CONNECT:ENTERPRISE

CONNECT:Enterprise HTTP Option

Installation and Administration Guide

Sterling Commerce
An IBM Company

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CONNECT:Enterprise™ HTTP Option

Installation and Administration Guide

Version 1.3

CONNECT:Enterprise HTTP Installation and Administration Guide
Version 1.3
First Edition

Contents

Preface

The *CONNECT:Enterprise HTTP Option Installation and Administration Guide* is written for CONNECT:Enterprise system administrator who installs and configures CONNECT:Enterprise HTTP Option and administers the system functions.

This manual explains how to install and configure CONNECT:Enterprise HTTP Option on the Windows NT/2000/XP or UNIX operating system. It assumes that you have a working knowledge of CONNECT:Enterprise and all of the hardware and software components associated with it, and knowledge of Windows NT/2000/XP and UNIX operating systems, including their major commands and functions.

Task Overview

The following table guides you to the information required to perform CONNECT:Enterprise HTTP Option tasks:

Task	Reference
Installing CONNECT:Enterprise HTTP Option on the UNIX OS	Chapter 2, *Installing CONNECT:Enterprise HTTP Option*
Upgrading CONNECT:Enterprise HTTP Option on the UNIX OS	Chapter 2, *Installing CONNECT:Enterprise HTTP Option*
Installing CONNECT:Enterprise HTTP Option on the Windows OS	Chapter 2, *Installing CONNECT:Enterprise HTTP Option*
Upgrading CONNECT:Enterprise HTTP Option on the Windows OS	Chapter 2, *Installing CONNECT:Enterprise HTTP Option*
Uninstalling CONNECT:Enterprise HTTP Option	Chapter 2, *Installing CONNECT:Enterprise HTTP Option*
Configuring the Tomcat Servlet Engine	Chapter 3, *Configuring the Servlet Engine*
Configuring the JRun Servlet Engine	Chapter 3, *Configuring the Servlet Engine*
Configuring the iPlanet Web Server	Chapter 3, *Configuring the Servlet Engine*
Configuring the IBM WebSphere Web Server for the UNIX OS	Chapter 3, *Configuring the Servlet Engine*
Configuring the IBM WebSphere Web Server for the Windows NT/2000/XP OS	Chapter 3, *Configuring the Servlet Engine*
Configuring the IBM WebSphere Web Server for OS/390.	Chapter 3, *Configuring the Servlet Engine*

Task	Reference
Obtaining a key certificate	Chapter 4, *Configuring Security*
Creating a key certificate file	Chapter 4, *Configuring Security*
Protecting your SSL passphrase	Chapter 4, *Configuring Security*
Configuring the SSL property files	Chapter 5, *Customizing Property Files*
Customizing System property files	Chapter 5, *Customizing Property Files*
Customizing Server property files	Chapter 5, *Customizing Property Files*
Customizing Remote property files	Chapter 5, *Customizing Property Files*
Customizing Directory property files	Chapter 5, *Customizing Property Files*
Customizing your HTML pages	Chapter 6, *Customizing the User Interface*
Redirecting CONNECT:Enterprise HTTP Option	Chapter 6, *Customizing the User Interface*
Localizing CONNECT:Enterprise HTTP Option	Chapter 6, *Customizing the User Interface*
Tracing CONNECT:Enterprise HTTP Option activity	Chapter 7, *Monitoring CONNECT:Enterprise HTTP Option*
Logging CONNECT:Enterprise HTTP Option activity	Chapter 7, *Monitoring CONNECT:Enterprise HTTP Option*

Getting Support for Sterling Commerce Products

Sterling Commerce provides intuitive technical products and superior Help and documentation to enable you to work independently. However, if you have a technical question regarding a Sterling Commerce product, use the Sterling Commerce Customer Support Web site.

The Sterling Commerce Customer Support Web site at www.sterlingcommerce.com is the doorway to Web support, information, and tools. This Web site contains several informative links, including a solutions database, an issue tracking system, fix information, documentation, workshop information, contact information, sunset and retirement schedules, and ordering information. Refer to the Customer Support Reference Guide at www.sterlingcommerce.com/customer/tech_support.html for specific information on getting support for Sterling Commerce products.

Conventions Used in This Guide

The CONNECT:Enterprise HTTP Option Installation and Administration Guide uses certain notational conventions. This section describes the conventions used in this guide.

Convention	Description
lowercase letters	Lowercase letters or words in commands or syntax boxes require substitution by the user. For example, `PNODE=primary-node-name` indicates that you must provide the name of the primary node.

Convention	Description
Underlined Letters	Underlining indicates default values for parameters and subparameters. For example, `RETAIN=Yes|No|Initial` specifies that the default for *RETAIN* is *NO*.
Vertical Bars (|)	Vertical bars indicate that you can supply one of a series of values separated by the vertical bars. For example `HOLD=Yes|No|Call` specifies that *Yes* or *No* or *Call* is valid.
Italics	Italic letters are placeholders for information you must provide. Italic font also indicates book, chapter, and section titles and is used for emphasis in the text.
Punctuation	Code all commas and parentheses as they appear.

CONNECT:Enterprise HTTP Option Documentation

The CONNECT:Enterprise HTTP Option documentation consists of the following publications:

- *CONNECT:Enterprise HTTP Option Installation and Administration Guide*

  This document is written for a UNIX, Windows, or OS/390 administrator responsible for the initial set up of CONNECT:Enterprise HTTP Option. It includes installation and configuration procedures for CONNECT:Enterprise HTTP Option on Windows, UNIX, and OS/390 operating systems.

- CONNECT:Enterprise HTTP Option Help

  The Help is written for all users of CONNECT:Enterprise HTTP Option. It includes information on sending and receiving text or binary data between a local system and a CONNECT:Enterprise data repository. The Help system also contains an explanation and a course of action for all error messages. You can access the Help from the CONNECT:Enterprise HTTP Option Main page.

- CONNECT:Enterprise HTTP Option Release Notes

  This document is written for a UNIX, Windows, or OS/390 administrator responsible for the initial set up of CONNECT:Enterprise HTTP Option. It describes features and last-minute product information.

Chapter 1

About CONNECT:Enterprise HTTP Option

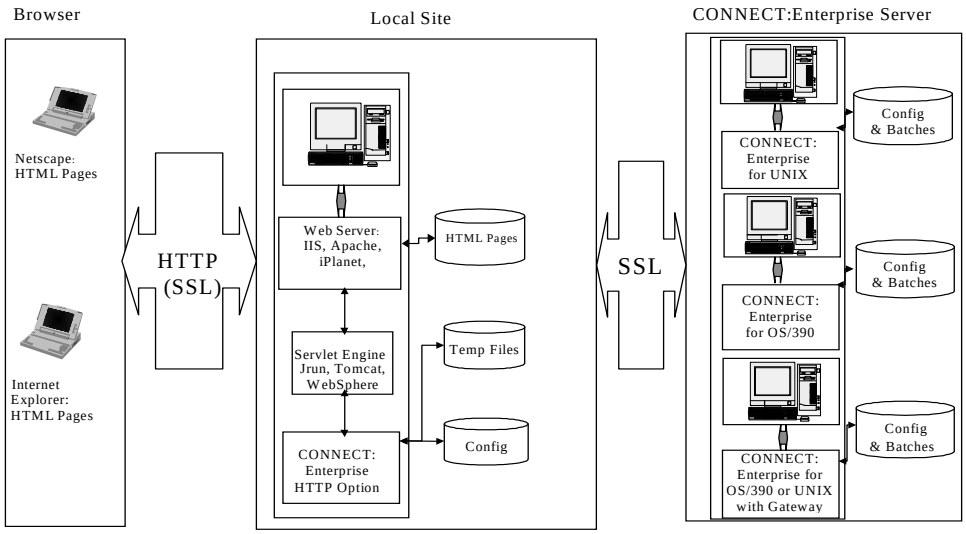
CONNECT:Enterprise HTTP Option is a Web-based utility that enables users to communicate with the CONNECT:Enterprise data repository through the Internet. Supported CONNECT data repositories are:

- CONNECT:Enterprise for UNIX
- CONNECT:Enterprise for UNIX with CONNECT:Enterprise Gateway
- CONNECT:Enterprise for OS/390
- CONNECT:Enterprise for OS/390 with CONNECT:Enterprise Gateway

The CONNECT:Enterprise HTTP Option software resides on a Web server and is supported by a servlet engine, which also resides on the Web server.

As a Web-based utility, CONNECT:Enterprise HTTP Option enables you to request, distribute, and track data on the CONNECT:Enterprise data repository from any location, requiring only a Web browser and a link to the Internet or an intranet.

From a CONNECT:Enterprise HTTP Option HTML page, you submit a request. The HTML page contains attributes that identify the operation you are performing. Property files contain the parameters that are not specified in the HTML page attributes. CONNECT:Enterprise HTTP Option uses the attributes and the property files to formulate a request to the servlet engine. The servlet engine sends the request to CONNECT:Enterprise over an FTP connection. CONNECT:Enterprise processes the request and returns it to CONNECT:Enterprise HTTP Option and CONNECT:Enterprise HTTP Option converts it to HTML. You can view the response to your request with your Web browser. The following diagram illustrates the relationship between CONNECT:Enterprise HTTP Option and the CONNECT:Enterprise server:



CONNECT:Enterprise HTTP Option Functions

CONNECT:Enterprise HTTP Option enables users to:

- Log on to a CONNECT:Enterprise server.
- Send text or binary data from their local system to a CONNECT:Enterprise server.
- Receive text or binary data from a CONNECT:Enterprise server on their local system.
- Limit access to CONNECT:Enterprise HTTP Option and the CONNECT:Enterprise server.
- Protect the information sent and received using CONNECT:Enterprise HTTP Option.

Chapter 2

Installing CONNECT:Enterprise HTTP Option

This chapter describes the procedures for upgrading and installing CONNECT:Enterprise HTTP Option on the UNIX operating system and the Windows NT/2000/XP operating systems. This chapter also contains instructions for uninstalling the product.

Before You Begin

Before you begin the installation, complete the following tasks:

- Review the *CONNECT:Enterprise HTTP Option Release Notes* for any changes in the product or installation procedure. It contains the latest product information. The information in this document may affect your installation procedures and definitions.
- Verify that your system meets product hardware and software requirements. Refer to the *CONNECT:Enterprise HTTP Option Release Notes* for specific requirements and recommendations.
- These installation procedures assume that all other CONNECT:Enterprise components and third-party applications are installed and ready for use. These components include CONNECT:Enterprise TCP/IP, FTP, SNA network, and database connectivity. Refer to the *CONNECT:Enterprise HTTP Option Release Notes* for the specific system requirements.
- Verify that you have installed and configured your Web server and servlet engine and that they are communicating with each other. This is required before you can configure CONNECT:Enterprise HTTP Option.
- Complete the appropriate *CONNECT:Enterprise HTTP Option Installation Worksheet* located in Appendix A. After you complete the installation worksheet, use it as a guide during CONNECT:Enterprise HTTP Option installation.
- If you are upgrading from a previous release of CONNECT:Enterprise HTTP Option, perform the procedure *Upgrading CONNECT:Enterprise HTTP Option on the UNIX OS* on page 2-5 or *Upgrading CONNECT:Enterprise HTTP Option on the Windows NT/2000/XP OS* on page 2-9.

Installing CONNECT:Enterprise HTTP Option on the UNIX OS

The following procedure installs CONNECT:Enterprise HTTP Option on a UNIX workstation. Install CONNECT:Enterprise HTTP Option using the same user ID that was used to install the Web server and servlet engine. Using the same ID avoids any file permission problems.

Note: In the installation script, the defaults are in upper-case letters and contained in brackets ([]). To accept the default, press **Enter**. Also, on questions that do not require a Y|N answer, type a question mark (?) to view a more detailed explanation.

To install CONNECT:Enterprise HTTP Option, follow these steps:

1. Have your completed *CONNECT:Enterprise HTTP Option Installation Worksheet for UNIX Operating System* available.
2. Insert the CONNECT:Enterprise HTTP Option CD-ROM and mount the CD-ROM drive.
3. Change to the UNIX directory on the CD-ROM (step 2 on page A-2).
4. Type **./cehttpinstall** and press **Enter**.

   When CONNECT:Enterprise begins installing CONNECT:Enterprise HTTP Option, the following screen is displayed:

```
================================================================================
Sterling Commerce, Inc., CONNECT:Enterprise HTTP Option
Version 1.3.00 Installation

You are about to start the installation of CONNECT:Enterprise HTTP Option
Sterling Commerce, Inc.(TM) and CONNECT:Enterprise(TM) are trademarks of
Sterling Commerce, Inc. in the U.S.A. and other countries.

UNIX(TM) is a trademark of X/Open Company, Ltd. in the U.S.A and other
countries.
================================================================================

Before continuing, the install directory for HTTP must exist, and have
the correct write permissions.

The following files will be installed for:

   New Install:
       cehttp.war, ReadMe.txt, Trusted.txt, and system and server property files.

   Upgrade:
       cehttp.war and ReadMe.txt files.
       (The current property files will be copied to an existing directory)

================================================================================
Do you want to continue?[Y/n]:
```

5. Type **Y** and press **Enter**.

   The following message is displayed:

```
Enter the FULL path to this install script on the install CD [/cdrom/UNIX]:
```

6. Type the full path to the installation script, for example, **/cdrom/UNIX/**, and press **Enter**.

The following message is displayed:

```
Please enter one of the following numeric values at the
prompt to select the type of Setup you prefer.
  1. New Install
  2. Upgrade
```

7. Type **1** and press **Enter**.

   The following message is displayed:

```
Enter a valid path name for the cehttp.war, ReadMe.txt, Trusted.txt and your
property files:
```

8. Type a valid path name for the cehttp.war file, ReadMe file, and property file (step 3 on page A-2) and press **Enter**.

   The following message is displayed:

```
You have chosen /home/server01/user01/http_1.3.00/cehttp
as the install directory for CONNECT:Enterprise HTTP Option. Please confirm:
[Y/n]
```

9. Do one of the following:

   - If the directory listed is not correct, type **n** at the prompt and press **Enter**. The system returns to step 7.
   - If the directory listed is correct, type **Y** at the prompt and press **Enter**. The system displays the disk space information as follows:

```
1700 kbytes of disk space is required to install
CONNECT:Enterprise HTTP Option.

================================================================================
  Here is the current free disk space for each disk partition:
================================================================================

Filesystem            kbytes    used   avail capacity  Mounted on
/proc                      0       0       0     0%    /proc
/dev/dsk/c0t0d0s0     119167   40537   66714    38%    /
/dev/dsk/c0t0d0s6     875215  757167   56783    94%    /usr
fd                         0       0       0     0%    /dev/fd
/dev/dsk/c0t0d0s1     482023  123133  310688    29%    /var
/dev/dsk/c0t2d0s7    8705501 3809852 4808594    45%    /cdlgb
/dev/dsk/c0t3d0s7    8705501 8099213  519233    94%    /cdlgb2
/dev/dsk/c0t0d0s7      96391    9277   77475    11%    /export/home
/dev/dsk/c0t0d0s5    1190719  448387  682797    40%    /opt
/dev/dsk/c0t0d0s4     962983  780313  124892    87%    /sci
swap                 1282960     376 1282584     1%    /tmp
fremont:/export/home4 13783040 9894440 3783952    73%    /home/fremont4

You have 3783952 kbytes of disk space available to you,
which is more than the required 1700 kbytes.

Do you want to continue? [Y/n]
```

10. To continue the installation, type **Y** and press **Enter**.

    The following message is displayed:

```
The following questions will ask for configuration parameters that
will be added to the system and server property files that this
installation will create.

Please enter the default CONNECT:Enterprise server property file name:
```

11. Type the default CONNECT:Enterprise server property file name (step 4 on page A-2), for example, **ENTserver** and press **Enter**. The server property file name is the logical name of the CONNECT:Enterprise server that CONNECT:Enterprise HTTP Option will access. The following message is displayed:

```
Please enter the default servlet_info[CONNECT:Enterprise HTTP Option]:
```

12. Press **Enter** to accept the default servlet_info name.

    The following message is displayed:

```
Please enter the session timeout value[300]:
```

13. Type the session timeout value (step 5 on page A-2) and press **Enter**. The default is 300 seconds. The maximum is 1800 seconds.

