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# iStrobe

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# Installation and Configuration Guide

**Release 16.03**

Please direct questions about iStrobe  
or comments on this document to:

**iStrobe Customer Support**

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# Contents

<b>Introduction</b> .....	<b>5</b>
Intended Audience .....	5
How This Guide is Organized .....	5
How to Use This Guide .....	5
iStrobe Publications .....	6
iStrobe 3rd Party Licensing Documentation .....	6
Compuware iStrobe Customer Support .....	6
Compuware Go Customer Support Website .....	6
Contacting Customer Support .....	6
Phone .....	6
Web .....	6
Mail .....	6
Corporate Website .....	7
<b>Chapter 1. Installation Overview</b> .....	<b>9</b>
iStrobe System Overview .....	9
Requirements .....	10
Installing iStrobe .....	10
Server Software Requirements .....	10
Server Hardware Requirements .....	10
Web Server Requirements .....	10
File Server Requirements .....	10
Individuals to Participate in the Installation .....	10
Installation Environment .....	11
Security Environment .....	11
<b>Chapter 2. Installing iStrobe on z/OS UNIX</b> .....	<b>13</b>
Before Beginning .....	13
Installing iStrobe .....	13
Uninstalling iStrobe on z/OS UNIX .....	14
<b>Chapter 3. Installing iStrobe on Linux</b> .....	<b>17</b>
Before Beginning .....	17
Installing iStrobe .....	17
Starting and Stopping CES .....	18
Installing and Starting the CES Daemon .....	18
Stopping the CES Daemon .....	18
Restarting the CES Daemon .....	18
Stopping and Uninstalling the CES Daemon .....	19
Uninstalling iStrobe on Linux .....	19
<b>Chapter 4. Installing iStrobe on Windows</b> .....	<b>21</b>
Before Beginning .....	21
Installing iStrobe .....	21
Uninstalling iStrobe on Windows .....	22
<b>Chapter 5. Configuring iStrobe</b> .....	<b>23</b>
Default Password .....	23
Security Configuration .....	23
Enable security using LDAP .....	24
Enable security using X.509 (Smart Card) .....	25

- Enable security using X.509 with LDAP ..... 25
- Enable security using Kerberos ..... 27
- Disable security ..... 27
- General Configuration Considerations. .... 27
- Appendix A. iStrobe Web Services ..... 29**
  - iStrobe Configuration ..... 29
  - How to Use the API. .... 29
    - Requesting WSDL URL. .... 29
    - Web Service Request to iStrobe Server. .... 29
      - Descriptions of Elements ..... 30
      - connectTest Web Service Request to iStrobe Server - Detail ..... 31
  - Using SSL with the Web Service ..... 32
    - Compuware Enterprise Services Server Configuration for SSL ..... 32
    - Web Service Java Client Using SSL Connection ..... 32
- Appendix B. Installing the Topaz Workbench Plug-in for iStrobe ..... 33**

## Introduction

This guide provides instructions on how to install iStrobe. iStrobe is an application performance analysis product designed to be used on workstations with the Strobe MVS Application Performance Measurement System. iStrobe uses a Web browser that enables you to create a custom view of Strobe MVS measurement data.

After installing iStrobe, you will be able to view the sample Performance Profile data packaged with it.

To create and analyze new Strobe measurement data using iStrobe, do the following:

1. Set up Strobe to communicate with iStrobe, as described in the *Strobe Installation and Customization Guide*.
2. Use Strobe to measure an application's performance, create an iStrobe Performance Profile data file, and store it in a directory where iStrobe users can access it, as described in the *Strobe User Guide*.

---

## Intended Audience

This installation guide is intended for those administrators or individuals installing iStrobe. You should be familiar with administering the operating system, your network security policies, and your web server. If you are unfamiliar with any of the prerequisite software, contact your administrator for help.

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## How This Guide is Organized

This guide contains the following chapters and appendixes:

Chapter 1, "Installation Overview"

Chapter 2, "Installing iStrobe on z/OS UNIX"

Chapter 3, "Installing iStrobe on Linux"

Chapter 4, "Installing iStrobe on Windows"

Appendix A, "iStrobe Web Services"

Appendix B, "Installing the Topaz Workbench Plug-in for iStrobe"

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## How to Use This Guide

If you are installing iStrobe for the first time, you should read the following chapters:

- "Installation Overview"
- The appropriate installation chapter or appendix for your environment
- Chapter 5, "Configuring iStrobe"

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## iStrobe Publications

To learn more about using iStrobe:

- See the iStrobe online help within the product.
- Visit Compuware's FrontLine at <http://frontline.compuware.com> and select iStrobe, for the latest technical information on iStrobe.

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## iStrobe 3rd Party Licensing Documentation

To view iStrobe 3rd party licensing documentation, refer to the legal subdirectory that is included as part of the iStrobe installation.

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## Compuware iStrobe Customer Support

Compuware provides a variety of support resources to make it easy for you to find the information you need.

### Compuware Go Customer Support Website

You can access online information for Compuware products via our Compuware Go customer support website at <http://go.compuware.com>.

Compuware Go provides access to critical information about your Compuware products. You can review frequently asked questions, read or download documentation, access product fixes, or e-mail your questions or comments. The first time you access Compuware Go, you are required to register and obtain a password. Registration is free.

