



The Mainframe Software Partner
For The Next 50 Years

Hiperstation

Auditor User Guide

Release 16.05

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

Compuware Customer Support

<https://go.compuware.com>

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Introduction

Compuware is committed to providing user-friendly documentation in a variety of electronic formats. This section describes the available formats and how to access them, provides an overview of this manual, and describes the conventions used within and the resources available to help you.

Accessing Hiperstation Documentation

The Hiperstation documentation is available on the Compuware Go (FrontLine) customer support website at <http://go.compuware.com>. *Release Notes* are provided in HTML format and manuals in Portable Document Format (PDF):

- **Release Notes** — Provides recent information for the Hiperstation product. In this file, you can quickly access system requirements, technical notes, customer support contact information, and a list of the new features available in the release. The *Release Notes* may be updated throughout the life cycle of a release with the most current version located on FrontLine for easy access to the latest product information.
- *Hiperstation Installation and Configuration Guide* — Provides installation and configuration procedures.
- *Hiperstation for VTAM User Guide* — Explains how to use Hiperstation for VTAM to test 3270 and LUO applications.
- *Hiperstation for WebSphere MQ User Guide*— Explains how to use Hiperstation for WebSphere MQ to test WebSphere MQ applications.
- *Hiperstation for Mainframe Servers User Guide* — Explains how to use Hiperstation for Mainframe Servers to test APPC and TCP/IP applications.
- *Hiperstation Auditor User Guide* — Explains how to use the Hiperstation Archive Function.
- *Hiperstation Automated Testing Vehicle (ATV) Manager User Guide* — Explains how to use the Hiperstation ATV Manager to manage your testing environment and test cases.
- *Hiperstation Messages and Codes* — Explains the messages and codes that Hiperstation produces.
- *Hiperstation Scripting Reference* — Introduces advanced script editing concepts and provides reference information for technical users.
- *Hiperstation Reference Summary* — Summarizes the commands used in Hiperstation for VTAM's Domain Traveler and Session Demo features.
- **Master Index** — This file contains an indexed list of the contents of the entire manual set. To use this file, all of the book files and the master index file must be located in the same directory. Open the master index file and search for the desired term. Clicking on a search result will open the appropriate book at the desired page.

View and print PDF files with Adobe Reader. Download a free copy of the latest version of the reader from Adobe's web site: <http://www.adobe.com>.

Note: With a few minor exceptions, PDF files comply with the requirements of section 508 of the Rehabilitation Act of 1973. Refer to the Accessibility preface in any of the user guides for information.

For your convenience, Compuware also provides the Hiperstation manuals in the following formats:

- Hypertext Markup Language (HTML)

Access these formats on FrontLine, Compuware's Customer Support Web site at <http://frontline.compuware.com>.

1. Log-in.
2. Select the desired product.
3. Click the Documentation link on the left selection bar.
4. Select the desired release. FrontLine presents a documentation index containing links to each of the product's manuals in all of the available formats.

HTML Files

View HTML files with any standard Web browser. Simply click the HTML link on the selected FrontLine documentation page.

Note: As you review the HTML content, you may encounter the known issue regarding screens and other graphic figures in which the image may be cropped along the left or bottom edge.

Using this Manual

This section describes the contents of this manual and notation conventions used throughout the manual.

Hiperstation Auditor User Guide Overview

This guide teaches you how to use Hiperstation for auditing mainframe business applications. It contains the following chapters:

- **Chapter 1, "Archive Function Overview"** — provides an introduction to the archive function.
- **Chapter 2, "Archive Function — 3270"** — creates archive recording requests allowing you to create search reports, write captured activity to a specified range of datasets called a repository, provide IT auditors and help desk personnel with the ability to easily locate and extract data from the repository, provide the ability to manage your archive reports and delete unnecessary reports, and define the terminals, applications, and user IDs to record or exclude from recording.
- **Chapter 3, "Archive Function — TCP/IP"** — creates archive recording requests allowing you to create search reports and write captured TCP/IP activity to a specified range of datasets called a repository.
- **Chapter 4, "Archive Function — WebSphere MQ"** — creates archive recording requests allowing you to create search reports and write captured WebSphere MQ activity to a specified range of datasets called a repository.
- **Chapter 5, "Auditing Profile Defaults"** — provides information on how to edit your auditing profile settings.
- **Appendix A, "Customer Support Diagnostics"** — produces a list of PTFs that have been applied to your installation.

Notation Conventions

This document uses the following notations to describe Hiperstation screens and the information you enter on those screens:

- Technical revisions made to this document are indicated by revision bars in the left margin, as shown here.
- Sample screens generally show only the information appropriate to the accompanying text, for example:

```
ZOOM:PF23 ----- Hiperstation ----- LINE 1 OF 24
COMMAND ==> record                               SCROLL ==> HALF
Record OFF Play OFF Journal OFF Compare Log OFF autoDoc OFF
***USR2312 WELCOME TO CICS/MVS *** 10:11:42
```

- Blank lines or standard footings, as shown below, are usually omitted from screen illustrations.

```
Press ENTER to begin recording. Use END to cancel setup.
```

- Information you enter is printed in **boldface**.
- Words defined within paragraphs are *italicized*.
- The phrase “select an option” refers to typing a slash next to one of the presented options and pressing Enter.

Accessibility

In accordance with section 508 of the Rehabilitation Act of 1973, Compuware has committed to making its products and services easier to use for everyone including people with disabilities.

Hiperstation is a mainframe application that runs on IBM's OS/390 and z/OS operating systems. It has an ISPF interface that is accessed with IBM 327x-type terminals or with 3270 terminal emulator software. Since the mainframe environment offers few accessibility features, Compuware has focused its attention, with regard to accessibility, on 3270 terminal emulator software running on personal computers (PCs) with Microsoft Windows 2000 or more current. Hiperstation supports, with a few exceptions, Microsoft Windows accessibility features and Window-based Assistive Technology (AT) software and devices, such as Braille devices, screen readers, magnifiers, etc.

Note: Hiperstation is intended for use by mainframe software developers, programmers, and testers. Much of the input and output used or produced by Hiperstation, such as Job Control Language (JCL) and hexadecimal contents or dumps of memory, are not easily understood by the general public. Unfortunately, as in the case of hexadecimal dumps, data in these formats can be confusing to screen readers and therefore confusing to the people who use them. Effective use of this application requires the specialized knowledge of a mainframe systems software developer or programmer.

Hiperstation accessibility was evaluated using:

- Freedom Scientific's JAWS screen reader
- Attachmate Corporation's myExtra Presentation Services tn3270 emulator
- Microsoft's Windows accessibility features
- Adobe Reader using the "Read Out Loud" function

This evaluation not only identified accessibility exceptions, but revealed emulator and screen reader compatibility issues that in some cases can be remedied through appropriate configuration.

Installing Windows Accessibility Features

Microsoft Windows operating systems offer several accessibility features to aid individuals who have difficulty typing or using a mouse, who are blind or have low vision, or who are deaf or are hard-of-hearing. Install these features during setup or later using the Windows installation disks. Refer to the "accessibility" topics in the Windows Help system for information on installing and using these features. Visit the Microsoft Web site, <http://www.microsoft.com/enable>, for additional information and tutorials.

Selecting Font and Font Size

Microsoft Windows and emulator software packages offer font and font size settings to accommodate users with low vision. The emulator software's tool bars and dialog boxes typically use the font specified in the operating system, while the terminal presentation uses the font and font size specified in the emulator. To change the font or font size:

- Presented on the toolbars and dialog boxes, refer to the Windows Help system.
- Presented in the terminal window, refer to the emulator's documentation or Help.

Some screen readers recommend certain fonts and font sizes for compatibility. For example, Freedom Scientific recommends setting the font to a common or "plain" font such as Lucida, Courier, or Times New Roman, and setting the font size to 10 points or smaller. Refer to the screen reader's documentation or Help for these recommendations.

Changing Color and Contrast

Color and contrast settings can assist users with low vision. ISPF and most emulator software packages offer color and contrast settings. If you are accessing Hiperstation with a terminal, use ISPF settings. Otherwise, adjust the color and contrast in the emulator software. Refer to ISPF Help or the emulator's documentation or Help.

Setting Cursor Blink Rate

The blink rate of the cursor can affect users with photosensitive epilepsy. Additionally, some screen readers require a specific blink rate. Some readers automatically adjust the blink rate while others expect you to adjust the rate. Refer to:

- The Microsoft Windows Help to find out how to set the cursor blink rate.
- The screen reader's documentation or Help to find out the recommended blink rate.

Using Keyboard Shortcuts

Keyboard access to application functions support users who cannot use a mouse.

Microsoft Windows provides keyboard access to all functions within the operating system, such as:

- Displaying or hiding the Windows Start Menu

- Showing the Desktop
- Minimizing all windows
- Searching for files
- Accessing the help system
- Controlling the behavior of the Windows accessibility features, for example, toggling the listening status to the microphone, or cycling focus backward and forward.

Most Windows-based applications also provide keyboard access to their functions. The combination of keys required to execute a given function is called a keyboard shortcut. Refer to the “Keyboard Shortcuts” topics in the Windows Help system for a complete list of Windows shortcuts. For a list of the shortcuts that are available in the emulator software or any third-party accessibility tool, such as the JAWS screen reader, refer to the software’s documentation or Help.

Accessibility Exceptions Work Arouns

During Hiperstation accessibility evaluation, some exceptions were encountered where some accessibility features or AT were not fully supported. The causes of and solutions for these exceptions are currently under investigation by Compuware Corporation.

Known Exceptions

Accessibility exceptions include:

- Function Key (F Key) information at the bottom of the screen is not read by the screen reader on some screens. This is believed to be caused by an external interface. See “Solutions” for a viable work-around.
- Some system error and warning messages are not read by the screen reader when issued. Believed to be caused by an external interface. See “Solutions” for a viable work-around.
- Some pop-up dialog boxes or windows do not capture exclusive focus and are not read correctly by the screen reader. This is believed to be caused by an external interface. No known solution is currently available.
- System error and warning messages do not capture visual focus for the screen magnifier. This is believed to be caused by an external interface. No known solution is currently available.
- Some entry and display fields lack individual labels. When entry fields are accessed using the Tab key, the entire individual line is read.
- Current Web-based reports are not easily navigated using the keyboard and lack table element coordinate tags. Additionally, some of these reports contain color-coded elements — for example, the color of some elements conveys meaning.

Solutions

When the screen reader fails to read the F Key information upon entry to a new screen, do one of the following:

- Use the arrow keys to move the cursor down to the lines with the F Key information. The screen reader reads each line as the cursor is placed on it.
- Press the Page Up key for the screen reader to reread the entire screen.

When the screen reader fails to read an error or warning message, an audio alert occurs if this feature is enabled on your system. Press the Up key to place the cursor on the line containing the error message, usually on the top or title line. The screen reader reads the line and its error message individually.

Getting Help

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

FrontLine Support Web Site

You can access online information for Compuware products via our FrontLine support site at <http://frontline.compuware.com>.

FrontLine 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 FrontLine, you are required to register and obtain a password. Registration is free.

Compuware now offers User Communities, online forums to collaborate, network, and exchange best practices with other Compuware solution users worldwide. Go to <http://groups.compuware.com> to join.

Contacting Customer Support

If you have difficulty with Hiperstation, refer to the information in the appropriate user's guide for help or consult with the Hiperstation technical representative at your site. If the problem persists, please obtain the following information before calling Compuware:

1. The release number of the product being used
2. The release number of the transaction processing utility (such as CICS, IMS/DC, or ISPF) being used
3. The operating system being used to help determine operating system dependencies
4. If an abend occurs, note the displacement and the module in which it occurs, and if possible, obtain a copy of the system dump.
5. The sequence of issued transactions and/or commands that resulted in the problem and the data type involved.

Phone

- USA and Canada: 1-800-538-7822 or 1-313-227-5444.
- All other countries: Contact your local Compuware office. Contact information is available at <http://frontline.compuware.com>.

Web

You can report issues via the **Report and Track Calls** tab on the FrontLine home page.

Note: Please report all high-priority issues by phone.

Mail

Hiperstation Customer Support
Compuware Corporation
One Campus Martius
Detroit, MI 48226-5099

Corporate Web Site

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.

Note: Hiperstation provides a report that may help Customer Support diagnose an issue. See Appendix A, "Customer Support Diagnostics" for details. Although it is not required, generating the report before calling may expedite diagnosis.

Chapter 1.

Archive Function Overview

Introducing the Archive Function

Hiperstation is a zSeries automated testing solution that enables systems and applications programmers and quality assurance personnel to streamline the testing process and improve the quality of their applications. In addition to automated testing, Hiperstation can address other business issues as well, specifically, security monitoring.

Using Hiperstation as a Security Monitoring Tool

Today's mainframe application organizations use two standard facilities for managing security. First, security systems prevent unauthorized users from logging on and then controlling access privileges of authorized users. Second, monitoring facilities, such as System Management Facilities (SMF), log a variety of activities performed by the user, including opening datasets and logging off. Most organizations have programs that post-process their SMF records to produce audit reports.

Hiperstation can provide what these facilities lack, which is an in-depth record of the detail on each screen the user accessed on their terminal. Hiperstation's Auditing Archive Recording feature allows you to record all users of a given application that you want to monitor, select users across all of the applications that they use, and for VTAM, document each keystroke and screen that the user sees. Hiperstation can be likened to an electronic security camera installed directly behind the user. The user is not aware that the recording is taking place unless the security team chooses to disclose this information.

Hiperstation is the watchdog for users who are able to gain access to the mainframe and are able to navigate throughout the system. Rather than relying only on security violations and SMF records, the Hiperstation script is a true picture of what the user saw and did.

Implementing Hiperstation as a Security Monitoring Tool

Implementing Hiperstation as a security-monitoring tool requires analysis and agreement between management and the system implementation team. You need to decide:

- Whether to monitor all mainframe users or just a selected group of users
- Whether to record groups or users in separate recordings or all together in one.
- Whether to record continuously
- Who will be responsible for administering the recording
- Where to store the recorded data and scripts in secured files
- Who will be accountable for the web reports
- How long to store the recorded data
- How to analyze the web reports

After you decide what to do about these issues, an implementation plan can be developed. Although the details will vary slightly, the general task list includes the following items:

- Set up and start Global Recording. Compuware recommends that you integrate the Global Recording Started Task into the IPL process. This allows data capture to begin immediately with any IPL.
- Implement your Archive Audit Request scheme (for example, how many requests record which users, terminals or applications). Use the Name and Description fields to help convey the probable contents of each Archive Audit Request to the users.
- Train your Search users to use the tool effectively (for example, restricting date/time of searches to save processing time and DASD space consumption).
- Ensure that users who plan to execute the Search Tool against the Archive Audit Requests understand the Archive Audit Request schemes.
- Ensure RACF controls are in place to provide proper access protection to the Archive Audit Repositories.
- Encourage Search users to build a repository of shared search criteria wherever possible.
- Set goals for report management (for example, cleanup and final disposition of Web Reports) by the Search users.

Summary

Hiperstation can provide an organization with a comprehensive audit trail of online user activity. Unlike other auditing processes that require looking at security logs and SMF records, Hiperstation provides a complete audit trail of what the user executed on their terminal with the application in question. The Archive Search Web Report capability gives the auditor the ability to step through each screen the user viewed. The auditor will see all traffic for that user from logon to logoff.

The benefit of using Hiperstation for security monitoring can be summed up in two words: maximum accountability. By combining the analysis potential of Hiperstation scripts with existing security tools, the security auditor is able to analyze and quantify the impact of all security breaches.

Figure 1-1. Hiperstation Archive Recording Setup Screen

```

Hiperstation ----- 3270 - Archive Criteria -----
Command ==>

Press ENTER to continue, or PF1 for help, or CANCEL to exit.

Name . . . . . CICSPROD
Description. . . . . Capture All Data for Region CICSPROD

Repository Registry Dataset. . . 'CICSPROD.ALLDATA'

Terminal . . . . . *          Use an asterisk for wildcarding
Application. . . . . CICSPROD the Terminal, Application or Userid
Userid . . . . . *          fields.
OR
Global Record Manager List . . . Second filter GRM List . .

          MM / DD / YYYY          HH : MM : SS
Start Date . . . 00 / 00 / 0000   Start Time . . . 00 : 00 : 00   (Optional)
End Date . . . . 00 / 00 / 0000   End Time . . . . 00 : 00 : 00   (Optional)
    
```


Figure 1-1 shows the Archive Criteria setup screen. In this example, we are capturing all of the activity for our CICSPROD region, regardless of terminal ID or user ID. Notice that there is no specified start or end date or time. Therefore, our recording will continue 24x7 as long as the Global Recording Started Task is running.

We have specified a meaningful NAME and DESCRIPTION for the request. We have also specified a Repository Registry Dataset of CICSPROD.ALDDATA. This name will be used to generate the Registry Dataset (VSAM file containing date/time indexes to the created repository segments). The Repository Registry Dataset name will also be used to generate the dataset names of the repository segments by adding a sequence number to it (for example, #0000001, #0000002, etc.).

Searches can be performed automatically against any repository segment that has filled up and switched, or has been switched manually, with an e-mail notification being sent to the owner of the request.

Note: E-mail notification is set up using Hiperstation profiles. See the *Hiperstation Installation and Configuration Guide* for details.

Topaz Workbench

Hiperstation/Eclipse provides access from a PC to the mainframe for Archive/Search through the Topaz Workbench (an Eclipse-based interface). The purpose of this Workbench is to create a communication pipeline that allows information to flow from the mainframe to the client and from the client to the mainframe. This permits users and help desk personnel to more easily access the reports and information they need from the mainframe in a format that they are more familiar with.

You will be able to create two types of search requests:

- Upon each repository switch, perform a search using standard criteria.
- Create unique search requests that will include all of the archived repositories for a given date range.

Search results are displayed in a drill-down interface.

To use the workbench, you will log on using your mainframe user ID and password. You will not be required to use a 3270 emulator to access the mainframe. Report data will be secured because users will only be able to access reports that they have the authorization to read.