    The following message is displayed:

```
Please enter the CONNECT:Enterprise server address
(e.g. sterlingcommerce.com or 199.20.4.111):
```

14. Type the CONNECT:Enterprise server address or alias name (step 6 on page A-2), and press **Enter**.

    The following message is displayed:

```
Please enter the port number that the ftpd of the
above CONNECT:Enterprise server is listening to[10021]:
```

15. Type the port number that the ftpd of the CONNECT:Enterprise server is monitoring (step 7 on page A-2) and press **Enter**. The default is 10021.

    The following message is displayed:

```
Copying cehttp.war file to your cehttp install directory

War file copied.


Creating property files in your cehttp install directory
```

When the system is finished, the following message is displayed:

```
You have successfully installed CONNECT:Enterprise HTTP Option.

Thank you for choosing Sterling Commerce, Inc.

The cehttp.war, system and server property files, Trusted.txt and ReadMe.txt have
been installed

in /home/server01/user01/http_1.3.00/cehttp.

It is recommended that you view the ReadMe.txt file.

Press ENTER to exit.
```

16. Press **Enter** to exit the installation.
17. Read the ReadMe.txt file.

You must configure the servlet engine before using CONNECT:Enterprise HTTP Option. Refer to Chapter 3, *Configuring the Servlet Engine*, for detailed instructions.

Upgrading CONNECT:Enterprise HTTP Option on the UNIX OS

This procedure protects your current property files from being overwritten. Use this procedure if you are upgrading from a previous version of CONNECT:Enterprise HTTP Option.

This procedure installs CONNECT:Enterprise HTTP Option on a UNIX workstation. Install CONNECT:Enterprise HTTP Option using the same user ID that was used to install the Web server and servlet engine. Using the same ID avoids any file permission problems.

Note: In the installation script, the defaults are in upper-case letters and contained in brackets ([]). To accept the default, press **Enter**. Also, on questions that do not require a Y|N answer, type a question mark (?) to view a more detailed explanation.

To upgrade CONNECT:Enterprise HTTP Option, follow these steps:

1. Have your completed *CONNECT:Enterprise HTTP Option Upgrade Installation Worksheet for UNIX Operating System* available.
2. Insert the CONNECT:Enterprise HTTP Option CD-ROM and mount the CD-ROM drive.
3. Change to the UNIX directory on the CD-ROM (step 1 on page A-3)**.**
4. Type ./**cehttpinstall** and press **Enter**.

When CONNECT:Enterprise begins installing CONNECT:Enterprise HTTP Option, the following screen is displayed:

```
================================================================================
Sterling Commerce, Inc., CONNECT:Enterprise HTTP Option
Version 1.3.00 Installation

You are about to start the installation of CONNECT:Enterprise HTTP Option
Sterling Commerce, Inc.(TM) and CONNECT:Enterprise(TM) are trademarks of
Sterling Commerce, Inc. in the U.S.A. and other countries.

UNIX(TM) is a trademark of X/Open Company, Ltd. in the U.S.A and other
countries.
================================================================================

Before continuing, the install directory for HTTP must exist, and have
the correct write permissions.

The following files will be installed for:

   New Install:
       cehttp.war, ReadMe.txt, Trusted.txt, and system and server property files.

   Upgrade:
       cehttp.war and ReadMe.txt files.
       (The current property files will be copied to an existing directory)

================================================================================
Do you want to continue?[Y/n]:
```

5. Type **Y** and press **Enter**.

   The following message is displayed:

```
Enter the FULL path to this install script on the install CD [/cdrom/UNIX]:
```

6. Type the full path to the installation script, for example, **/cdrom/unix/**, and press **Enter**.

   The following message is displayed:

```
Please enter one of the following numeric values at the
prompt to select the type of Setup you prefer.
  1. New Install
  2. Upgrade
```

7. Type **2** and press **Enter**. The following message is displayed.

```
Enter the fully qualified path to your existing property folder.
/home/server01/user01/http_1.2.01/
```

8. Type the path name to your existing property folder (step 2 on page A-3) and press **Enter**. The following message is displayed.

```
Enter the fully qualified path to where you would like to have the property files
copied.

The existing Destination Folder should be named 'property', and be an empty
folder.
/home/server01/user01/http_1.2.01/property
All Property Files have been copied to
/home/server01/user01/http_1.2.01/property.
```

9. Type the path where you want to save a copy of your existing property files (step 3 on page A-3) and press **Enter**. The following message is displayed.

```
Enter a valid path name for the cehttp.war and ReadMe.txt files:
/home/server01/user01/http_1.3.00/cehttp

You have chosen /home/server01/user01/http_1.3.00/cehttp
as the install directory for CONNECT:Enterprise HTTP Option. Please confirm: [Y/n]
y

1700 kbytes of disk space is required to install
CONNECT:Enterprise HTTP Option.
```

10. Type the path where you want to install CONNECT:Enterprise HTTP Option (step 4 on page A-3) and press **Enter**.
11. Do one of the following:
    - ❖ If the directory listed is not correct, type **n** at the prompt and press **Enter**. The system returns to step 9.
    - ❖ If the directory listed is correct, type **Y** at the prompt and press **Enter**. The system displays the disk space information as follows:

```
1700 kbytes of disk space is required to install
CONNECT:Enterprise HTTP Option.

================================================================================
  Here is the current free disk space for each disk partition:
================================================================================

Filesystem            kbytes    used   avail capacity  Mounted on
/proc                      0       0       0     0%    /proc
/dev/dsk/c0t0d0s0     119167   40537   66714    38%    /
/dev/dsk/c0t0d0s6     875215  757167   56783    94%    /usr
fd                         0       0       0     0%    /dev/fd
/dev/dsk/c0t0d0s1     482023  123133  310688    29%    /var
/dev/dsk/c0t2d0s7    8705501 3809852 4808594    45%    /cdlgb
/dev/dsk/c0t3d0s7    8705501 8099213  519233    94%    /cdlgb2
/dev/dsk/c0t0d0s7      96391    9277   77475    11%    /export/home
/dev/dsk/c0t0d0s5    1190719  448387  682797    40%    /opt
/dev/dsk/c0t0d0s4     962983  780313  124892    87%    /sci
swap                 1282960     376 1282584     1%    /tmp
fremont:/export/home4 13783040 9894440 3783952    73%    /home/fremont4

You have 3783952 kbytes of disk space available to you,
which is more than the required 1700 kbytes.

Do you want to continue? [Y/n]
```

12. To continue the installation, type **Y** and press **Enter**. The following message is displayed:

```
Copying cehttp.war file to your cehttp install directory

War file copied.
```

13. When the system is finished, the following message is displayed:

```
You have successfully installed CONNECT:Enterprise HTTP Option.

Thank you for choosing Sterling Commerce, Inc.

The cehttp.war and ReadMe.txt have been installed

in /home/server01/user01/http_1.3.00/cehttp.

It is recommended that you view the ReadMe.txt file.

Press ENTER to exit.
```

14. Press **Enter** to exit the installation.
15. Read the ReadMe.txt file.

You must configure the servlet engine before using CONNECT:Enterprise HTTP Option. Refer to Chapter 3, *Configuring the Servlet Engine* for detailed instructions.

Installing CONNECT:Enterprise HTTP Option on the Windows NT/2000/XP OS

Use this procedure to install CONNECT:Enterprise HTTP Option for the first time.

The CONNECT:Enterprise HTTP Option CD-ROM comes with an Autorun application that automatically detects the Windows operating system installed on your computer and begins the setup process when you insert the CD-ROM in the drive.

The installation application displays default values in dialog boxes where applicable. To install CONNECT:Enterprise HTTP Option on your Windows NT/2000/XP server, use the following steps:

1. Have your completed *CONNECT:Enterprise HTTP Option Installation Worksheet for Windows NT/2000/XP Operating System* available.
2. Insert the CONNECT:Enterprise HTTP Option CD-ROM into the CD-ROM drive.
   - ❖ If the installation setup begins automatically, continue with step 3 on page 2-8.
   - ❖ If the installation setup does not begin automatically:
     - Click **Start** and point to **Run**.
     - In the **Run** dialog box, click **Browse**.
     - In the **Browse** dialog box, click the drive mapped to your CD-ROM drive from the **Look in** box.
     - Change the directory to the Windows NT/2000/XP directory.
     - Double-click **Setup.exe**. The program returns to the **Run** dialog box.
     - Click **OK**.
3. On the **Welcome** dialog box, click **Next**.
4. In the **Select Location** dialog box, click **U.S**. or **International** to specify your location and click **Next.**
5. Click **Yes** to accept the license agreement.
6. In the **Setup Type** dialog box, click **New Install** and click **Next**.

7. In the **HTTP Option Install Location** dialog box, type the name of the directory where you want to install CONNECT:Enterprise HTTP Option (step 1 on page A-4) and click **Next**. You can use the **Browse** button to specify a different destination location.
8. In the **Default CONNECT:Enterprise Server Property File Name** dialog box, type the logical name of the server that CONNECT:Enterprise HTTP Option will access (step 2 on page A-4) and click **Next.**

   You can configure additional CONNECT:Enterprise servers after the installation procedure is complete. You must create a server property file for each CONNECT:Enterprise server accessed by CONNECT:Enterprise HTTP Option. See Chapter 5, *Customizing Property Files*, for more information about the server property file and about setting up additional CONNECT:Enterprise servers.
9. In the **Default servlet_info Value** dialog box, click **Next** to accept the default. This value identifies the servlet to the Web server.
10. In the **Session Timeout Value** dialog box, type the session timeout value (step 3 on page A-4) and click **Next**. This value specifies the number of seconds of idle time users have before they are automatically logged off the CONNECT:Enterprise server. The default is 300 seconds. The maximum is 1800 seconds.
11. In the **CONNECT:Enterprise Server Address** dialog box, type the IP address of the default CONNECT:Enterprise server (step 4 on page A-4) and click **Next**.
12. In the **CONNECT:Enterprise Server Port** dialog box, type the port address (step 5 on page A-4) for the default CONNECT:Enterprise server and click **Next**.
13. In the **Start Copying Files** dialog box, verify that the current settings are correct and click **Next** to begin copying the files. After the files are copied, the **Setup Complete** dialog box is displayed.
14. Activate the **I would like to view the README file** check box, and click **Finish** to complete the installation.
15. Read the ReadMe.txt file.

You must configure the servlet engine before using CONNECT:Enterprise HTTP Option. Refer to Chapter 3, *Configuring the Servlet Engine* for detailed instructions.

Upgrading CONNECT:Enterprise HTTP Option on the Windows NT/2000/XP OS

This procedure protects your current property files from being overwritten. Use this procedure if you are upgrading from a previous version of CONNECT:Enterprise HTTP Option.

The CONNECT:Enterprise HTTP Option CD-ROM comes with an Autorun application that automatically detects the Windows NT or 2000 operating system installed on your computer and begins the setup process when you insert the CD-ROM in the drive.

The installation application displays default values in dialog boxes where applicable. To install CONNECT:Enterprise HTTP Option on your Windows NT/2000/XP server, use the following steps:

1. Have your completed *CONNECT:Enterprise HTTP Option Upgrade Installation Worksheet for Windows NT/2000/XP Operating System* available.
2. Insert the CONNECT:Enterprise HTTP Option CD-ROM into the CD-ROM drive.
   - ❖ If the installation setup begins automatically, continue with step 3 on page 2-10.
   - ❖ If the installation setup does not begin automatically:
     - Click **Start** and point to **Run**.
     - In the **Run** dialog box, click **Browse**.

- In the **Browse** dialog box, click the drive mapped to your CD-ROM drive from the **Look in** box.
- Change the directory to the Windows NT/2000/XP directory.
- Double-click **Setup.exe**. The program returns to the **Run** dialog box.
- Click **OK**.

3. On the Welcome window, click **Next**.
4. In the **Select Location** dialog box, click **U.S**. or **International** to specify your location and click **Next.**
5. Click **Yes** to accept the license agreement.
6. In the **Setup Type** dialog box, click **Upgrade** and click **Next**.
7. In the **Property Folder Location** dialog box, type the path name of your existing property folder (step 1 on page A-5) and click **Next**.
8. In the **Destination Folder** dialog box, accept the default, or type a path where you want to save a copy of your existing property files and (step 2 on page A-5) click **Next**.

   A message is displayed verifying that the property files were successfully copied. If you get an error message, repeat step 8 and verify that the path you entered meets the requirements.
9. In the **HTTP Option Install Location** dialog box, type the path where you want to install CONNECT:Enterprise HTTP Option (step 3 on page A-5) and click **Next**.
10. In the **Start Copying Files** dialog box, verify that the current settings are correct and click **Next** to begin copying the files. After the files are copied, the **Setup Complete** dialog box is displayed.
11. Click **Finish** to complete the installation.
12. Activate the **I would like to view the README file** check box, and click **Finish** to complete the installation.
13. Read the ReadMe.txt file.

You must configure the servlet engine before using CONNECT:Enterprise HTTP Option. Refer to Chapter 3, *Configuring the Servlet Engine*, for detailed instructions.

Uninstalling CONNECT:Enterprise HTTP Option

Use the instructions in this section to uninstall CONNECT:Enterprise HTTP Option.

Uninstalling from Your UNIX OS

To uninstall CONNECT:Enterprise HTTP Option from your UNIX OS:

1. If you deployed CONNECT:Enterprise HTTP Option on Tomcat or JRun 4.0, go to step 2. Otherwise, uninstall (remove) the deployed application from the Web server console.
2. Delete, rename, or move the directory where CONNECT:Enterprise HTTP Option was deployed. These files are located in *{DEPLOYMENT_DIRECTORY}*/cehttp.

Uninstalling from Your Windows Operating System

The Windows uninstall program completely removes the CONNECT:Enterprise HTTP Option application, its components, program folder, program items, and all other settings. To uninstall CONNECT:Enterprise HTTP Option and all of its components, follow these steps:

1. Uninstall (remove) the deployed application from the Web server console.
2. Click **Start** and then click **Settings**.
3. On the **Settings** menu, click **Control Panel**.
4. Click **Add/Remove Programs**.
5. On the list of programs, click **CONNECT:Enterprise HTTP Option**.
6. Click **Add/Remove**.
7. After all of the files are deleted, click **OK**. The uninstall procedure is complete.

Note: You must also delete or rename the MailboxServlet.jar file if you copied it to another location.

Chapter 3

Configuring the Servlet Engine

After you install CONNECT:Enterprise HTTP Option, you must configure the servlet engine before processing requests to CONNECT:Enterprise HTTP Option. This chapter contains configuration instructions for the Web servers, and instructions for verifying your configuration.

Note: All back slashes ("\") in path names in this file are forward slashes ("/") in UNIX.

Configuring the Tomcat Servlet Engine for CONNECT:Enterprise HTTP Option

Complete the following steps to configure Tomcat for a new installation on either a UNIX or Windows OS. In this procedure, replace {*TOMCAT_ROOT_DIR*} with the directory where Tomcat is installed.

Before you begin this configuration, ensure that your Tomcat servlet is communicating properly with the Apache Web server. You can do this by testing one of the sample applications provided with Tomcat.

1. Move **cehttp.war** from the directory where CONNECT:Enterprise HTTP Option is installed to the *{TOMCAT_ROOT_DIR}*/webapps directory.
2. Start Tomcat. Tomcat automatically deploys the CONNECT:Enterprise HTTP Option WAR file.
3. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

   ```
   {TOMCAT_ROOT_DIR}\webapps\cehttp\property\
   ```

4. Move the server property file (named in item 4 on page A-2 for UNIX or in item 2 on page A-4 for Windows NT/2000/XP) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

   ```
   {TOMCAT_ROOT_DIR}\webapps\cehttp\property\server\
   ```

5. After the initial startup, use the following URL to run CONNECT:Enterprise HTTP Option. The default port value for Tomcat is 8080. You can omit the port value if you are using port 80.

   ```
   http://servername:port/cehttp/html/main.htm
   ```

Configuring the Tomcat Servlet Engine to Upgrade CONNECT:Enterprise HTTP Option

Use the following procedure to configure Tomcat for a CONNECT:Enterprise HTTP Option upgrade on either a UNIX or Windows OS. In this procedure, replace {*TOMCAT_ROOT_DIR*} with the directory where Tomcat is installed.