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You can report issues via the Quick Link **Create & View Support Cases** on the Compuware Go home page.

**Note:** Please report all high-priority issues by telephone.

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## Corporate Website

To access Compuware's site on the Web, go to <http://www.compuware.com>.

The Compuware site provides a variety of product and support information.





# Chapter 1.

## Installation Overview

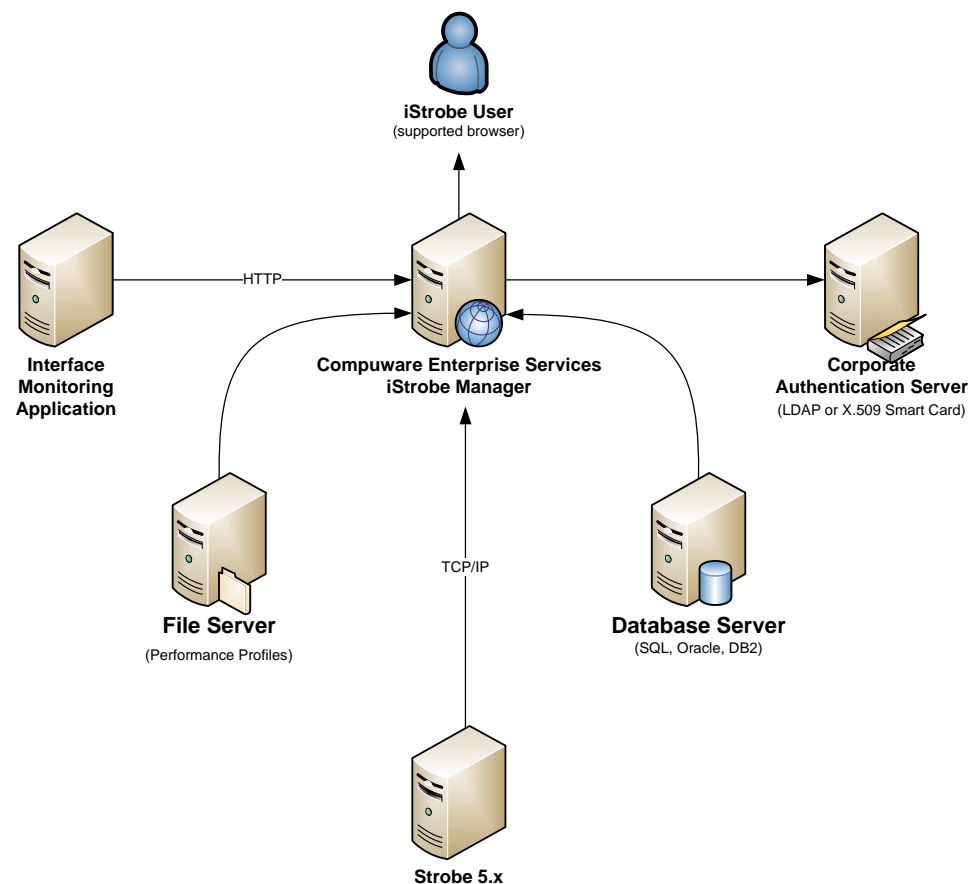
This chapter provides an overview of the different hardware and software components needed to install iStrobe. It also identifies those individuals who will participate in the iStrobe installation.

---

## iStrobe System Overview

The diagram below is an overview of the components and data flow in iStrobe. iStrobe should be on the same release level as Strobe to use all of the available features. Refer to the operating systems-specific installation chapters for setup and security considerations.

**Figure 1-1.** iStrobe Components and Data Flow



Starting at the bottom of the diagram, Strobe collects performance statistics for your z/OS applications. Strobe versions transfer the performance metrics directly to the iStrobe Manager. The iStrobe Manager then stores the Profiles on your file server as well as loading them into a database. The Manager listens for transfer requests from Strobe,

processes update requests from the Web server, and optionally watches for new profiles transferred from Strobe and prepares them for viewing.

The iStrobe web application can authenticate all users against your corporate authentication server, so you may secure performance measurements and iStrobe functionality. In addition, user preferences and state information are stored in the database. The performance reports use the individual profile data downloaded from Strobe for rendering them, while Strobe Insight obtains its data from the iStrobe repository by aggregating data from many profiles. The end user runs iStrobe using a browser.

---

## Requirements

### Installing iStrobe

If your site intends to use both Strobe and iStrobe, Compuware recommends that you install the latest version of iStrobe before installing the latest version of Strobe in order to utilize any new measurement functionality in iStrobe.

### Server Software Requirements

For complete server software requirements, refer to the details described in the *iStrobe Release Notes* for this version.

### Server Hardware Requirements

#### Web Server Requirements

Ensure that the Web server where you will be installing iStrobe meets the following hardware requirements:

- Minimum of 1 GB available disk space
- Minimum 2 GB of RAM
- Minimum 2 GHz processor

**Note:** These are the minimum requirements for a server dedicated to iStrobe with less than 20 users. If you experience performance problems, you may need to increase memory or processor speed.

#### File Server Requirements

The following are the minimum hardware and software requirements for the file server where iStrobe Performance Profiles are stored:

- 1 GB RAM
- Each Performance Profile requires 0.2 to 50 MB of disk space, depending on the measured application and the Strobe measurement parameters. Your space requirements may vary widely depending on the number of users and how many profiles they keep.