For detailed information on how to use the workbench, see the workbench online help. Refer to the *Topaz Workbench Installation and Configuration Guide* to learn how to install Hiperstation/Eclipse and the Topaz Workbench.

Chapter 2.

Archive Function — 3270

The Archive/Search function allows you to create archive record requests. A request is started and repositories are generated based on filter criteria. A registry dataset is also created. The registry dataset contains entries that indicate the date and time ranges of each generated repository segment so that the Archive/Search function can locate specific datasets by date and time.

The Archive Record Administrator will set up security so that only authorized users have access to, and can search from, the list of audit requests.

The Archive/Search function:

- Creates archive recording requests that allow you to create search reports.
- Manages your requests and frees up space by deleting requests that are no longer needed.
- Builds lists of applications, terminals, and user IDs to include or exclude from recording. Global Recording Manager Lists provide greater flexibility in defining Global Recording requests.
- Provides IT auditors and help desk personnel with the ability to easily locate and extract data from the repository. This function provides global search reports that can be used by any user with GRADMIN authority.

To make the Archive/Search function easier to use, Hiperstation/Eclipse can be run from the Topaz Workbench, an Eclipse-based graphical user interface (GUI). The purpose of Hiperstation/Eclipse is to create a communication pipeline that allows information to flow from the mainframe to the client and from the client to the mainframe. This permits users and help desk personnel to more easily access the reports and information they need from the mainframe in a format that they are more familiar with.

Note: Although Hiperstation/Eclipse is meant to run from the Topaz Workbench, the Topaz Workbench is not required. Hiperstation/Eclipse can be run from your own Eclipse installation. See the online help for detailed information on how to use Hiperstation/Eclipse.

Archive Reports provide the following:

- List of sessions
- Session details
- List of screens
- Search Criteria
- Message Log
- Ability to delete reports

CAUTION:

To improve processing time when performing searches, Hiperstation for VTAM has added a qualifying analysis routine. If you use a screen optimizer, there may be rare instances when a search string may not be found. For example, this might occur if the search string contains many repeating characters. This can be avoided by disabling screen optimization.

Accessing the Archive/Search Menu

Archive/Search provides a facility for creating archive recording requests and search reports. Recordings can consist of groups of users performing their daily routines without any additional knowledge or training.

Note: You can also create search requests using Archive/Search with Hiperstation/Eclipse. Refer to the *Topaz Workbench Installation and Configuration Guide* for information on how to install Hiperstation/Eclipse. Refer to the online help after installation to learn how to use Hiperstation/Eclipse.

Archive recording is initiated based on Archive Recording Requests. These requests allow you to specify the exact terminals, applications, user IDs, and time frames to record.

Archive recording functions as a separate task that must be started by operational personnel before recordings are activated.

This chapter provides information on how to perform archive requests for 3270 (VTAM).

Starting 3270 Archive/Search Using Hiperstation for VTAM

1. Start Hiperstation for VTAM and select option **5 Archive/Search** on the Hiperstation for VTAM - Main Menu (Figure 2-1).

Figure 2-1. Hiperstation for VTAM - Main Menu

```

----- Hiperstation - Main Menu -----
Option ==> 5

1 Domain Traveler          Record and Playback
2 Quick Play              Select a Script and Go
3 Session Demo            Demonstrate Online Applications
4 Global Recording        System and Application Test Creation
5 Archive/Search          Audit and Help Desk Functions
6 Script Processors       Automatic Script Editing
7 Unattended Processing   Setup Unattended Playback and Compare Jobs

Product Release: 07.08.00

```

The Archive/Search menu appears (Figure 2-2).

Figure 2-2. Archive/Search Menu

```

Hiperstation----- Archive/Search -----
Option ==>

1 Archive Requests        Add, Review or Terminate your requests
2 Create Search Reports   Search archive requests
3 Search Report Management Search report maintenance
4 Global Record Manager   Manage Include/Exclude filter lists
5 Global Search Manager    Manage Global Search Criteria

Enter END command to return to Hiperstation Main Menu.

```

2. From this menu, select one of the following options and press Enter, or use the END command to return to the Hiperstation for VTAM Main Menu.
 - **1 Archive Requests** — allows you to create and manage your archive requests. The “Archive Recording - Monitor 3270 Requests Screen (Left View)” appears

(Figure 2-5 on page 2-4).

- **2 Create Search Reports** — allows you to create and submit searches against an archive request. The “Search - Archive Requests Screen” appears (Figure 2-11 on page 2-12).
- **3 Search Report Management** — allows you to manage your reports by deleting unwanted reports. The “Search Report Management Screen” appears (Figure 2-25 on page 2-29).
- **4 Global Record Manager** — allows you to build lists of applications, terminals, and user IDs to include or exclude from recording. Global Recording Manager Lists provide greater flexibility in defining Global Recording requests. The “Global Record Manager * Include/Exclude Lists Screen” appears (Figure 2-28 on page 2-31).
- **5 Global Search Manager** — allows you to create and submit searches against an archive request. The “Search - Archive Requests Screen” appears (Figure 2-11 on page 2-12).

Archive Requests — Hiperstation for VTAM

Archive recording writes captured activity to a specified range of datasets called a repository set. You can also create search reports from the capture repository set.

To capture activity to be searched, you need to create a recording request. If you specify a time frame for the request, it becomes active at the designated start time. If you do not specify a time frame, it becomes active immediately. Capture begins when all of the criteria for an active request are met.

Note: You can use the DCI to add any Archive request type (3270, WebSphere MQ, TCP/IP). See “Using the Global Recording Batch Interface” in the appropriate user guide for information and examples of how to use the DCI. DCI Archive Samples in the Sample Dataset have the prefix 'DCIADAxX'.

Archive Recording Requests

This section explains how to start using the Archive Requests option:

1. Select option **1 Archive Requests** from the “Archive/Search Screen” (Figure 2-3).

Figure 2-3. Archive/Search Screen

```

Hiperstation ----- Archive/Search -----
Option ==> 1_

  1 Archive Requests      Add, Review or Terminate your requests
  2 Create Search Reports Search archive requests
  3 Search Report Management Search report maintenance
  4 Global Record Manager Manage Include/Exclude filter lists
  5 Global Search Manager Manage Global Search Criteria

Enter END command to return to Hiperstation Main Menu
    
```

- If no active or inactive archive recording requests exist, the “Archive Recording - Add Requests Screen” appears (Figure 2-4) stating that no Archive Recording Requests were found.

Figure 2-4. Archive Recording - Add Requests Screen

```

Hiperstation ----- Archive Recording - Add Requests -----
Command ==>

*****
*
*               No Archive Recording Requests were found.
*
*
*****

Press ENTER to continue, or END to return.
    
```

Press Enter to advance to the “3270 - Archive Criteria Screen” (Figure 2-8 on page 2-8) or END to return to the “Archive/Search Screen”.

Note: The “Archive Recording - Add Requests Screen” is only available to users who have GRADMIN (Global Recording Administrator) authority.

- If active or inactive archive recording requests already exist, the “Archive Recording - Monitor 3270 Requests Screen (Left View)” appears (Figure 2-5). This screen presents a list of existing requests with active requests highlighted. Press Tab twice to position the cursor in the S (select) column on the first request listed.

The Archive Recording - Monitor 3270 Requests screen has two views. The left view displays the name of the archive recording request and its corresponding description (Figure 2-5). The right view displays LU Type (3270), Applid, Terminal, Userid (or the Global Recording Manager List), the Repository Dataset, and Users information (Figure 2-6).

Figure 2-5. Archive Recording - Monitor 3270 Requests Screen (Left View)

```

Hiperstation ---- Archive Recording - Monitor 3270 Requests ---- Row 1 of 17
Command ==>                               Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)Stop, (R)estart, (D)isable,
                  (S)elect, (1)Add 3270, (9)Switch Repositories
                                                    MORE->

S  Name      Description
-  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
BGTEST
CHRISJ  *TESTING...WHAT ELSE?
DANR    *JUST A QUICK ARCHIVE TEST
DANR2   *SECOND ATTEMPT AT A QUICK ARCHIVE REPOSITORY
JAJR780 TEST ARCHIVE FOR 780
JAYXXXX *JAY TEMP
JAYYYYY
SECURIT2 RECORDING SERVICE ACCESS 24/7
LYPAECH1 TEST VTAM ARCHIVE REQUEST
LYPARCH2 TEST2
AVTAMI1 *ARCHIVE VTAM ISPF 1
AVTAMI2 *ARCHIVE VTAM ISPF 2
A3270D1 *Archive 3270 via DCI 1
SHEL    NEW TEST
SHELTEST *TEST
    
```

Figure 2-6. Archive Recording - Monitor 3270 Requests Screen (Right View)

```

Hiperstation ---- Archive Recording - Monitor 3270 Requests ---- Row 1 of 17
Command ==> Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)stop, (R)estart, (D)isable,
                  (S)elect, (1)Add 3270, (9)Switch Repositories

                                     <-MORE
S  LU  Side-A/  Side-B/  Repository  Users
   Type Applid  Terminal  Userid  Dataset
-----
3270  *  *  *  USR3132  ENTQA.VP.ARCHIVE.#0000001  0
3270  *  *  *  USR3132  *USR3132.USR3132.ARCHIVE1.TEST.#000000  0
3270  *  *  TCW00688  *  *USR4132.DANR.#0000001  0
3270  *  *  TCW00688  *  *USR4132.DANR2.#0000001  0
3270  *  *  *  USR3*  USR3132.JAJR780.#0000024  0
3270  *  *  *  USR313*  *USR3132.JAYXXXX.#0000001  0
3270  *  *  *  USR313*  USR3132.JAYYYYY.#0000007  0
3270  *  *  *  USR4232  USR4232.R780.REG.#0000001  0
3270  *  *  *  USR423*  USR4232.USR4232.R780.LYPARCH1.#000000  0
3270  *  *  *  USR423*  USR4232.R780.LYPARCH2.#0000001  0
3270  *  *  *  USR4232  *USR4232.R780.VANTAGE.AVTAMI1.#0000001  0
3270  *  *  *  USR4232  *USR4232.R780.VANTAGE.AVTAMI2.#0000001  0
3270  H06AC*  *  *  *USR4232.R780.VANTAGE.DCIARCH.#0000001  0
3270  *  *  *  *  USR4233.INPUT.#0000001  0
3270  *  *  *  *  *USR4233.NEWONE.#0000001  0
    
```

Note: The Archive Recording - Monitor 3270 Requests screen is only available to users who have GRADMIN (Global Recording Administrator) authority. Refer to the online help for information about the primary commands that are valid on this screen.

- Depending on the task you want to perform, enter the appropriate line command in the Selection column and press Enter. The selection column is available on both the left and right view. See “Description of Available Archive Recording Line Commands” for a description of the line commands available on this screen.

Description of Available Archive Recording Line Commands

Following is a description of the available line commands:

C (Cancel)

Terminates the request and deletes the request entry without waiting for sessions that match your filter criteria to end. All buffered information is also deleted, which may result in partially recorded business transactions. To avoid losing important data, STOP the request first. Wait for recording to terminate before issuing the CANCEL command. All session data is written to the specified repository dataset and the repository registry is updated.

Canceled requests can still be searched even though they no longer appear on the “Archive Recording - Monitor 3270 Requests Screen”. They still appear on the “Search - Archive Requests Screen”. If the data from the archive record request is no longer needed, use ISPF management tools to delete the repository set datasets.

F (Force)

Terminates the capture request without waiting for sessions that match your filter criteria to end. This may result in partially recorded business transactions. To stop capturing new sessions, but allow capture to finish in-flight sessions, use STOP instead. All session data is written to the specified repository dataset and the repository registry is updated. A terminated request will restart when Archive Recording is restarted.

Note: Using the (F)orce line command will result in the immediate termination of your request and possible loss of session data not yet written to your repository dataset from Archive Recording ECSA buffers. Use this line command with caution.

P (Stop)

Deactivates the capture request and ensures that no new sessions matching your capture criteria will be captured. Archive Recording continues capturing all sessions that are in-flight at the time Stop is issued and will write data to the specified repository dataset when they end. A stopped request will restart when Archive Recording is restarted. A stopped request is no longer highlighted in the list of requests.

R (Restart)

Restarts a request that was previously stopped using either the Force or Stop line command. The request becomes active as soon as the time frame specified within the request is met. Use this option to activate an inactive request. When the request is restarted, it appears highlighted in the list of requests.

Note: If the request contained a start date and time and/or an end date and time, the request will not become active if the current time is not within the start or end dates and times originally specified in the request.

D (Disable)

Prevents a request from starting when the Archive Recording job is started or when the Start Time is reached. An asterisk (*) appears next to the description in the left view, and the dataset name in the right view, indicating that the request is disabled. A disabled request will not restart when Archive Recording is restarted.

Note: Stop or Force the request and wait for the request to terminate prior to disabling it. Once it is disabled, issuing (R)estart, (P)Stop, or (F)orce enables the request causing it to perform the task requested by the selected line command.

S (Select)

Displays the Active Sessions screen, which lists all 3270 sessions being recorded. This allows you to view the statistics on sessions that match your capture criteria. See “Viewing Active Sessions” on page 2-6 for a description of this screen.

1 (Add 3270)

Initiates the 3270 Add Archive Request process allowing you to add additional 3270 archive recording requests. See “Creating Archive Criteria” on page 2-7 for more information about this screen.

9 (Switch Repositories)

Closes the repository segment that is currently being written and opens, in sequence, the next segment to resume capturing data. A message appears stating which repository is closed and the number of the next repository that is opened. When the repository is closed, a search is performed automatically, and an e-mail is sent to the owner of the search request if e-mail notification is set up in Hiperstation profiles.

Enter

Press the Enter key without entering a primary or line command to refresh the request list and reposition the cursor on the Command Line on the left view.

Viewing Active Sessions

This section explains how to access the “Global Recording * Active Sessions Screen” and describes the columns on the screen. On this screen is a list of all sessions currently being recorded for a given request. To access this screen:

1. Type **S** (select) next to the appropriate request on the “Archive Recording - Monitor 3270 Requests Screen (Left View)” (Figure 2-5 on page 2-4) and press Enter. The “Global Recording * Active Sessions Screen” appears (Figure 2-7).

Figure 2-7. Global Recording * Active Sessions Screen

```

----- Global Recording * Active Sessions ----- Row 1 of 2
COMMAND ==>                                     SCROLL ==> PAGE

```

Terminal	App1	Userid	Start Time	Last Update	Trans	Lost
TCW00095	A01TS004	USER25	09/07 18:12:05	09/07 18:13:29	0167	0000
CW010002	A01TS002	USER37	09/07 18:04:33	09/07 18:13:48	5275	0000

```

***** BOTTOM OF DATA *****

```

The information on the “Global Recording * Active Sessions Screen” includes the Terminal ID, Application ID, and User ID being recorded, and it shows statistics not just for the selected archive recording request but for the VTAM session across all archive and global recording requests.

The Start Time column shows the time the user logged on or the time the first transaction was recorded for the given session.

The Last Update column shows the last time Global Recording flushed and processed the captured information from the ECSA buffers. This indicates the age of the counts displayed in the Trans and Lost fields.

If Last Update indicates a significant lag, or sessions are being recorded that do not appear on this screen, contact your MVS Systems Programmer. The *Hiperstation Installation and Configuration Guide* provides instructions for optimizing Global Recording performance.

The Trans column shows the number of inbound and outbound VTAM data streams (transactions) recorded for the given session.

The Lost column shows the number of transactions (PIUs) lost. Slow processing or full buffers can result in lost messages. If this field reports lost messages, contact your MVS Systems Programmer. The Global Recording buffers may require tuning for optimal performance as described in the *Hiperstation Installation and Configuration Guide*.

2. After reviewing the information on the screen, press **End** to return to the “Archive Recording - Monitor 3270 Requests Screen”.

Creating Archive Criteria

This section describes how to create a new archive recording request.

1. From the “Archive Recording - Monitor 3270 Requests Screen”, type a **1** (Add 3270) next to any recording request and press Enter. The “3270 - Archive Criteria Screen” appears (Figure 2-8).

Figure 2-8. 3270 - Archive Criteria Screen

```

Hiperstation ----- 3270 - Archive Criteria -----
Command ==>

Press ENTER to continue, or PF1 for help, or CANCEL to exit.

Name . . . . .
Description. . . . .

Repository Registry Dataset. . .

Terminal . . . . . Use an asterisk for wildcarding
Application. . . . . the Terminal, Application or Userid
Userid . . . . . fields.
OR
Global Record Manager List . . Second filter GRM List . .

MM / DD / YYYY HH : MM : SS
Start Date . . . 00 / 00 / 0000 Start Time . . . 00 : 00 : 00 (Optional)
End Date . . . . 00 / 00 / 0000 End Time . . . . 00 : 00 : 00 (Optional)
    
```

2. Enter a **Name** and optional **Description** for your new archive criteria. You can specify up to eight characters for the name. The name can be alphanumeric but must start with a letter.
3. Enter the **Repository Registry Dataset** name. This dataset contains the index to this archive recording request. Specify a dataset name. The repository registry dataset name can be up to 35 characters in length. The repository set created by this archive recording request will be based on the repository registry dataset name (for example, a repository registry dataset of A.B.C would result in repository set segments being created from A.B.C.#0000001 to A.B.C.#9999999).

This is a required field that stores information to make searching more efficient. All other datasets are built based on this dataset name.

Note: If you delete your registry by mistake, you can run HSREGEN to recreate it.

4. The **Terminal**, **Application**, and **Userid** fields are mutually exclusive with the **Global Record Manager List** field. In addition, if you fill in the Terminal field, the Userid field is not required and vice versa. Application is required with either the Terminal or Userid field.

In other words, fill in either the Terminal and/or Userid and Application fields *or* an include or exclude list in the Global Record Manager List field.

- Terminal is the logical unit name of the terminal to record, Application is the ID of the application to record, and Userid is the ID of the user to record. These fields hold eight characters. Enter one of the following:
 - A specific terminal ID, application ID, or user ID in the appropriate field.
 - An asterisk (*) to select all terminals, applications, or user IDs. Leaving these fields blank selects all terminals, applications, or users.
 - A prefix followed by an asterisk to select a group of terminals, applications, or user IDs. For example, H8606* selects all terminals beginning with H8606.