Before you begin this configuration, ensure that your Tomcat servlet is communicating properly with the Apache Web server. You can do this by testing one of the sample applications provided with Tomcat.

1. Navigate to the following directory:

```
{TOMCAT_ROOT_DIR}\webapps\
```

2. Delete the cehttp folder.
3. Move **cehttp.war** from the directory where CONNECT:Enterprise HTTP Option is installed to the *{TOMCAT_ROOT_DIR}*/webapps directory.
4. Start Tomcat. Tomcat automatically deploys the CONNECT:Enterprise HTTP Option WAR file.
5. Navigate to the following directory:

```
{TOMCAT_ROOT_DIR}\webapps\cehttp\
```

6. Open and edit the web.xml file by changing the path initialization parameter value to the directory where you moved the property files. You can get this information from item 3 on page A-3 for UNIX, or item 2 on page A-5 for Windows:

```
<init-param>
 <param-name>path</param-name>
 <param-value>C:/HTTP Option/</param-value>
</init-param>
```

7. Save the web.xml file. CONNECT:Enterprise HTTP Option uses the new path to locate the property files.
8. Restart Tomcat.
9. After the initial startup, use the following URL to run CONNECT:Enterprise HTTP Option. The default port value for Tomcat is 8080. You can omit the port value if you are using port 80.

```
http://servername:port/cehttp/html/main.htm
```

Configuring the JRun 3.1 Servlet Engine

Use the following procedure to configure JRun 3.1 for CONNECT:Enterprise HTTP Option on either a UNIX or Windows OS. In this procedure, replace {*JRUN3.1_ROOT_DIR*} with the directory where JRun 3.1 is installed.

Before you begin this configuration, be certain that your JRun servlet is communicating properly with your Web server.

1. Stop the Web server where you are installing CONNECT:Enterprise HTTP Option.
2. Start the JRun Application Management Console (JMC).
3. Sign on as the JRun administrator to the JMC.
4. If you are installing CONNECT:Enterprise HTTP Option for the first time, go to step 5. If you are upgrading from a previous installation, complete the following procedure:
   a. Select ***hostname*>JRun Default Server>Web Applications>cehttp** in the left frame of the JMC and click **delete**.
   b. On the **Remove a Web Application** screen, select **cehttp** and click **remove**.
5. Select ***hostname*>JRun Default Server>Web Applications** in the left frame of the JMC.
6. Click **Deploy an Application** in the right frame.
7. In the **Web Application Information** window, supply the following information and click **deploy.**

Field	Information
Servlet War File or Directory	Directory where cehttp.war resides. This is the directory where CONNECT:Enterprise HTTP Option is installed. For UNIX, this is the same directory you named in item 3 on page A-2. For Windows, this is the same directory you named in item 1 on page A-4.
JRun Server Name	JRun Default Server
Application Name	cehttp
Application Host	All Hosts
Application URL	/cehttp
Application Deploy Directory	This field is populated by JRun with a value similar to the following: C:/Program Files/Allaire/JRun/servers/default/cehttp

8. When the deployment is complete, select ***hostname*>JRun Default Server>Java Settings** in the left frame of the JMC.
9. Click **Classpath**. An edit window is displayed.
10. Add the following lines to the beginning of **Input Field**, replace *{JRUN3.1_ROOT_DIR}* with the directory where JRun is installed and click **Update**.

```
{JRUN3.1_ROOT_DIR}\servers\default\cehttp\WEB-INF\classes
{JRUN3.1_ROOT_DIR}\servers\default\cehttp\WEB-INF\lib
```

11. Restart the JRun Default server and Apache server.
12. Click **logout** to close the JRun Application Management Console.

13. If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, go to step 14 on page 3-4. If you installed CONNECT:Enterprise HTTP Option for the first time, perform the following:

    a. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

    ```
    {JRUN3.1_ROOT_DIR}\servers\default\cehttp\property\
    ```

    b. Move the server property file (named in item 4 on page A-2 for UNIX or in item 2 on page A-4 for Windows) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

    ```
    {JRUN3.1_ROOT_DIR}\Servers\bin\https\webapps\cehttp\property\server\
    ```

14. If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 16 on page 3-4. If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, perform the following:

    a. Navigate to the following directory:

    ```
    {JRUN3.1_ROOT_DIR}\servers\default\cehttp\WEB-INF
    ```

    b. Open and edit the web.xml file by changing the path initialization parameter value to the directory where you moved the property files. You can get this information from item 3 on page A-3 for UNIX and item 2 on page A-5 for Windows:

    ```
    <init-param>
     <param-name>path</param-name>
     <param-value>C:\HTTP Option\</param-value>
    </init-param>
    ```

15. Save the web.xml file. CONNECT:Enterprise HTTP Option uses the new path to locate the property files.

    The configuration is complete.

16. Restart the JRun Default Server.

17. Select ***hostname***>**JRun Default Server**>**JRun Web Server** in the left frame of the JMC and identify the **Web Server Port** value.

18. Use the following URL to run CONNECT:Enterprise HTTP Option. Use the value you identified in step 17 as the port. You can omit the port value if you are using port 80.

    ```
    http://servername:port/cehttp/html/main.htm
    ```

Configuring the JRun 4.0 Servlet Engine

Use the following procedure to configure JRun 4.0 for CONNECT:Enterprise HTTP Option on a Windows OS. In this procedure, replace {*JRUN4_ROOT_DIR*} with the directory where JRun 4.0 is installed.

Before you begin this configuration, be certain that your JRun 4.0 servlet is communicating properly with your Web server.

1. Launch JRun Launcher.
2. Select **default**. If the **Status** of **default** is blank, go to step 3. If the **Status** of **default** is **Running**, click **Stop**.
3. From the directory that you installed CE HTTP Option (item 1 on page A-4), copy **cehttp.war** to the {*JRUN4_ROOT_DIR*}/servers/default directory.
4. From JRun Launcher, select default and click **Start**.
5. Verify that a directory named **cehttp** is created in the {*JRUN4_ROOT_DIR*}/servers/default directory. If it is created, go to step a. If it is not created, perform the following, then go to step a.
   a. From JRun Launcher, select **default** and click **Stop**.
   b. Add a new folder named **cehttp** to the {*JRUN4_ROOT_DIR*}/servers/default directory.
   c. Open the {*JRUN4_ROOT_DIR*}/servers/default/SERVER-INF/temp/cehttp.war-ddddddd directory (ddddddd are decimal digits).
   d. Copy the contents of the {*JRUN4_ROOT_DIR*}/servers/default/SERVER-INF/temp/cehttp.war-ddddddd directory to the {*JRUN4_ROOT_DIR*}/servers/default/cehttp directory.
   e. Open the {*JRUN4_ROOT_DIR*}/servers/default/SERVER-INF/temp directory and delete all files and folders that begin with **cehttp**.
   f. Open the {*JRUN4_ROOT_DIR*}/servers/default directory and delete **cehttp.war**.
6. If you are upgrading from a previous version of CONNECT:Enterprise HTTP Option, go to step 7. If you are installing CONNECT:Enterprise HTTP Option for the first time, perform the following steps:
   a. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed (item 1 on page A-4) to the following directory:

      ```
      {JRUN4_ROOT_DIR}\servers\default\cehttp\property\
      ```

   b. Move the server property file (named in item 2 on page A-4) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

      ```
      {JRUN4_ROOT_DIR}\Servers\bin\https\webapps\cehttp\property\server\
      ```

7. If you are installing CONNECT:Enterprise HTTP Option for the first time, go to step 8. If you are upgrading from a previous version, perform the following:
   a. Navigate to the following directory:

```
{JRUN4_ROOT_DIR}\servers\default\cehttp\WEB-INF
```

   b. Open and edit the web.xml file by adding the location of your existing property files to the path initialization parameter. You can get this information from item 3 on page A-3 for UNIX and item 2 on page A-5 for Windows. Following is an example:

```
<init-param>
 <param-name>path</param-name>
 <param-value>C:\HTTP Option\</param-value>
</init-param>
```

8. From JRun Launcher, select default and click **Start**.
9. From JRun Launcher, identify the **Web Port** value for **default**.
10. Use the following URL to run CONNECT:Enterprise HTTP Option. Use the value you identified in step 9 as the port. You can omit the port value if you are using port 80.

```
http://servername:port/cehttp/html/main.htm
```

Configuring the iPlanet Web Server

Use the following procedure to configure iPlanet for CONNECT:Enterprise HTTP Option on either a UNIX or Windows OS. In this procedure, replace {*iPLANET_ROOT_DIR*} with the directory where iPlanet is installed.

1. Start your iPlanet Web Server.
2. Sign on to the iPlanet Administration Server using your iPlanet administrator user name and password.
3. Click the **Global Settings** tab.
4. Click Configure **JRE/JDK Paths**.
5. Click **JDK** and type a path to the **JDK** installation folder.
6. Click **OK**.
7. If you are prompted to restart the servers, click **OK**. However, you do not need to restart the servers at this time.
8. If you are installing CONNECT:Enterprise HTTP Option for the first time, go to step 9. If you are upgrading from a previous version, perform the following:
   a. Click the **Servers** tab.
   b. Click **Manage Servers** in the left frame.
   c. Select the server you want to manage and click **Manage**.
   d. Click the **Virtual Server Class** tab.
   e. Select **defaultclass** and click **Manage**.
   f. Select the virtual server that cehttp is installed on and click **Manage**.
   g. Click the **Web Applications** tab.

h. Click **Edit Web Applications**.

i. In the **Action** field, select **Delete**. In the **URI**, type **/cehttp** and click **OK.** Click **OK** on the pop-up dialog box.

j. At the top of the screen, click the name of the server (the left-most button).

k. At the top of the screen, select **Web Server Administration Server**.

9. Click the **Servers** tab.
10. Click **Manage Servers** in the left frame.
11. Select the server you want to manage and click **Manage**.
12. Click the **Virtual Server Class** tab, select **defaultclass,** and click **Manage**.
13. Click **Manage Virtual Servers** in the left frame.
14. Select the correct Virtual Server and click **Manage**.
15. Click the **Web Applications** tab.
16. Click **Deploy Web Application** in the left frame.
17. Type the following information and click **OK**.

Field	Information
WAR File On	Local Machine
WAR File Path	Path and file name of the cehttp.war file. For example: C:\CEHTTP Option\cehttp.war
Application URL	/cehttp
Installation Directory	*{iPLANET_ROOT_DIR}*\Servers\bin/https\webapps\cehttp.

18. Click **OK** when the *Web Application successfully deployed* message is displayed.

    You may get the following message:

```
Bad Request
Your browser sent a query this server could not understand.
```

    This is normal and does not affect the servlet configuration.

19. Click the button in the upper left corner corresponding to your server.
20. Click the **Preferences** tab.
21. Click **On/Off** in the left frame.
22. Click **Server On**.
23. Click **OK** when the *Success! The server has started up* message is displayed.
24. Click **Edit Listen Sockets**.
25. Write down the value for **Port**.
26. Close the Web Server Administration Server.

    ❖ If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 27.

    ❖ If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, go to step 29.

27. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{iPLANET_ROOT_DIR}\Servers\bin\https\webapps\cehttp\property\
```

28. Move the server property file (named in item 4 on page A-2 for UNIX or in item 2 on page A-4 for Windows) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{iPLANET_ROOT_DIR}\Servers\bin\https\webapps\cehttp\property\server\
```

29. If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 32. If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, perform the following:

    a. Navigate to the following directory:

```
{iPLANET_ROOT_DIR}\Servers\bin\https\webapps\cehttp\WEB-INF
```

    b. Open and edit the web.xml file by changing the path initialization parameter value to the directory where you moved the property files. You can get this information from item 3 on page A-3 for UNIX and item 2 on page A-5 for Windows:

```
<init-param>
 <param-name>path</param-name>
 <param-value>C:\HTTP Option\</param-value>
</init-param>
```

30. Save the web.xml file. CONNECT:Enterprise HTTP Option uses the new path to locate the property files.
31. Start your iPlanet Web Server.
32. Use the following URL to run CONNECT:Enterprise HTTP Option. For port, use the port value identified in step 25. You can omit the port value if you are using port 80.

```
http://servername:port/cehttp/html/main.htm
```

Configuring the IBM WebSphere Web Server on the UNIX OS

Use the following procedure to configure WebSphere for CONNECT:Enterprise HTTP Option on the UNIX OS. In this procedure, replace {*WebSphere_ROOT_DIR*} with the directory where WebSphere is installed.

Before you begin this configuration, ensure that your WebSphere servlet is communicating properly with the IBM HTTP server.

1. If your WebSphere Application Server is not already running, run the **adminserver.sh** shell script located in the ./WebSphere4.02/bin directory.
2. Start the WebSphere Advanced Administrative Console by running the **adminclient.sh** shell script located in the ./WebSphere4.02/bin directory.

3. If you are installing CONNECT:Enterprise HTTP Option for the first time, go to step 4 on page 3-9. If you are upgrading CONNECT:Enterprise HTTP Option, do the following:
   a. Stop the IBM HTTP Server.
   b. On the WebSphere Advanced Administrative Console, expand **WebSphere Administrative Domain** in the left-hand panel.
   c. Expand **Enterprise Applications**.
   d. Right-click on **cehttp** and select **Remove**.
4. On the WebSphere Advanced Administrative Console, expand **WebSphere Administrative Domain** in the left-hand panel.
5. Right-click **Enterprise Applications** and select **Install Enterprise Application**.
6. Select **Install Stand-alone module**, specify the following parameters, and click **Next**.

Parameter	Value
Path	Path and file name of the cehttp.war file. For example: C:\CEHTTP Option\cehttp.war
Application Name	cehttp
Context Root	/cehttp

7. Accept the defaults on the remaining screens until you are finished.

   It can take several minutes to deploy CONNECT:Enterprise HTTP Option.
8. In the left-hand panel, expand **Nodes**.
9. Right-click the server name and select **Regen Webserver Plugin**.
10. Expand the server you are configuring.
11. Expand **Application Servers**.
12. Right-click **Default Server** and select **Stop**. Leave the WebSphere Advanced Administrative Console running.
    - ❖ If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 13.
    - ❖ If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, go to step 15.
13. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{WebSphere_ROOT_DIR}/installedApps/cehttp.ear/cehttp.war/property/
```

14. Move the server property file (named in item 4 on page A-2) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{WebSphere_ROOT_DIR}/installedApps/cehttp.ear/cehttp.war/property/
server/
```

15. If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 16 on page 3-10. If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, perform the following:

    a. Navigate to the following directory:

    ```
    {WebSphere_ROOT_DIR}/installedApps/cehttp.ear/cehttp.war/WEB-INF/
    ```

    b. Open and edit the web.xml file by changing the path initialization parameter value to the directory where you moved the property files. You can get this information from item 2 on page A-5.

    ```
    <init-param>
     <param-name>path</param-name>
     <param-value>C:/HTTP Option</param-value>
    </init-param>
    ```

16. Edit the web.xml file by changing the WebSphere flag to **Y** as shown in the following example:

    ```
    <init-param>
      <param-name>websphereFlag</param-name>
      <param-value>Y</param-value>
    </init-param>
    ```

17. Save the web.xml file. CONNECT:Enterprise HTTP Option uses the new path to locate the property files.
18. From the WebSphere Advanced Administrative Console, right-click **Default Server** and select **Start**.
19. From the WebSphere Advanced Administrative Console, select **Virtual Hosts>default _host** and identify the **Web Server Port** value. The default for IBM WebSphere is **9080**.
20. Use the following URL to run CONNECT:Enterprise HTTP Option. Use the value you identified in step 19 as the port. You can omit the port value if you are using port 80.

    ```
    http://servername:port/cehttp/html/main.htm
    ```

Configuring the IBM WebSphere Web Server on the Windows OS

Use the following procedure to configure WebSphere for CONNECT:Enterprise HTTP Option on the Windows OS. In this procedure, replace {*WebSphere_ROOT_DIR*} with the directory where WebSphere is installed.

Before you begin this configuration, ensure that your WebSphere servlet is communicating properly with the IBM HTTP server.