---

## Individuals to Participate in the Installation

This section identifies individuals who should participate in the installation and the information needed to complete the installation.

## Installation Environment

The installation environment requires an administrator familiar with either a Windows, z/OS Unix, or zLinux environment, as is appropriate for your site. The user performing the installation needs to have the appropriate authorizations in the selected environment.

## Security Environment

The security features in iStrobe can utilize LDAP security servers for user authentication. To implement LDAP, the iStrobe server post-installation configuration requires a security administrator with knowledge of LDAP security settings.



## Chapter 2.

# Installing iStrobe on z/OS UNIX

This installation procedure leads you through the process for installing iStrobe on z/OS UNIX.

A z/OS UNIX system administrator should install iStrobe.

---

## Before Beginning

Before beginning the installation, you should have the following:

- An installed and configured version of Compuware Enterprise Services, at the same release level as iStrobe.
- The known path to an iStrobe compatible version of Java on the machine. Those versions include Java Technology Edition V7 SR4 FP2, 7.1, or 8. This would have been known during the installation of Compuware Enterprise Services.
- The iStrobe media image downloaded from the iStrobe media; image downloaded from an RFN order; or from the Enterprise Common Components (ECC) EP Media Browser.
- Ensure that the installable media is on the machine on which you intend to install.
- Sufficiently allocated system temporary space to accommodate the installation. Compuware recommends 85,000 1k blocks (120 cylinders). When the installation is complete, the temporary installation files are removed.
- Determine where you will store your Performance Profiles and how the profiles are transferred from z/OS to the directory where they are stored for iStrobe.
- If you decide to use the Web Service interface for requesting a Strobe measurement, you may set up the HCI connection information in the Configuration section of Administration.

If you are performing an upgrade installation of iStrobe:

- Be sure to stop the CES service *before* beginning the upgrade.
- Export any user-defined help that was created *before* beginning the upgrade. Any user-defined help that is not exported will be lost. After exporting the help and completing the upgrade, you must import the user-defined help.

---

## Installing iStrobe

1. Select **Install iStrobe for z/OS UNIX**. The **Mainframe FTP Information** tab appears.
2. Specify a valid **Host**, **User ID/Password**, **Port** number (default = 21), and finally an existing **z/OS UNIX Path** in which to upload the `install.jar` and `install.sh` files from the Compuware Enterprise Services product image to the mainframe as binary. The `install.jar` is uploaded as binary and the `install.sh` is uploaded as text.
3. Select **Upload files to mainframe** button to begin the upload.

4. Log on to the mainframe and navigate to an OMVS command prompt. Change the directory to the location where the `install.jar` and the `install.sh` files were transferred.

```
cd <directory containing the uploaded install.jar and install.sh files>
```

5. Ensure that the `install.sh` file has execute authority and execute it. Perform a `chmod 777` to open up permissions if necessary.
6. Execute the **install.sh** file. For example:

```
./install.sh
```

The iStrobe installer starts.

**Notes:**

- You can cancel the installation at any time by typing `quit`.
- You can go back in the installation panels at any time by typing `back`.

7. Enter the directory path to a supported installation of JAVA. For example: `usr/lpp/java/J7.1_64.b1d111513`.

The **Introduction** panel appears.

**Notes:**

- You can cancel the installation at any time by typing `quit`.
- You can go back in the installation panels at any time by typing `back`.

8. After reading the panel, Press **Enter**.
9. Enter the path to the installed and configured instance of Compuware Enterprise Services to be associated with this iStrobe installation. Press **Enter**. The **License Agreement** panel appears.
10. Read the license agreement, type **Y**, and press **Enter** to accept the terms of the license agreement.
11. iStrobe stores measurement data in profiles. Enter the location for your profile directory. Press **Enter**.
12. When a profile cannot be read, it goes to a different location referred to as a Quarantine. Choose the location for your Quarantine Profile directory. Press **Enter**.

The **Ready to Install** panel appears.

13. Review the installation information. If it is incorrect, type **Back** and revise the installation settings as necessary. If it is correct, press **Enter** to start the iStrobe installation.

**Note:** This process will take several minutes. If you are using a 3270 device, you will need to press **PF8** to check the status of the installation.

14. The **Installation Complete** panel appears when the installation finishes. Press **Enter** to exit the installer.

---

## Uninstalling iStrobe on z/OS UNIX

Follow the procedures in this chapter to uninstall iStrobe. If you are uninstalling in order to move the iStrobe application to a different server, and would like to retain the existing configuration, reports, preferences, etc., be certain to export your User-defined Help (see Help for User-defined Help).

**Notes:**

- There is a sample shell script named **uninstall.sh** located in `<CDROM>:\cpwr\USS` that you can use as a template.
  - If you are executing the shell script, be sure to place it outside the directory where iStrobe is installed.
1. Log on to your system.
  2. Stop the Compuware Enterprise Services OSGi Manager. Instructions for stopping and starting CES are found in the installation chapter applicable to your platform.
  3. Enter the directory path to the supported installation of JAVA. For example:  

```
usr/lpp/java/J7.1_64.bld111513)
```
  4. Enter the path to the installed and configured instance of Compuware Enterprise Services.
  5. Enter the path to the designated temporary directory space.
  6. Delete any additional files or folders that the uninstall did not delete.