OR

- Enter the Global Recording Manager List (GRM) to use for this request. Save time by creating Global Recording Manager Lists that specify terminals, applications, and user IDs to include or exclude from capture.

If you specify a list name, and an existing list starts with the same characters, the "Global Record Manager * Include/Exclude Lists Screen" appears. It presents all lists beginning with the same characters. Do one of the following:

- Select one of the existing lists by typing an S next to it and pressing Enter.

- Use the **A** (add) line command to define the new list. Press **End** to return to request creation.

If you specify a list that does not exist, the “Global Record Manager * Add List Screen” appears. Fill in the fields and press **End** to return to request creation.

See “Defining Global Recording Manager Lists in the Global Recording Requests and Scripts chapter of the *Hiperstation for VTAM User Guide* for more information.

This field accepts a value only if you did not fill in the **Terminal**, **Application** or **Userid** fields.

- If you specified a Global Recording Manager List, you can specify a Second filter GRM List. The list can be either an Include or Exclude list. If the first and second lists are the same, it is equivalent to the one list. If they are different, the second filter is applied to the result of the first filter.
5. Fill in the start and end date and time that you want to activate and deactivate the request.
 - If you supply a start time, you must also supply a start date, and if you supply an end time, you must supply an end date. However, when you supply a start or end date an accompanying start or end time is not required.
 - To activate the request immediately, accept the default values of all zeros in both the **Start Date** and **Start Time** fields.
 - To activate and/or deactivate the request on a specific date, enter a two-digit month, two-digit day, and four-digit year.
 - To activate and/or deactivate the request at a specific time, enter a two-digit hour based on a 24-hour clock, a two-digit minute or press Tab to accept 00, and a two-digit second or press Tab to accept 00.
 - If you supply a start date, but accept all zeros for the start time, the request activates at midnight at the beginning of the start date.
 - To keep the request active until you Stop, Force, or Cancel it, accept the default values of all zeros for both the **End Date** and **End Time** fields.
 - If you supply an end date, but accept all zeros for the end time, the request deactivates at midnight at the beginning of the end date. Therefore, to include records up to and including a specific day, enter the following day as the end date.
 6. To validate the information on this screen and continue, press Enter. If the information is invalid, a message will appear telling you what needs to be added or changed. If the information is valid, the “Archive Criteria - Delete or Terminate Message Screen” appears (Figure 2-9).

Note: The request is not added until the initial segment is allocated.

Figure 2-9. Archive Criteria - Delete or Terminate Message Screen

```

Hiperstation ----- 3270 - Archive Criteria -----
C |----- Archive Criteria - Delete or Terminate -----|
  |Command ==>|
  |
  |Hiperstation archive record requests create repository
  |segment datasets based on the registry dataset name. You must
  |specify what action to take if the archive recording request
  |encounters an existing dataset in the following range:
  |
  |R   First . . USR3213.ARCH.VTAM.#0000001
  |   Last . . USR3132.ARCH.VTAM.#9999999
  |
  |S
  |E Existing dataset option: (Enter number to select)
  |  - 1. Delete existing datasets
  |  - 2. Terminate the archive request
  |-----|
  |L|----- Client ----- Server -----|
  |S Ftr IP Address          Port IP Address          Port
  |* ** * *****|*****|*****|*****|
  |001
  
```

Hiperstation for VTAM archive recording requests create repository segment datasets based on the registry dataset name. You must specify what action to take if the archive recording request encounters an existing dataset in the specified range.

Note: The purpose of the “Archive Criteria - Delete or Terminate Message Screen” is to decide what to do when the next dataset segment in the repository set exists. This situation is not desirable because both options may have negative consequences. It is strongly recommended that this situation be avoided. To help prevent this situation from occurring, have the security administrator ensure that only the global recording started task has ALTER authority to the repository set datasets after the archive record request has been initiated.

The First and Last fields show the dataset name of the first and last repository dataset segment that can be used. These include the registry dataset name followed by “.#0000001” and “.#9999999”.

7. Select 1 or 2 and press Enter to continue. Your choices include:
 - **1. Delete existing datasets:** Deletes the existing datasets and creates new datasets that have the same names and are allocated with the same options as the initial repository dataset segment. Specify this option if the archive recording request must remain active.
 - **2. Terminate the archive request:** Terminates the archive request. The archive recording request will not start if any existing datasets match the repository dataset specification. Also, if a dataset is created later that matches the repository dataset specification, the archive request will terminate when it needs to switch to that dataset.

Note: You **must** make a choice. There is no default value, and your previous choices are not remembered from session to session.

- Use END or CANCEL to cancel the add archive request and return to the “3270 - Archive Criteria Screen”.

After selecting 1 or 2, the “Global Recording - Allocate Dataset Screen” appears allowing you to define your repository file without exiting Hiperstation for VTAM. The repository is a sequential dataset with variable blocked format. The record length of this dataset is four less than the specified block size. A block size of 9004 (default) is recommended.

8. The Management Class, Storage Class, and Data Class are defined by the storage administrator at your site. Leave blank to accept the default class.

9. Specify the type of Space Units to be used to store the data. Valid values are: TRKS (Tracks), CYLS (Cylinders), BLKS (Blocks), BYTES, KB (kilobytes), or MB (megabytes). Space units combined with the primary and secondary quantities define the amount of space allocated for the dataset.
10. Specify the primary and secondary quantity of space units to allocate. After Global Recording fills the primary quantity, it allocates the secondary quantity.
11. After you have filled in this screen, press Enter. The “Archive Recording - Monitor 3270 Requests Screen” reappears showing the new request in the list.

Searching Archives — Hiperstation for VTAM

The Create Search Reports function provides IT auditors and help desk personnel with the ability to easily locate and extract data from the repository. Using this function, you can locate specific screen events within a large data capture.

This section describes both local and global archive search requests. Most of the screens for options 2 and 5 on the “Archive/Search Menu” (Figure 2-10) are the same or very similar. The main difference is that option 2 allows you to create, modify, and delete local search criteria and option 5 allows you to create, modify, and delete global criteria (if you have GRADMIN authority). When there are differences between the search types, those differences are described. Otherwise, the search criteria and screens are the same.

Global archive search requests make up a pool of search requests that are created by an auditor with GRADMIN authority and are available on a site-wide basis to all auditors. With this feature, each auditor does not have to individually create the same search request. GLOBAL will appear in the member list ID column. Global archive search requests cannot be changed by auditors who do not have GRADMIN authority; however, global members can be copied to an auditor’s local filter member list and modified.

Local archive search requests are available only for the auditor who created them. If you copy a global member to your local member list, two members of the same name will exist. The local version takes precedence over the global version, and only the local version will appear in your filter member list. LOCAL will appear in the member list ID column. If the LOCAL member is renamed or deleted, the GLOBAL member will reappear.

Searching Archive Requests

The “Search - Archive Requests Screen” allows you to view or search a list of current active and inactive archive requests.

You can examine these archive requests using the View line command.

You can search the archive repository sets using search criteria defined on the “Search - Criteria Screen” by using the Select line command (Figure 2-12 on page 2-14).

The Archive Search process produces HTTP web reports that can be viewed using the Index of Search Results URL link on the screen.

1. Select option 5 **Archive/Search** on the “Hiperstation for VTAM - Main Menu”. The “Archive/Search Menu” appears (Figure 2-10).

Figure 2-10. Archive/Search Menu

```

Hiperstation ----- Archive/Search -----
Option ==> 2_

  1 Archive Requests      Add, Review or Terminate your requests
  2 Create Search Reports Search archive requests
  3 Search Report Management Search report maintenance
  4 Global Record Manager Manage Include/Exclude filter lists
  5 Global Search Manager Manage Global Search Criteria

Enter END command to return to Hiperstation Main Menu
    
```

2. Select option 2 **Create Search Reports** or option 5 **Global Search Manager**.

Selecting option 2 allows you to work with local search requests. Option 5 allows you to work with local and global search requests.

Either choice displays the “Search - Archive Requests Screen” (Figure 2-11). This screen shows a list of the available archives that can be searched.

Figure 2-11. Search - Archive Requests Screen

```

Hiperstation ----- Search - Archive Requests ----- Row 1 of 8
Command ==>                                           Scroll ==> PAGE

Line commands are: (S)elect, (V)iew or (Q)ueued

Index of Search Results:
http://cw06.compuware.com/usr/local/hs/hs078/archive/AZCC011/index.xml

S Name      Description
-----
DEANTEST THIS IS DEAN'S FIRST ARCHIVE
USR2503 MIKEY'S TEST
HELEN HELEN'S FIRST TEST
JAY0626A JAY 6/26
EVERTON2 TEST CAPTURE OF H06AC079
TEST5 ANOTHER TEST
BOB0709A TEST
HLMTST1
***** BOTTOM OF DATA *****
    
```

Note: For a complete list of the primary and line commands valid on this screen and how to use them, refer to the online help.

The “Search - Archive Requests Screen” contains a list of the Archive Requests held in the Global Recording request file. Both active and inactive Archive requests are shown. Active requests are shown in bold. Even canceled recording requests that were not canceled using the Global Recording Batch Interface are shown if the first segment of the repository set exists.

3. You can use the FIND, RFIND, or LOCATE commands as well as FORWARD or BACK to help you locate the desired Archive. After locating the desired Archive, type:
 - S and press Enter to select the Archive (see “Selecting or Creating Search Criteria” on page 2-13). (S)elect displays the “Search - Criteria Screen” if you are working with local requests and the Global Search - Criteria screen if you are working with global requests. From these screens, you can initiate search requests on the screens recorded in the selected archive repository set.
 - V and press Enter to view the Archive (see “Viewing Archive Requests” on page 2-22). (V)iew displays the “Archive Recording - View Request Screen” where you can view the details of an Archive request. This includes the capture criteria

(Terminal, Application, Userid, or Global Recording Manager List), Start and End date and time specification, and registry specification. No Archive request values can be altered on the view screen. Press PF3 to return to the “Search - Archive Requests Screen”.

- Q and press Enter. The “Search - Archive at Switch Time Requests Screen” appears showing the archive search requests that will be executed against the last full repository segment when a switch from a full segment to the next segment occurs. Typically, you will see only those search requests that you queued against this archive. However, if you have GRADMIN authority and access this screen via the Global Search Manager, you can see all search requests queued against this archive set.

Index of Search Results

On the Search - Archive Requests screen (Figure 2-11), the Index of Search Results is a display-only field showing the URL path to the HTTP index page that lists the results of both local and global Archive Search requests.

This URL is constructed from several installation variables that are set in the ETRMGPAR member. The HTTPSRVR variable defines the first path qualifier (the location of the HTTP web server holding the Archive Search report files). The next set of path qualifiers, down to but not including the archive directory, are defined via the HFSPATH installation variable. See the example URL components below.

The qualifier between the archive directory and index.xml is your TSO user ID. Your user ID is disguised to provide a more secure directory name in which to store important files such as your Archive Search criteria files and HTTP search output reports. Use this path, up to and including your disguised user ID, to locate these files.

On some 3270 terminal emulators, you can double-click this URL link to open a web browser window and go directly to the HTTP report index page. For other browsers, you may need to copy and paste this link into the browser address field.

Example URL Components

The URL example in Figure 2-11 on page 2-12 is comprised of the following parts:

- sysname.compuware.com — The system name specified by the installer.
- /usr/local/hs/hs078 — The Hiperstation web reports directory specified by the installer.
- archive — The fixed folder location where all archive search reports go.
- AZCCO11 — A generated folder containing a disguised user ID based on the user’s TSO user ID.
- index.xml — The fixed name of the user’s index page.

4. Press END or CANCEL to return to the Search - Archive Requests screen.

Selecting or Creating Search Criteria

The “Search - Criteria Screen” allows you to specify complex search conditions for locating 3270 sessions based on the content of output screen data within the previously selected 3270 archive.

Target screens can be identified via tests for visible screen data at either a specific row (Row) and column (Col) position or with a wildcard to search an entire row or column of screen data. The specified screen area is compared with or searched for the entered search string depending on the Relational Operator (RO).

Individual line entries can be grouped into compound conditions using And/Or (A/O) Boolean connectors and parentheses () fields.

The amount of archived 3270 data included in the search can be controlled via the Start and End Date and Time fields (which subset the archive by time) and the 3270 session selection criteria of Userid, Application, and Terminal.

Validation rules for Search Criteria are enforced when the SAVE or GO primary commands are executed.

To begin working with search criteria:

1. On the "Search - Archive Requests Screen" (Figure 2-11 on page 2-12), type **S** on one of your archive request lines and press Enter. The "Search - Criteria Screen" appears (Figure 2-12).

Figure 2-12. Search - Criteria Screen

```

Hiperstation ----- Search - Criteria ----- Row 1 to 1 of 1
Command ==> Scroll ==> PAGE

SAVE - Store search conditions under entered Search Criteria Name.
GO - Initiate a search and SAVE the search criteria.
QUEUE - Execute a search on the last segment at every Archive dataset switch.

Specify session filter criteria below:
                MM / DD / YYYY                HH : MM : SS
Start Date . . 00 / 00 / 0000 Start Time . . 00 : 00 : 00
End Date . . . 00 / 00 / 0000 End Time . . . 00 : 00 : 00
Userid: *                Application: *                Terminal: *

Enter Search Criteria and new Name or Name of existing search criteria.
Search Criteria Name: XXXXXXXX (BLANK for list) Type: 0 (In/Out/Both)

Line commands are: (R)epeat, (D)elete, or (I)nsert
S A/O ( ) Row Col Len RO Search String
* *** ** *** ** * * * *****
AND 1 1 1 NE a
***** Bottom of data *****
    
```

2. Enter **Start and End Dates and Times**. The Start and End Date and Time fields limit the Archive Search to a specific time period, rather than an entire archive repository set. Since an archive can contain data captured over many weeks or months, designating a specific time period to be searched can reduce processing time considerably. The End Date and Time must be later than the Start Date and Time.

- To fill in the Start and End Date fields, enter a two-digit month in the **MM** field, a two-digit day in the **DD** field, and a four-digit year in the **YYYY** field. The range of acceptable year values is 2000 to 2040.
- To fill in the Start and End Time fields, enter a two-digit hour in the **HH** field, a two-digit month in the **MM** field, and a two-digit second in the **SS** field. Times are entered using a 24-hour clock. If a Start or End Time is entered, a corresponding Start or End Date must be entered. If a Start or End Date is entered, an accompanying Start or End Time is not required.

Note: The default time, when no time is entered, is the start of the day. For example, to search records up to and including a specific day, enter the following day as the End Date.

3. Enter the **User ID** of the user associated with a session. You can enter a user ID, a wildcard (*) for all users, or user ID prefix with a wildcard (for example USER*) to find user IDs beginning with USER. The user ID tracking facility of Global Recording must be active for user IDs to be captured in an Archive.
4. Enter the VTAM LU name of the in-session **Application** associated with a terminal session and the VTAM LU name of the **Terminal** session. The same wildcard rules apply as for User ID.

5. Enter the **Search Criteria Name**. This is a one- to eight-character name that follows the naming conventions of a PDSE member name. The Search Criteria name creates both a PDSE member name and an HFS file name. A set of one or more Search Criteria entries are stored within these files.
6. Enter the **Type** of data you want to compare your filters against — **I** (Input), **O** (Output), or **B** (Both). Input data is user-entered keystrokes sent from a user's keyboard to an application. Output data is data sent from an application to a user's terminal. Both compares against both types of information.

For Input fields, the Row field can be used to specify either row number or relative field number depending on the desired format. For a relative field number, the Col field must be blank. If the Col field is not blank, input is in the row and column format.

For either row and column or relative field format, the non-blank fields can contain either numeric values (row: 1 to 43, column: 1 to 132, relative field number: 1 to 999) or asterisk (*). For relative field inputs, an asterisk (*) in the one Row field searches all inputs. For row and column, an asterisk (*) in both Row and Col fields also searches all inputs. For row and column, when only one of the fields is an asterisk, not all inputs are searched. For example:

- Row of *, Col of 32 would search for the input value in column 32 on any row.
- Row of 10, Col of * would search for the input value anywhere on row 10.

When selecting **B** (Both), all fields must be specified in a row and column format, whether they are input or output fields, because relative field format does not exist for output fields.

Notes:

1. In a script, the input Relative Field Number is designated as *<Innn>* where *nnn* is the number of the field as counted from the top left side and tabbing across and down. In a script, the input Row and Column are designated as *<I(rr,ccc)>* where *rr* is the row number and *ccc* is the column number of the start of input field data (which is one position after the attribute byte).
2. Global Recording and Hiperstation do not record the content of every input field every time an input data stream is transmitted from the user's terminal to the application. Only new and/or changed input fields are transmitted.

Perform an Archive Search

To perform an Archive Search for one or more sessions without specifying any output screen search criteria:

- Set a search criteria in one of the session criteria fields (Userid, Application, or Terminal) to a value that is not blank or asterisk (*). This finds a specific set of sessions.

AND

- Leave the Search Criteria Name blank.

AND

- Enter the GO command.

Archive Search will proceed with a special internal filter that matches every screen in any session that matches the session criteria entered in the Userid, Application, or Terminal field.

You can also use a name prefix with a wildcard (*) to limit your member selection list.

Search Criteria Name Notes

- A new Search Criteria Name cannot duplicate an existing Search Criteria Name.

