

## Profile Management Tool

- First you have created a profile to operate server.

You have to remember your IBM Installation Manager path where you have installed it. Then follow the path where you can find profile management tool to manage profiles.

```
[root@localhost ProfileManagement]# pwd
/opt/IBM/WebSphere/AppServer/bin/ProfileManagement
[root@localhost ProfileManagement]#
```

After reaching the directory there is a application name **pmt.sh**

```
[root@localhost ProfileManagement]# ls
eclipse64  pmt.sh  wct.sh
[root@localhost ProfileManagement]#
```

After finding this file run command `./pmt.sh`

```
[root@localhost ProfileManagement]# ls
eclipse64  pmt.sh  wct.sh
[root@localhost ProfileManagement]# ./pmt.sh
```

After run this command profile management tool will open and look like this and then click on create.



After pressing create, the next step is to select the environment you want to create like application server or custom profile etc. Right now we have to create application server.

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**Environment Selection**

Select a specific type of environment to create.

Environments:

- ▼ WebSphere Application Server
  - Cell (deployment manager and a federated application server) Management
  - Application server**
  - Custom profile
  - Secure proxy (configuration-only)

**Select if you want to create an application server**

**Click**

**Description**

An application server environment runs your enterprise applications. WebSphere Application Server is managed from its own administrative console and functions independently from all other application servers.

If you plan to migrate profiles from an existing installation of WebSphere Application Server, it is

< Back   **Next >**   Cancel   Finish

After pressing the next button, the next step is to select which type of profile you have to create, select one of the type and press on next button.

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## Profile Creation Options



Choose the profile creation process that meets your needs. Pick the Typical option to allow the Profile Management Tool to assign a set of default configuration values to the profile. Pick the Advanced option to specify your own configuration values for the profile.

☒ Typical profile creation

Create an application server profile that uses default configuration values. The Profile Management Tool assigns unique names to the profile, node, and host. The tool might create a system service to run the application server depending on the operating system of your machine and the privileges assigned to your user account. The administrative console and the default application will be installed. You can optionally select whether to enable administrative security. The tool might create a system service to run the application server depending on the operating system of your machine and the privileges assigned to your user account.

**Note:** Default personal certificates expire in one year. Select Advanced profile creation to create a personal certificate with a different expiration.

☐ Advanced profile creation

Create application server using default configuration settings or specify your own configuration settings, such as the location of the profile and names of the profile, node, and host. You can optionally choose whether to deploy the administrative console, and create a Web server definition. You might have the option to run the application server as a system service depending on the operating system of your machine and the privileges assigned to your user account.

Typical profile creation uses default configuration and tools and packages to create server profile

Advanced profile creation asks for some details for profiles and do custom setting what you want for the server profile.

After selecting the type of the server (Advanced profile creation) press next button so you can proceed to the next step and then deselect the 2<sup>nd</sup> and 3<sup>rd</sup> option, only select 1<sup>st</sup> option Deploy the administrative console and then press on next button for the next step.

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### Optional Application Deployment



Select the applications to deploy to the WebSphere Application Server environment being created.



Deploy the administrative console (recommended).

Select

Install a Web-based administrative console that manages the application server. Deploying the administrative console is recommended, but if you deselect this option, the information center contains detailed steps for deploying it after the profile exists.



Deploy the default application.

Deselect

Install the default application that contains the Snoop, Hello, and HitCount servlets.



Deploy the Installation Verification Tool application.

Install the Installation Verification Tool (IVT) to verify that the creation of the application server is successful. IVT scans product log files for errors and verifies core product functionality by starting and monitoring the server process and querying servlets.

After proceeding to the next step, you have to enter Profile name and profile directory and last select server runtime performance Standard or Peak or Advanced and then click on next button to proceed to next step.

