

Tru64 UNIX Best Practice

Configuring the Secure Web Server Using Internet Express

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Product Version: **Internet Express Version 6.0**

This Best Practice describes how to configure the Secure Web Server
(*Powered by Apache*) for the HP Tru64 UNIX Operating System.

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Contents

Configuring the Secure Web Server

Is This Best Practice Right for You?	1
Before You Begin	1
Applying the Best Practice	2
Obtaining the Internet Express Kit	2
Installing the Secure Web Server and Administration Utility	2
Using the Secure Web Server Administration Utility	3
Verifying Success	4
Troubleshooting	4
Alternative Practices	5
Comments and Questions	6
Legal Notice	6

Configuring the Secure Web Server

This Best Practice describes how to use the Internet Express installation procedure and Secure Web Server Administration utility to configure the Secure Web Server (*Powered by Apache*).

See the Tru64 UNIX Best Practices Web page at the following URL for more information about Best Practices documentation:

http://www.tru64unix.compaq.com/docs/best_practices/

Is This Best Practice Right for You?

Not all Best Practices apply to all configurations, so you must be sure that it is appropriate for your system and circumstances. To use this Best Practice, you must meet the requirements described in the following table:

Requirement	Description
Operating System	Tru64 UNIX Version 5.0A or higher
Product Version	Internet Express Version 6.0 or higher

If you do not meet the previous requirements, see *Alternative Practices* for information.

Before You Begin

Before you apply the Best Practice for configuring the Secure Web Server, you must understand some background information and perform some preliminary tasks.

If you have not already done so, register the IP address and any IP aliases for the system and configure the network. The Internet Express installation procedure will lead you through the network configuration, if necessary.

The Apache Web Server is a public domain HTTP server, distributed freely on the Internet. You can obtain the sources for this Web Server from the Apache Web site (<http://www.apache.org>). You can configure the Apache Web Server using the documentation from the Apache Software Foundation. However, instead of obtaining the sources from the Internet

and searching for configuration information, you can use the Internet Express product. This product provides you with the Secure Web Server, HP's implementation of the Apache Web Server, built and qualified on Tru64 UNIX with a user-friendly administration interface.

Internet Express is a collection of popular Open Source software, including the Secure Web Server, contained on a single CD-ROM. Using Internet Express, you can install the Secure Web Server on your *Tru64* UNIX system and use the default configuration values provided. You can use the Secure Web Server Administration Server utility provided with Internet Express to modify the Web server configuration values.

Applying the Best Practice

Before you configure the Web server, be sure to follow the recommendations in *Before You Begin*.

The Internet Express CD-ROM labeled "Installation and Documentation" contains the Secure Web Servers, as well as other Internet software. You should:

1. Obtain a copy of the Internet Express kit.
2. Install the Secure Web Server Administration subset and pick one of the Secure Web Server subsets and install it. Ensure that you answer yes to the prompt when asked if you want to configure a Public Web server for general use when you choose to install the Secure Web Server 1.3.

The Secure Web Server Administration subset is separate from the basic Internet ExpressAdministration utility subset.

3. Use the Secure Web Server Administration utility to configure the Web server settings for your site.

Obtaining the Internet Express Kit

HP includes the Internet Express CD-ROM with Tru64 UNIX AlphaServer systems. If you need the Internet Express CD-ROM, you can contact your HP representative. The part number for the Internet Express Kit is QB-3NCAA-SA.

Installing the Secure Web Server and Administration Utility

To install the Secure Web Server, follow the instructions in the *Internet Express for Tru64 UNIX Installation Guide* regarding choosing which

Secure Web Server version is best for your needs and installing the Secure Web Server subset.

Note that starting with Internet Express Version 6.0, you have the option of installing either Secure Web Server Version 1.3 or Version 2.0, or both.

After you have installed the Secure Web Server from the Internet Express kit, the Web Server is set up on your system with default configuration settings.