1. Start the WebSphere Application Server.
2. Start the WebSphere Administrative Console.
3. If you are installing CONNECT:Enterprise HTTP Option for the first time, go to step 4. If you are upgrading CONNECT:Enterprise HTTP Option, do the following:

    a. Stop the IBM HTTP Server.

    b. On the **WebSphere Advanced Administrative Console**, expand **WebSphere Administrative Domain** in the left-hand panel.

    c. Expand **Nodes** in the left-hand panel.

d. Select **Enterprise Applications.**

e. Select **cehttp** and click **delete**.

f. Expand **Enterprise Applications**.

4. Log on to the WebSphere Application Server through Internet Explorer or Netscape Navigator on the Windows OS.
5. Expand **Nodes** in the left-hand panel.
6. Select the node where you want to install CONNECT:Enterprise HTTP Option.
7. Select **Enterprise Applications**.
8. Click **Install**.
9. Under *Specify the Application or Module located on this machine to upload and install*, specify the following parameters, and click **Next**.

Parameter	Value
Path	Path and file name of the cehttp.war file. For example: C:\CEHTTP Option\cehttp.war
Application Name	cehttp
Context Root	/cehttp

10. Under **Specifying Virtual Host names and Precompiled JSP option for Web Modules** specify the following parameters, and click **Next**.

Parameter	Value
Virtual Host Name	default_host
Precompile JSPs	Yes

11. Confirm the settings from steps 9–10 and click **Finish**.

    It takes several minutes to deploy CONNECT:Enterprise HTTP Option.
12. After CONNECT:Enterprise HTTP Option is deployed, click **Plug-in Configuration needs to be regenerated**.
13. Click **Generate**.
14. Click **Configuration needs to be saved**.
15. Select **Save** and click **OK**.
16. Select **Enterprise Applications** in the left-hand panel.
17. Click the check box next to **cehttp** and click **Start**.

    If CONNECT:Enterprise HTTP Option it does not start, stop and restart the WebSphere Application Server.

18. Click **Configuration needs to be saved** and click **OK**.
    - ❖ If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 19 on page 3-12.
    - ❖ If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, go to step 21 on page 3-12.
19. Move the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{WebSphere_ROOT_DIR}\AppServer\installedApps\cehttp.ear\cehttp.war\property\
```

20. Move the server property file (named in item 4 on page A-2 for UNIX or in item 2 on page A-4 for Windows) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
{WebSphere_ROOT_DIR}\AppServer\installedApps\cehttp.ear\cehttp.war\property\
server\
```

21. If you installed CONNECT:Enterprise HTTP Option for the first time, go to step 22 on page 3-12. If you upgraded from a previous version of CONNECT:Enterprise HTTP Option, perform the following:
    a. Navigate to the following directory:

```
{WebSphere_ROOT_DIR}/AppServer/installedApps/cehttp.ear/cehttp.war/WEB-INF
```

    b. Open and edit the web.xml file by changing the path initialization parameter value to the directory where you moved the property files. You can get this information from item 2 on page A-5.

```
<init-param>
 <param-name>path</param-name>
 <param-value>C:/HTTP Option/</param-value>
</init-param>
```

22. Edit the web.xml file by changing the WebSphere flag to **Y** as shown in the following example:

```
<init-param>
  <param-name>websphereFlag</param-name>
  <param-value>Y</param-value>
</init-param>
```

23. Save the web.xml file. CONNECT:Enterprise HTTP Option uses the new path to locate the property files.
24. From the WebSphere Administrative Console, select **Virtual Hosts>default _host>Aliases** in the left frame and identify the Web Server Port value. The default for IBM WebSphere is **9080**.
25. Select **Enterprise Applications** in the left-hand panel.
26. Click the check box next to **cehttp** and click **Start**.

    If CONNECT:Enterprise HTTP Option it does not start, stop and restart the WebSphere Application Server.
27. Use the following URL to run CONNECT:Enterprise HTTP Option. Use the value you identified in step 24 as the port. You can omit the port value if you are using port 80.

```
http://servername:port/cehttp/html/main.htm
```

Configuring the IBM WebSphere Web Server 3.5 on OS/390

Use the following procedure to configure WebSphere 3.5 Web server for CONNECT:Enterprise HTTP Option on OS/390.

1. Use FTP to transfer the cehttp.war file from the directory where you installed CONNECT:Enterprise HTTP Option to the following location, replacing *applicationserverroot* with the location where the IBM WebSphere server is installed (/usr/lpp/WebSphere, for example). You must transfer the cehttp.war file as a binary file.

   ```
   applicationserverroot/AppServer/hosts/default_host/cehttp.war
   ```

2. Log on with superuser authority to the OS/390 system where WebSphere is installed.
3. Change the current directory to:

   ```
   applicationserverroot/AppServer/bin
   ```

4. Type the following command:

   ```
   ./wartowebapp.sh WAR_FILENAME=../hosts/default_host/cehttp.war WEBAPP_PATH=/cehttp
   ```

   The wartowebapp.sh shell script converts the cehttp.war file to a Web application acceptable to WebSphere. While the shell script executes, it prompts you to confirm various default values.

5. Press **Enter** to accept each default.
6. Copy the contents of *applicationserverroot*/AppServer/hosts/default_host/cehttp/was.conf.updates to the end of the *applicationserverroot*/AppServer/properties/was.conf file.
7. Insert the statement shown in bold in the httpd.conf file used by the IBM HTTP Server. This file is usually located in /etc.

   ```
   #   ================================
   #   ***  WAS directives  ***
   #   ================================
   ServerInit
   applicationserverroot/AppServer/bin/was350plugin.so:init_exit applicationserverroot

   Service /webapp/examples/* applicationserverroot/AppServer/bin/was350plugin.so:service_exit

   Service /cehttp/* applicationserverroot/AppServer/bin/was350plugin.so:service_exit

   ServerTerm applicationserverroot/AppServer/bin/was350plugin.so:term_exit
   ```

8. Update the http.conf file by inserting the following statement at the end of the file:

   ```
   NoLastMod ON
   ```

9. Use FTP to transfer the system property file (named **system**) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

   ```
   applicationserverroot/AppServer/hosts/default_host/cehttp/WEB/property/
   ```

Replace *applicationserverroot* with the location where the IBM WebSphere server is installed (/usr/lpp/WebSphere, for example).

You must transfer the server property file as ASCII with the OS/390 lrecl and blksize parameters.

The TSO region must be 8 MB or larger, or you may receive an out of memory error.

10. Use FTP to transfer the server property file (named in step 11 on page 2-4 for UNIX) from the directory where CONNECT:Enterprise HTTP Option is installed to the following directory:

```
applicationserverroot/AppServer/hosts/default_host/cehttp/property/server
```

Replace *applicationserverroot* with the location where the IBM WebSphere server is installed (/usr/lpp/WebSphere, for example).

You must transfer the server property file as ASCII with the OS/390 lrecl and blksize parameters.

11. Navigate to the following directory:

```
applicationserverroot/AppServer/hosts/default_host/cehttp/servlet/
```

12. Open and edit the cehttp.webapp file by changing the WebSphere flag to **Y** as shown in the following example:

```
<init-parameter>
  <name>websphereFlag</name>
  <value>Y</value>
</init-parameter>
```

13. Start the IBM HTTP Web Server.
14. After initial startup, type the following URL to run CONNECT:Enterprise HTTP Option. You can omit the port value if you are using port 80.

```
http://servername:port/cehttp/html/main.htm
```

If an ABEND occurs in the Java JIT compiler when you are testing CONNECT:Enterprise HTTP Option, perform the following steps to disable the compiler:

a. Open the *applicationserverroot*/AppServer/properties/default_global.properties file.

b. Find the following line:

```
# appserver.product.java.jvmconfig.jit=
```

c. Remove the comment character (#) and change the line to:

```
appserver.product.java.jvmconfig.jit=off
```

d. Stop and restart the IBM HTTP server.

Chapter 4

Configuring Security

CONNECT:Enterprise HTTP Option offers two types of security: user and data. User security limits who has access to CONNECT:Enterprise HTTP Option and the CONNECT:Enterprise server. Data security protects the information sent and received using CONNECT:Enterprise HTTP Option.

User Security

CONNECT:Enterprise HTTP Option secures the link between CONNECT:Enterprise HTTP Option and CONNECT:Enterprise servers by allowing only authorized users to get into, but not past, the repository. This method ensures the security of the system and the data. To access CONNECT:Enterprise HTTP Option, users must have a CONNECT:Enterprise user ID and password. Without a user ID and password, users can view the HTML pages, but cannot make requests of the CONNECT:Enterprise data repository.

CONNECT:Enterprise HTTP Option enables administrators to specify various initialization parameters and property keys that limit the CONNECT:Enterprise servers with which users interact. The CONNECT:Enterprise server provides the security, but you can prevent requests from being sent to a server by not defining those servers in either the server property files or the system property file.

Data Security

Another level of security is the one between the Web browser and the Web server. This security is not provided by CONNECT:Enterprise HTTP Option. However, CONNECT:Enterprise HTTP Option does support the Secure Sockets Layer (SSL) protocol, a protocol that provides secure communications with transport protocols, including FTP over TCP/IP. It is an open, nonproprietary Internet protocol that is widely adopted as standard.

When using the SSL protocol, CONNECT:Enterprise HTTP Option ensures point-to-point security, meaning that the data is secured as it is transmitted across a single socket. To use the SSL protocol with CONNECT:Enterprise HTTP Option, the CONNECT:Enterprise server you communicate with must have Secure FTP functionality. You must also configure the CONNECT:Enterprise HTTP Option SSL property files. Refer to *Configuring the SSL Property Files* on page 5-2 for more information on configuring the property files for the SSL protocol.

Cryptography

Cryptography involves algorithms that transform a readable text message into an encrypted text (called cipher text). There are two categories of cryptographic algorithms, symmetric and public key (asymmetric). Symmetric cryptography requires the sender and receiver to share one key. The key is used to both encrypt and decrypt the data. Public key cryptography requires a private key, known only by the owner, and a public key, which can be disseminated freely. Data encrypted with the private key can only be decrypted with the public key, and vice versa. Symmetric algorithms are much faster than public key algorithms, but require securely transmitting the key to trusted partners.

Authentication

A message digest algorithm, also called a one-way hash function, is used to create a hash (a short, fixed-length representation of a longer, variable-length plain text message). The resulting value of the hash cannot be used to derive the original message. The hash is also called a digest.

When a message digest is encrypted with a private key, the result is a digital signature. Digital signatures allow a client to authenticate the server, because the client has the public key of the server and can use it to decrypt the signature (created with the private key). The client knows the server is the only one who has the private key, so the server must be the one that sent the message.

Clients and servers obtain public keys as part of a certificate that is signed by a trusted, well-known entity called a certificate authority (CA). CAs are responsible for verifying and processing certificate requests, and issuing and managing certificates.

Certificates typically contain:

- Distinguished name and public key of the server or client
- Distinguished name and digital signature of the CA
- Period of validity (certificates expire and must renewed)
- Administrative and extended information

You obtain a certificate from a CA by first generating a certificate signing request (CSR) that contains specific information in a specific format about the requester. The CA analyzes those fields in the CSR, validates the accuracy of those fields, generates a certificate, and sends it to the requester.

Client-Server Session

CONNECT:Enterprise HTTP Option makes use of both symmetric and asymmetric key algorithms. A client-server session begins with a handshake sequence in which the following actions occur:

- The client obtains the public key of the server using certificates.
- The client generates a symmetric session key and sends a message to the server, encrypted with the public key of the server, which contains the session key.
- The server decrypts this message with its private key to obtain the session key.
- The client and server use the session key to encrypt and decrypt the rest of the transmitted data.

The server does not need any information about the client, and the client needs to know only the public key of server. The private key of the server is kept secret and is never transmitted. The bulk of the communication is secured with relatively speedy symmetric key algorithms.

Obtaining a Certificate

The first step to using secure communication is to generate a public/private key pair and a CSR. The key pair and CSR are generated using Sterling Commerce Certificate Wizard, which is shipped with CONNECT:Enterprise HTTP Option. Refer to Certificate Wizard Help for specific instructions. After the CSR has been generated, you must send it to the CA of your choice. This is done either online or by e-mail. After the CA has verified the information in the CSR, you receive a certificate file. As soon as you receive the certificate file, make a backup copy of your certificate. Certificates can become corrupted or can be accidentally deleted. If you lose your certificate and do not have a backup, you must acquire a new certificate.

Note: If you paste your CSR information into a text file, ensure that there are no leading spaces.

Creating the Key Certificate File

The certificate you received from the CA is used to create the key certificate file. This file is a combination of your certificate and the private key you created with Certificate Wizard.

Complete the following steps to create the key certificate file.

1. Make a backup copy of your certificate if you have not already done so.
2. Install the CA trusted root certificate.

   Your must obtain a trusted root certificate from the CA or from the system administrator of the CONNECT:Enterprise site with which you communicate. You must create a trusted root certificate file (for example, *trusted.txt*) and add your CA trusted root certificate to the file. Each trusted root certificate must be in X.509, BER-encoded PEM format. Your trusted root certificate file should not contain more than one certificate for each CA. Superseded or expired root certificates should be removed.
3. Create your key certificate file.

   The key certificate file is created by concatenating your certificate to your private key. The key certificate file name and location can be specified as needed.

   For UNIX, you can use the following command:

   ```
   cat privkey.txt cert.txt > keycert.txt
   ```

   For Windows, create a separate file and copy the contents of your private key file followed by the contents of your certificate.

   The private key must be in PKCS#8, BER-encoded base64-encoded format. Certificate Wizard automatically creates your private key in this format. The certificate must be in X.509, BER-encoded base64-encoded format. If you require more than one certificate, you can create a certificate chain by concatenating each certificate to the end of the key certificate file. The first certificate should be the certificate and each following certificate should be the signer of the certificate immediately preceding it in the chain.

   Use Certificate Wizard to verify your key certificate file.

4. Make a secure backup copy of your key certificate file.

   You always want to have a backup copy of your key certificate file. This file can become corrupted or can be accidentally deleted. If you lose your key certificate file and do not have a backup, you must acquire a new certificate. If a third party gains access to your private key, they could access secure data transfers and masquerade as the server.

Protecting Your SSL Passphrase

When the key pair is generated with Certificate Wizard, a passphrase is used for SSL connections. This passphrase is stored in clear text in the file and in the property files unless you choose to encrypt it.

Complete the following steps to encrypt your SSL passphrase.

1. Create a text file with any name.
2. Type the following command into the text file:

```
ssl_passphrase=passphrase
```

Note: Replace *passphrase* in the command with the passphrase you chose when you created the key pair.

3. From the *cehttp/tools* directory, type the following command:

```
java -classpath pfcheck.jar cepassprotect -f filename
```

Note: Replace *filename* in the command with the name of the file you created in step 1.

   The encrypted passphrase is output to the text file in the following format:

```
ssl_passphrase=ENCRYPTED_xxxxxxxxxxxxxxxxxx
```

4. When you configure your property files for SSL connections, copy this line to the appropriate property file. Refer to Chapter 5, *Customizing Property Files*, for instructions.

Note: You can also use the **cepassprotect** utility to encrypt any passwords in your property files. Simply replace the **ssl_passphrase** key with the **password** key and type the appropriate password.

Chapter 5

Customizing Property Files

This chapter provides information about the property files contained within the CONNECT:Enterprise HTTP Option software. It explains the contents of the property files, how to configure your system to use the pfcheck utility to validate customized property files, and how to customize your property files.

How Property Files Work

CONNECT:Enterprise HTTP Option uses property files to determine which servers to connect to, and to specify how to control the look of Web pages used by the system. Property files consist of key/value pairs. The keys represent individual properties. Each key is defined by a value.

CONNECT:Enterprise HTTP Option uses four types of property files: system, server, remote, and directory. Each property file contains information on how the system responds to a request. Depending on how the request is made, the system may reference any one of these property files for instructions on how to proceed.