## Chapter 3.

# Installing iStrobe on Linux

This installation procedure leads you through the process of installing iStrobe on Linux.

A server administrator should install iStrobe in a Linux environment.

Before you begin the iStrobe installation, determine where you will store your Performance Profiles.

If you are only running Strobe version 4.4, all profiles are transmitted directly to the CES Server daemon. Therefore, the ID used to run the daemon is always the owner and is the only ID that needs *write* access to the profiles and quarantine directories.

---

## Before Beginning

Before beginning the installation, you should have the following:

- An installed and configured version of Compuware Enterprise Services, at the same release level as iStrobe.
- The known path to an iStrobe compatible version of Java on the machine. Those versions include Java Technology Edition V7 SR4 FP2, 7.1, or 8. This would have been known during the installation of Compuware Enterprise Services.
- The iStrobe media image downloaded from the iStrobe media; image downloaded from an RFN order; or from the Enterprise Common Components (ECC) EP Media Browser.
- Ensure that the installable media is on the machine on which you intend to install.
- Determine where you will store your Performance Profiles and how the profiles are transferred from z/OS to the directory where they are stored for iStrobe.
- If you decide to use the Web Service interface for requesting a Strobe measurement, you may set up the HCI connection information in the Configuration section of Administration.
- Location of the CES installation directory.

If you are performing an upgrade installation of iStrobe:

- Be sure to stop the CES daemon *before* beginning the upgrade.
- Export any user-defined help that was created *before* beginning the upgrade. Any user-defined help that is not exported will be lost. After exporting the help and completing the upgrade, you must import the user-defined help.

---

## Installing iStrobe

1. Select **Install iStrobe for Linux** and locate **install.bin**.
2. Ensure that the `install.bin` file has execute authority. Perform a `chmod 777` to open up permissions if necessary. This file is located at `Disk1\InstData\NoVM`.
3. Execute the following commands:

```
export JAVA_HOME=<directory location for Java Runtime Environment>
export PATH=$JAVA_HOME/bin:$PATH
./install.bin
```

The iStrobe installer starts. The Introduction panel appears.

**Notes:**

- You can cancel the installation at any time by typing **quit**.
  - You can go back in the installation panels at any time by typing **back**.
4. After reading the panel, press **Enter**.
  5. Enter the path to the installed and configured instance of Compuware Enterprise Services to be associated with this iStrobe installation. Press **Enter**.

The **License Agreement** panel appears.

6. Read the iStrobe license agreement, pressing **Enter** until you have scrolled through and read the entire agreement.
7. Type **Y** and press **Enter** to accept the terms of the license agreements.
8. iStrobe stores measurement data in profiles. Enter the location for your profile directory. Press **Enter**.
9. When a profile cannot be read, it goes to a different location referred to as a Quarantine. Choose the location for your Quarantine Profile directory. Press **Enter**.
10. Review the installation information on the **Pre-installation summary** panel. If it is incorrect, type **Back** and revise the installation settings as necessary. Otherwise, press **Enter**. This process will take several minutes. When complete, the **Installation Complete** panel appears.
11. Press **Enter** to exit the installer. The iStrobe software installation is complete.
12. Restart CES.

---

## Starting and Stopping CES

By default, CES is installed as a daemon.

### Installing and Starting the CES Daemon

To install and start the CES daemon, issue the following command:

```
./ces_service.sh -install
```

### Stopping the CES Daemon

To stop the CES daemon, issue the following command:

```
./execces.sh -stop <defined service stop port>
```

If you are having difficulty stopping the CES daemon, you may issue the following command:

```
./execces.sh kill
```

### Restarting the CES Daemon

To restart the CES daemon, issue the following command:

```
./execces.sh -start
```

## Stopping and Uninstalling the CES Daemon

To stop and uninstall the CES daemon, issue the following command:

```
ces_service.sh -remove
```

---

## Uninstalling iStrobe on Linux

Follow this procedure to uninstall iStrobe. If you are uninstalling in order to move the iStrobe application to a different server, and would like to retain the existing configuration, reports, preferences, etc., be certain to export your User-defined Help (see Help for User-defined Help).

1. Log on to your system as superuser (root).
2. Navigate to `<iStrobe_install_directory>/uninstall`.
3. Execute the command:

```
./uninstall
```

4. Delete any additional files or folders that the uninstall did not delete.



## Chapter 4.

# Installing iStrobe on Windows

A Windows Server Administrator should install iStrobe for departmental or corporate use.

End-users with administration authority on their workstation can do a standalone workstation install for their own use.

Before beginning the iStrobe install for Windows, determine where you will store your Performance Profiles.

- When storing Performance Profiles locally on the machine where you've installed iStrobe, you may use the "local system" for the CES Manager service. This is usually the case for a standalone workstation install.
- When storing Performance Profiles on a file server, you need a domain ID for the CES Manager service. The ID needs authority to run a service. The Profile Directory permissions for the CES Manager must include both update and create. And the service ID must have read access to the Profile directory.

---

## Before Beginning

Before beginning the installation, you should have the following:

- An installed and configured version of Compuware Enterprise Services, at the same release level as iStrobe.
- The ID and password for the CES Manager service (if required).

