x do with this file?
Open with	IrfanView (default)
Save File	
🔲 Do this <u>a</u> uto	omatically for files like this from now on.
	OK Cancel

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,

AdventNet	Update Manager		
	Install To install a Software Upgrade or 8 button. This will open the Installat you through the upgrade process.	Service Pack, click ion Wizard which v	'Install' /ill guide
			Browse
		Readme	Install
	installed Service Pack Service Pack(s) installed is(are) li of a particular Service Pack, either 'Details' button. To uninstall a parti click 'Uninstall' button.	sted below. To vie r double-click on it icular Service Pack	w the details or click , select and
		<u>U</u> ninstall	Details
		Exit	Help

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.

🚇 AdventNet l	lpdate Manager		
	Install To install a Software I	Ingrade or Service	a Park clirk Install
📴 Select a File	9		<u> </u>
Look in: 📑 S	upportCenter		- 66585
application bin csv_files custom dict fileAttachm help	s images inlineimages jre lib licenses ents logs mysql	server     tools     wcf_resour	ces
File <u>N</u> ame:			
Files of <u>T</u> ype:	AdventNet Patch Files(	.ppm)	-
			Open Cancel
		<u> </u>	
			E <u>x</u> it <u>H</u> elp

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.

	Update Manager	
	Installation Wizard	8
	Installation Status	
	Installation Path: C:\ManageEngine\SupportCenter	
You are upgrade p The upgrade p a) Takes a full b) Upgrades y Proceed ?	ading from Build No : 7915 to Build No : 7916 .Please ensure that you h procedure involves two steps : I backup of your data (approx 30 minutes) your server (approx 30 minutes) Yes No	ave at least 100 MB of free disk space.
	□ View Readme and Installed files.         Finish       View Log >>	
	Exit	Help

- 6. Click 'No' to stop the upgrade process.
- 7. On successful installation an "Installed" message appears. Exit from the window and start the service.



Upgrade Service Pack on Linux

- 1. Stop ManageEngine SupportCenter Plus server.
- 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.
- 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-centos5-3 bin]# sh UpdateManager.sh -c
Press i to Install
    u to Uninstall
    v to View installed ServicePack versions
    e to Exit
Choose an Option:i
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.

Step 1: Create a Keystore file
Step 2: Create .CSR (Certificate Signing Request) file
Step 3: Install your SSL Certificate
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.

# 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

Administrator: C:\Windows\system32\cmd.exe	
C:\>cd ManageEngine\SupportCenter\jre\bin	
C:\ManageEngine\SupportCenter\jre\bin>keytool -genkey -alias zoho.com -keyalg RS A -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



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4. You will then be prompted to choose a password for your keystore.

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

 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 **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.

**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.

# 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 **CA-Signed Certificate** files.

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

- 1. Open the Command Prompt
- 2. From the location **<installation directory> \ jre \ bin** execute the below command.

**keytool -certreq -alias <your\_alias\_name> -file key.csr -keystore scp.keystore** In the above command **<your\_alias\_name>** is the alias name provided when creating the keystore, **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'.

Certificate	? 💈
General Details Certification Path	
Certification path Go Daddy Class 2 Certification Authority Go Daddy Secure Certification Auth Main Commentation Auth Main Commentation	y ority
	View Certificate
Certificate status:	
This certificate has expired or is not yet valid.	
	ОК

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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

- 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

Administrator: C:\Windows\system32\cmd.exe	
C:\>cd ManageEngine\SupportCenter\bin	
C:\ManageEngine\SupportCenter\bin>changeWebServerPort.bat 443 https	
Web Server Port set as 443, Web Server configured to support HTTPS protocol.	
C:\ManageEngine\SupportCenter\bin>	1
	-

 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

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

# 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,

File Action View Help			
🐤 🤿 🖄 📅 🙆 😼 🛛 🖬			
Certificates - Current User	Issued To	Issued By	di
	📮 zoho.com	Thawte Trial Secure Server CA	
Certificates	Thawte Trial Secure Server C	A thawte Trial Secure Server Root CA	

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

2. Right click on the certificate and select All Tasks -> Export option.

File       Action       View       Help         Image: State of the state of	ser\C:\MANAGEENGIN	E\SUPPORTCEN	TER\JRE	BIN/DOMAL	×
Certificates - Current User	Issued To		Issued	I Ву	Ex
C:\MANAGEENGINE\SUPPOR	🖙 zoho.com	Open		e Trial Secure Server CA Trial Secure Server Root CA	11 2/
		All Tasks	•	Open	
		Сору		Export	
		Help			
< ► Export a certificate	•				•