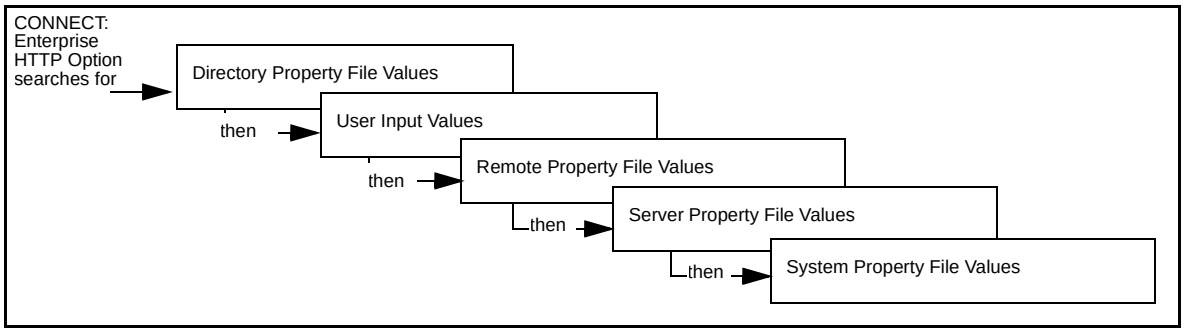
During initialization, CONNECT:Enterprise HTTP Option reads the contents of the system property file and uses the values specified to handle all requests it receives from users. It is often necessary for CONNECT:Enterprise HTTP Option to then reference key values in the remote, server, and directory property files in order to complete a user request.

Priority order for key values is as follows:

1. Directory property file values
2. User-specified property file values
3. Remote property file values
4. Server property file values
5. System property file values

CONNECT:Enterprise HTTP Option first searches for key values in the directory property file, then searches user input. If no key values are specified in the user input, CONNECT:Enterprise HTTP Option searches the remote, server, and system property files (in priority order) to get the necessary information.

The following diagram illustrates this hierarchy.



The pfcheck Utility

CONNECT:Enterprise HTTP Option comes with a utility that checks the syntax of keys and values to verify that you have typed them correctly. The syntax utility is called pfcheck. It is a stand-alone application that performs syntax checks on all customized CONNECT:Enterprise HTTP Option property files. It verifies the keywords and their corresponding values in the property files. If pfcheck finds any discrepancies, it notifies you by displaying the findings on the screen. The procedure for running pfcheck is included in each procedure for customizing the property files.

Configuring the SSL Property Files

You must make specific changes to the property files to enable security at the system, server, or remote level. Place security-related keywords in the system property file to implement security at the system level, in the server property file to implement security at the server level, or in the remote property file to implement security at the remote level. In order for security to function, the keywords can only be added to one file, not spread out over all three. The security keywords are **cipher_strength**, **keycert_file**, **root_cert_file**, **security_policy**, **ssl_client_ccc**, and **ssl_passphrase**.

Refer to *Customizing the System Property File* on page 5-3 for information on updating the security-related keywords.

Customizing the System Property File

The system property file contains all key values and defaults used by CONNECT:Enterprise HTTP Option for requests. After CONNECT:Enterprise HTTP Option is initialized, the system reads the system property file and provides the software with the necessary values to handle user requests. Unless you plan to change the keys of the CONNECT:Enterprise HTTP Option property files, it is not necessary to customize them. Following is a sample system property file.

```
cipher_strength=all
data_format=B
defined_remotes_only=N
directory=directory_file_name
directory_in_memory=N
keycert_file=certificate_file_name
mailbox_id=mailboxid
mailbox_server=mailboxserver_file_name
remote=remote_file_name
root_cert_file=trusted_root_certificate_file
security_policy=Y
servlet_info=CONNECT:Enterprise HTTP Option
session_timeout=300
ssl_passphrase=ENCRYPTED_passphrase
trigger_flag=N
```

Use the following procedure to customize the system property file. In this procedure, replace *Installation_Directory* with the directory where you installed CONNECT:Enterprise HTTP Option.

1. Navigate to the following directory:

   ```
   Installation_Directory\cehttp\property
   ```

2. Open the file named **system** with any plain-text editor such as Notepad, WordPad, or vi editor.
3. Based on the definitions and valid values in *System Property File Key/Value Pairs* on page 5-4, modify the Key/Value pairs. You can add a key, remove a key, or change a key value.

   Note: Keys are case sensitive. If the keys are not specified correctly, CONNECT:Enterprise HTTP Option ignores them and uses default keys and values.

4. Save the property file.
5. Validate your changes with the pfcheck utility using the following command:

   ```
   java -classpath CEHTTP_Deploy_Directory/cehttp/tools/pfcheck.jar pfcheck -system
   system
   ```

   The following table describes the parameters for pfcheck:

Argument	Definition
CEHTTP_Deploy_Directory	Directory inside your Web server directory where CONNECT:Enterprise HTTP Option is deployed.

   For help with the pfcheck utility, type **java pfcheck -help** or **java pfcheck -?**

6. Restart the servlet engine.

System Property File Key/Value Pairs

The system property file contains the following keys and possible values:

Key	Valid Values	Definition
cipher_strength	strong | weak | <u>all</u>	Specifies the type of cipher suites: **strong** allows only allows suites greater than 40-bit, **weak** allows only 40-bit, and **all** allows both. Strong cipher suites are: • SSL_RSA_WITH_RC4_128_MD5 • SSL_RSA_WITH_RC4_128_SHA • SSL_RSA_WITH_DES_CBC_SHA • SSL_RSA_WITH_3DES_EDE_CBC_SHA Weak cipher suites are: • SSL_RSA_EXPORT_WITH_RC4_40_MD5 • SSL_RSA_EXPORT_WITH_RC2_CBC_40_MD5 • SSL_RSA_EXPORT_WITH_DES40_CBC_SHA **Note:** If you specify this key in the system property file, do not specify any security-related keys in the server or remote property files.
data_format	A | <u>B</u>	Specifies the data format used for files sent if unspecified. A= ASCII; B=binary. Binary is the default.
defined_remotes_only	Y | <u>N</u>	Specifies whether all users have access to the CONNECT:Enterprise HTTP Option software or only those users who are defined in a remote property file. Y means only those users who specify defined remote property files can access the CONNECT:Enterprise HTTP Option software. If the value is Y, at least one remote property file must exist. N means that you do not need to define and reference a remote property file to use the software.
directory	File name	Specifies the directory property file name to use when setting values for directory requests when one is not specified.
directory_in_memory	Y | <u>N</u>	During directory operation in CONNECT:Enterprise HTTP Option, directory information received from CONNECT:Enterprise servers is spooled for further processing by CONNECT:Enterprise HTTP Option. This requires write permissions for CONNECT:Enterprise HTTP Option in order to build the temporary file. On some UNIX systems, CONNECT:Enterprise HTTP Option does not have the appropriate write permissions on the file system, which leads to a failure of the directory operation. To avoid this problem, specify **directory_in_memory=Y**. This builds the directory listing in memory. The default is directory_in_memory=N.
keycert_file	File name	Specifies the fully qualified file name of the key certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows NT/2000/XP. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.
mailbox_id	Remote user ID	Specifies the name of the mailbox ID to use if one is not specified. If no mailbox_id property is specified, the system uses the same user ID value that connects to the CONNECT:Enterprise server.

Key	Valid Values	Definition
mailbox_server	File name	Specifies the logical name of the CONNECT:Enterprise server you are connecting to if one is unspecified. The value for this property must coincide with the name of one of the server property files. You *must* specify this property or the servlet cannot start.
remote	File name	Specifies the remote property file name or CONNECT:Enterprise user ID to use if one is not specified in a request.
root_cert_file	File name	Specifies the fully qualified file name of the trusted root certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows NT/2000/XP. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.
security_policy	Y | N	Specifies whether secure SSL connections are required. If **security_policy=N** is specified, then no attempt is made to establish a secure connection with the CONNECT:Enterprise server. If **security_policy=Y** is specified, then a secure connection is attempted with the CONNECT:Enterprise server. If an error occurs, the session fails without attempting a non-secure connection. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.
servlet_info	String	Specifies the value returned when the getServletInfo() method is invoked.
session_timeout	nnnn | 300	Specifies the number of inactive seconds the software waits before the session is terminated. When the time-out period is exceeded, the FTP connection established on behalf of a user between the servlet and a CONNECT:Enterprise server is terminated. Units are seconds. The maximum value is 1800. **Note:** The FTP server time-out, the Web server, or the servlet engine time-outs can override this time-out.
ssl_passphrase	Encrypted passphrase	Specifies the encrypted passphrase used to access the key certificate file. This key and value are created in *Protecting Your SSL Passphrase* on page 4-4. Copy and paste the key and value stored in the text file you created. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.

Customizing the Server Property Files

The server property files contain details on the CONNECT:Enterprise servers that process user requests. Users can only make requests of CONNECT:Enterprise servers that have an associated server property file. Therefore, you must create a server property file for each CONNECT:Enterprise server that is accessed by CONNECT:Enterprise HTTP Option.

The CONNECT:Enterprise logical server names are used as the name of the server property files. For example, if you have three CONNECT:Enterprise servers called MServer1, MServer 2, and MServer 3 then you can have as many as three server property files named *MServer1*, *MServer2*, and, *MServer3*.

These names are aliases. The alias points to a file that contains the true identity and port number of the CONNECT:Enterprise server. For example, if you do not want users to know what the true name of the CONNECT:Enterprise server (such as *enterprise.secure.company.com)*, you can give the file an alias, such as *company.* When users want to receive files from the CONNECT:Enterprise server, they type *company* in the **CONNECT:Enterprise Server Input** field. Following is a sample server property file:

```
address=111.111.111.111
port=10021
port_range=r0,r1,r2,r3,r4
port_retry_wait_time=30
port_retries=0
cipher_strength=weak
description=CONNECT:Enterprise Option
download_confirm_mode=N
ftp_passive_mode=N
keycert_file=key_certificate_file
root_cert_file=trusted_root_certificate_file
security_policy=N
ssl_client_ccc_policy=DISALLOWED
ssl_passphrase=ENCRYPTED_passphase
trigger_flag=N
```

Use the following procedure to customize the server property file:

1. Navigate to the following directory:

   ```
   Installation_Directory\cehttp\property
   ```

   Replace *Installation_Directory* with the CONNECT:Enterprise HTTP Option installation directory.

2. Open the server property file with any plain-text editor such as Notepad, WordPad, or vi editor.

3. Based on the definitions and valid values in *System Property File Key/Value Pairs* on page 5-4, modify the Key/Value pair.

   Note: Keys are case sensitive. If the keys are not specified correctly, CONNECT:Enterprise HTTP Option ignores them and uses default keys and values.

4. Save the property file.

5. Validate your changes with the pfcheck utility using the following command:

   ```
   java -classpath CEHTTP_Deploy_Directory/cehttp/tools/pfcheck.jar pfcheck -server
   filename
   ```

The following table describes the parameters for pfcheck:

Argument	Definition
CEHTTP_Deploy_Directory	Directory inside your Web server directory where CONNECT:Enterprise HTTP Option is deployed.
filename	Name of the server file you are checking. Use the absolute path or relative path of the file.

For help with the pfcheck utility, type **java pfcheck -help** or **java pfcheck -?**

Server Property File Key/Value Pairs

The server property file contains the following keys and possible values:

Key	Valid Values	Definition
address	IP address or domain name (Required)	Specifies either the domain name or IP address (in dotted-decimal notation
cipher_strength	strong | weak | <u>all</u>	Specifies the type of cipher suites: **strong** allows only cipher suites greater than 40-bit, **weak** allows only 40-bit, and **all** allows both. Strong cipher suites are: • SSL_RSA_WITH_RC4_128_MD5 • SSL_RSA_WITH_RC4_128_SHA • SSL_RSA_WITH_DES_CBC_SHA • SSL_RSA_WITH_3DES_EDE_CBC_SHA Weak cipher suites are: • SSL_RSA_EXPORT_WITH_RC4_40_MD5 • SSL_RSA_EXPORT_WITH_DES40_CBC_SHA **Note:** If you specify this key in the system property file, do not specify any security-related keys in the server or remote property files.
description	User-defined	Specifies descriptive information about this server property file.
download_confirm_mode	Y | <u>N</u>	Indicates whether to enable file transfer acknowledgement. If **download_confirm_mode=Y** is set, the **Receive Confirmation** window is displayed in addition to the **File Download** dialog box. You must indicate whether or not the file was successfully received by the server. This ensures that the correct batch flags are set in the CONNECT:Enterprise server in the case of a transmission error. **Note:** If **download_confirm_mode=Y** is set, Netscape Navigator users can only receive one file at a time. The Receive function behaves the same as the Directory function.
ftp_passive_mode	Y | <u>N</u>	Specifies whether CONNECT:Enterprise HTTP Option uses normal or passive mode transfer. N specifies normal mode transfer. This is the default. Y specifies passive mode transfer. In this mode, CONNECT:Enterprise HTTP Option sends a PASV command to the CONNECT:Enterprise server. The CONNECT:Enterprise server returns a valid port and IP address.

Key	Valid Values	Definition
keycert_file	File name	Specifies the fully qualified file name of the key certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows 2000/NT. **Note:** If you specify this key in the server property file, you cannot specify any security-related keys in the system or remote property files.
port	Port number	Specifies the FTP port number of this CONNECT:Enterprise server. If the port number is not specified, it defaults to 10021.
port_range	Port range	Specifies one or more local port ranges used by the data connection when in active mode so they match the range allowed by the firewall. Specify as a comma-separated list. Each range is a hyphen-separated low and high value used to define the port range. You can specify a maximum of 5 port ranges in each server property file. There is no default range. Following is an example: port_range=10022-10200,20022-20022
port_retries	0–99	Specifies the number of times the ports defined in the port_range attribute are re-examined to find an available port. The default value is zero 0, and indicates that port ranges are searched once per socket attempt.
port_retry_wait_time	0–180	Specifies the number of seconds that CONNECT:Enterprise HTTP Option waits before attempting a retry of the port search. The default is 30.
root_cert_file	File name	Specifies the fully qualified file name of the trusted root certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows 2000/NT. **Note:** If you specify this key in the server property file, you cannot specify any security-related keys in the system or remote property files.
security_policy	Y | N	Specifies whether secure SSL connections are required. If **security_policy=N** is specified, then no attempt is made to establish a secure connection with the CONNECT:Enterprise server. If **security_policy=Y** is specified, then a secure connection is attempted with the CONNECT:Enterprise server. If an error occurs, the session fails without attempting a non-secure connection. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.

Key	Valid Values	Definition
ssl_client_ccc_policy	REQUIRED | DISALLOWED | OPTIONAL	Specifies whether to turn off encryption by issuing an FTP Clear Control Channel (CCC) command in a control socket that has been secured using SSL. DISALLOWED specifies that CONNECT:Enterprise HTTP Option does not issue the FTP CCC command after a secure or unsecured connection has been established with a CONNECT:Enterprise server. This is the default. REQUIRED specifies that CONNECT:Enterprise HTTP Option issues an FTP CCC command after it has established a secured connection and the browser user has been authenticated by the CONNECT:Enterprise server. OPTIONAL specifies that CONNECT:Enterprise HTTP Option submits an FTP CCC command to the CONNECT:Enterprise server. If a positive result code is returned from the server, CONNECT:Enterprise HTTP Option goes into a clear text state for the control socket. If a negative result code is returned from the server, CONNECT:Enterprise HTTP Option stays in an encrypted state.
ssl_passphrase	Encrypted passphrase	Specifies the encrypted passphrase used to access the key certificate file. This key and value are created in *Protecting Your SSL Passphrase* on page 4-4. Copy and paste the key and value stored in the text file you created. **Note:** If you specify this key in the server property file, you cannot specify any security-related keys in the system or remote property files.
trigger_flag	Y | N	Indicates if the batch placed in the remote server repository should be immediately sent to other remote sites after an upload operation. If **trigger_flag=Y** is set in the server or remote property files or the **Trigger automatic routing** check box is checked on the Upload Web page, then the CONNECT:Enterprise server triggers automatic routing. **Note:** If the action parameters are not specified in the CONNECT:Enterprise for UNIX RSD or ACD files, the trigger flag is ignored. If the server is a CONNECT:Enterprise for OS/390, the trigger flag is not supported and an error message is generated.

Customizing the Remote Property Files

The remote property files contain values that the CONNECT:Enterprise HTTP Option software uses to process user requests. The actual CONNECT:Enterprise user ID and the values used by CONNECT:Enterprise HTTP Option to handle user requests are defined in these files.

Remote property file names are the logical names of the users or groups allowed to use CONNECT:Enterprise HTTP Option. They are set up by the CONNECT:Enterprise HTTP Option administrator. Their names do not have to match the corresponding CONNECT:Enterprise user ID, but they can.