If you are performing an upgrade installation of iStrobe:

- Be sure to stop the CES service *before* beginning the upgrade.
- Export any user-defined help that was created *before* beginning the upgrade. Any user-defined help that is not exported will be lost. After exporting the help and completing the upgrade, you must import the user-defined help.

---

## Installing iStrobe

1. From the Compuware Enterprise Services media image downloaded from an RFN order, or from the Enterprise Common Components (ECC) EP media, select **Install iStrobe for Windows**, and click **Start Install**. Install Anywhere application prepares for the installation. The **iStrobe** dialog box appears.
2. Read the introduction content, and then click **Next** to proceed. The **Locate CES** page appears.
3. iStrobe requires Compuware Enterprise Services be installed and configured prior to installation. Choose the CES instance to associate with this installation. Click **Next**.
4. You are required to read and accept the Compuware License Agreement. Click **Next**. The **License Agreement** page appears.
5. Accept the terms of the License Agreement and click **Next**. The **Configuration** page appears.

6. iStrobe stores measurement data in profiles. When a profile cannot be read, it goes to a different location referred to as a Quarantine. Choose the locations for both your Profile and Quarantine directories and click **Next**. By default, this location is as follows:

```
C:\ProgramData\Compuware\CES
```

The **Pre-Installation Summary** page appears.

7. Confirm the selections made. If any changes are required, click **Previous** and revise the installation settings. Otherwise, click **Install** to start the iStrobe installation process. The process may run for several minutes. When complete, the **Install Complete** page appears.

**CAUTION:**

**Before exiting the installer, open the iStrobe URL in a browser and bookmark the page so you can easily access iStrobe in the future.**

8. Click **Done** to exit the installer.

The installation is complete. You have successfully installed iStrobe.

You have additional configuration options within iStrobe. Those include:

- Configuring the email host
- Configuring additional HCI
- Strobe Preferences

Refer to the online help within iStrobe for direction.

Refer to Chapter 5, “Configuring iStrobe” for complete configuration considerations.

---

## Uninstalling iStrobe on Windows

Follow the procedures in this chapter to uninstall iStrobe. If you are uninstalling in order to move the iStrobe application to a different server, and would like to retain the existing configuration, reports, preferences, etc., be certain to export your User-defined Help (see Help for User-defined Help).

**Note:** Uninstalling iStrobe does not uninstall CES. CES must be uninstalled separately.

1. Log on to your system as a user with administrator authority.
2. Use the Windows **Programs and Features** dialog box to uninstall the iStrobe application.
3. Delete any additional files or folders that the uninstall did not delete.

## Chapter 5.

# Configuring iStrobe

After installing iStrobe, you may optionally configure the following:

- Security
- General Configuration
  - Email
  - Profiles
  - iStrobe Manager Communications
  - Logging Levels
  - Usage Data
- Host connection settings
- User and Roles
- Auto Delete
- SMF Data Management
- Profile History

1. Open the iStrobe application by pointing your web browser to:

```
<host address>:<application server port number>/<ces context root>
```

- *host address* is the name of the server where you just installed iStrobe.
- *application server port number* is the port on which the application server is listening.
- *iStrobe context root* is the name you entered when naming the application in any of the installation environments.

Ex. `http://myserver:48080/istrobe`

## Default Password

The default password for configuring iStrobe settings is `isadministration`. Enter the administration password and click **OK**.

---

## Security Configuration

The security features in iStrobe are optional and can utilize your existing LDAP security servers, X.509 certificates from a smart card, or Kerberos for user authentication. iStrobe does not store passwords, but does store user IDs. By requiring a user ID and either a password or PIN to access iStrobe, you are able to provide role-based content and give users access to specific functionality.

By default, iStrobe security is *disabled* upon first installing iStrobe and all content is available to all users.

As an administrator, you may configure and enable iStrobe security after installing iStrobe. The first time you click the button to the administration section, you are prompted to provide the administration password. The default password is “isadministration”. Having been provided the password, you are able to act as the administrator and enable security. You also have the ability to change the administrator password. Do this by clicking the **Security** button within the **Administration** section.

**Note:** Although you are not required to secure content, you should consult with the network security group at your site to determine whether or not to enable security for iStrobe. You always have the ability to disable security that has been enabled.

With security configured, users must present credentials for authentication and access to iStrobe. When security is enabled with an LDAP authentication server, users are prompted for both a user ID and password. When security is enabled with an X.509 certificate from a smart card, users are prompted for a PIN only.

## Enable security using LDAP

To configure and enable LDAP security, the security administrator must provide the following:

- iStrobe administrator(s) ID. *Do not* include the domain name in this field.
- Binding URL for binding the URL to the LDAP server
- Distinguished Name (DN) of a service account used to search LDAP for the service account
- Password of an account that can be used to bind to the LDAP server
- Search base and filter to use to locate the user's ID

When logging on, users are prompted for their user ID and password.

1. Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.
2. Click **Security**. The **Security** window appears.
3. Select the LDAP security mode:
4. Enter the required information in each of the fields:
  - LDAP server URL  
The location of the server running LDAP (Lightweight Directory Access Protocol).  
Ex. `ldap://ldap.example.com`
  - LDAP server port number  
The port used for LDAP on the server
  - Bind with  
The process where the LDAP server authenticates the client. This can be done with either a search filter or a DN. If binding with User DN, another dialog box will be displayed for Login ID and Password.
  - Distinguished name (DN)  
A DN is a sequence of relative distinguished names (RDN) which are connected with commas. Each RDN is an attribute value pair (i.e., `attribute1=value1,attribute2=value2`). Note that spaces are not to be included after commas. If binding with DN, enter `CN={0}` and on the next dialog, whatever value supplied to Login ID will be used in place of `{0}`.  
Ex. `CN={0},OU=User Accounts,OU=Detroit Corp,DC=example,DC=corp`
  - Password for DN  
Required only when binding with search filter. If binding with DN, another dialog box will be displayed for this information.
  - Search base  
Required only when binding with search filter. This defines the base level in the directory where the search will begin at. This is defined with the DN of the search base object.  
Ex. `OU=Sales,DC=example,DC=com`
  - Search filter  
Required only when binding with search filter. This defines how to filter the search, such as including or excluding specific values.



Ex. (cn={0}) - This will search for an entry with the cn (common name) equal to the User ID entered. It is required for the search filter to have the parentheses such as listed in our example.

- iStrobe administrator(s)  
Required so that the iStrobe administrator account can be set in the database. Otherwise, you may be locked out of the system once the security mode is set.

5. Click **LDAP server connection test**. If an LDAP server connection is available, you will be able to apply this security configuration.
6. Click **Apply**.

You *must* restart your web application for the security settings to become effective. When logging on, users will be prompted for their user ID and password.

## Enable security using X.509 (Smart Card)

With security configured for X.509 (Smart Card), users must first have their smart card plugged into the reader. They must also have a valid X.509 certificate. And they must log on using the `https://` protocol as the first element in the URL.

To configure and enable X.509 (Smart Card) security, the security administrator must provide the following:

- iStrobe administrator(s) ID
- X.509 mask. This is needed to extract the user ID from the smart card certificate.

When logging on, users are prompted for their smart card PIN. Those users without both the smart card and PIN for that card are denied access to iStrobe.

1. Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.
2. Click **Security**. The **Security** window appears.
3. Select the X.509 (Smart Card) security mode:
4. Enter the required information in each of the fields:
  - X.509 mask
  - iStrobe administrator(s)
5. Click **Apply**.

You *must* restart your web application for the security settings to become effective. When logging on, users will be prompted for their smart card PIN.

## Enable security using X.509 with LDAP

With security configured for X.509 with LDAP, users can log on with a smart card and PIN using the `https://` protocol or with LDAP using the `http://` protocol.

To configure and enable X.509 with LDAP security, the security administrator must provide the following:

- LDAP server URL
- LDAP server port number
- Distinguished name (DN)
- Password for DN
- Search base
- Search filter
- iStrobe Administrator

- X.509 mask. This is needed to extract the user ID from the smart card certificate.
1. Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.
  2. Click **Security**. The **Security** window appears.
  3. Select the X.509 with LDAP security mode:
  4. Enter the required information in each of the fields:
    - LDAP server URL  
The location of the server running LDAP (Lightweight Directory Access Protocol).  
Ex. ldap://ldap.example.com
    - LDAP server port number  
The port used for LDAP on the server
    - Bind with  
The process where the LDAP server authenticates the client. This can be done with either a search filter or a DN. If binding with User DN, another dialog box will be displayed for Login ID and Password.
    - Distinguished name (DN)  
A DN is a sequence of relative distinguished names (RDN) which are connected with commas. Each RDN is an attribute value pair (i.e., attribute1=value1,attribute2=value2). Note that spaces are not to be included after commas. If binding with DN, enter CN={0} and on the next dialog, whatever value supplied to Login ID will be used in place of {0}.  
Ex. CN={0},OU=User Accounts,OU=Detroit Corp,DC=example,DC=corp
    - Password for DN  
Required only when binding with search filter. If binding with DN, another dialog box will be displayed for this information.
    - Search base  
Required only when binding with search filter. This defines the base level in the directory where the search will begin at. This is defined with the DN of the search base object.  
Ex. OU=Sales,DC=example,DC=com
    - Search filter  
Required only when binding with search filter. This defines how to filter the search, such as including or excluding specific values.  
Ex. (cn={0}) - This will search for an entry with the cn (common name) equal to the User ID entered. It is required for the search filter to have the parentheses such as listed in our example.
    - X.509 mask  
Extracts the user ID from the smart card certificate.
    - iStrobe administrator(s)  
Required so that the iStrobe administrator account can be set in the database. Otherwise, you may be locked out of the system once the security mode is set.
  5. Click **LDAP server connection test**. If an LDAP server connection is available, you will be able to apply this security configuration.
  6. Click **Apply**.

You *must* restart your web application for the security settings to become effective. When logging on, users will be prompted for their user ID and password for LDAP or their smart card PIN.

## Enable security using Kerberos

With security configured for Kerberos, users are automatically signed on using their user ID.

To configure and enable Kerberos, the security administrator must provide the following:

- Service principal
  - Keytab location
  - iStrobe administrator(s).
1. Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.
  2. Click **Security**. The **Security** window appears.
  3. Select the Kerberos security mode:
  4. Enter the required information in each of the fields:
    - Service principal
    - Keytab location  
Set this as a URL.  
Ex. file:///etc/s100086.keytab
    - iStrobe administrator(s)
  5. Click **Kerberos login test**. If you are able to log in, you will be able to apply this security configuration.
  6. Click **Apply**.