- The GO primary command saves/creates Search Criteria files as part of search request submission.
- To create a blank/empty Search Criteria area, blank out the Search Criteria Name and press **PF3** to return to the Archive Requests screen. Use the Select line command to reenter the “Search - Criteria Screen”, where a blank Search Criteria area awaits.
- To view a list of your Search Criteria sets, blank out the Search Criteria Name field and press Enter. The “Search Filter Members - Member List Screen” appears. This screen displays a list of Search Criteria sets that can be Selected, Viewed, Renamed, Copied, and Deleted via line commands. See “Member Selection Lists” on page 2-19 for more information about Member Lists.
- To create a new Search Criteria file, change the Search Criteria Name and enter the SAVE command. SAVE validates the search entries, reports any errors and, if valid, creates the new criteria file. The same method can be used to modify the contents of existing Search Criteria files.
- Existing Search Criteria files can be retrieved and used by typing the file name in the Search Criteria Name field and pressing Enter.
- Search Criteria sets are stored in HFS files and are personal to each user. The file path is:

```
<HFSPATH>/archive/<disguised user ID>
```

HFSPATH is an ETRMGPAR variable defining the path from the root directory to the archive directory. The disguised user ID is the search requestor's TSO user ID disguised to increase security. You can see your disguised user ID on the Archive Requests screen in the Index of Search Results path between the /archive and /index.xml qualifiers. See “Index of Search Results” on page 2-13 for a description of these qualifiers.

Create Search Filters

Define your search criteria by creating search filters:

1. Enter either **A** (AND) or **O** (OR) (required). AND is the default. These Boolean operators, AND plus OR (Inclusive OR) allow individual criterion to be combined into a single comparison condition. The A/O entry for the top or first search criteria is ignored since there is no previous criteria to connect.
2. Insert **parentheses** () to group sets of AND and OR conditions together. This allows more complex compound conditions to be constructed. There must be an equal number of left and right parentheses specified overall, and the first parentheses must be a left parentheses.

A left parentheses “(” indicates the start of a new grouping beginning with this criterion. A right parentheses “)” indicates the end of a grouping with this criterion being the last one in that grouping.

3. Enter the **Row Number** of the screen line containing the target area (required). An asterisk (*) wildcard can be specified to indicate that all rows should be searched. As with scripts, the first row is row 1. The row number can be from 1 to 43, because 43 is the largest possible 3270 terminal row size, but it must be a row number that exists on the target terminal screen (for example, between 1 and 24 for a 3270 model 2 and between 1 to 32 for a 3270 model 3). The search verifies that the row number exists on the screen being tested. If a row number does not exist, this single criterion is marked as failing.
4. Enter the **Column Number** of the screen line in which the target area begins (required). As with scripts, the farthest left column is column 1. Column number is validated from column 1 to 132 because 132 is the longest line length allowed for 3270 terminals. An asterisk (*) wildcard can be used to specify that all columns should be searched, but only when the CO (COntains) or NC (Not Contains) condition is entered in the RO field.

5. Enter a **Length**. When used for comparison operators, other than CO or NC, this is the length of the Search String. For search operators CO and NC, this is the length of the output screen line from the entered starting column that is to be searched.

Length is an optional value and is normally calculated automatically at SAVE or GO time. If length is left blank at SAVE or GO time, for comparison operators (not CO or NC), length is set to the length of the entered Search String. If length is left blank for search operators CO or NC, length is set to zero to indicate the entire line is to be searched.

If COL is an asterisk (*) wildcard, with the relational operator set to CO or NC, any entered length is ignored. Length is forced to zero to search the whole line.

If a length value larger than the Search String length is entered, the Search String will be padded to the right with blanks when compared to screen data. If a smaller value is given, the entered Search String is truncated to match the specified length.

6. Enter an **RO** (Relational Operator). This is used with Row, Column, Length, and Search String to set up a comparison or search test between the entered Search Criteria and output screen data within the specified area.

If both the Search String and the extracted output screen data form valid REXX numbers and if the relational operator is a valid numerical operator, not CO (COntains) or NC (Not Contains), then REXX numerical comparison rules apply. In all other cases, REXX character comparison rules apply. In other words, the comparison is numeric if both sides form valid numbers; otherwise, the comparison is character based.

Valid relational operators include:

Relational Operator	Symbol	Description
EQ	=	equal to
NE	≠	not equal to
GT	>	greater than
LT	<	less than
GE	>=	greater than or equal to
LE	<=	less than or equal to
CO		search a screen area for presence of a Search value
NC		search a screen area for the absence of a Search value

7. Enter a **Search String**. This is a text string that is either compared with extracted output screen data or searched for in an area of an output screen depending on the specified relational operator. The entered Search String is treated as mixed case data for comparison or search purposes.

If both the Search String and the extracted output screen data form valid REXX numbers and if the relational operator is a valid numerical operator, not CO (COntains) or NC (Not Contains), then REXX numerical comparison rules apply. In all other cases, REXX character comparison rules apply. In other words, the comparison is numeric if both sides form valid numbers; otherwise, the comparison is character based.

Entry screen validation will double up on any orphan or single quotes in the Search String. Two consecutive single quotes within the Search String will remain unaltered.

Note: Typically, entries you make and line commands (R, D, or I) you specify are processed before your primary command is acted on.

Modify or Execute the Search

After completing your criteria, issue commands to modify or execute the search:

1. Enter **Line Commands** to edit your filters if desired. Commands are processed on ENTER or END; CANCEL ignores commands.
 - **(R)repeat** creates a copy of the selected filter immediately below the copied filter. Use this to quickly create several similar filters. Type **R** and press Enter.
 - **(D)delete** deletes an existing filter. Type **D** and press Enter.
 - **(I)nsert** adds a new blank filter after the selected filter. Hiperstation for VTAM provides eight blank filters by default. However, you can create up to 999 filters. Use this line command to add additional filters. Type **I** and press Enter.
2. If you have not already set up your job card, which needs to be created only once, you must do it before issuing the **GO** command.
 - a. Type **OPT** on the command line and press Enter. The “Completed Search Options Screen” appears (Figure 2-13).

Note: A job card is required and is not automatically provided since job cards are very site specific. If you need help creating your job card, contact your archive administrator. The information on your job card will not match the one in Figure 2-13.

Figure 2-13. Completed Search Options Screen

```
Hiperstation ----- Search Options -----
Command ==>

Job statement information for Search batch job:
==> //XXXXXXXXA JOB ('ACCOUNT',5M-0000),'HIPERSTN',
==> //          CLASS=Q,MSGCLASS=R,NOTIFY=&SYSUID
==> /* JOBPARM ROOM='DTW 5TH FLOOR MONROE'
==> //PRINTER OUTPUT ROOM='DTW 5TH FLOOR MONROE'
```

- b. Enter the job card information with your site-specific information.
 - c. Press **END** to return to the “Search - Criteria Screen” (Figure 2-12 on page 2-14).
3. Either **SAVE** your search criteria or type **GO** to save the criteria and execute the search.
 - The **SAVE** command validates the search criteria and reports any errors. It saves a valid criteria set under the Search Criteria Name for future use.
 - The **GO** command saves the criteria you entered for reuse, validates search criteria, and initiates the search request immediately. After job submission, you will return to the “Search - Archive Requests Screen” (Figure 2-11 on page 2-12) and the search request batch job number will be displayed. When the search is complete, you will get another status message. Then you can find your reports at the Index of Search Results URL listed on the “Search - Archive Requests Screen”.
4. After validating the search criteria, issue the **QUEUE** command to add the search request to the search at switch time queue. After the search request is queued, you return to the Archive Requests list.

The **QUEUE** command generates a REXX message filter and stores that filter in the switch message filter PDSE. Each filter is allocated a new unique name because multiple auditors can submit search requests with identically named filters. The index member, \$\$\$INDEX, records both the new name and the original name so the original name can be used in the generation of HTML search reports.

The \$\$\$INDEX member is a comma-delimited file that contains six columns?

- REXX Message Filter member name in this switch filter PDSE
- Original REXX Message Filter member name, as supplied by an auditor
- TSO user ID of requesting auditor
- Terminal session filter criteria
- Application ID session filter criteria
- User ID session filter criteria

Whether you got to this point by selecting Option 2 Create Search Reports or Option 5 Global Search Manager determines which filters you will see in the “Search Filter Members - Member List Screen” (Figure 2-14). An auditor with GRADMIN authority will see all of the filters, both global and local. An auditor who does not have GRADMIN authority will see only the filters available for the signed on auditor.

At repository switch time, all of the filters that are queued in the member list will be executed. An auditor with GRADMIN authority can administer the list by checking what filters will be executed or deleting filters that are no longer needed.

From the “Search - Archive Requests Screen”, the (Q)ueued line command allows you to see the archive search requests that will be executed against the last full repository segment when a switch from a full segment to the next segment occurs. Typically, you will see only those search requests you queued against this archive. However, if you access this screen via the Global Search Manager option, which requires GRADMIN authority, you can see all of the search requests queued against this archive set.

Issuing the Q line command displays the “Search - Archive at Switch Time Requests Screen” (Figure 2-16 on page 2-21).

Notes:

- When the search job is complete, you can find the report at the URL on the screen.
- If you select S to create a new search, the “Search - Criteria Screen” will contain the information you previously entered.
- To be notified when the search job is complete, include a NOTIFY=parameter on your job card, and ISPF will send a notification.
- To view a list of all of the criteria you have saved or executed to date, blank the Search Criteria Name and press Enter. The “Search Filter Members - Member List Screen” appears showing all of the criteria you have saved or executed to date (Figure 2-14).

Member Selection Lists

A member selection list is a list of the members of an ISPF library or TSO partitioned dataset. To exit from a member selection list, enter the END command.

For more information about Member Selection Lists, and for a list of the primary commands that are valid on this screen, refer to the Hiperstation for VTAM online help.

1. To access the “Search Filter Members - Member List Screen” (Figure 2-14), blank the Search Criteria Name on the “Search - Criteria Screen” (Figure 2-12 on page 2-14) and press Enter.

Figure 2-14. Search Filter Members - Member List Screen

```
Hiperstation ---- Search Filter Members - Member List --- Row 00001 of 00004
Command ==>                                         Scroll ==> PAGE

Select a member to import then press ENTER or END to return.

Line Commands are: (B)rowse, (C)opy, (D)elete, (R)ename or (S)elect

  Name      Prompt      Size  Created      Changed      ID
JGLOBL1    JGLOBL1      1     2009/02/09   2009/05/25 19:03:10  GLOBAL
JGLOBL2    JGLOBL2      1     2009/02/09   2009/05/03 17:05:02  GLOBAL
SRCH1      SRCH1        1     2009/02/31   2009/05/10 14:46:13  USER2312
SRCH2      SRCH2        1     2009/03/06   2009/06/29 18:36:15  USER2312
**End**
```

2. You can use the FIND, RFIND, or LOCATE commands as well as FORWARD or BACK to help you locate the desired member.

Note: The ID column specifies the type of member. GLOBAL members are created by a GRADMIN authorized auditor and cannot be changed by auditors who do not have that authority. GLOBAL members can be copied to other auditor's local directories and modified. When you copy the GLOBAL member, LOCAL appears in the ID column. Then there will be a GLOBAL and LOCAL member with the same name, but only the LOCAL version will show on the Member List screen. If the LOCAL member is renamed or deleted, the GLOBAL member will reappear. If a user ID appears in the ID column, this designates a member that is private to that auditor, and it has no GLOBAL counterpart.

3. After locating the desired member, the action that occurs will depend on the command or line command issued.

Following is a description of the line commands. You can use the line commands for one member at a time.

- Type **B** and press Enter to browse a search filter member. The "Browse a Search Filter Member Screen" appears (Figure 2-15). You cannot modify fields on the Browse screen.

Figure 2-15. Browse a Search Filter Member Screen

```
Menu Utilities Compilers Help
-----
BROWSE    VP.ATUPDTSC.SCRIPT.F103823(USER2312)      Line 00000000 Col 001 080
Command ==>                                         Scroll ==> PAGE
***** Top of Data *****
/* AND,,1,9,8,EQ,CJYAPLS */
/* AND,,12,4,7,EQ,HFILEMP */
```

- Type **C**, tab to the **Prompt** field, type a name for the new member, and press Enter to copy the selected search filter member. The new filter will appear alphabetically in the filter member list.
- Type **D** and press Enter to delete a search filter member.
- Type **R**, tab to the **Prompt** field, type a new name for the selected member, and press Enter to rename the selected member. The new filter name will appear alphabetically in the filter member list.
- Type **S** and press Enter to select a search filter member. The "Search - Criteria Screen" appears with your filter criteria filled in. You can use the criteria as entered, or you can make changes before issuing the GO or SAVE command. If

you provide a new Search Criteria Name in the Search Criteria Name field, you can save the criteria as a new member.

- To save your member list, type SAVE to write the member list to either the ISPF list dataset or another sequential dataset. If the sequential dataset exists, it is overwritten. If it does not exist, it is created.

If you enter SAVE without a list ID, the member list is sent to the ISPF list dataset. If you specify a list-id, the member list is sent to the sequential dataset formed by concatenating your system prefix (if it exists and is different from your user ID), your user ID, and the list-id and “MEMBERS”.

Unprocessed line commands, any information in the Prompt field, and column headings are omitted. If the member list is sent to the ISPF list dataset, it is formatted. If the member list is written to another dataset, it is written as it appears on the display.

Additionally, for PDS datasets not containing load libraries, the untranslated member name is written after the member name.

Search at Repository Switch

On the “Search - Archive Requests Screen” (Figure 2-11 on page 2-12), issue the Q (Queue) line command for the desired archive request to access the “Search - Archive at Switch Time Requests Screen” (Figure 2-16).

Figure 2-16. Search - Archive at Switch Time Requests Screen

```

Hiperstation ----- Search - Archive at Switch Time Requests ----- Row 1 of 1
Command ==>                                                                    Scroll ==> PAGE

Line commands are: (V)iew or (D)elete

S  Criteria  Userid      Session Filters
-  - - - - -  - - - - -  - - - - -
  JGLOBL1  USR2312    *          *          *
*****
***** BOTTOM OF DATA *****

```

The purpose of this screen is to manage the archive search requests queued against the selected archive set. Whether you got to this point by selecting Option 2 Create Search Reports or Option 5 Global Search Manager determines which requests you will see. An auditor with GRADMIN authority, who selected option 5, will see all of the search requests, both global and local. An auditor who selected option 2, or who does not have GRADMIN authority, will see only the requests available for the signed on auditor.

When an archive repository switch occurs (i.e., the current archive segment is full so recorded data is now stored in the next archive segment), the queued searches are executed against the full, or just switched from, archive segment and the report will go to the listed user ID.

An auditor with GRADMIN authority can administer the list by checking which filters will be executed or deleting filters that are no longer needed.

Press PF3 or END to return to the Archive Requests list screen.

The (V)iew line command allows you to see the details of the selected Search Criteria set (for example, the screen data used to determine whether each session seen is a search match or not). You cannot make changes on the view screen. To change the Search Criteria, delete this Search Criteria entry and queue a new Search Criteria entry. Entering the V line command displays the “Search - Archive at Switch Time Criteria Screen” (Figure 2-18 on page 2-22).

The (D)delete line command allows you to remove this Search Criteria entry from the archive search at switch queue for this archive set. The delete is issued immediately without a confirmation.

Viewing Archive Requests

On the “Search - Archive Requests Screen” (Figure 2-11 on page 2-12), type **V** next to one of your archive requests and press **Enter**. The “Archive Recording - View Request Screen” appears (Figure 2-17). You cannot modify information on this screen.

Figure 2-17. Archive Recording - View Request Screen

```
Hiperstation ----- Archive Recording - View Request -----
Command ==>

Press PF1 for help, or PF3 to exit.

Terminal . . . . . *           Asterisk is the wildcard character.
Application . . . . . *
Userid . . . . . *
OR
Global Record Manager List . .           Second filter GRM List . .

                MM / DD / YYYY                HH : MM : SS
Start Date . . . 00 / 00 / 0000 (Optional) Start Time . . . 00 : 00 : 00
End Date . . . . 00 / 00 / 0000 (Optional) End Time . . . . 00 : 00 : 00

Registry Specification . . . 'USERID05.CEDC3270.REPOS'
```

The fields on this screen correspond to the fields you filled in on the “3270 - Archive Criteria Screen” (Figure 2-8 on page 2-8).

View Details of Selected Search Criteria

Type **V** on the “Search - Archive at Switch Time Requests Screen” (Figure 2-16 on page 2-21). The “Search - Archive at Switch Time Criteria Screen” appears (Figure 2-18).

Figure 2-18. Search - Archive at Switch Time Criteria Screen

```
Hiperstation ----- Search - Archive at Switch Time Criteria ----- Row 1 of 1
Command ==>                                                                Scroll ==> PAGE

No Line Commands are defined for this view.           Type: B (Input/Output/Both)

  AND ( ) Row Col Len RO Search String
- - - - -
  AND   1   9   8   EQ HFILEMP
***** BOTTOM OF DATA *****
```

The purpose of the screen is to display the details of the selected Search Criteria set.

The Type field shows the kind of filter queued against the archive. Types include:

- I (Input): Search only the recorded input fields.
- O (Output): Search only the recorded output screens.
- B (Both): Search both the recorded input fields and output screens.

No line commands are available on this screen.

Press **PF3** or **END** to return to the queued Requests panel.

Archive Reports

Accessing Archive Search Reports

From the “Hiperstation - Product Menu”, type 1 and press Enter to start Hiperstation for VTAM. The “Hiperstation for VTAM - Main Menu” appears. Select option 5 Archive Search. The “Archive/Search Menu” appears. Select option 2 Create Search Reports. The “Search - Archive Requests Screen” appears. The link to the URL where your reports are located is in the **Index of Search Results** field.

After you navigate to the URL, you can bookmark it for future reference. Some emulator software allows you to double-click on the URL to navigate to the reports window in your browser (Figure 2-20 on page 2-24). If this does not work, copy the URL and paste it into your browser to navigate to the reports window.

Note: You can also create search requests using the Hiperstation/Eclipse Archive/Search feature. Refer to the *Topaz Workbench Installation and Configuration Guide* for information on how to install Hiperstation/Eclipse. Refer to the online help after installation to learn how to use Hiperstation/Eclipse.

Navigating Archive Search Reports

Archive search reports start with general data and continue with links to more detailed information. To review your reports start with the Archive Search Reports index.

Reports Index

The “Hiperstation for VTAM - Search Reports Index” (Figure 2-19) shows the results from your archive request searches by request timestamp.

The Reports Index appears when you double-click the Index of Search Results field on your mainframe “Search - Archive Requests Screen” (Figure 2-11 on page 2-12). After you access the report index the first time, you can bookmark the link in your web browser for future viewing.