Note: If the **defined_remotes_only** key of the system property file is set to **Y**, at least one remote property file must exist.

Following is a sample remote property file:

```
data_format=B
description=CONNECT:Enterprise HTTP Test Remote File
directory=directory_file_name
keycert_file=key_certificate_file
mailbox_id=mailboxid
mailbox_server=mailboxserver_file_name
password=password
root_cert_file=trusted_root_certificate_file
security_policy=N
ssl_passphrase=ENCRYPTED_passphase
trigger_flag=N
user_id=userid
```

Use the following procedure to customize the remote property file:

1. Navigate to the following directory:

   ```
   Installation_Directory\cehttp\remote\
   ```

   Replace *Installation_Directory* with the CONNECT:Enterprise HTTP Option is installation directory.

2. Open the remote property file with any plain-text editor such as Notepad, WordPad, or vi editor.

3. Based on the definitions and valid values in *Remote Property File Key/Value Pairs* on page 5-11, modify the Key/Value pair.

   Note: Keys are case sensitive. If the keys are not specified correctly, CONNECT:Enterprise HTTP Option ignores them and uses default keys and values.

4. Save the property file.

5. Validate your changes with the pfcheck utility using the following command:

   ```
   java -classpath CEHTTP_Deploy_Directory/cehttp/tools/pfcheck.jar pfcheck -remote
   filename
   ```

   The following table describes the parameters for pfcheck:

Argument	Definition
CEHTTP_Deploy_Directory	Directory inside your Web server directory where CONNECT:Enterprise HTTP Option is deployed.
filename	Name of the server file you are checking. Use the absolute path or relative path of the file.

   For help with the pfcheck utility, type **java pfcheck -help** or **java pfcheck -?**

Remote Property File Key/Value Pairs

The remote property file contains the following keys and possible values:

Key	Valid Values	Definition
cipher_strength	strong | weak | all	Specifies the type of cipher suites: **strong** allows only cipher suites greater than 40-bit, **weak** allows only 40-bit, and **all** allows both. Strong cipher suites are: • SSL_RSA_WITH_RC4_128_MD5 • SSL_RSA_WITH_RC4_128_SHA • SSL_RSA_WITH_DES_CBC_SHA • SSL_RSA_WITH_3DES_EDE_CBC_SHA Weak cipher suites are: • SSL_RSA_EXPORT_WITH_RC4_40_MD5 • SSL_RSA_EXPORT_WITH_RC2_CBC_40_MD5 • SSL_RSA_EXPORT_WITH_DES40_CBC_SHA **Note:** If you specify this key in the system property file, do not specify any security-related keys in the server or remote property files.
data_format	A | B	Specifies the data type used for files sent. **A** means ASCII and **B** means binary. Binary is the default.
description	User-defined	Specifies descriptive information about this remote property file.
directory	File name	Specifies the directory property file to use to set values for directory requests.
keycert_file	File name	Specifies the fully qualified file name of the key certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows NT/2000/XP. **Note:** If you specify this key in the remote property file, you cannot specify any security-related keys in the system or server property files.
mailbox_id	User-defined	Specifies the default mailbox ID to use if one is not specified in a request. This parameter is a 1 to 8 character alphanumeric string.
mailbox_server	File name	Specifies the logical name of the default server to connect with if it is unspecified. This value must coincide with one of the server property file names in the server property file directory. This value is used if no value is specified in the user request.
password	User-defined	Specifies the password corresponding to the user_id property value. If no value is specified, the system assumes that either no password is associated with the user_id or that a password is specified in a request. Password syntax is determined by the CONNECT:Enterprise server. Contact your system administrator for information on password syntax. **Note:** If the password key is assigned to a remote file with password encoding activated, it is not protected by anything other than the operating system file protection. To turn on password encoding, refer to *Protecting Your SSL Passphrase* on page 4-4.
root_cert_file	File name	Specifies the fully qualified file name of the trusted root certificate file. When specifying the path, you must use forward slashes (/) for UNIX and double back slashes (\\) for Windows NT/2000/XP. **Note:** If you specify this key in the remote property file, you cannot specify any security-related keys in the system or server property files.

Key	Valid Values	Definition
security_policy	Y | N	Specifies whether secure SSL connections are required. If **security_policy=N** is specified, then no attempt is made to establish a secure connection with the CONNECT:Enterprise server. If **security_policy=Y** is specified, then a secure connection is attempted with the CONNECT:Enterprise server. If an error occurs, the session fails without attempting a non-secure connection. **Note:** If you specify this key in the system property file, you cannot specify any security-related keys in the server or remote property files.
ssl_passphrase	Encrypted passphrase	Specifies the encrypted passphrase used to access the key certificate file. This key and value is created in *Protecting Your SSL Passphrase* on page 4-4. Copy and paste the key and value stored in the text file you created. **Note:** If you specify this key in the remote property file, you cannot specify any security-related keys in the system or server property files.
trigger_flag	Y | N	Indicates if the batch placed in the remote server repository should be immediately sent to other remotes after an upload operation. If **trigger_flag=Y** is set in the server or remote property files or the **Trigger automatic routing** check box is checked on the Upload Web page, then the CONNECT:Enterprise server triggers automatic routing. **Note:** If the action parameters are not specified in the CONNECT:Enterprise for UNIX RSD or ACD files, the trigger flag is ignored. If the server is a CONNECT:Enterprise for OS/390, the trigger flag is not supported and an error message is generated.
user_id	User-defined	Specifies the default user ID used when logging on to the CONNECT:Enterprise system if not otherwise specified. If no value is specified for the user_id, then the remote property file name is used if no value is specified in the user request. This value is a 1 to 8 character alphanumeric string.

Customizing the Directory Property Files

The directory property files store content and formatting information used by CONNECT:Enterprise HTTP Option. These files determine the type of data returned in response to a directory request. A system property file, a remote property file, or both, can reference a directory property file. However, it is not necessary to define any directory property files for CONNECT:Enterprise HTTP Option to function.

Following is a sample directory property file:

```
show_batch_id=U
show_batch_num=Y
show_creation_date=Y
show_creation_time=Y
show_data_format=N
description=CONNECT:Enterprise HTTP Test Directory
show_mailbox_id=Y
show_flags=Y
show_originator_id=N
show_deleted_batches=N
show_unrequestable_batches=N
show_size=Y
```

Use the following procedure to customize the directory property file:

1. Navigate to the following directory:

```
Installation_Directory\cehttp\property
```

   Replace *Installation_Directory* with the CONNECT:Enterprise HTTP Option is installation directory.

2. Open the directory property file with any plain-text editor such as Notepad, WordPad or vi editor.
3. Based on the definitions and valid values in *Directory Property File Key/Value Pairs* on page 5-13, modify the Key/Value pair.

> **Note:** Keys are case sensitive. If the keys are not specified correctly, CONNECT:Enterprise HTTP Option ignores them and uses default keys and values.

4. Save the property file.
5. Validate your changes with the pfcheck utility using the following command:

```
java -classpath CEHTTP_Deploy_Directory/cehttp/tools/pfcheck.jar pfcheck
-directory filename
```

   The following table describes the parameters for pfcheck:

Argument	Definition
CEHTTP_Deploy_Directory	Directory inside your Web server directory where CONNECT:Enterprise HTTP Option is deployed.
filename	Name of the server file you are checking. Use the absolute path or relative path of the file.

   For help with the pfcheck utility, type **java pfcheck -help** or **java pfcheck -?**

Directory Property File Key/Value Pairs

The directory property file contains the following keys and possible values:

Key	Valid Values	Definition
description	User-defined	Specifies descriptive information about this directory property file.
show_batch_id	Y | N | U	Indicates whether batch IDs for batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. **U** means yes and also that batch IDs are displayed as URLs so that if selected, a receive operation is initiated. The value in the directory is the batch ID. **Note:** If users of CONNECT:Enterprise HTTP Option are using Internet Explorer for their Web browser, set this key to **U**. If not, Internet Explorer users cannot receive any files.

Key	Valid Values	Definition
show_batch_num	Y | N	Indicates whether batch numbers for batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the batch number.
show_creation_date	Y | N	Indicates whether the creation dates of batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the creation date of the batch in MonthDDCCYY format.
show_creation_time	Y | N	Indicates whether the creation times of batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the creation time of the batch in HHMM format.
show_data_format	Y | N	Indicates whether the data types of batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is **A** for ASCII or **B** for binary. **Note:** The data format is presented from the perspective of the user not from the CONNECT:Enterprise server view.
show_flags	Y | N	Indicates whether the flag values for batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The values in the directory are CONNECT:Enterprise flags, such as RTME.
show_mailbox_id	Y | N	Indicates whether the mailbox IDs for batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the mailbox ID.
show_originator_id	Y | N	Indicates whether the originator of the batch is displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the name of the remote or user that added the batch.
show_deleted_batches	Y | N	Indicates whether the logically deleted batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no.
show_unrequestable_batches	Y | N	Indicates whether only the transmittable batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no.
show_size	Y | N	Indicates whether the sizes of batches are displayed for directory list operations if unspecified. **Y** means yes. **N** means no. The value in the directory is the size of the batch in bytes.

Chapter 6

Customizing the User Interface

This chapter provides information on customizing the CONNECT:Enterprise HTTP Option user interface.

Using the Change Password Function

If you are using a CONNECT:Enterprise server that supports the change password function, you will need to change the logon page. Perform the following:

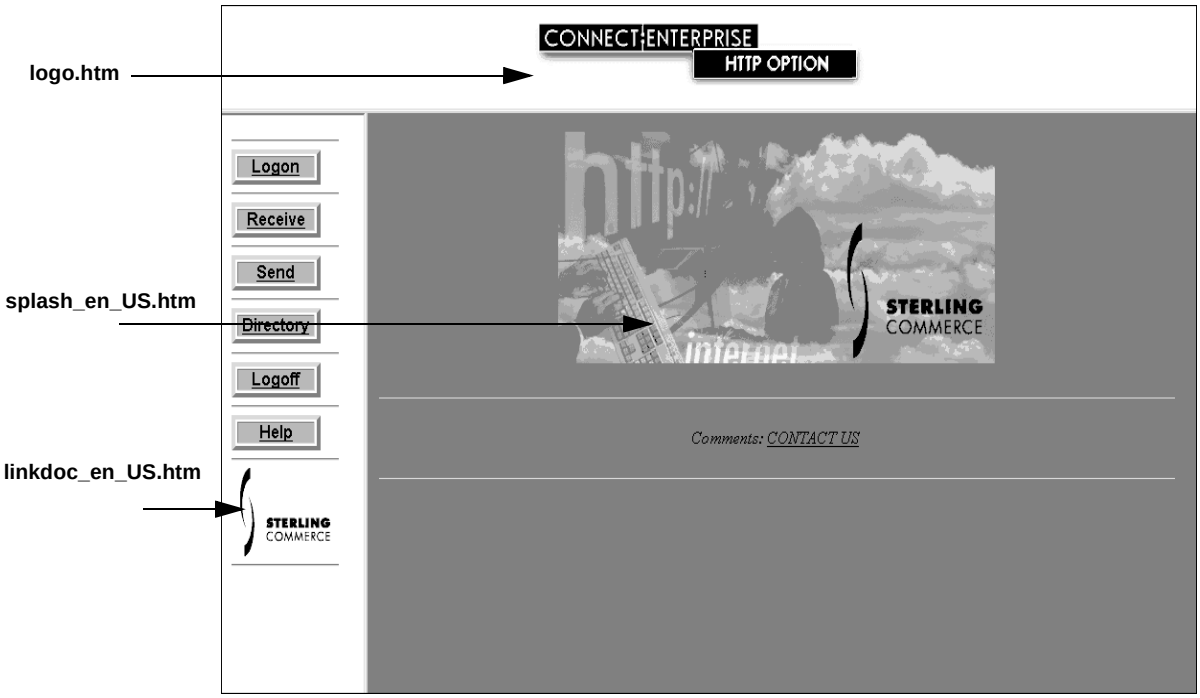
1. In the *Installation_Directory*\cehttp\html folder, rename **logon_en_US.htm** to **logon_en_US.htm.nopassword**
2. In the *Installation_Directory*\cehttp\html folder, rename **logon_en_US.htm.changepassword** to **logon_en_US.htm**

Installation_Directory is the directory where CONNECT:Enterprise HTTP Option is installed.

Customizing Your HTML Pages

You can change the look of the user interface by editing the HTML pages. These pages are located in the *Installation_Directory*\cehttp\html directory. *Installation_Directory* is the directory where CONNECT:Enterprise HTTP Option is installed.

The main page is made up of three different pages displayed in three frames as follows:



You can customize each of these pages to display different graphics. Use the following procedure:

1. Place the graphics you want to use in the *Installation_Directory*\cehttp\html\images directory.
2. Open and edit the HTML page and replace the original graphic name with the name of the graphic you placed in step 1. The following table identifies the original name of the graphic in each page.

Page	Name of the Original Graphic
logo.htm	mbwa.gif
splash_en_US.htm	wasplash.gif
linkdoc_en_US.htm	sterlogo.gif

3. Save the HTML page.

Additionally, you can edit the remaining HTML pages by adding or removing the appropriate HTML code.

Page	HTML File Name	Description
Logon	logon_en_US.htm	Is displayed when you click **Logon**.
Send	upload_en_US.htm	Is displayed when you click **Send**.
Receive	download_en_US.htm	Is displayed when you click **Receive**.
Directory	dirlist_en_US.htm	Is displayed when you click **Directory**.
Help	help_en_US.htm	Is displayed when you click **Help**.

Redirecting CONNECT:Enterprise HTTP Option

CONNECT:Enterprise HTTP Option enables you to change the way CONNECT:Enterprise HTTP Option behaves after an event. When a CONNECT:Enterprise HTTP Option event is complete, it first searches the cehttp/html directory for an HTML file with a specific name. If this file does not exist, CONNECT:Enterprise HTTP Option displays the default HTML file associated with the event.

For example, after a successful logon, CONNECT:Enterprise HTTP Option searches the cehttp/html directory for a file named MSG_LOGON_SUCCESSFUL.htm. If this file does not exist, CONNECT:Enterprise HTTP Option displays the default HTML file associated with a successful logon:

```
Servlet has returned the following message
Logon is successful.
```

You can change this behavior by creating the MSG_LOGON_SUCCESSFUL.htm file in the cehttp/html directory. After a successful logon, CONNECT:Enterprise HTTP Option opens the MSG_LOGON_SUCCESSFUL.htm page rather than the default HTML file. This behavior is called redirection.

You can redirect CONNECT:Enterprise HTTP Option to any HTML code. You can create code that is as simple as displaying simple text, or as complicated as requesting CONNECT:Enterprise HTTP Option to perform additional operations.