Using the Secure Web Server Administration Utility

The Secure Web Server Administration utility helps you to configure and manage the Web servers. Use the Secure Web Server Administration utility to modify the Web server configuration files. Follow these steps:

1. Populate your Web server hierarchy with the pages you wish to serve. The default location is `/data/web/public`.
2. Create the `index.html` file, which will be the server's home page. This step overrides the default `welcome.html`.
3. Connect to the Secure Web Server Administration utility for Internet Express using port 8081 on your Web browser. Use the form:
`http://host.domain.name:8081/`
4. Supply the administration user name and password. These are defined during the installation of Internet Express.
5. Choose the Manage the Public Web Server option from the Web Server Administration menu.

The Manage the Public Web Server menu is displayed.

6. Choose the Change Configuration Parameters option.
7. Change the configuration parameters as desired. You can specify the following types of configuration parameters:
 - Server tuning parameters
 - Access control entries
 - Listening ports and addresses
 - Virtual hosts
 - URL defaults
 - HTML directory aliases

- CGI directory aliases
- Logging and reporting parameters

For a description of these parameters, see the *Secure Web Server Administration Guide*.

8. To verify that the Secure Web Server is running, display the Start/Stop the Public Web Server page from the Manage the Public Web Server menu. If the status is indicated as stopped, choose the option to start the Public Web Server.

Verifying Success

After you apply the Best Practice for configuring the Secure Web Server, you can verify whether it was successful:

- You successfully installed the Secure Web Server component of the Internet Express.
- You can access the Secure Web Server Administration utility.
- You can view your new home page using the URL `http://system-name`, where `system-name` is a fully qualified system name.

If the Best Practice was not successful, see *Troubleshooting* for information about identifying and solving problems.

Troubleshooting

If you determine that the Best Practice was not successful, as described in *Verifying Success*, use the following table to identify and solve problems.

Problem	Possible Solutions
The Secure Web Server did not install.	Review the installation steps described in the <i>Internet Express for Tru64 UNIX Installation Guide</i> .
The Web server is not running or an error is reported when you try to access the Web Server.	<ul style="list-style-type: none"> Check that the Secure Web Server Public Web server directory hierarchy exists: <ul style="list-style-type: none"> <code>/usr/internet/httpd</code> (for Version 1.3) <code>/usr/opt/hpapache2</code> (for Version 2.0) If not, reinstall, the Secure Web Server subset and select the Create Public Web Server Instance option. Remember to answer yes if prompted to configure a Public Web server for general use by the Secure Web Server 1.3 subset. Verify that the Web server is running by displaying the Start/Stop the Public Web Server page from the Manage the Public Web Server menu. If the status is indicated as stopped, choose the option to Start the Web Server. Alternatively, you can start it from the command line by issuing the command: <ul style="list-style-type: none"> <code>/sbin/init.d/httpd_public start</code> (for Public Web Server 1.3) <code>/sbin/init.d/hpapache2 start</code> (for Public Web Server 2.0) Check the ownership and permissions of the new <code>index.html</code> file. The Web Server runs as user <code>httpd</code>, so <code>index.html</code> must be readable by the <code>httpd</code> user.

Alternative Practices

Although this Best Practice is the recommended method for configuring the Secure Web Server, you can use an alternative method.

- Install the binary kit or compile Apache Web Server sources copied from <http://www.apache.org/>. The `README` and `INSTALL` files in these distributions explain the installation procedure.

- Tailor the directives in the Web Server configuration file `./conf/httpd.conf` for Version 1.3 and `/usr/opt/hpapache2/conf/httpd.conf` for Version 2.0).
- The *Apache User's Guide* at <http://www.apache.org/docs/> contains a reference manual on runtime configuration directives and examples.

Comments and Questions

We value your comments and questions on the information in this document. Please mail your comments to us at this address:

`best_practices@zk3.dec.com`

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