You *must* restart your web application for the security settings to become effective. When logging on, users are not prompted.

### Important:

Only administrators can add or remove users and manage access to specific functionality. This function appears in the list of functions on the administration tab in the Application Controls panel. See “General Configuration Considerations” on page 27.

## Disable security

Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.

1. Click **Security**. The **Security** window appears.
2. Select the None radio button.
3. Click **Apply**.

You must restart your web application for the security settings to become effective. When logging on, users are no longer prompted for their user ID and password, and all content and profiles are available to all users.

---

## General Configuration Considerations

Start iStrobe in your browser and click the **Administration** button. The **Administration** window appears.

The install sets up much of the configuration. Compuware recommends reviewing all the configuration parameters when you do the initial install. Refer to the online help for detailed instructions on updating each page.

1. Click **Users and Roles**. The **Users and Roles** window appears in the display pane.

If you want to restrict access to iStrobe content other than administration use the Roles page to create roles to assign to users. The install creates three roles:

**USER** - Has access to all content except Administration and defining new Strobe Insight Reports.

**ADMINISTRATOR** - This is not listed in the Role page to prevent accidental deletion. You can give others access to Administration by going to the user page and adding ROLE\_ADMIN.

**Super** - Has access to all content.

Since users are created automatically when iStrobe is accessed, you would not need to visit this window at this time except to create another iStrobe administrator.

2. Navigate back to the **Administration** window.
3. Click **Host Connections**. The **Host Connections** window appears. Host Connections is used to define configuration connections to the Host Communications Interface (HCI) component to support measurement requests from the iStrobe Web Service.

The Compuware HCI can be configured to support multiple Strobe instances within a network. This tab allows you to enter specifications for multiple HCI instances. Refer to the Strobe/HCI Configuration documentation for more information on details to support multiple Strobe instances. If you wish to use this web service, contact Compuware Technical Support for full documentation.

## Appendix A.

# iStrobe Web Services

iStrobe 5.2 accepts an HTTP request to initiate a Strobe measurement of an active z/OS process. You can use this feature with a performance monitor to start a Strobe measurement when you notice performance problems on the mainframe and would like a deep dive analysis.

---

## iStrobe Configuration

To configure iStrobe you need to specify Host Name or IP address, Port number, and Strobe signature for each System you want to use with the Web Service. The z/OS systems programmer who set up Strobe and the HCI will have this information. Go to the **Administration** section and select **Host Connections**. You may configure as many HCIs as needed to connect to your Strobe Release 5.2 and above installations. The connection for an individual measurement is specified in the Web Service request. Refer to the iStrobe online help **Manage HCIs** page for more details about the individual fields.

---

## How to Use the API

Measurement requests are sent to the iStrobe Web Server as a Web Service request via HTTP or HTTPS. You should consider using an HTTPS connection, because the z/OS ID and password are included in the request. The z/OS ID only needs permission to start a Strobe measurement. It does not need access to TSO.

### Requesting WSDL URL

The Web Services Description Language (WSDL) of this Web Service can be retrieved using this URL:

**Figure 5-1.** URL to Retrieve WSDL

```
HTTP://istrobeHost:port/iStrobe/ws/Measurement/measurement.wsdl
```

### Web Service Request to iStrobe Server

The SOAP body expected by the iStrobe Web Service is described below. The requester will receive the return value formatted as a SOAP response. See below for the available request types.

**Figure 5-2.** URL Format of the Web Service Request to the iStrobe Server

```
HTTP://istrobeHost:port/iStrobe/ws/Measurement
```

When the message for an “addActive” request is sent to the iStrobe Web Service, a response will be returned. If the request is successfully processed, the response will include the URL for the iStrobe measurement report.

**Figure 5-3.** Example Web Service Request SOAP Body Format

```
<!-- Copyright (c) 2010 Compuware Corporation. All rights reserved. -->
<AddActiveRequest xmlns="http://istrobe.compuware.com/ws/Measurement" >
  <reqType>addActive</reqType> <!-- addQueue for Add Queued request -->
  <logonid>mainframe-userid</logonid>
  <password>mainframe-password</password><!-- sample java code will ask this value at runtime -->
  <jobname>YOURJOB0</jobname>
  <system>yourSystem</system>
  <!-- Optional -->
  <tags>list of tags</tags>
  <profileName>profile name to be created</profileName>
  <emailto>email-id to notify</emailto><!-- iStrobe should be configured to use email notification -->
  <duration>minimum measurement time</duration>
  <samples>number of samples</samples>
  <limit>number of sample dataset to be created</limit>
  <finalAction>quit|stop|continue</finalAction>
  <hlq>MY.GROUP</hlq>
  <trandid>transaction id mask</trandid>
</AddActiveRequest>
```

## Descriptions of Elements

### reqType

addActive. Adds a request for measurement of an active job.

### logonid

Required. z/OS logon ID.

### password

Required. z/OS password. An SSL connection should be used to prevent exposing the password to the network.

### jobname

Required. Jobname to be measured.

### system

Required. Host Connection name defined by the iStrobe HostConnections configuration screen.

### tags

Optional. Tags to be assigned to profile.

### profileName

Optional. Name of the profile. The default is the jobname.

### emailto

Optional. SMTP e-mail address to notify when the measurement is complete and the profile is ready to view.