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The screenshot shows the 'Profile Name and Location' window of the Profile Management Tool 9.0. The window has a title bar with a close button. Below the title bar, there is a section titled 'Profile Name and Location'. The instructions state: 'Specify a profile name and directory path to contain the files for the run-time environment, such as command configuration files, and log files. Click on the Next button to proceed to the next step.' There are two text input fields: 'Profile name:' with the value 'Hamza00' and 'Profile directory:' with the value '/opt/IBM/WebSphere/AppServer/profiles/Hamza00'. Below these fields, there is a section titled 'Server runtime performance tuning settings'. The instructions state: 'Select the performance tuning settings that most closely match the type of environment in which the application server will run. Review the online product documentation article on performance tuning settings before choosing a setting because additional tuning still might be necessary to optimize the performance of the server for your applications.' There is a dropdown menu with three options: 'Standard', 'Peak', and 'Development'. Below the dropdown menu, there is a link: 'View the online product documentation'. At the bottom of the window, there is an 'Important' note: 'Deleting the directory a profile is in does not completely delete the profile. Use the manageprofiles command to completely delete the profile.' There are four buttons at the bottom: '< Back', 'Next >', 'Cancel', and 'Finish'. Annotations with arrows point to the 'Profile name' field, the 'Profile directory' field, the 'Standard' option in the dropdown menu, the 'Peak' option in the dropdown menu, the 'Development' option in the dropdown menu, and the 'Next >' button.

**Profile Name and Location**

Specify a profile name and directory path to contain the files for the run-time environment, such as command configuration files, and log files. Click on the Next button to proceed to the next step.

Profile name: Hamza00

Profile directory: /opt/IBM/WebSphere/AppServer/profiles/Hamza00

Select the performance tuning settings that most closely match the type of environment in which the application server will run. Review the online product documentation article on performance tuning settings before choosing a setting because additional tuning still might be necessary to optimize the performance of the server for your applications.

Server runtime performance tuning settings

Standard

Peak

Development

View the online product documentation

**Important:** Deleting the directory a profile is in does not completely delete the profile. Use the manageprofiles command to completely delete the profile.

< Back Next > Cancel Finish

**Enter Profile Name**

**Enter Profile Directory where you want to save profile**

**Standard: Balanced settings for general-purpose use.**

**Peak: Optimized for high performance under heavy workloads.**

**Development: Fast setup for development and testing environments.**

**Click**

After pressing next button, the next step is to put node name, server name and host name for the domain name and for the administrative name and power and then press next button to proceed to next button.

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### Node and Host Names

Specify a node name, a server name, and a host name for this profile.

Node name:

localhostNode01

Server name:

practiceserver1

Host name:

localhost

**Node Name: A unique identifier for the administrative group of server processes; used for management purposes.**

**Server Name: A logical name given to the specific application server instance within the node.**

**Host Name: The DNS name or IP address of the physical machine hosting the server.**

**Node name:** A node name is used for administration. If the node name is not specified, the default node name is localhostNode01.  
**Server name:** A server name is used to identify the application server instance within the node. If the server name is not specified, the default server name is practiceserver1.  
**Host name:** A host name is used to identify the physical machine hosting the server. It can be a DNS name (short or long) or the IP address of this machine.

The following naming rules must be followed:

- Names must start and end with alphabetic characters (A-Z, a-z), numbers (0-9), and underscores (\_) only.
- Names may contain alphabetic characters (A-Z, a-z), numbers (0-9), periods (.), dashes (-) and underscores (\_).
- Names must not contain spaces or these characters: / \ \* , ; : = + ? | < > \_ % ' " [ ] # \$ ^ { } ( )

If you plan to migrate an existing profile to the profile being created, read the premigration considerations at [View the online product documentation](#)

Click

< Back

Next >

Cancel

Finish

After pressing the next button, the next step is to secure the administrative power by entering username and password for the admin power and then press next button for the next step but you can deselect the enable administrative security then you no need to enter username and password for administrative security.

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### Administrative Security

Choose whether to enable administrative security. To enable security, supply a user name and password for logging into administrative tools. This administrative user is created in a repository within the application server. After profile creation finishes, you can add more users.

☒ Enable administrative security

Depend on the user that user want to secure the administrative or not.

User name:

HamzaShamsi

Enter user name for the administrative security

Password:

●●●●●●●●●●●●●●●●

Enter password for the administrative security

Confirm password:

●●●●●●●●●●●●●●●●

See the online product documentation for more information about administrative security.

[View the online product documentation](#)

Click

< Back

Next >

Cancel

Finish

After pressing the next button, the next step is to put the security certificate for the server and client secure communication or if you don't have certificate just press next button tool will create default personal certificate.