Figure 2-19. Hiperstation for VTAM - Search Reports Index

Name	Request Timestamp	Start Time	End Time	Total Sessions	Sessions with Hits	Total Hits	Criteria	Message Log
PFHHLMD	2009/04/09-11:32:17	N/A	N/A	28	20	1852		

There are several areas on this window that you can click for additional information:

- Click on the Request Timestamp link to navigate to the “Hiperstation for VTAM - Search Results - Sessions List Window” (Figure 2-20). See “List of Sessions” for details.
- From the list of Sessions window, click on a session number (Figure 2-21 on page 2-25) to see the detail about that session, or expand your sessions and click on a screen number (Figure 2-22 on page 2-26) to see a copy of the screen. See “Session

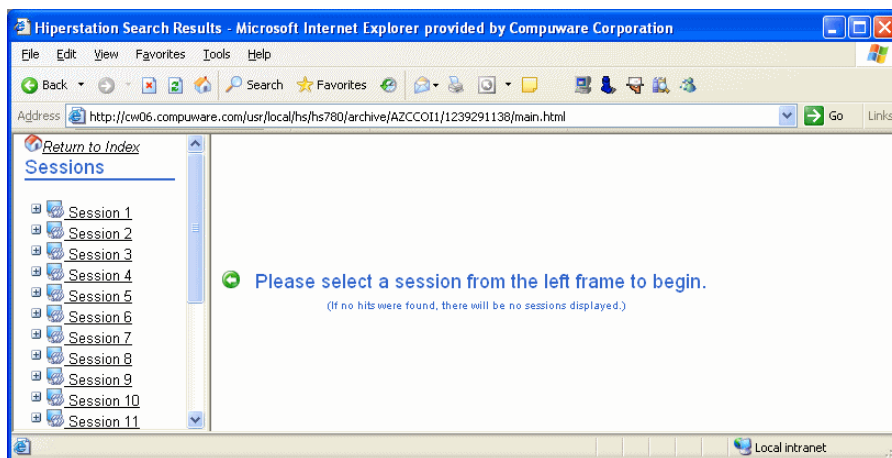
Details” on page 2-24 and “List of Screens” on page 2-25 for details.

- Return to the Archive Search Reports Index window and click the Criteria link to view the criteria that was specified to create the report (Figure 2-23 on page 2-27). See “Search Criteria” on page 2-26 for details.
- Return to the “Hiperstation for VTAM - Search Reports Index” window and click the Message Log link to view the “Hiperstation for VTAM Message Log Window” (Figure 2-24 on page 2-28). See “Message Log” on page 2-27 for details.

List of Sessions

The left pane shows the list of sessions that contain at least one search criteria hit (Figure 2-20).

Figure 2-20. Hiperstation for VTAM - Search Results - Sessions List Window



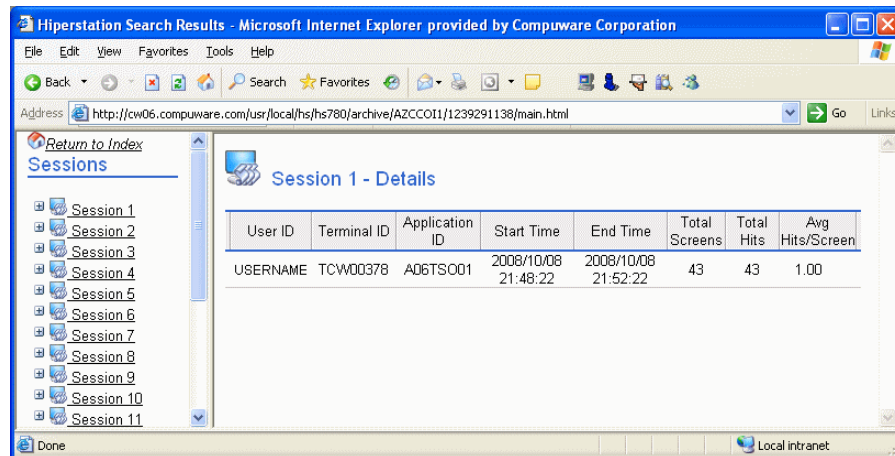
Click on a session to view the details for that session (Figure 2-21) or expand a session to see the list of screens for that session (Figure 2-22 on page 2-26).

Session Details

The Session Details window (Figure 2-21) shows additional information about the session including the number of hits found in a specific session.

Note: You can access this window by clicking the session number for which you want details.

Figure 2-21. Hiperstation for VTAM - Search Results - Session Details Window



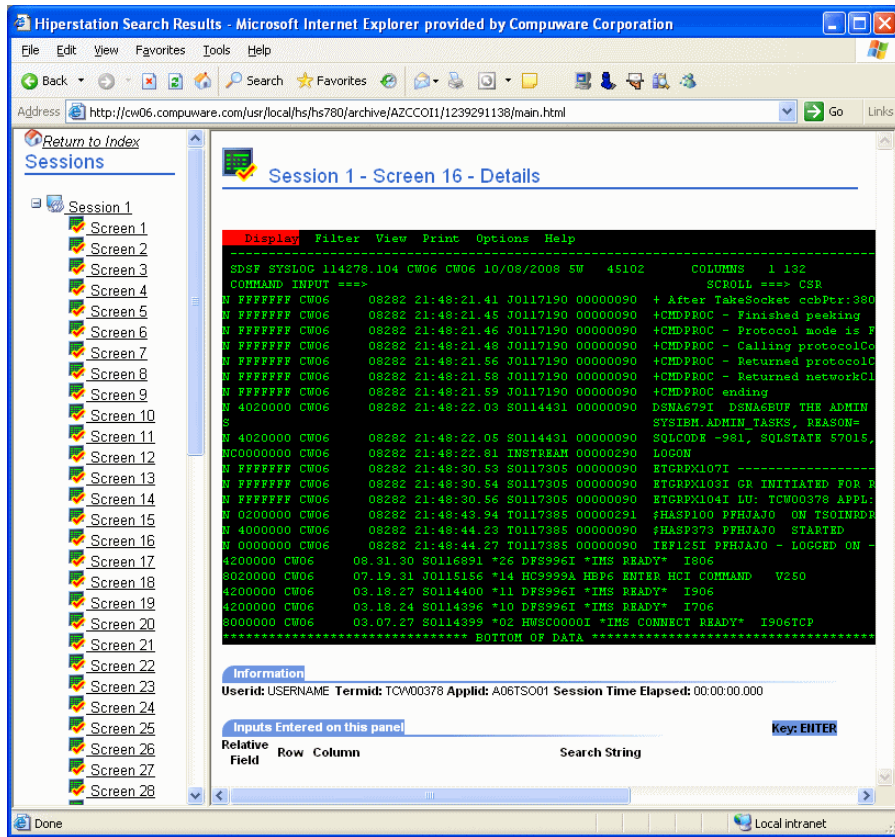
The information provided on this window includes:

- **User ID:** User ID of the person associated with the session.
- **Terminal ID:** Terminal ID of the terminal associated with the session.
- **Application ID:** Application ID of the application associated with the session.
- **Start and End Time:** Start time of the session and, if the complete session is captured, the end time of the session. If only a partial session is captured, End Time is the time of the last screen recorded for this session.
- **Total Screens:** Total number of screens recorded for this session during the recording period.
- **Total Hits:** Total number of hits for this session during the recording period.
- **Avg Hits/Screen:** Percentage of hits per screen for this session during the recording period.

List of Screens

You can access the list of screens by clicking the Request Timestamp link on the "Hiperstation for VTAM - Search Reports Index" window (Figure 2-19 on page 2-23). Specific screens are listed under the sessions in the left pane (Figure 2-22). Expand the session to view the list of screens for that session.

Figure 2-22. Hiperstation for VTAM - Search Results - Screen List and Screen Details



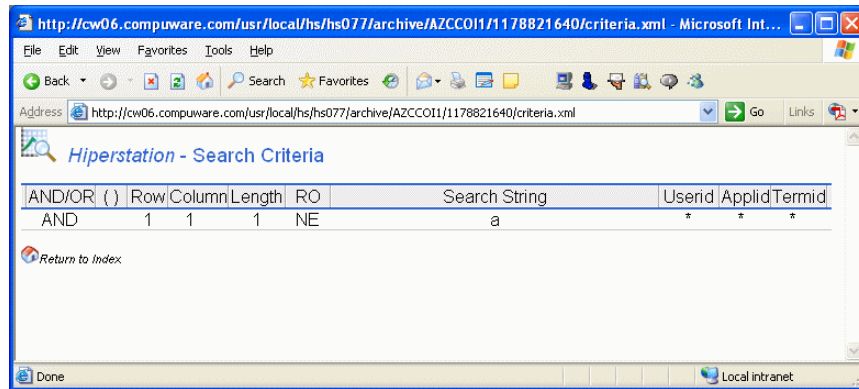
Screens in the session list designated with a green icon and a red check mark show a match for your search criteria. Screens designated with a green icon without the red check mark do not contain a match for your search criteria.

Click on a screen link to view the captured screen in the right pane (Figure 2-22). The information that matches the search criteria is shown in red on the captured screen.

Search Criteria

The “Hiperstation for VTAM Search Criteria Window” (Figure 2-23) shows the criteria that was used to create the selected report. You can access this window by clicking the Criteria icon on the “Hiperstation for VTAM - Search Results - Sessions List Window” (Figure 2-20 on page 2-24).

Figure 2-23. Hiperstation for VTAM Search Criteria Window



See “Selecting or Creating Search Criteria” on page 2-13 for details about how to create your search criteria.

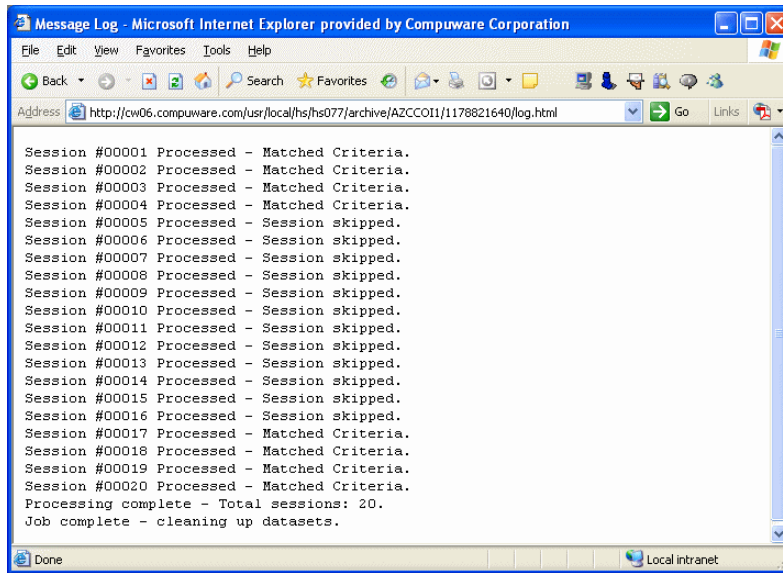
This window shows what you filled in when you created your Search Criteria:

- **AND/OR:** Shows whether AND or OR was selected as a search filter. AND is always selected as the filter for the first search criterion listed or if there is only one criterion. OR can be used with multiple search criteria.
- **():** Shows whether parentheses were used in the search filter. No parentheses were used if this field is blank.
- **ROW:** The specific row number that was searched. An asterisk (*) wild card designates all rows.
- **COLUMN:** The specific column number that was searched. An asterisk (*) wild card designates all columns. An asterisk is allowed only if you selected CO (contains) or NC (not contains) as your relational operator.
- **LENGTH:** The length of the search string. The length converts to zero if the relational operator is CO (contains) or NC (not contains).
- **RO:** Shows the relational operator that was used in the search criteria.
- **Search String:** The alphanumeric characters that were specified in the search criteria and for which the search was conducted.
- **Userid:** The user ID that was specified in the search criteria. This can be a specific user ID, an asterisk (*) or blank designating all user IDs, or a user ID prefix followed by an asterisk to select a group of user IDs.
- **Applid:** The ID of the application that was specified in the search criteria. This can be a specific application ID, an asterisk (*) or blank designating all applications, or an application prefix followed by an asterisk to select a group of applications.
- **Termid:** The logical unit name of the terminal that was specified in the search criteria. This can be a specific terminal ID, an asterisk (*) or blank designating all terminals, or a terminal prefix followed by an asterisk to select a group of terminals.
- **Return to Index:** Returns to the “Hiperstation for VTAM - Search Reports Index” window.

Message Log

The “Hiperstation for VTAM Message Log Window” (Figure 2-24) lists the message for each session captured during the recording period.

Figure 2-24. Hiperstation for VTAM Message Log Window



Message texts might include:

- **Matched Criteria** — This session found information matching the search criteria.
- **No hits found** — This session found no information matching the search criteria.
- **Session skipped** — This session was not included in the criteria search.

Deleting Reports

Search Report Management allows you to manage your requests and free up space by deleting requests that are no longer needed.

To delete a report from the Archive Search Reports list, you must delete it from the “Search Report Management Screen”. Then you must refresh your browser screen before the report is removed from the list.

1. From the “Hiperstation for VTAM - Main Menu”, select option **5 Archive/Search**. The Archive/Search menu appears.
2. Select option **3 Search Report Management**. The “Search Report Management Screen” appears (Figure 2-25) containing a list of all of the search reports to which you have access.

One of the reports in Figure 2-25 shows “None” in the **Name** column. The only time lowercase letters appear in this field is when a search is issued with no search criteria.

Figure 2-25. Search Report Management Screen

```

Hiperstation ----- Search Report Management ----- Row 1 of 7
Command ==>                                           Scroll ==> PAGE

Line commands are: (D)elete                               Userid: USER2312

S  Date      Time      Name      Search Criteria
-  -----
  2008/05/15 10:42:09 USR2312  R=1,C=1,L=1,EQ,A
  2008/05/15 10:44:01 USR2312  R=1,C=2,L=1,EQ,H
  2008/05/15 10:46:13 USR2312  R=1,C=1,L=1,EQ,A
  2008/05/15 10:47:34 USR2312  R=1,C=1,L=1,EQ,A
  2008/05/15 11:19:11 USR2312  R=1,C=1,L=1,EQ,A
  2008/05/15 14:24:56 None       U:USR*
  2008/05/15 14:27:20 XXXXXXXX  R=1,C=1,L=1,NE,a
*****
***** BOTTOM OF DATA *****
    
```

Note: You can view the actual reports using your Web browser after creating a search report. See “Searching Archives — Hiperstation for VTAM” on page 2-11 for more information.

3. To delete one or more reports, type a **D** in the selection column for each report that you want to delete, and press Enter to delete the selected reports.
A **D** placed on a line deletes all of the HFS files related to the selected report and removes it from the list of available reports for the current user.
4. The first time you delete a report, the “Search Report Management - Delete Confirmation Screen” appears (Figure 2-26). Press Enter to delete the report.

Figure 2-26. Search Report Management - Delete Confirmation Screen

```

Hiperstation ----- Search Report Management -----
C +-----+ =====> PAGE
| ----- Search Report Management - Delete Confirmation ----- |
L | Command ==> | : USERID
S | You have requested to delete the report, TEST3 , that |
- | was created on 2009/05/11 11:19:11. Do you really wish |
  | to delete this report? |
  | Permanently set delete confirmation off |
d | Press the Enter key to delete. Enter End or Cancel to abort. |
+-----+
*****
***** BOTTOM OF DATA *****
    
```

If you decide not to delete the report, press **END** to return to the “Search Report Management Screen”. The report will remain in the list.

Note: If you do not want the Delete Confirmation screen to appear when you delete your reports, type a “/” in the **Permanently set delete confirmation off** field. To turn on Delete Confirmation after you have turned it off, type **CONFIRM** on the command line and you will be required to confirm your deletions.

5. When you have deleted all of the reports you want to delete, press **END** to return to the “Archive/Search Menu”.

Global Recording Manager Lists

You can use Global Recording Manager Lists to save time and work. For example, if the users you need to record do not have similar user IDs, you can either create a separate request for each user ID or you can define a Global Recording Manager List and create a request that uses that list.

Defining Global Recording Manager Lists

Within a Global Recording request, you either specify the terminals, applications, and user IDs to capture, or you specify a Global Recording Manager List. A Global Recording Manager List defines the terminals, applications, and user IDs to record or exclude from recording.

The Global Recording Manager List screen displays lists created by all users on the system. You can use or copy any existing list, but you can edit and delete only the lists you create unless you have Global Recording administrator (GRADMIN) authority.

To use the Global Recording Manager:

1. On the “Hiperstation for VTAM - Main Menu”, select option 5 Archive/Search. The “Archive/Search Screen” (Figure 2-27) appears.

Figure 2-27. Archive/Search Screen

```

Hiperstation ----- Archive/Search -----
Option ==> 4_

  1  Archive Requests      Add, Review or Terminate your requests
  2  Create Search Reports Search archive requests
  3  Search Report Management Search report maintenance
  4  Global Record Manager Manage Include/Exclude filter lists
  5  Global Search Manager Manage Global Search Criteria

Enter END command to return to Hiperstation Main Menu

```

2. Select option 4 **Global Record Manager**.

Note: You can also access the Global Recording Manager List screen from the Global Recording menu. On that screen, type 3 to select the Global Recording Manager option and press Enter.

- If you have no existing Global Recording Manager Lists, the “Global Record Manager * Add List Screen” (Figure 2-29 on page 2-32) appears. See “Creating a New Global Recording Manager List” on page 2-31 for information on how to create a new Global Recording Manager list.
- If you have existing Global Recording Manager Lists, the “Global Record Manager * Include/Exclude Lists Screen” appears (Figure 2-28). It displays a list of existing Include/Exclude lists. To move the cursor from the Command line to the selection column of the first list entry, press **Tab** twice. Once the cursor is in the list, use **Tab** and **Back Tab** (Shift+Tab) to move the cursor up and down the list. To exit from the “Global Record Manager * Add List Screen” without creating a list, type CANCEL on the command line and press Enter.