### duration

Optional. Estimated minimum measurement time in minutes. See the *Strobe User Guide* for details.

### samples

Optional. The target number of samples to take during the measurement session. See the *Strobe User Guide* for details.

**limit**

Optional. Suspends sampling when the target number of samples is reached. See the *Strobe User Guide* for details.

**finalAction**

Optional. Controls the measurement session when the final dataset has been completed. Value can be one of the following: {QUIT | STOP | CONTINUE}. See the *Strobe User Guide* for details.

**hlq**

Optional. High Level Qualifier. DSNAME High level qualifier - Temporary dataset prefix.

**tranid**

Optional. May occur up to 5 times. Used for transaction profiling, the tranids are transaction ID masks used to specify the transactions to be measured.

**Figure 5-4.** Example of Returns: SOAP Body Format

```
<?xml version="1.0" encoding="UTF-8"?>
<ns2:AddActiveResponse xmlns:ns2="http://istrobe.compuware.com/ws/Measurement">
  <ns2:reqType>addQueue</ns2:reqType>  <!-- addActive | addQueue -->
  <ns2:returnCode>0</ns2:returnCode>
  <!-- below is the iStrobe reporter url when the returnCode is less than 5 -->
  <ns2:reportUrl>http://iStrobe.server:8080/iStrobe43/iStrobe.html?js=on&auto=on&
  amp;report=MSD&profile=D%3A%5Ceclipse%5C... Sample11</ns2:reportUrl>
  <ns2:messageList>
    <ns2:message>STR6300I Input = ADD SBHCI,STEP=*ALL,GOMIN=0002,SAMPLES=009999,
    NONOTIFY,LIMIT=(01,QUIT),ISPFLAG=0000,RJCLFILE=( _YES_ )</ns2:message>
    <ns2:message>STR6261I 0581 JOBNAME1 QUEUED STEP=*ALL CREATED=(09:29:53
    06/23/2011) GOMIN=2 SAMPLES=9999 LIMIT=(1,QUIT)</ns2:message>
    <ns2:message>STR6261I EXPIRATION=(06/30/2011) NONOTIFY</ns2:message>
    <ns2:message>STR6130I ADD operation completed</ns2:message>
  </ns2:messageList>
  <ns2:statusList>
    <ns2:status number="581" state="QUEUED"/>  <!-- QUEUED | RUNNUNG -->
  </ns2:statusList>
</ns2:AddActiveResponse>
```

If there is an error in the addActive request, the return code will be non-zero with an appropriate message.

## connectTest Web Service Request to iStrobe Server - Detail

This request is used to test the z/OS connection information to confirm that it is correct and available.

**Figure 5-5.** URL Format of connectTest Web Service Request

```
HTTP://istrobeHost:port/iStrobe/ws/Measurement
```

See Figure 5-6 for the available request types.

**Figure 5-6.** Web Service Request SOAP Body Format

```
<ConnectTestRequest xmlns="http://istrobe.compuware.com/ws/Measurement"/>
```

**Figure 5-7.** Returns (Response): Soap Body Format

```
<?xml version="1.0" encoding="UTF-8"?>
<ConnectTestResponse>
  <returnCode>nnnn</returnCode>
  <message>message_string</message>
</ConnectTestResponse>
```

If there is an error in the connectTest request, the return code will be non-zero with an appropriate message. If the request is successful, the return code will be 0, and the message will include the available system list.

---

## Using SSL with the Web Service

You may secure communications between the web server and the web service client using Secure Sockets Layer (SSL/HTTPS). In order to request an Add Active via the SSL, the web server and the web service client should be configured for the SSL. The protocol is controlled by the web server. No special coding is needed in the iStrobe web service.

Settings for the web server configuration for SSL and the client should be documented by the web server provider. Here is an example of how to set up the SSL configuration for the CES server and the web service client using Java Secure Socket Extension (JSSE).

### Compuware Enterprise Services Server Configuration for SSL

To configure the Compuware Enterprise Services server for HTTPS, use the instructions at the following link:

[https://wiki.eclipse.org/Jetty/Howto/Configure\\_SSL#Setting\\_the\\_Port\\_for\\_https](https://wiki.eclipse.org/Jetty/Howto/Configure_SSL#Setting_the_Port_for_https)

The file to modify to add the SSL connector is:

```
<ces install dir>/data/jetty/etc/jetty_selector.xml
```

To use Smart Card support for authentication, use the following parameter in `jetty_selector.xml`:

```
-wantClientAuth=true
```

### Web Service Java Client Using SSL Connection

To access iStrobe web service via SSL, use the following JVM parameter:

```
-Djavax.net.ssl.trustStore=client.keystore
```

Or, you can set the following parameter in your web service client Java program:

```
System.setProperty("javax.net.ssl.trustStore", "<proper-path>/client.keystore");
```

The file `client.keystore` is the same file generated in the previous section. The URL for the web service will be similar to the following:

```
https://istrobeHost:8443/iStrobe
```



## Appendix B.

# Installing the Topaz Workbench Plug-in for iStrobe

The Topaz Workbench plug-in for iStrobe can be launched from within the Topaz Workbench or installed into an Eclipse or RDz instance. To use the iStrobe plug-in from within the Topaz Workbench, refer to the *Topaz Workbench Installation Guide* for installation instructions.