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.

ertificate Export Wizard		
Export File Format Certificates can be exported in a variety of file formats.		
Select the format you want to use:		
⑦ DER encoded binary X.509 (.CER)		
Base-64 encoded X. 509 (.CER)		
Cryptographic Message Syntax Standard - PKCS #7 Certificates (.P7B)		
Include all certificates in the certification path if possible		
Personal Information Exchange - PKCS #12 (.PFX)		
Include all certificates in the certification path if possible		
Delete the private key if the export is successful		
Export all extended properties		
Microsoft Serialized Certificate Store (.SST)		
Learn more about <u>certificate file formats</u>		
< Back Next > Cancel		

5. Specify the name of the file you want to export.Click Next.

Certificate Export Wizard
File to Export Specify the name of the file you want to export
File name:
C:\ManageEngine\SupportCenterPlus\jre\bin\ <mark>zoho.com.certi</mark> Browse
< Back Next > Cancel

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

Certificate Export Wizard		23
	Completing the Certificate Exp Wizard You have successfully completed the Certificate wizard. You have specified the following settings:	D <b>ort</b> Export
	File Name Export Keys Include all certificates in the certification path File Format	C:Wan No No Base64
	<	•
	< Back Finish	Cancel

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

Certificate Export Wizard		<u> </u>
	Completing the C Wizard You have successfully comp wizard. You have specified the follo	Certificate Export pleted the Certificate Export owing settings:
	File Name Export Keys	C:\Man No
	Include all File Forma The expon	t was successful.
		ОК
	< Back	Finish Cancel

# 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 essentialSSL -file essentialSSLCA.crt -keystore
<Keystore\_Name>.keystore
keytool -import -trustcacerts -alias

# **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.



# **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,

- 1. Stop ManageEngine SupportCenter Plus service.
- Copy the .pfx file to the location C:\ManageEngine\SupportCenter\server\default\conf (where C: is the dsrive in which SupportCenter Plus is installed)
- 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\jbosswebtomcat50.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"
```

sslProtocol = "TLS" />

- 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/nam
e.pfx"
keystoreType="pkcs12" keystorePass="your
password" sslProtocol = "TLS" />
```

8. Restart ManageEngine SupportCenter Plus service.

# **Uninstalling SupportCenter Plus**

- In Windows
- In Linux

### In Windows

To uninstall SupportCenter Plus from Windows

1. Click Start -> Programs -> ManageEngine SupportCenter Plus -> Uninstall SupportCenter.

#### 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,

ManageEngine SupportCenter plus OUSTOMER SUPPORT SOFTWARE				
Renew				
To renew ManageEngine SupportCenter Plus, locate the license file sent to you and click Apply button License File : Apply				
Product Name	: ManageEngine SupportCenter Plus 7.9.0			
License Type	: Trial Version			
Product Edition	: Enterprise			
Localized SupportCenter Plus : True				
Max. Number of Business Units	: 10			
Max. Number of Support Rep Logins	: 2			
Max. Number of Accounts : Unlimited				
Max. Number of Zoho Meeting Session	<b>s</b> : 2			
Max. Number of CTI Users : 2				
Zoho CRM Integration : True				
Expires on	: Wed, 30 Jan 2013 (Expires in 29 days)			
Contact ManageEngine SupportCenter Plus support : Email : support@supportcenterplus.com Toll free : +1-888-720-9500				

- 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)

 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.

R License Agreement	
X 1 23&jk9)NM\$;L	Licensee Details Please enter the license file that you have obtained from AdventNet. It can either be an Evaluation user license file or a Registered user license file. P\SupportCenter\bin\license\AdventNetLicense.xml
	Back Next Exit

5. Select the **User Name** from the from the list with which you wish to register the installation copy.

R License Agreement		
	Licensee Details	
	The list of User Names for whom the license file i listed here. Select the User Name with which you installation copy. User Name	is authorized is want to register this
*X1238	John Paul	×
NIGH	Company Name	
	Acme	
	Back	sh Exit

6. Click **Finish** to complete the registration and start the server.

# **Contacting ZOHO Corporation**

- Contact Information
- Sales
- Technical Support

### **Contact Information**

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	Zoho Corporation
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	Main Line : 63344486
	Fax : 62819188
	Mobile : 97552882
	Contact Person : Ong Yang Peng
	Email: yangpeng.ong@cananex.com.sg

# 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.