Figure 2-28. Global Record Manager * Include/Exclude Lists Screen

```

----- Global Record Manager * Include/Exclude Lists ----- Row 1 of 1
COMMAND ==> SCROLL ==> PAGE

Line Commands:  A - Add      B - Browse    C - Copy     D - Delete   E- Edit

      Name      Type  Description                      Creator
      HLMLIST1  IN    TEST LIST                          USER2312

```

3. To create a new list, position the cursor in the selection column on any of the existing list entries. Type A (add) and press Enter. See “Creating a New Global Recording Manager List” on page 2-31 for more information.
4. To browse, copy, edit, or delete a list, type the applicable line command in the selection column of the appropriate list and press Enter. Use primary commands to locate the desired list. Most of the commands reposition the list but do not move the cursor from the Command line. However, FIND and RFIND move the cursor to the first displayed entry that matches the specified search string. Press **Back Tab** (Shift+Tab) to move the cursor to the selection column of the given entry.

Note: To help you find a Global Recording Manger List, the FIND, RFIND, Locate, TOP, BOTTOM, UP, DOWN, and SORT primary commands can be entered on the command line. See the online help for a description of these commands.

The line commands on this screen make it possible to view, add, delete, edit, and copy a Global Recording Manager List.

(A)dd displays the Add List screen. See the “Creating a New Global Recording Manager List” on page 2-31 for more information.

(B)rowse displays the include/exclude list for viewing. You cannot make changes on this screen.

(C)opy displays the Copy List screen. See “Copying an Existing Global Recording Manager List” on page 2-33 for more information.

(D)elete deletes the selected list. You can delete any list that you created as long as it is not currently in use by an active Global Recording request. Global Recording Manager prompts you for confirmation. Press **End** to delete the selected list. To exit the screen without deleting the list, type **CANCEL** on the command line and press Enter.

(E)dit displays the Edit List screen. This screen contains the same fields as the “Global Record Manager * Add List Screen”. Modify any field except **List Name**, **List Type**, and **Description**, which are display-only fields. You can edit any list you create. If you edit a list that is currently in use by an active Global Recording request, the request is not affected. It continues to capture with the parameters of the original list. Stop and restart the request to apply your changes to that request.

Creating a New Global Recording Manager List

The “Global Record Manager * Add List Screen” appears after you issue the A (add) line command on the “Global Record Manager * Include/Exclude Lists Screen” (Figure 2-28 on page 2-31). If you have no existing Global Recording Manager Lists, the Add List screen appears when you start the Global Recording Manager.

Figure 2-29. Global Record Manager * Add List Screen

```

----- Global Record Manager * Add List -- Row 1 to 14 of 200
COMMAND ==>                                SCROLL ==> PAGE

List Name  ==> GROUP2
List Type  ==> IN (INClude/EXClude)
Description ==> INCLUDE LIST FOR GROUP2

Term      Appl      Userid
*         CICSREG1  USER25
*         CICSREG5  USER23

```

1. In the **List Name** field, type a name for your Global Recording Manager List. Enter up to eight characters.
2. In the **List Type** field, type **IN** to capture only the specified terminals, applications, and/or users, or type **EX** to capture all activity except the specified terminals, applications, and/or users.
3. Type a **Description** for the list. Enter up to 55 characters.
4. In the **Term** field, type the logical unit name of the terminal to record or exclude from recording. Enter one of the following:

- A specific terminal ID.
- An asterisk (*) to select all terminals.
- A terminal prefix followed by an asterisk to select a group of terminals. For example, H8606* selects all terminals beginning with H8606.

If you leave this field blank, but supply a value in the **Appl** or **Userid** fields on the same line, Global Recording Manager inserts an asterisk when you save the list. This field holds eight characters.

5. In the **Appl** field, type the ID of the application to record or exclude from recording. Enter one of the following:
 - A specific application ID.
 - An asterisk (*) to select all applications.
 - An application name prefix followed by an asterisk to select a group of similar applications. For example, to select all applications that have names beginning with CICS, enter CICS*.

If you leave this field blank, but supply a value in the **Term** or **Userid** fields on the same line, Global Recording Manager inserts an asterisk when you save the list. This field holds eight characters.

6. In the **Userid** field, type the ID of the user to record or exclude from recording. Enter one of the following:
 - A specific user ID.
 - An asterisk (*) to select all users.
 - A user ID prefix followed by an asterisk to select a group of users. For example, USER* selects all user IDs beginning with USER.

If you leave this field blank, but supply a value in the **Term** or **Appl** fields on the same line, Global Recording Manager inserts an asterisk when you save the list. This field holds eight characters.

7. Press **END** to create your list, or type **CANCEL** on the command line and press Enter to exit the screen without saving the list.

Copying an Existing Global Recording Manager List

Copy an existing list to save time when creating a new list and to ensure full control over the lists you use. Although you can use Global Recording Manager Lists created by other users, you cannot edit or delete lists created by another user.

1. On the “Global Record Manager * Include/Exclude Lists Screen” (Figure 2-28 on page 2-31), issue the C (copy) line command on the Global Recording Manager List you want to copy. The “Global Record Manager * Copy List Screen” (Figure 2-30) appears.

Figure 2-30. Global Record Manager * Copy List Screen

```

----- Global Record Manager * Copy List -----
COMMAND ==>

From Name  GROUP1
From Type  IN
From Description  INCLUDE LIST_FOR GROUP1

To Name  GROUP2
To Type  IN
To Description  INCLUDE LIST_FOR GROUP2

Press END to copy and exit,  CANCEL to exit without copying

```

The **From Name** field displays the name of the list being copied. **From Type** displays the type of list being copied with **IN** indicating an include list and **EX** indicating an exclude list. **From Description** displays the description of the list being copied.

2. In the **To Name** field, type the name to assign to the new list. Enter up to eight characters.
3. In the **To Type** field, specify the type of list, **INCLUDE** or **EXCLUDE**, to assign to the new list. Enter **IN** to record the terminal, applications, and user IDs specified within the list. Enter **EX** to record all activity except for the terminals, applications, and user IDs specified within the list.
4. In the **To Description** field, type a description to describe the new list. Enter up to 55 characters.
5. Press **END** to save your new list or type **CANCEL** on the command line and press Enter to exit the screen without saving the list.

Chapter 3.

Archive Function — TCP/IP

The Archive function allows you to create archive record requests. A request is started and repositories are generated based on filter criteria. A registry dataset is also created. The registry dataset contains entries that indicate the date and time ranges of each generated repository segment so that the Archive function can locate specific datasets by date and time.

The Archive Record Administrator will set up security so that only authorized users have access to, and can search from, the list of audit requests.

The Archive Recording function provides archive request capture capability.

To make the Archive function easier to use, Hiperstation/Eclipse can be run from the Topaz Workbench, an Eclipse-based graphical user interface (GUI). The purpose of Hiperstation/Eclipse is to create a communication pipeline that allows information to flow from the mainframe to the client and from the client to the mainframe. This permits users and help desk personnel to more easily access the reports and information they need from the mainframe in a format that they are more familiar with.

Note: Although Hiperstation/Eclipse is meant to run from the Topaz Workbench, the Topaz Workbench is not required. Hiperstation/Eclipse can be run from your own Eclipse installation. See the online help for detailed information on how to use Hiperstation/Eclipse.

Archive Reports provide the following:

- List of sessions
- Session details
- List of screens
- Search Criteria
- Message Log
- Ability to delete reports

Accessing the Archive Menu

Archive provides a facility for creating archive recording requests. Recordings can consist of groups of users performing their daily routines without any additional knowledge or training.

Note: You can also create search requests using Archive/Search with Hiperstation/Eclipse. Refer to the *Topaz Workbench Installation and Configuration Guide* for information on how to install Hiperstation/Eclipse. Refer to the online help after installation to learn how to use Hiperstation/Eclipse.

Archive recording is initiated based on Archive Recording Requests. These requests allow you to specify the exact IP addresses and port numbers to record. IPv6 and IPv4 IP address formats are both valid.

Archive recording functions as a separate task that must be started by operational personnel before recordings are activated.

This chapter provides information on how to perform archive requests for TCP/IP.

Starting TCP/IP Archive Requests

1. Start Hiperstation for Mainframe Servers and select option 5 Archive Requests on the “Hiperstation for Mainframe Servers - Main Menu” (Figure 3-1).

Figure 3-1. Hiperstation for Mainframe Servers - Main Menu

```

----- Hiperstation for Mainframe Servers - Main Menu -----
Option ==>
Product Release: 07.08.00

SNA (3270, LU0, APPC)
 1 Monitor Requests          Add/Review your Global Record requests
 2 Review Repository         Create scripts from a repository
 3 Global Record Manager     Manage Include/Exclude filter lists
 4 Unattended Processing      Setup Unattended Playback and Compare JCL

TCP/IP
 5 Archive Requests          Add, Review or Terminate archive requests
 6 Monitor TCP/IP Requests   Add/Review your Global Record requests
 7 Create TCP/IP Scripts     Create scripts from a repository
 8 Playback TCP/IP Scripts   Execute playbacks of TCP/IP scripts
 9 TCP/IP Playback Reporting  Report on database created from playback
10 Archive Web Reporting      Manage TCP/IP archive web reports
    
```

- If no active or inactive archive recording requests exist, the “Archive Recording - Add Requests Screen” appears (Figure 3-2) stating that no Archive Recording Requests were found.

Figure 3-2. Archive Recording - Add Requests Screen

```

Hiperstation ----- Archive Recording - Add Requests -----
Command ==>

*****
*
*                               No Archive Recording Requests were found.
*
*
*****

Press ENTER to continue, or END to return.
    
```

Press Enter to advance to the “TCP/IP - Archive Criteria Screen” or END to return to the Hiperstation for Mainframe Servers - Main Menu.

- If active or inactive archive recording requests already exist, the “Archive Recording - Monitor TCP/IP Requests Screen” appears (Figure 3-4 on page 3-3). This screen presents a list of existing requests with active requests highlighted.

Archive Requests — Hiperstation for Mainframe Servers

Archive recording writes captured activity to a specified range of datasets called a repository set. You can also create search reports from the capture repository set.

To capture activity to be searched, you need to create a recording request. If you specify a time-frame for the request, it becomes active at the designated start time. If you do not

specify a time-frame, it becomes active immediately. Capture begins when all of the criteria for an active request are met.

The “Archive Recording - Monitor TCP/IP Requests Screen” contains a list of all active and inactive requests. This screen has two views. The left view displays the name of the archive recording request and its corresponding description (Figure 3-3). The right view displays the request owner, active sessions, total sessions, and the repository dataset (Figure 3-4). Press PF11 (Right) and PF10 (Left) to see all of the information available on the Archive Recording - Monitor TCP/IP Requests screen.

Figure 3-3. Archive Recording - Monitor TCP/IP Requests Screen (Left View)

```

----- Archive Recording - Monitor TCP/IP Requests ----- Row 1 of 11
Command ==>                                           Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)Stop, (R)estart, (D)isable,
                  (S)elect, (A)dd, (V)iew, (9)Switch Repositories
                                                                MORE->

S  Name      Description
-  -
CJYSOS  TEST TCPIP SOS
NEWDEAN THIS IS DEAN'S NEW ARCHIVE REQUEST
DEANNEW2 THIS IS DEAN'S NEW NEW ARCHIVE REQUEST
GODEAN  *Description of Vantage data
DEANTEST THIS IS A TEST OF THE TCP/IP ARCHIVE REQUEST
DEAN05  *Another converted Vantage repository
BGTCP006 CW06 TCP TEST
CAJTEST *Chris, adding Deans testing DCI ADD
VANT-A  *VANTAGE HDATA/VDATA CASE A
ALPHA   FIRST RUN OF TCP AUDITING
SOSTEST *ANOTHER TEST
***** BOTTOM OF DATA *****
    
```

Figure 3-4. Archive Recording - Monitor TCP/IP Requests Screen (Right View)

```

Hiperstation ----- Archive Recording - Monitor TCP/IP Requests ----- Row 1 of 11
Command ==>                                           Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)Stop, (R)estart, (D)isable,
                  (S)elect, (A)dd, (V)iew, (9)Switch Repositories
                                                                <-MORE

S  Request  Active  Total  Repository
   Owner   Sessions Sessions Dataset
-  -
USRCXY0  USRCXY0.SOSTEST1.#0000001
USRDLPO  USRDLP0.DEAN.NEW.ARCHIVE.REQUEST.#0000001
USRDLPO  USRDLP0.DEAN.NEW2.ARCHIVE.REQUEST.#0000001
USRDLPO  *USRDLPO.R780.VANTAGEA.#0000001
USRDLPO  USRDLP0.TCP.TEST.ARCHIVE.#0000001
USRDLPO  *USRDLPO.VANTAGEA.TEST.#0000001
USRBAGO  USRBAGO.HIPER.TCP6.REPOSIT.#0000001
USRCAJO  *USRCAJO.DCITEST.ARCHIVE.#0000001
USRLYPO  *USRLYPO.R780.VANTAGEA.#0000001
USRSPSO  USRSPSO.ALPHA.TCP.#0000001
USRSPSO  *USRSPSO.TESTSOS.TCP.#0000001
***** BOTTOM OF DATA *****
    
```

Notes:

1. The “Archive Recording - Monitor TCP/IP Requests Screen” is only available to users who have GRADMIN (Global Recording Administrator) authority.
2. Refer to the online help for information about the primary commands that are valid on this screen.
3. Extremely large TCP/IP records may not be captured if the specified buffers are not large enough.

4. If Global Record abends, data may possibility be lost.
5. You can use the DCI to add any Archive request type (3270, MQ, TCP). See “Using the Global Recording Batch Interface” in the appropriate user guide for information and examples of how to use the DCI. DCI Archive Samples in the Sample Dataset have the prefix 'DCIADAxX'.
6. Depending on the task you want to perform, enter the appropriate line command in the Selection column and press Enter. The selection column is available on both the left and right view. See “Description of Available Archive Recording Line Commands” for a description of the line commands available on this screen.
7. Press Enter (after specifying a line command or entering a primary command on the command line) to proceed, or use the **END** command to return to the “Hiperstation for Mainframe Servers - Main Menu”.

Description of Available Archive Recording Line Commands

Enter the desired line command in the Selection (S) column of the “Archive Recording - Monitor TCP/IP Requests Screen” (either left or right view).

C (Cancel)

Terminates the request and deletes the request entry without waiting for sessions that match your filter criteria to end. All buffered information is also deleted, which may result in partially recorded business transactions. To avoid losing important data, STOP the request first. Wait for recording to terminate before issuing the CANCEL command. All session data is written to the specified repository dataset and the repository registry is updated.

F (Force)

Terminates the capture request without waiting for sessions that match your filter criteria to end. This may result in partially recorded business transactions. To stop capturing new sessions, but allow capture to finish in-flight sessions, use STOP instead. All session data is written to the specified repository dataset and the repository registry is updated. A terminated request will restart when Archive Recording is restarted.

Note: Using the (F)orce line command will result in the immediate termination of your request and possible loss of session data not yet written to your repository dataset from Archive Recording ECSA buffers. Use this line command with caution.

P (Stop)

Deactivates the capture request and ensures that no new sessions matching your capture criteria will be captured. Archive Recording continues capturing all sessions that are in-flight at the time STOP is issued and will write data to the specified repository dataset when they end. A stopped request will restart when Archive Recording is restarted. A stopped request is no longer highlighted in the list of requests.

R (Restart)

Restarts a request that was previously stopped using either the Force or Stop line command. The request becomes active as soon as the time frame specified within the request is met. Use this option to activate an inactive request. When the request is restarted, it appears highlighted in the list of requests.

Note: If the request contained a start date and time and/or an end date and time, the request will not become active if the current time is not within the start or end dates and times originally specified in the request.

D (Disable)

Prevents a request from starting when the Archive Recording job is started or when the Start Time is reached. An asterisk (*) appears next to the description in the left view, and the dataset name in the right view, indicating that the request is disabled. A disabled request will not restart when Archive Recording is restarted.

S (Select)

Displays the “Global Recording - Active TCP/IP Sessions Screen”, which lists all TCP/IP sessions being recorded that match your capture criteria. See “Viewing Session Information” on page 3-6 for a description of this screen.

A (Add)

Displays the “TCP/IP - Archive Criteria Screen”, which allows you to add additional TCP/IP archive recording requests. See “Creating TCP/IP Archive Criteria” on page 3-7 for more information about this screen.

V (View)

Reviews the Start/End Date/Time and filters entered at the time the selected archive request was added.

9 (Switch Repositories)

Closes the repository segment that is currently being written and opens, in sequence, the next segment (without interrupting capture) to resume capturing data. A message appears stating which repository is closed and the number of the next repository that is opened.

When using the optional search on switch and the repository is closed, a search is performed automatically, and an e-mail is sent to the owner of the search request.

Enter

Press the Enter key without entering a primary or line command to refresh the request list and reposition the cursor on the Command Line for the left view.

Viewing Archive Requests

This section explains how to access the “TCP/IP View Archive Request Screen” and describes the columns on the screen. On this screen is a list of all sessions currently being recorded for a given request. To access this screen:

1. Type **V (View)** next to the desired request on the “Archive Recording - Monitor TCP/IP Requests Screen” (Figure 3-4 on page 3-3) and press Enter. The “TCP/IP View Archive Request Screen” appears (Figure 3-5).

Figure 3-5. TCP/IP View Archive Request Screen

```

Hiperstation ----- TCP/IP View Archive Request ----- Row 1 to 1 of 1
Command ==>                                           Scroll ==> PAGE

Review the data, then type OK on the Command line.

Name . . . . . ARCHHLM1
Description. . . . . TCP/IP archive criteria

Repository Registry Dataset. . . USR2312.REPOS.REGDSET1

Restrict collection to certain times (optional):
                HH : MM : SS                MM / DD / YYYY
Start Time . . : 00 : 00 : 00  Start Date . . : 00 / 00 / 0000
End Time . . . : 00 : 00 : 00  End Date . . . : 00 / 00 / 0000

Collect data that match these filters (* are wildcards):
Line commands are: (S)elect
----- Client ----- Server -----
S Ftr IP Address          Port IP Address          Port
* ** *****
_ 001
***** Bottom of data *****
    
```

The information on the “TCP/IP View Archive Request Screen” cannot be changed, only viewed.