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**Security Certificate (Part 1)**

Choose whether to create a default personal certificate and root signing certificate, or import them from keystores. To create new certificates, proceed to Part 2 and provide the certificate information. To import existing certificates from keystores, locate the certificate information.

☒ Create a new default personal certificate.  
☐ Import an existing default personal certificate.

**If you have security certificate then select import and give details if you done have security certificate just let tool create the default certificate for the server**

Default personal certificate

Path:  Browse...

Password:

Keystore type:

Keystore alias:

☒ Create a new root signing certificate.  
☐ Import an existing root signing certificate.

Root signing certificate

Path:  ...

Password:

**click**

< Back   Next >   Cancel   Finish



After pressing the next button, the next step is to check the information or details of the security certificate and then press next button for proceed to the next step.

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### Security Certificate (Part 2)



Modify the certificate information to create new certificates during profile creation. If you are importing existing certificates from keystores, use the information to verify whether the selected certificates contain the appropriate information. If the selected certificates do not, click **Back** to import different certificates.

Restore Defaults

Default personal certificate (a personal certificate for this profile, public and private key):

Issued to distinguished name:

cn=localhost,ou=localhostNode01Cell,ou=localhostNode01,o=IBM,c=US

Issued by distinguished name:

cn=localhost,ou=Root Certificate,ou=localhostNode01Cell,ou=localhostNode01,o=IBM,c=US

Expiration period in years:

1 ▼

Root signing certificate (personal certificate for signing other certificates, public and private key):

Expiration period in years:

15 ▼

Default keystore password:

●●●●●●

Click

< Back

Next >

Cancel

Finish

After pressing the next button, the next step is to step up the ports number or assign the port values of the server you can use default port or create your own ports and then press next button.

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**Use defaults ports which is set by the profile management tools**

The values in the following fields define the ports for the application server profiles in this installation. Another installation of WebSphere Application Server must not use the same ports. To avoid run-time port conflicts, verify that each port value is unique.

**Add your choice of ports**

Default Port Values

Recommended Port Values

Administrative console port (Default 9060):

9060 - +

Administrative console secure port (Default 9043):

9043 - +

HTTP transport port (Default 9080):

9080 - +

HTTPS transport port (Default 9443):

9443 - +

Bootstrap port (Default 2809):

2809 - +

SIP port (Default 5060):

5060 - +

SIP secure port (Default 5061):

5061 - +

SOAP connector port (Default 8880):

8880 - +

Administrative interprocess communication port (Default 9633)(X):

9633 - +

**Click**

< Back

Next >

Cancel

Finish

After pressing the next button, the next step is to enable linux service or not and then press next, linux service provide you linux work environment.

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### Linux Service Definition

Choose whether to use a Linux service to run WebSphere Application Server.

☐ Run the application server process as a Linux service.

User name:

After pressing the next button, the next step is to enable the web server or not its depend on the user, web server allow the user to set the routes of the application server and then press the next button for the next step.

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### Web Server Definition

Optionally create a Web server definition if you use a Web server to route requests for dynamic content to the application server. Alternatively, you can create a Web server definition from the administrative console or a script that is generated during Web server plug-ins installation.

☐ Create a Web server definition

Web server type:

IBM HTTP Server

Web server operating system:

Linux

Web server name:

webserver1

Web server host name or IP address:

localhost

Web server port (Default 80):

80

After assigning the ports and then press the next button to reach the final destination of the server  
take the screenshot of the last step so you can save all the details.

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Profile Creation Summary

Review the information in the summary for correctness. If the information is correct, click **Create** to start creating a new profile. Click **Back** to change values on the previous panels.

Application server environment to create: Application server

Location: /opt/IBM/WebSphere/AppServer/profiles/Hamza00

Disk space required: 200 MB

Profile name: Hamza00

Make this profile the default: True

Performance tuning setting: Development

Node name: localhostNode01

Server name: practiceserver1

Host name: localhost

Deploy the administrative console (recommended): True

Deploy the default application: False

Deploy the Installation Verification Tool application: False

Enable administrative security (recommended): True

Administrative console port: 9060

Administrative console secure port: 9043

HTTP transport port: 9080

HTTPS transport port: 9443

Bootstrap port: 2809

SOAP connector port: 8880

< Back

Create

Cancel

Finish

Press on create (for creating the server)