To redirect CONNECT:Enterprise HTTP Option, perform the following procedure:

1. Select the event that you want to redirect CONNECT:Enterprise HTTP Option from.
2. Create the HTML file that you want to redirect CONNECT:Enterprise HTTP Option to.
3. Save the HTML file you created in step 2 to the *{WEBSERVER_INSTALL_DIR}*/cehttp/html directory and give it the required HTML file name associated with the event you selected in step 1. Refer to the following table for the required file names:

Event	Required HTML File Name
Invalid batch ID detected.	MSG_BATCHID_FAILED.htm
Clear channel control command has failed.	MSG_CCC_ERROR.htm
Your password has not been changed, contact system administrator for further information. (Note: This will fail if the current password was not valid.)	MSG_CHGPWD_FAILED.htm
Your password has not been changed, contact system administrator for further information. You can still log on with your original password.	MSG_CHGPWD_FAILED_USER.htm
Your password has been successfully changed.	MSG_CHGPWD_SUCCESSFUL.htm
Server CONFIRM action failed.	MSG_CONFIRM_FAILED.htm
The server has been notified that the file was successfully received.	MSG_CONFIRM_SUCCESSFUL.htm
Cannot connect to server.	MSG_CONNECT_FAILED.htm
Cannot create an instance.	MSG_CREATE_INSTANCE_ERROR.htm
Default Mailbox server does not exist.	MSG_DEFAULT_SERVER_ERROR.htm

Event	Required HTML File Name
Directory property file is not found.	MSG_DIR_FILE_NOT_FOUND.htm
A directory property file is not readable.	MSG_DIR_FILE_NOT_READABLE.htm
Download confirmation required but not implemented on CONNECT:Enterprise server.	MSG_DOWNLOAD_CONFIRMATION_REQUIRED
The File was received successfully.	MSG_DOWNLOAD_SUCCESSFUL.htm
Unknown error.	MSG_ERROR.htm
No file name specified on upload page.	MSG_FILE_NOT_ATTACHED.htm
A file is not found.	MSG_FILE_NOT_FOUND.htm
A file is not readable.	MSG_FILE_NOT_READABLE.htm
A format error is encountered.	MSG_FORMAT_ERROR.htm
Your current password is not a valid password. Please try again.	MSG_INVALID_CURRENT_PWD.htm
The HTML page format is incorrect.	MSG_INVALID_HTML_FORMAT.htm
Invalid port range detected.	MSG_INVALID_PORT_RANGE.htm
Invalid request, bad parameters.	MSG_INVALID_REQUEST.htm
An I/O error is encountered.	MSG_IO_ERROR.htm
Logoff is successful.	MSG_LOGOFF_SUCCESSFUL.htm
The logon was successful.	MSG_LOGON_SUCCESSFUL.htm
You have to select a new password that is different from the current password.	MSG_NEWPWD_MATCH_OLD.htm
No available batches match receive criteria.	MSG_NO_BATCH.htm
Class cannot be dynamically loaded.	MSG_NO_CLASS.htm
No user ID is specified.	MSG_NO_REMOTE_DEFINED.htm
No user ID is defined.	MSG_NO_USERID.htm
User is not logged on.	MSG_NOT_LOGGED_ON.htm
Your new password does not match the re-entered new password. Please try again.	MSG_NOT_MATCH_PWD.htm
No available port found in the specified port ranges.	MSG_PORT_RANGE_ERROR.htm
Your password has expired; please change your password now.	MSG_PWD_EXPIRED.htm
You have to enter a new password.	MSG_PWD_ZERO_LENGTH.htm
Batch (file) receive failed.	MSG_RECEIVE_FAILED.htm
A remote property file is not found.	MSG_REMOTE_FILE_NOT_FOUND.htm
A remote property file is not readable.	MSG_REMOTE_FILE_NOT_READABLE.htm
A remote property is used out of context.	MSG_REMOTE_PROPERTY_ONLY.htm
Server ROLLBACK action failed.	MSG_ROLLBACK_FAILED.htm

Event	Required HTML File Name
The server has been notified that the file requested was NOT received.	MSG_ROLLBACK_SUCCESSFUL.htm
Batch (file) send failed.	MSG_SEND_FAILED.htm
A server property file is not found.	MSG_SERVER_FILE_NOT_FOUND.htm
A server property file is not readable.	MSG_SERVER_FILE_NOT_READABLE.htm
An invalid server IP address is detected.	MSG_SERVER_IP_INVALID.htm
An invalid server port is detected.	MSG_SERVER_PORT_INVALID.htm
Cannot set timeout.	MSG_SET_TIMEOUT_ERROR.htm
SSL connection failed.	MSG_SSL_FAILED.htm
Error occurred loading KeyCert file.	MSG_SSL_KEYCERT_FAILED.htm
No cipher suite specified for SSL connection.	MSG_SSL_NO_CIPHER.htm
Error occurred loading trusted root file.	MSG_SSL_ROOT_FAILED.htm
SSL connection established.	MSG_SSL_SUCCESSFUL.htm
Invalid timeout value entered.	MSG_TIMEOUT_VALUE_INVALID.htm
Transmission failed.	MSG_TRANSMISSION_FAILED.htm
Transmission failed.	MSG_TRANSMISSION_FAILED_UNKNOWN.htm
Server unknown.	MSG_UNKNOWNHOSTEXCEPTION.htm
Send of a file is successful.	MSG_UPLOAD_SUCCESSFUL.htm

Localizing the User Interface

CONNECT:Enterprise HTTP Option is designed to allow you to localize the application, that is, customize the language for all screens and messages. Sterling Commerce provides translations into many different languages on the support Web site. You can also incorporate your own translations into the product.

Accessing the Localization Files

The files required for localization are available on the Sterling Commerce Customer Support Web site. To access these files, complete the following steps.

1. Access the login page at https://commerce.support.sterlingcommerce.com/Start/Login.asp.
2. Type your login information and click **Login**.

> **Note:** To obtain a user ID and password, request one online at the Login page. Refer to the *CONNECT:Enterprise HTTP Option Release Notes* for more information.

3. Under **product family support** in the left-hand navigation frame, click **connect support**.

4. Under **product downloads**, in the left-hand navigation frame, click **CONNECT:Enterprise**.

   A new browser windows opens.

5. Click **CONNECT:Enterprise HTTP Option**.

   The translated packages and the translator instructions are listed.

Installing a Translation Package

To use CONNECT:Enterprise HTTP Option in a language other than English, you must download the appropriate package, copy the individual files to the correct locations, and make a few configuration changes.

Downloading a Language Package

To download a language package, select the appropriate language and country from the list of translated packages and save it to a temporary location. The package is in ZIP format and contains all necessary files to convert CONNECT:Enterprise HTTP Option to the new language.

Copying the Files

You must copy the individual files contained within the ZIP file to the appropriate locations within the cehttp directory structure.

To copy the files, complete the following steps:

1. Make a copy of the existing *{WEBSERVER_INSTALL_DIR}*/cehttp/html directory to prevent overwrite.
2. Copy all .htm files from the ZIP file to the cehttp/html directory.
3. Navigate to the cehttp/WEB-INF/classes directory.
4. Copy the property file named **message** for your language from the ZIP file to this directory.

Changing the Configuration

1. Navigate to the following directory, where WEB_SERVER_*ROOT_DIR* is the directory where your Web server is installed:

   ```
   WEB_SERVER_ROOT_DIR/webapps/cehttp/WEB-INF
   ```

2. Edit the web.xml file by changing the country code and the language code to the language you are using.

   Available language codes are:

Language	Code
English	en
Norwegian	no
German	de
Spanish	es
Italian	it
French	fr
Portuguese	pt

Available country codes are:

Country	Code
United States	US
Great Britain	GB
Canada	CA
France	FR
Germany	DE
Spain	ES
Norway	NO
Italy	IT
Mexico	MX
Portugal	PT

3. Restart your Web server or servlet and verify the changes.
   - Verify that all buttons, Web pages, and return messages are displayed in the correct language.
   - Verify the format of dates, time stamps, and other elements in the directory listing.

Creating a New Translation

To create a translation for a new language or locale, download all the files under the Translator Instructions heading on the CONNECT:Enterprise HTTP Option download site. Follow the instructions in the CONNECT:Enterprise HTTP Option localization document listed as Translator Instructions.

Chapter 7

Monitoring CONNECT:Enterprise HTTP Option

CONNECT:Enterprise HTTP Option uses two methods of monitoring the processing flow of data within the system: tracing and logging. Both methods occur on the Web server running the CONNECT:Enterprise servlet engine and the CONNECT:Enterprise HTTP Option software.

Tracing CONNECT:Enterprise HTTP Option Activity

Tracing is unique to CONNECT:Enterprise HTTP Option and refers to a system function that, when activated, records all method calls and other information. Under normal circumstances, do not activate tracing. If tracing is necessary, contact a Sterling Commerce Customer Service Representative before activating the feature.

When activated, the tracing process starts when the CONNECT:Enterprise servlet starts. CONNECT:Enterprise HTTP Option gathers information until the CONNECT:Enterprise HTTP Option servlet is stopped. All data recorded is stored in the *Installation_Directory*\cehttp folder in a file named **trace**. When you restart the servlet engine, the trace file automatically refreshes and old trace data is lost.

Perform the following procedure to trace CONNECT:Enterprise HTTP Option activity:

1. For the UNIX and Windows operating systems, navigate to the following directory. Replace *{WEBSERVER_ROOT_DIR}* with the name of the directory where cehttp is deployed.

   ```
   {WEBSERVER_INSTALL_DIR}/cehttp/WEB-INF
   ```

   For OS/390, navigate to the following directory. Replace *applicationserverroot* with the IBM WebSphere installation directory.

   ```
   applicationserverroot/AppServer/hosts/default_host/cehttp/servlet/
   ```

2. For the UNIX and Windows operating systems, open the web.xml file.

   For OS/390, open the cehttp.webapp file.

3. Edit the file by changing the debug parameter value to one of the following:

Value	Description
0	Turns off tracing. This is the default.
1	Records the method entered or returned.
2	Records key information about the method entered or returned.
3	Records all information about the method entered or returned.

Following is an example for the UNIX or Windows operating systems:

```
<init-param>
  <param-name>debug</param-name>
  <param-value>3</param-value>
</init-param>
```

Following is an example for OS/390:

```
<init-param>
  <name>debug</name>
  <value>3</value>
</init-param>
```

4. Save the file.
5. Perform the operations that you want to trace.
6. Rename the **trace** file located in directory where cehttp is deployed and save it to a location where you want to store historical trace information.

If you do not frequently restart the Web application, your trace information can grow dramatically in size. Manage the size of this file by opening the file in a text editor and moving the existing trace information to a new file. Save the new file to a location where you plan on storing your trace information.

Logging CONNECT:Enterprise HTTP Option Activity

Logging refers to a server function that, when activated, records transmissions and information that is generated while the servlet engine is processing requests. The recorded information includes who is logged in, where they are logged in, specific FTP information, and what error occurred.

The logging process is initialized when the servlet engine is started, and the servlet continues to monitor information until the servlet engine is stopped. Unlike the trace file, the log file does not refresh when the servlet engine is restarted. If you are using JRun, the log file is found at *jrun*\j*sm-default*\services\jse\logs\event.log.

1. For the UNIX and Windows operating systems, navigate to the following directory. Replace *{WEBSERVER_ROOT_DIR}* with the name of the directory where cehttp is deployed.

```
{WEBSERVER_INSTALL_DIR}/cehttp/WEB-INF
```

   For OS/390, navigate to the following directory. Replace *applicationserverroot* with the IBM WebSphere installation directory.

```
applicationserverroot/AppServer/hosts/default_host/cehttp/servlet/
```

2. For the UNIX and Windows operating systems, open the web.xml file.

   For OS/390, open the cehttp.webapp file.

3. Edit the file by changing the debug parameter value to one of the following:

Value	Description
0	Turns on minimal logging. Only stop, start, and errors are recorded.
1	Turns on maximum logging. All obtainable information about user requests and error messages is logged.

   Following is an example for the UNIX and Windows operating systems:

```
<init-param>
  <param-name>logging</param-name>
  <param-value>1</param-value>
</init-param>
```

   Following is an example for OS/390:

```
<init-parameter>
  <name>logging</name>
  <value>1</value>
</init-parameter>
```

4. Save the file.

Because the log file is not refreshed, it can grow very large. If you activate logging, you must maintain this file to keep your system running efficiently. The best way to manage the log file is to open the file in a text editor and move the existing logs to a new file. Save the new file to a location where you plan on storing your log information.

Appendix A

Installation Worksheets

This appendix provides worksheets that correspond to CONNECT:Enterprise HTTP Option installation on the Windows NT/2000/XP and UNIX systems. Use these worksheets to guide you through the installation process.

CONNECT:Enterprise HTTP Option Installation Worksheet for the UNIX Operating System

Complete this worksheet *before* you install CONNECT:Enterprise HTTP Option. You are prompted for the information on this worksheet during the CONNECT:Enterprise HTTP Option installation and configuration.

Install CONNECT:Enterprise HTTP Option for the UNIX Operating System

1. Locate the user ID and password for the Web server and servlet engine you are using. Use the same user ID and password for both.

   Web server user ID and password:_____

   Servlet engine user ID and password:_____

2. Locate the full path to the cpio file containing the CONNECT:Enterprise HTTP Option software. This file is located on the CONNECT:Enterprise HTTP Option CD-ROM.

   The full path name is:_____

3. Destination directory where you want to install CONNECT:Enterprise HTTP Option.

   The full path name is:_____

4. Choose the CONNECT:Enterprise server you want to connect to.

   The default server property file stores the server address and ftpd port information.

   ❑ Type the CONNECT:Enterprise server file name:_____

5. Choose the session time-out value.

   The value for the keyword session_timeout determines how long the servlet waits before it terminates an inactive session.

   ❑ Accept default session time-out value: **300 seconds**

   ❑ Type a different session time-out value (up to a maximum of 1800)

   New session time-out value: _____

6. Locate the address for the selected CONNECT:Enterprise server.

   The value for the server address is either a fully qualified domain name or an IP address (host.universe.com or 10.10.10.10).

   The CONNECT:Enterprise server address is: _____

7. Locate the port number for ftpd of the selected CONNECT:Enterprise server.

   The value of the port number is the port that the ftpd monitors. It must be an integer between **0** and **65535**.

   The CONNECT:Enterprise server port number is: _____

CONNECT:Enterprise HTTP Option Upgrade Installation Worksheet for the UNIX Operating System

Complete this worksheet *before* you upgrade CONNECT:Enterprise HTTP Option. You are prompted for the information on this worksheet during the CONNECT:Enterprise HTTP Option installation and configuration.

Install CONNECT:Enterprise HTTP Option for the UNIX Operating System

1. Locate the full path to the cpio file containing the CONNECT:Enterprise HTTP Option software. This file is located on the CONNECT:Enterprise HTTP Option CD-ROM.

   The full path name is:_____

2. Location of the existing CONNECT:Enterprise HTTP Option property files:

   _____

3. Directory where you want to store your existing CONNECT:Enterprise HTTP Option property files. The directory must meet the following requirements:

   - The directory cannot reside inside the directory where your Web server deploys Web applications.
   - The directory must be empty.
   - You must name the folder **property**, for example, /home/server01/user01/http_1.2.01/**property**/.

   _____

4. Location where you want to install CONNECT:Enterprise HTTP Option:

   _____

5. Location where your existing CONNECT:Enterprise HTTP Option is deployed:

   _____

CONNECT:Enterprise HTTP Option Installation Worksheet for the Windows NT/2000/XP Operating System

Complete this worksheet *before* you install CONNECT:Enterprise HTTP Option.

Install CONNECT:Enterprise HTTP Option for the Windows NT/2000/XP Operating Systems

1. Choose the destination directory for CONNECT:Enterprise HTTP Option. The destination directory is the path your Web server uses to search for HTML files. CONNECT:Enterprise HTTP Option installs its files in this directory, for example, \docs, \NES\docs or \Inetpub\wwwroot.

   The destination directory:_____

2. Choose the file name for the CONNECT:Enterprise server you are connecting to. The default server property file stores server address and ftpd port information. See Chapter 5, *Customizing Property Files*, for more information.

   The CONNECT: Enterprise server property file name:_____

3. Choose the session time-out value.

   This value is the number of inactive seconds CONNECT:Enterprise HTTP Option waits before the logon session is terminated. The default value is **300** seconds.

   ❑ Accept default session time-out value: **300** seconds

   ❑ Type a different session time-out value

   New session time-out value: _____

4. Locate the address for the selected CONNECT:Enterprise server. The value for the server address is either a fully qualified domain name or an IP address (*host.universe.com* or *10.10.10.10*).

   The CONNECT:Enterprise server address is: _____

5. Locate the port number for ftpd of the selected CONNECT:Enterprise server. This number specifies the FTP port of the CONNECT:Enterprise server. The value of port number is the port to which the ftpd monitors. It is an integer between **0** and **65535**.

   Your CONNECT:Enterprise server port number is: _____

CONNECT:Enterprise HTTP Option Upgrade Installation Worksheet for the Windows NT/2000/XP Operating System

Complete this worksheet *before* you upgrade CONNECT:Enterprise HTTP Option.

Install CONNECT:Enterprise HTTP Option for the Windows NT/2000/XP Operating Systems

1. Location of the existing CONNECT:Enterprise HTTP Option property files:
   _____
2. Directory where you want to store your existing CONNECT:Enterprise HTTP Option property files. The directory must meet the following requirements:
   - The directory cannot reside inside the directory where your Web server deploys Web applications.
   - The directory must be empty.
   - You must name the folder **property**, for example, C:/CEHTTP Option/**property**/.