Start Date and End Time show the start time of the capture request for the selected session, and End Date and End Time show the ending time of the capture request for the selected session.

The Client IP Address and Port and Server IP Address and Port list the addresses and ports subject to capture. IPv6 and IPv4 IP address formats are both valid. See the *Hiperstation for Mainframe Servers User Guide* for details on IP address formats.

2. After reviewing the information on the screen, press **End** to return to the “Archive Recording - Monitor TCP/IP Requests Screen”.

Viewing Session Information

You can view an active request’s session information to verify recording criteria. If you see activity you did not intend to capture, Cancel, Force, or Stop the request and create a new archive request with appropriately refined capture criteria. Disable the original request if you did not Cancel it to ensure it does not restart after IPL.

To view session information, type **S** in the selection column of an active request on the “Global Recording - Monitor TCP/IP Requests Screen” (Figure 3-4 on page 3-4) and press Enter. The “Global Recording - Active TCP/IP Sessions Screen” appears (Figure 3-6). Press End to return to the Monitor TCP/IP Requests Screen.

Figure 3-6. Global Recording - Active TCP/IP Sessions Screen

```

----- Global Recording - Active TCP/IP Sessions ----- Row 1 of 8
Command ==>                                           SCROLL ==> PAGE

----- Client ----- Server ----- Session Start   Last Update at Total
IP Address      Port IP Address      Port MM/DD HH:MM:SS MM/DD HH:MM:SS Bytes
-----
127.0.0.1       1050 127.0.0.1       1051 04/10 15:43:14 04/10 15:43:14    4
10.10.0.214    1056 10.10.0.214    1918 04/10 15:43:14 04/10 15:43:14  8530
127.0.0.1       1067 127.0.0.1       1071 04/10 15:41:54 04/10 15:47:54    7
127.0.0.1       1067 127.0.0.1       1069 04/10 15:41:54 04/10 15:47:54   72
127.0.0.1       1045 127.0.0.1       1047 04/10 15:41:54 04/10 15:47:54   74
127.0.0.1       1045 127.0.0.1       1046 04/10 15:41:54 04/10 15:47:54   76
10.10.0.214    1072 10.10.0.214    1918 04/10 15:41:54 04/10 15:47:54  41K
10.10.0.200    4567 10.10.0.215    1029 04/10 15:40:57 04/10 15:46:15  100K
***** BOTTOM OF DATA *****
    
```

The information that appears on this screen includes Client IP Address and Port, Server IP Address and Port, the time when the connection was established, the time of the most recent activity within the connection, and total bytes of message data recorded for the given connection. 'K' indicates the value is in thousands, 'M' indicates millions.

Creating TCP/IP Archive Criteria

This section describes how to create a new archive recording request.

1. From the "Archive Recording - Monitor TCP/IP Requests Screen", type A (Add) in the selection column of any recording request and press Enter. The "TCP/IP - Archive Criteria Screen" appears (Figure 3-7).

Figure 3-7. TCP/IP - Archive Criteria Screen

```

Hiperstation ----- TCP/IP - Archive Criteria -----
Command ==>                                           Scroll ==> PAGE

Type OK to continue, PF1 for help, or CANCEL to exit.

Name . . . . .
Description . . . .

Repository Registry Dataset. . . ARCH.TCPIP

Restrict collection to certain times (optional):
      HH : MM : SS           MM / DD / YYYY
Start Time . . 00 : 00 : 00   Start Date . . 00 / 00 / 0000
End Time . . . 00 : 00 : 00   End Date . . . 00 / 00 / 0000

Collect data that match these filters (use * for wildcards):
Line commands are: (S)elect, (R)peat, (D)elete, or (I)nsert
----- Client ----- Server -----
S Ftr IP Address           Port IP Address           Port
* ** * *****
_ 001
***** Bottom of data *****
    
```

2. Enter a **Name** and optional **Description** for your new archive criteria. You can specify up to eight characters for the name. The name can be alphanumeric but must start with a letter.
3. Enter the **Repository Registry Dataset** name. This dataset contains the index to this archive recording request. Specify a dataset name. The repository registry dataset name can be up to 35 characters in length. The repository set created by this archive recording request will be based on the repository registry dataset name (for example, a repository registry dataset of A.B.C would result in repository set segments being created from A.B.C.#0000001 to A.B.C.#9999999).

This is a required field that stores information to make searching more efficient. All other datasets are built based on this dataset name.

Note: If you delete your registry by mistake, you can run HSREGEN to recreate it.

4. Fill in the start and end date and time that you want to activate and deactivate the request.
 - If you supply a start time, you must also supply a start date, and if you supply an end time, you must supply an end date.
 - To activate the request immediately, accept the default values of all zeros in both the **Start Date** and **Start Time** fields.
 - To activate and/or deactivate the request on a specific date, enter a two-digit month, two-digit day, and four-digit year.

- To activate and/or deactivate the request at a specific time, enter a two-digit hour based on a 24-hour clock, a two-digit minute or press Tab to accept 00, and a two-digit second or press Tab to accept 00.
 - If you supply a start date, but accept all zeros for the start time, the request activates at midnight at the beginning of the start date.
 - To keep the request active until you STOP, FORCE, or CANCEL it, accept the default values of all zeros for both the **End Date** and **End Time** fields.
 - If you supply an end date, but accept all zeros for the end time, the request deactivates at midnight at the beginning of the end date. Therefore, to include records up to and including a specific day, enter the following day as the end date.
5. Enter the client and server IP addresses and port numbers that you want to record. You can enter a port number, a wildcard (*) for all port numbers, or a prefix with a wildcard (for example 2*) to find all port numbers beginning with 2. The same wildcard rules apply for IP addresses.
 6. Type **OK** on the command line. If the information is incomplete, a message will appear telling you what needs to be added. If the information is complete, the "Archive Criteria - Delete or Terminate Message Screen" appears (Figure 3-8).

Note: The request is not added until the initial segment is allocated.

Figure 3-8. Archive Criteria - Delete or Terminate Message Screen

```

Hiperstation ----- 3270 - Archive Criteria -----
C +-----+
  |----- Archive Criteria - Delete or Terminate -----|
  |Command ==>|
  |
  |Hiperstation archive record requests create repository
  |segment datasets based on the registry dataset name. You must
  |specify what action to take if the archive recording request
  |encounters an existing dataset in the following range:
  |
  |R   First. . USR3213.ARCH.VTAM.#0000001
  |   Last . . USR3132.ARCH.VTAM.#9999999
  |
  |S   Existing dataset option: (Enter number to select)
  |E   - 1. Delete existing datasets
  |C   - 2. Terminate the archive request
  |-----+
  |----- Client ----- Server -----|
  |S Ftr IP Address          Port IP Address          Port
  |* ** * *****
  |001
  |***** Bottom of data *****
  
```

Hiperstation for Mainframe Servers archive recording requests create repository segment datasets based on the registry dataset name. You must specify what action to take if the archive recording request encounters an existing dataset in the specified range.

Note: The purpose of the "Archive Criteria - Delete or Terminate Message Screen" is to decide what to do when the next dataset segment in the repository set exists. This situation is not desirable because both options may have negative consequences. It is strongly recommended that this situation be avoided. To help prevent this situation from occurring, have the security administrator ensure that only the global recording started task has ALTER authority to the repository set datasets after the archive record request has been initiated.

The First and Last fields show the dataset name of the first and last repository dataset segment that can be used. These include the registry dataset name followed by “.#0000001” and “.#9999999”.

7. Select 1 or 2 and press Enter to continue. Your choices include:
 - 1. **Delete existing datasets:** Deletes the existing datasets and creates new datasets that have the same names and are allocated with the same options as the initial repository dataset segment. Specify this option if the archive recording request must remain active.
 - 2. **Terminate the archive request:** Terminates the archive request. The archive recording request will not start if any existing datasets match the repository dataset specification. Also, if a dataset is created later that matches the repository dataset specification, the archive request will terminate when it needs to switch to that dataset.

Note: You **must** make a choice. There is no default value, and your previous choices are not remembered from session to session.

- Use END or CANCEL to cancel the add archive request and return to the TCP/IP - Archive Criteria screen.

After selecting 1 or 2, the “Global Recording - Allocate Dataset Screen” appears allowing you to define your repository file without exiting Hiperstation for Mainframe Servers. The repository is a sequential dataset with variable blocked format. The record length of this dataset is four less than the specified block size. A block size of 9004 (default) is recommended.

8. The Management Class, Storage Class, and Data Class are defined by the storage administrator at your site. Leave blank to accept the default class.
9. Specify the type of Space Units to be used to store the data. Valid values are: TRKS (Tracks), CYLS (Cylinders), BLKS (Blocks), BYTES, KB (kilobytes), or MB (megabytes). Space units combined with the primary and secondary quantities define the amount of space allocated for the dataset.
10. Specify the primary and secondary quantity of space units to allocate. After Global Recording fills the primary quantity, it allocates the secondary quantity.
11. After you have filled in this screen, press Enter. The “Archive Recording - Monitor TCP/IP Requests Screen” appears showing the new request in the list.

Search Report Management

The “Search Report Management Screen” allows you to view a list of current active and inactive archive requests.

1. Select option 10 **Archive Web Reporting** on the “Hiperstation for Mainframe Servers - Main Menu”. The “Search Report Management Screen” appears (Figure 3-9).

Figure 3-9. Search Report Management Screen

```

Hiperstation ----- Search Report Management ----- Row 1 of 1
Command ==>                                           Scroll ==> PAGE

Index of Search Results:
http://mach1.compuware.com/usr/local/hs/hs780/archive_tcpip/AZCC011/index.xml

Line commands are: (D)elete                               Userid: USER015

S  Date      Time      Name      Search Criteria
-----
-  2009/05/07 12:58:11 TESTE01
***** BOTTOM OF DATA *****
    
```

The “Search Report Management Screen” contains a complete list of the search reports you have access to.

Note: For a complete list of the primary and line commands valid on this screen and how to use them, refer to the online help.

2. You can use the FIND, RFIND, or LOCATE commands as well as FORWARD or BACK to help you locate the desired Archive. After locating the desired Archive, the only available line command is (D)elete.
3. To delete one or more reports, type a **D** in the selection column for each report that you want to delete, and press Enter to delete the selected reports.

A **D** placed on a line deletes all of the HFS files related to the selected report and removes it from the list of available reports for the current user.

Unless delete confirmation has been disabled, a popup will appear that shows the name and date/time information for the report to be deleted. Press Enter from this popup to delete the associated report.

To turn off delete confirmation, enter a slash (/) in the **Permanently set delete confirmation off** field.

Index of Search Results

On the “Search Report Management Screen” (Figure 3-9), the Index of Search Results is a display-only field showing the URL path to the HTTP index page that lists the results of both local and global Archive Search requests.

This URL is constructed from several installation variables that are set in the ETRMGPAR member. The HTTPSRVR variable defines the first path qualifier (the location of the HTTP web server holding the Archive Search report files). The next set of path qualifiers, down to but not including the archive directory, are defined via the HFSPATH installation variable. See the example URL components below.

The qualifier between the archive directory and index.xml is your TSO user ID. Your user ID is disguised to provide a more secure directory name in which to store important files such as your Archive Search criteria files and HTTP search output reports. Use this path, up to and including your disguised user ID, to locate these files.

On some 3270 terminal emulators, you can double-click this URL link to open a web browser window and go directly to the HTTP report index page. For other browsers, you may need to copy and paste this link into the browser address field.

Example URL Components

The URL example in Figure 3-9 is comprised of the following parts:

- sysname.compuware.com — The system name specified by the installer.
 - /usr/local/hs/hs078 — The Hiperstation web reports directory specified by the installer.
 - archive — The fixed folder location where all archive search reports go.
 - AZCCO11 — A generated folder containing a disguised user ID based on the user’s TSO user ID.
 - index.xml — The fixed name of the user’s index page.
4. Press END or CANCEL to return to the “Hiperstation for Mainframe Servers - Main Menu”.

Convert ClientVantage Agentless Monitoring Data Records to TCP/IP

This section provides the instructions for converting ClientVantage Agentless Monitoring data records to a Hiperstation TCP/IP archive request so the data can be saved to a repository and searched. Beginning in release 8.0.0, an automated import process is available. This is the recommended method. Both the automated and manual processes are described below.

Hiperstation audit search expects records in Hiperstation archive requests records to be in time sequence. Ensure that converted repositories are imported in time order. Adding a repository to a Hiperstation archive request with a timestamp earlier than previously imported repositories can cause the search to function improperly. It is highly recommended that Hiperstation archive requests only contain repositories imported from the same ClientVantage Agentless AMD to help maintain time sequence.

Note: Currently, the ClientVantage Agentless Monitoring files contain only HTTP input data. Therefore, searches can be performed only on input data.

Note: For more information on setting up a Global Recording request, see the “Using the Global Recording Batch Interface” section in the *Hiperstation for VTAM User Guide*, the *Hiperstation for Mainframe Servers User Guide*, or the *Hiperstation for WebSphere MQ User Guide*.

Automated Import of Vantage Data

In the install library, Hiperstation creates member VANTADAM. This JCL is used to add the automated Vantage archive request. This JCL contains six steps:

- COPY1 — Specify the Request_ID for this archive record request. Request_ID must be unique with a maximum length of six characters. An error will occur if the Request_ID is not unique. Make a note of the Request_ID — you will need it in the later steps.
- COPY2 — Specify the Archive_ID for this archive record request. Archive_ID must be unique with a maximum length of eight characters. An error will occur if the Archive_ID is not unique.
- COPY3 — Specify the Archive_Desc (archive description) for this archive record request. This description can have a maximum length of 53 characters.
- COPY4 — Specify the Archive Dataset Specification for this archive record request. The value must be a unique dataset specification and end with .#* consisting of a maximum length of 38 characters. Make a note of the Archive Dataset specification — you will need it in the later steps.
- COPY5 — Specify the IP Address of the Vantage AMD (Agentless Monitoring Device) and optionally the Port. The IP Address must be a specific address, it cannot be wildcarded.
- -COPY6 — If your Vantage AMD requires authentication, specify the authentication criteria here. UserId is limited to a maximum of 20 characters. Password is allowed to be up to 127 characters. These fields are optional if your Vantage AMD does not require authentication.

Manual Import of Vantage Data

1. In the install library, Hiperstation creates member VANDAR. This JCL contains four steps:
 - COPY1 — Specify the Request_ID for this archive record request. Request_ID must be unique with a maximum length of six characters. An error will occur if the

Request_ID is not unique. Make a note of the Request_ID — you will need it in the later steps.

- COPY2 — Specify the Archive_ID for this archive record request. Archive_ID must be unique with a maximum length of six characters. An error will occur if the Archive_ID is not unique.
 - COPY3 — Specify the Archive_Desc (archive description) for this archive record request. This description can have a maximum length of 53 characters.
 - COPY4 — Specify the Archive Dataset Specification for this archive record request. The value must be a unique dataset specification and end with `.#*` consisting of a maximum length of 38 characters. Make a note of the Archive Dataset specification — you will need it in the later steps.
2. To get data from the Vantage AMD (Agentless Monitoring Device) to the mainframe, FTP the Vantage vdata and headerdata files to an HFS directory. It must be sent as text data, not as binary data.

The vdata and headerdata files are created based on how the Vantage AMD is configured. The path where the data will be written is:

```
/var/spool/adlex/rtm
```

Note: For complete information on configuring ClientVantage Agentless Monitoring to produce vdata and headerdata files, refer to the ClientVantage Agentless Monitoring documentation, which can be found on Compuware's FrontLine web site.

3. Convert the vdata and headerdata files on HFS into the Hiperstation repository dataset. The HFS location is what was specified in the previous step. Update the VCONVERT JCL:
 - VPDATA is the repository dataset that gets created. The dataset name should be based on the dataset specified in VANTADAR, in COPY4, except instead of ending with `.#*` it must end with `.IMPORTDS`.
 - VDATA is the vantage vdata file that is stored on an HFS directory.
 - HDATA is the Vantage headerdata file that is stored on an HFS directory.
 - IGNORE specifies an IP address to ignore during conversion. It should specify the IP address of the Vantage AMD so its records in the Vantage data files will be ignored during conversion.
4. Import the converted files into the Hiperstation archive request. Update the VANTIMPT JCL:

COPY1 — Specify the Request_ID for this archive record request. This should be the same value entered in COPY1 above.

COPY4 — Specify the Archive Dataset Specification for this archive record request. This should be the same value that was specified in COPY4 above.

Hiperstation takes the `.IMPORTDS` dataset file and renames it to the next available segment and then adds it to the archive request.

Repeat steps 2, 3, and 4 to add new segments to the archive. You can perform searches on the data in the archive.

Chapter 4.

Archive Function — WebSphere MQ

The Archive function allows you to create archive record requests. A request is started and repositories are generated based on filter criteria. A registry dataset is also created. The registry dataset contains entries that indicate the date and time ranges of each generated repository segment so that the Archive function can locate specific datasets by date and time.

The Archive Record Administrator will set up security so that only authorized users have access to, and can search from, the list of audit requests.

The Archive Recording function provides archive request capture capability.

To make the Archive function easier to use, Hiperstation/Eclipse can be run from the Topaz Workbench, an Eclipse-based graphical user interface (GUI). The purpose of Hiperstation/Eclipse is to create a communication pipeline that allows information to flow from the mainframe to the client and from the client to the mainframe. This permits users and help desk personnel to more easily access the reports and information they need from the mainframe in a format that they are more familiar with.

Note: Although Hiperstation/Eclipse is meant to run from the Topaz Workbench, the Topaz Workbench is not required. Hiperstation/Eclipse can be run from your own Eclipse installation. See the online help for detailed information on how to use Hiperstation/Eclipse.

Archive Reports provide the following:

- List of sessions
- Session details
- List of screens
- Search Criteria
- Message Log
- Ability to delete reports

Accessing the Archive Menu

Archive provides a facility for creating archive recording requests. Recordings can consist of groups of users performing their daily routines without any additional knowledge or training.