   _____
3. Location where you want to install CONNECT:Enterprise HTTP Option:
   _____
4. Location where your existing CONNECT:Enterprise HTTP Option is deployed:
   _____

Appendix B

Error Messages

This appendix explains error messages related to CONNECT:Enterprise HTTP Option.

Logon Messages

The system returns the following error messages based on different logon conditions:

Message	Condition	Action
Cannot connect to the server.	The *ftpd* is not monitoring the port specified, or the server is down.	Contact your system administrator to verify that the CONNECT:Enterprise server is up and running on the specified port.
Cannot connect to the CONNECT:Enterprise server.	After exhausting the numbers in the port ranges specified in the property file, no valid socket could be created.	Contact your system administrator to verify the available port ranges on the server and change the value of the port_range attribute to include the available port ranges.
Cannot find remote property file.	The Remote property file as entered or specified by the system administrator cannot be found.	Verify that you are entering the correct user ID when logging on.
Cannot find server file.	A value was typed into the CONNECT:Enterprise server field that does not match the file names in the server property directory. This error can also occur if file names are not included in the CONNECT:Enterprise server field, and the default server file is not in the Server property file directory.	Contact your system administrator to verify that the Server property file is in place.
Cannot find directory property file.	The Directory property file cannot be found as entered or specified by the system administrator.	Contact your system administrator to check for the existence of the file and make sure it is readable.
Cannot open directory property file.	The Directory property file is specified, but cannot be opened. Either the file does not exist, or the file is not readable.	Contact your system administrator to check for the existence of the file and make sure it is readable.

Message	Condition	Action
Cannot open remote property file.	The Remote property file cannot be opened.	Contact your system administrator to check for the existence of the file and make sure it is readable.
Cannot open server property file.	The Server property file is specified, but cannot be opened. Either the file does not exist or file is not readable.	Contact your system administrator to check for the existence of the file and make sure it is readable.
Cannot set time_out.	An error occurred while trying to set the socket time_ out.	Contact your system administrator to reinitialize the servlet engine by restarting it. If reinitialization fails, restart the Web server.
Clear control channel command failed.	FTP Clear Control Channel (CCC) command failed to turn off encryption.	Contact your system administrator
CONNECT:Enterprise server hostname/IP address is invalid.	The hostname/IP address you are trying to connect to is invalid.	Contact your system administrator to verify that the keyword address in the Server property file has the proper value.
CONNECT:Enterprise server port number is invalid.	The Server property file does not have a port line or the port is not valid. A test is performed on the port if the value is an integer between 1 and 65535. In all other cases, this error is returned.	Contact your system administrator to type the correct port number in the Server property file.
Default CONNECT:Enterprise server does not exist.	Nothing was typed in the CONNECT:Enterprise server field and the **Mailbox_server** value is not valid in the System property file or in the Remote property file.	Contact your system administrator to set up a default CONNECT:Enterprise server.
Invalid request.	A customized Web page does not contain hidden field operations with proper values.	Contact your system administrator to verify the parameters entered on the HTML form. Make sure that the value for operation is LOGON.
No available port found in the specified ranges.	Port ranges specified in the port_range attribute of the Server property file do not include a port on the server.	Contact your system administrator to change the port_range attribute to include port number available on the server.
No remote value defined.	The remote value is either not defined or cannot be recognized.	Type a valid user ID.
No user ID is specified.	You did not specify a user ID.	Specify a user ID and try again, or contact the system administrator to set up a default remote value in the System property file, or allow the you type one on the log on screen.
Only a user with a remote property file defined can access CONNECT:Enterprise server.	Either the user ID field entry does not match the file in the remote directory, and the **defined_remote_only** value is **Y**, or the user ID field is empty, the remote field does not exist, and the **defined_remote_only** value is Y.	Contact your system administrator to set up the account.
Server Unknown.	The hostname/IP address you are trying to connect to is invalid.	Contact your system administrator to verify that the keyword address in the Server property file has the proper value.

Message	Condition	Action
Time-out value entered is not valid.	The value for **time_out** is not valid.	Contact your system administrator to verify that the value for the keyword session_timeout in the System property file is a positive integer.
You are not logged on to a server. Please log on first.	You sent a request before logging on or after the you were logged off because of a system time-out.	Log on, then attempt your request again.
Your password has expired. Please change your password now.	Your current password has expired.	Change your password.

Change Password Messages

The system returns the following error messages based on change password conditions:

Message	Condition	Action
You are not logged on to a server. Please log on first.	You clicked Change Password before you successfully logged on.	Log on, then attempt to change your password.
You have to enter a new password.	You attempted to change your password, but did not enter a new password.	Attempt to change your password and provide a new password.
You have to select a password that is different from the current password.	You attempted to change your password using your current password.	Attempt to change your password again and provide a new password that is different from your current password.
Your password has expired; please change your password now.	Your current password has expired.	Change your password.
Your current password is not a valid password. Please try again.	When you attempted to log on, you typed an incorrect password.	Attempt to log on again, using the correct password. Contact the system administrator if you do not know your password.
Your new password does not match the reentered password.	The values you typed for New Password and Verify Password are not the same.	Attempt to change your password again, make sure that you type the same values for New Password and Verify Password.
Your password has not been changed, contact system administrator for further information.	The system prompted you to change your password, and your attempt to change your password failed.	Contact your system administrator.
Your password has not been changed, contact system administrator for further information. You can still log on with your current password.	Your attempt to change your password failed.	Log on with your current password and contact your system administrator.

Directory Messages

The system returns the following error messages based on different directory request conditions:

Message	Condition	Action
Cannot find the directory property file.	The system cannot find the Directory property file as it is entered or specified.	Contact your system administrator to check for the existence of the file and make sure it is readable.
Class cannot be dynamically loaded.		Contact your system administrator to verify the correct MailboxServlet.jar file.
Cannot create an instance.	The class may be missing.	Contact your system administrator. When the class is dynamically loaded, a new instance is created. If an error occurs while an instance is being created, try to restart the servlet engine. If restarting the servlet engine fails, restart the Web server.
Invalid request.	A customized Web page does not contain hidden field operations with proper values.	Contact your system administrator to verify the parameters entered on the HTML form. Make sure that the value for operation is DIRECTORY.
No batch available matches your receiving criteria.	This error occurs when there is no batch in the mailbox ID specified, or no batch satisfies the criteria provided.	Verify that the batch requested is available for viewing.
There is a format error.	The return format from dir $$ command is not correct. This message is displayed on UNIX only.	Contact your system administrator to verify that the format settings on the CONNECT:Enterprise server are correct.
There is an I/O error.	A write error occurs during the ftp session or http session.	Retry the request. If it still fails, contact your system administrator to verify that the directory format settings on the CONNECT:Enterprise server are correct.

Send Messages

The system returns the following error messages based on different send conditions:

Message	Condition	Action
Attempt to Close with Data Remaining.	You attempted to send a binary file but indicated that it was an ASCII file.	Resend the file and correctly specify the file type.

Message	Condition	Action
Class cannot be dynamically loaded.		Contact your system administrator to verify that the correct MailboxServlet.jar file is in the JRun/Servlets directory.
File name has not been specified.	You did not type a file name in the Send File Name field and press Send.	Resend the file and verify that you have typed a file name in the file name field.
Invalid batch id detected.	The batch ID specified in the send was too long, or did not match a batch ID on the server.	Correct the batch ID.
Invalid request.	A customized Web page does not contain hidden field operations with proper values.	Contact your system administrator to verify the parameters entered on the HTML form. Make sure that the value for operation is UPLOAD.
Send failed.	Your send request failed due to file permission issues.	Submit the request again. If it still fails, contact your system administrator to check the permissions to verify that you have permission to send files to the mailbox with the ID you specified.
Send failed.	After exhausting the numbers in the port ranges specified in the property file, no valid socket could be created.	Contact your system administrator to verify the available port ranges on the server and change the value of the port_range attribute to include the available port ranges.
There is an I/O error.	A write error has occurred in transmission during the ftp session or http session.	Submit the request again. If it still fails, contact your system administrator to restart the servlet engine, and if needed, restart the Web server.
Parameter not recognized. The following text was not accepted: TRIGGER	You attempted to specify trigger_flag=Y in the property files while sending to a CONNECT:Enterprise for OS/390 server, which does not support the trigger flag feature.	Specify trigger_flag=N in the system, server, and remote property files and attempt to send the file again.

Receive Messages

The system returns the following error messages based on different receive conditions:

Message	Condition	Action
Class cannot be dynamically loaded.		Contact your system administrator to verify the correct MailboxServlet.jar file.
Invalid request.	A customized Web page does not contain hidden field operations with proper values.	Contact your system administrator to verify the parameters entered on the HTML form. Make sure that the value for operation is DOWNLOAD.

Message	Condition	Action
Receive failed.	After exhausting the numbers in the port ranges specified in the property file, no valid socket could be created.	Contact your system administrator to verify the available port ranges on the server and change the value of the port_range attribute to include the available port ranges.
No available batch matches your receiving criteria.	No batch matches your receive criteria.	Contact your system administrator to verify that the batch requested is available for download.
There is an I/O error.	A read error occurred in transmission during the ftp session or http session.	Submit the request again. If it still fails, contact your system administrator to restart the servlet engine and if needed, restart the Web server.

Glossary

A

Applet A program designed to execute from within another application. Unlike an application, you cannot execute applets directly from the operating system.

ASCII American Standard Code for Information Interchange. A standard format used to communicate data between different types of computers. ASCII is the traditional System V coded character set and defines 128 characters, including both control and graphic characters, each of which is represented by 7-bit binary values from 0–127 decimal. An ASCII file created on a UNIX computer is readable on other kinds of computers.

Attribute Characteristics that identify the operation performed and the options for that operation. The attribute values are provided using form fields and hidden parameters within the HTML pages.

B

Batch Attribute Specifies how files are handled after they reach the destination CONNECT:Enterprise server.

Batch ID You can complete a parameter with either a batch number or user batch ID entry. See also *batch number* and *user batch ID.*

Batch Number A sequential number between 1 and 9,999,999 assigned internally by CONNECT:Enterprise to each batch. You can specify this number using the BATCHID= parameter. Obtain the number by either the $$DIRECTORY or the **cmulist** commands. See also *BATCHID* and *user batch ID*.

Binary Data Data that is not in a readable format. For example, executable files are binary data.

C

Class A Java file that is loaded dynamically to expand the functionality of a server. In object-oriented programming, a category of objects defining all the common properties of the different botches that belong to it.

CONNECT:Enterprise for UNIX A Sterling Commerce online telecommunications program that runs in a host computer and manages data collection and data transmission between the host and remote terminals and computers. The system includes command line utilities to manage the batch data storage system. For UNIX, CONNECT:Enterprise supports the standard protocols including Bisync, Async and FTP.

D

Data Format Designates the file type of the file being sent.

Debugging The process of locating and correcting errors in computer programs.

Directory Request Provides a list of batches from the CONNECT:Enterprise data repository by using the HTTP protocol support inherent to most Web browsers.

F

File name The name given to a file. Files in the same directory cannot have the same name, but files in different directories can have the same name.

FTP File Transfer Protocol. The command used to connect to any other computer on your network running FTP. When connected, you can use FTP to transfer files to your computer. Is also used to access files anywhere on the Internet provided you have access to the Internet.

H

HP-UX The Hewlett-Packard implementation of the UNIX operating system.

HTML Hypertext Markup Language. The authoring language used to create documents on the World Wide Web.

HTTP Hypertext Transfer Protocol. The underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions Web servers and browsers take in response to various commands. HTTP is called a stateless protocol because each command is executed independently, without any knowledge of the commands that came before it.

I

IIS Short for Internet Information Server, the Microsoft Web server that runs on Windows NT/2000/XP platforms.

Initialization Assigns a starting value to a property file key. Used to begin a function within the CONNECT:Enterprise HTTP Option system.

Internet The name for a group of interlinked computer networks that distribute news, electronic mail, and information throughout the world. Currently, the largest computer network system in the world.

Internet address The name given to a computer system that enables it to receive and send Internet news and mail.

Intranet A network based on TCP/IP protocols (an internet) belonging to an organization, usually a corporation, accessible only by organization members, employees, or others with authorization.

J

Java A general-purpose programming language with a number of features that make the language well suited for use on the World Wide Web. Java is an object-oriented language similar to C + +, but simplified to eliminate language features that cause common programming errors.

L

Log A collection of messages placed in an auxiliary storage device for accounting or data collection purposes.

Logging Takes place at the Web server and refers to a server log file that logs information such as who logs in, from where they log in, what time, and what operations are being conducted.

Logon The process of establishing a session between a remote site and a local site program such as CONNECT:Enterprise. You can logon automatically after a connection is established, or you can type a logon as a text command or a control function. In CONNECT:Enterprise either the remote site or the local site can start the logon process.

M

Mailbox The file area used to store electronic mail messages.

Mailbox ID A 1–8 character name that identifies CONNECT:Enterprise batches. Usually, a single mailbox ID is assigned to each remote site for its exclusive use. The mailbox ID is always specified in the ID= keyword.

N

NES Short for Netscape Enterprise Server, the Netscape Web server that runs on Windows NT/2000/XP and UNIX platforms.

P

Parameter A special type of variable used within shell programs to access values related to arguments on the command line or the environment in which the program is executed. Also, an option or variable on the command line that modifies the default action of the command.

Password A value known only to the user that is called for in the login authentication process. The computer uses the password to verify that the user is actually valid and permitted to use the system.

Process Generally, a program that is at some stage of execution. In UNIX, it refers to the execution of a computer environment, including contents of memory, register values, name of the current directory, status of files, information recorded at login time, and various other items.

Property Files Java property files are ASCII files and can be edited with any plain-text editor. They contain sets of key/value pairs. The keys are words, which represent individual properties, and the values are their definitions. Each property is a single logical line within a property file.

R

Record A row in a structured data file. For example, if a user creates a file containing the names, phone numbers, and salary of every employee, with employee information contained in a single row, that row is called a record.

Remote Any terminal, computer, or software that can connect with CONNECT:Enterprise through FTP, switched or leased line connections. See also *FTP.*

Receive To download data (usually an entire file) from the CONNECT:Enterprise data repository to the servlet.

S

Send The process of copying a file from your own computer to another computer.

Server A computer that serves all the other terminals or computers within a network. The server usually contains additional memory, storage capacity, and printer capabilities enabling it to handle the users to which it is linked.

Servlet A Java applet that runs within a Web server environment, expanding the functionality of a server. A program designed to be executed from within another application. CONNECT:Enterprise HTTP Option is considered a servlet.

Session A logical connection between CONNECT:Enterprise at the local site and another computer at the remote site. When a logon command is completed between CONNECT:Enterprise and a remote site, the two are said to be in session.

Shell A program that interprets commands from the user into instructions the computer can understand. Popular UNIX shells include the Bourne, Korn, and C shells.

Solaris The Sun Microsystem implementation of the UNIX operating system.

SSL Secure Sockets Layer is a communications system that ensures privacy when communicating with other SSL-enabled products. SSL is a protocol that runs above TCP/IP and below HTTP.

String A designation for a particular group or pattern of characters, such as a word or phrase.

Syntax The grammar of a command. How the command line, its variables, and parameters are arranged so that the program or system understands what the user means.

System A combination of components working together. For example, a computer system includes both hardware and software.

System administrator The person officially assigned to oversee housekeeping chores on a computer system, including adding new users, assigning addresses and logon names, scheduling system backups, and maintaining system integrity.

T

TCP/IP Transmission Control Protocol/ Internet Protocol. The suite of communications protocols that connects hosts on the Internet. TCP/IP is built into the UNIX operating system and is used by the Internet, making it the de facto standard for transmitting data over networks.

Tracing In CONNECT:Enterprise, the ability to create a snapshot of a dump of internal CONNECT:Enterprise control information for communications activity, user exit calls, or mailbox access.

U

UNIX A general-purpose, multiuser, interactive, time-sharing operating system developed by AT&T Bell Laboratories. The UNIX system enables several users

to share limited computer resources and efficiently organizes the user interface to a computer system.

User Batch ID The 1–64 character free-form batch identifier that the user gives to describe the contents of a batch of data in the Enterprise. Entry is made in the *BATCHID=* parameter. See also *BATCHID* and *batch number*.

User ID In CONNECT:Enterprise for UNIX, the name of the RSD file for the local site user.

V

vi A text editor packaged with most UNIX systems.

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