Note: You can also create search requests using Archive/Search with Hiperstation/Eclipse. Refer to the *Topaz Workbench Installation and Configuration Guide* for information on how to install Hiperstation/Eclipse. Refer to the online help after installation to learn how to use Hiperstation/Eclipse.

Archive recording is initiated based on Archive Recording Requests. These requests allow you to specify the exact queue managers, queue/object names, job names, completion codes, and reason codes to record.

Archive recording functions as a separate task that must be started by operational personnel before recordings are activated.

This chapter provides information on how to perform archive requests for WebSphere MQ.

Starting WebSphere MQ Archive Requests

1. Start Hiperstation for WebSphere MQ and select option **5 Archive Requests** on the “Hiperstation for WebSphere MQ - Main Menu” (Figure 4-1).

Figure 4-1. Hiperstation for WebSphere MQ - Main Menu

```

----- Hiperstation for WebSphere MQ - Main Menu -----
Option ==>
                                     Product Release: 07.08.00

 1 Monitor MQ Requests      Add/Review your MQ recording requests
 2 Create MQ Scripts        Create MQ scripts from a repository
 3 Playback MQ Scripts      Execute and save playbacks of MQ scripts
 4 MQ Playback Reporting    Report on database created from playback
 5 MQ Archive Requests      Add, Review or Terminate MQ archive requests
 6 MQ Archive Web Reports   Manage MQ archive web reports

```

- If no active or inactive archive recording requests exist, the “Archive Recording - Add Requests Screen” appears stating that no Archive Recording Requests were found.

Press Enter to advance to the “WebSphere MQ - Archive Criteria Screen” or END to return to the “Hiperstation for WebSphere MQ - Main Menu”.

- If active or inactive archive recording requests already exist, the “Archive Recording - Monitor MQ Requests Screen (Left View)” appears (Figure 4-3). This screen presents a list of existing requests with active requests highlighted.

Archive Requests — Hiperstation for WebSphere MQ

Archive recording writes captured activity to a specified range of datasets called a repository set. You can also create search reports from the capture repository set.

To capture activity to be searched, you need to create a recording request. If you specify a time-frame for the request, it becomes active at the designated start time. If you do not specify a time-frame, it becomes active immediately. Capture begins when all of the criteria for an active request are met.

The “Archive Recording - Monitor MQ Requests Screen” contains a list of all active and inactive requests. This screen has two views. The left view displays the name of the archive recording request and its corresponding description (Figure 4-2 on page 4-3). The right view displays the request owner, active sessions, total sessions, and the repository dataset (Figure 4-3). Press **PF11** (Right) and **PF10** (Left) to see all of the information available on the Archive Recording - Monitor MQ Requests screen.

Figure 4-2. Archive Recording - Monitor MQ Requests Screen (Left View)

```

Hiperstation ---- Archive Recording - Monitor MQ Requests      ---- Row 1 of 10
Command ==>                                                    Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)Stop, (R)estart, (D)isable,
                  (S)elect, (A)dd, (V)iew, (9)Switch Repositories      MORE->

S  Name          Description
-  - - - - -
MQEFC  H06AC079 MQ ARCHIVE 1
CARUMBA LET US TRY THIS WITH A DESCRIPTION
DEANMQ
DEANMQTS LET US TRY THIS WITH A DESCRIPTION
SYSTEMI  INCLUDE SYSTEM
SYSTEMX  EXCLUDE SYSTEM
SYSTEST2 *TEST OF SYSTEM EXCLUDE
SYSTEST3 *DONT EXCLUDE SYSTEM TRAFFIC
HLMTST03 MQ TEST
SHELTEST *
***** BOTTOM OF DATA *****
    
```

Figure 4-3. Archive Recording - Monitor MQ Requests Screen (Right View)

```

Hiperstation ---- Archive Recording - Monitor MQ Requests      ---- Row 1 of 10
Command ==>                                                    Scroll ==> PAGE

Line commands are: (C)ancel, (F)orce, (P)Stop, (R)estart, (D)isable,
                  (S)elect, (A)dd, (V)iew, (9)Switch Repositories      <-MORE

S  Request  Active  Total  Repository
   Owner   Sessions Sessions Dataset
-  - - - - -
USRCXY0
USRDLPO  USRDLPO.BART.SIMPSON.ARCHIVE.#0000001
USRDLPO  USRDLPO.DEAN.MQ.ARCHIVE.#0000001
USRDLPO  USRDLPO.DEAN.MQ.TEST.ARCHIVE.#0000001
USRDHRO  USRDHRO.SYSTEMI.REPOS.#0000001
USRDHRO  USRDHRO.SYSTEMX.REPOS.#0000001
USRDHRO  *USRDHRO.SYSTEST2.REPOS.#0000001
USRDHRO  *USRDHRO.SYSTEST3.REPOS.#0000001
USRHLM0  USRHLM0.ARCH.MQ.#0000001
USRSPSO  *USRSPSO.REG.MQ.#0000001
***** BOTTOM OF DATA *****
    
```

Notes:

1. The “Archive Recording - Monitor MQ Requests Screen” is only available to users who have GRADMIN (Global Recording Administrator) authority.
2. Refer to the online help for information about the primary commands that are valid on this screen.
3. If Global Recording abends, data may possibly be lost.
4. You can use the DCI to add any Archive request type (3270, MQ, TCP). See “Using the Global Recording Batch Interface” in the appropriate user guide for information and examples of how to use the DCI. DCI Archive Samples in the Sample Dataset have the prefix 'DCIADAxX'.
5. Depending on the task you want to perform, enter the appropriate line command in the Selection column and press Enter. The selection column is available on both the left and right view. See “Description of Available Archive Recording Line Commands” for a description of the line commands available on this screen.
6. Press Enter (after specifying a line command or entering a primary command on the command line) to proceed, or use the END command to return to the “Hiperstation for WebSphere MQ - Main Menu”.

Description of Available Archive Recording Line Commands

Enter the desired line command in the Selection (S) column of the “Archive Recording - Monitor MQ Requests Screen” (either left or right view).

C (Cancel)

Terminates the request and deletes the request entry without waiting for sessions that match your filter criteria to end. All buffered information is also deleted, which may result in partially recorded business transactions. To avoid losing important data, STOP the request first. Wait for recording to terminate before issuing the CANCEL command. All session data is written to the specified repository dataset and the repository registry is updated.

F (Force)

Terminates the capture request without waiting for sessions that match your filter criteria to end. This may result in partially recorded business transactions. To stop capturing new sessions, but allow capture to finish in-flight sessions, use STOP instead. All session data is written to the specified repository dataset and the repository registry is updated. A terminated request will restart when Archive Recording is restarted.

Note: Using the (F)orce line command will result in the immediate termination of your request and possible loss of session data not yet written to your repository dataset from Archive Recording ECSA buffers. Use this line command with caution.

P (Stop)

Deactivates the capture request and ensures that no new sessions matching your capture criteria will be captured. Archive Recording continues capturing all sessions that are in-flight at the time STOP is issued and will write data to the specified repository dataset when they end. A stopped request will restart when Archive Recording is restarted. A stopped request is no longer highlighted in the list of requests.

R (Restart)

Restarts a request that was previously stopped using either the Force or Stop line command. The request becomes active as soon as the time frame specified within the request is met. Use this option to activate an inactive request. When the request is restarted, it appears highlighted in the list of requests.

Note: If the request contained a start date and time and/or an end date and time, the request will not become active if the current time is not within the start or end dates and times originally specified in the request.

D (Disable)

Prevents a request from starting when the Archive Recording job is started or when the Start Time is reached. An asterisk (*) appears next to the description in the left view, and the dataset name in the right view, indicating that the request is disabled. A disabled request will not restart when Archive Recording is restarted.

S (Select)

Displays the “Global Recording - Active MQ Sessions Screen”, which lists all WebSphere MQ sessions being recorded that match your capture criteria. See “Viewing Session Information” on page 4-6 for a description of this screen.

A (Add)

Displays the “WebSphere MQ - Archive Criteria Screen”, which allows you to add additional WebSphere MQ archive recording requests. See “Creating WebSphere MQ Archive Criteria” on page 4-6 for more information about this screen.

V (View)

Reviews the Start/End Date/Time and filters entered at the time the selected archive request was added.

9 (Switch Repositories)

Closes the repository segment that is currently being written and opens, in sequence, the next segment (without interrupting capture) to resume capturing data. A message appears stating which repository is closed and the number of the next repository that is opened.

When using the optional search on switch and the repository is closed, a search is performed automatically, and an e-mail is sent to the owner of the search request.

Enter

Press the Enter key without entering a primary or line command to refresh the request list and reposition the cursor on the Command Line for the left view.

Viewing Archive Requests

This section explains how to access the “WebSphere MQ View Archive Request Screen” and describes the columns on the screen. On this screen is a list of all sessions currently being recorded for a given request. To access this screen:

1. Type **V** (View) next to the desired request on the “Archive Recording - Monitor MQ Requests Screen” (Figure 4-3 on page 4-3) and press Enter. The “WebSphere MQ View Archive Request Screen” appears (Figure 4-4).

Figure 4-4. WebSphere MQ View Archive Request Screen

```

Hiperstation ----- WebSphere MQ View Archive Request ----- Row 1 of 1
Command ==>                                                    Scroll ==> PAGE

Review the data to collect, then type OK on the Command line.

Name . . . . . MQEFC / Exclude SYSTEM traffic ('/')
Description . . . . 06AC079 MQ ARCHIVE 1

Repository Registry Dataset. . . USR2503.MQEFC

Restrict collection to certain times (optional):
      HH : MM : SS           MM / DD / YYYY
Start Time . : 00 : 00 : 00   Start Date . : 00 / 00 / 0000
End Time . . : 00 : 00 : 00   End Date . . : 00 / 00 / 0000

Collect data that match these filters (* are wildcards):

Act  QMGR Queue/Object name                               Jobname  Comp Reas
***  *** *****
INCL *___ H06AC079.*_____
***** BOTTOM OF DATA *****
    
```

The information on the “WebSphere MQ View Archive Request Screen” cannot be changed, only viewed.

Start Date and End Time show the start time of the capture request for the selected session, and End Date and End Time show the ending time of the capture request for the selected session.

Action specifies whether filter actions are to be included or excluded. QMGR name is the name of the queue manager to be monitored. Queue/Object name is the name of objects defined on the specified queue manager. Comp lists valid completion codes: 0 is successful completion, 1 is warning - partial completion, and 2 is call failed.

2. After reviewing the information on the screen, press **End** to return to the “Archive Recording - Monitor MQ Requests Screen”.

Viewing Session Information

You can view an active request’s session information to verify recording criteria. If you see activity you did not intend to capture, Cancel, Force, or Stop the request and create a new archive request with appropriately refined capture criteria. Disable the original request if you did not Cancel it to ensure it does not restart after IPL.

To view session information, type S in the selection column of an active request on the “Archive Recording - Monitor MQ Requests Screen” (Figure 4-3 on page 4-3) and press Enter. The “Global Recording - Active MQ Sessions Screen” appears (Figure 4-5). Press End to return to the “Archive Recording - Monitor MQ Requests Screen”.

Figure 4-5. Global Recording - Active MQ Sessions Screen

```
Hiperstation ----- Global Recording - Active MQ Sessions ----- Row 1 of 10
Command ==> SCROLL ==> PAGE

-----
QMGR Queue/Object Name          Session Start      Last Update at    Total
MM/DD HH:MM:SS MM/DD HH:MM:SS Bytes
-----
N530 *                          04/13 15:36:23 04/13 15:36:23    0
N530 *                          04/13 15:36:23 04/13 15:36:23    0
NMQM *                          04/13 15:36:18 04/13 15:36:18    0
NMQM *                          04/13 15:36:18 04/13 15:36:18    0
N600 *                          04/13 15:36:18 04/13 15:36:18    0
N600 *                          04/13 15:36:18 04/13 15:36:18    0
N520 *                          04/13 15:36:18 04/13 15:36:18    0
N520 *                          04/13 15:36:18 04/13 15:36:18    0
N210 *                          04/13 15:36:15 04/13 15:36:15    0
N210 *                          04/13 15:36:15 04/13 15:36:15    0
***** BOTTOM OF DATA *****
```

The information that appears on this screen includes QMGR number, Queue/Object Name, the time when the session started, the time of the last update, and total bytes of message data recorded for the given queue manager. ‘K’ indicates the value is in thousands, ‘M’ indicates millions.

Creating WebSphere MQ Archive Criteria

This section describes how to create a new archive recording request.

1. From the “Archive Recording - Monitor MQ Requests Screen”, type A (Add) in the selection column of any recording request and press Enter. The “WebSphere MQ - Archive Criteria Screen” appears (Figure 4-6).

Figure 4-6. WebSphere MQ - Archive Criteria Screen

```
Hiperstation ----- Websphere MQ - Archive Criteria ----- Row 1 to 1 of 1
Command ==> Scroll ==> PAGE

Type OK to continue, PF1 for help, or CANCEL to exit.

Name . . . . . Exclude SYSTEM traffic ('/')
Description . . . . MQ TEST

Repository Registry Dataset. . . 'USR2503.ARCH.MQ'

Restrict collection to certain times (optional):
      HH : MM : SS          MM / DD / YYYY
Start Time . . 00 : 00 : 00  Start Date . . 00 / 00 / 0000
End Time . . . 00 : 00 : 00  End Date . . . 00 / 00 / 0000

S Ftr Act QMGR Queue/Object name          Jobname Comp Reas
* *** *** * *****
_ 001 INCL
* *** *** * *****
```

2. Enter a **Name** and optional **Description** for your new archive criteria. You can specify up to eight characters for the name. The name can be alphanumeric but must start with a letter.
3. **Exclude SYSTEM traffic** allows the exclusion of SYSTEM traffic from your archive recording request. Enter a slash (/) to exclude all traffic to queues beginning with SYSTEM (except for SYSTEM.DEFAULT queues, which will still be captured).
4. Enter the **Repository Registry Dataset** name. This dataset contains the index to this archive recording request. Specify a fully qualified dataset name. The repository registry dataset name can be up to 35 characters in length. The repository set created by this archive recording request will be based on the repository registry dataset name (for example, a repository registry dataset of A.B.C would result in repository set segments being created from A.B.C.#0000001 to A.B.C.#9999999).

This is a required field that stores information to make searching more efficient. All other datasets are built based on this dataset name.

Note: If you delete your registry by mistake, you can run HSREGEN to recreate it.

5. Fill in the start and end date and time that you want to activate and deactivate the request.
 - If you supply a start time, you must also supply a start date, and if you supply an end time, you must supply an end date.
 - To activate the request immediately, accept the default values of all zeros in both the **Start Date** and **Start Time** fields.
 - To activate and/or deactivate the request on a specific date, enter a two-digit month, two-digit day, and four-digit year.
 - To activate and/or deactivate the request at a specific time, enter a two-digit hour based on a 24-hour clock, a two-digit minute or press Tab to accept 00, and a two-digit second or press Tab to accept 00.
 - If you supply a start date, but accept all zeros for the start time, the request activates at midnight at the beginning of the start date.
 - To keep the request active until you STOP, FORCE, or CANCEL it, accept the default values of all zeros for both the **End Date** and **End Time** fields.
 - If you supply an end date, but accept all zeros for the end time, the request deactivates at midnight at the beginning of the end date. Therefore, to include records up to and including a specific day, enter the following day as the end date.
6. Enter the desired filter information:
 - **Ftr** is an arbitrary value assigned as a unique ID for each filter. This field cannot be modified.
 - **Act** allows INCLude or EXCLude as valid filter actions.
 - **QMGR** name is the name of the queue managers to monitor.
 - **Queue/Object name** is the name of objects defined on the specified queue manager.
 - **Jobname** is part of the origin context of the message (defined by the application that created the message).
 - **Comp** is the completion code. 0 is successful completion, 1 is a warning - partial completion, and 2 is call failed.
 - **Reas** is the reason code. This should be a zero (0) or a numeric reason code.

Note: If you need more space for the queue manager or Queue/Object names, use the 'S'elect line command.

After selecting 1 or 2, the “Global Recording - Allocate Dataset Screen” appears allowing you to define your repository file without exiting Hiperstation for WebSphere MQ. The repository is a sequential dataset with variable blocked format. The record length of this dataset is four less than the specified block size. A block size of 9004 (default) is recommended.

9. The Management Class, Storage Class, and Data Class are defined by the storage administrator at your site. Leave blank to accept the default class.
10. Specify the type of Space Units to be used to store the data. Valid values are: TRKS (Tracks), CYLS (Cylinders), BLKS (Blocks), BYTES, KB (kilobytes), or MB (megabytes). Space units combined with the primary and secondary quantities define the amount of space allocated for the dataset.
11. Specify the primary and secondary quantity of space units to allocate. After Global Recording fills the primary quantity, it allocates the secondary quantity.
12. After you have filled in this screen, press Enter. The “Archive Recording - Monitor MQ Requests Screen” appears showing the new request in the list.

Search Report Management

The “Search Report Management Screen” allows you to view a list of current active and inactive archive requests.

1. Select option **6 MQ Archive Web Reports** on the Hiperstation for WebSphere MQ Main Menu. The “Search Report Management Screen” appears (Figure 4-8).

Figure 4-8. Search Report Management Screen

```

Hiperstation ----- Search Report Management ----- Row 1 of 1
Command ==>                                           Scroll ==> PAGE

Index of Search Results:
http://mach1.compuware.com/usr/local/hs/hs780/archive_mq/AZCC011/index.xml

Line commands are: (D)elete                               Userid: USER015

S  Date      Time      Name      Search Criteria
-----
  2009/05/07 12:36:43 TSTMQE2
***** BOTTOM OF DATA *****

```

The “Search Report Management Screen” contains a complete list of the search reports to which you have access.

Note: For a complete list of the primary and line commands valid on this screen and how to use them, refer to the online help.

2. You can use the FIND, RFIND, or LOCATE commands as well as FORWARD or BACK to help you locate the desired Archive. After locating the desired Archive, the only available line command is (D)elete.
3. To delete one or more reports, type a **D** in the selection column for each report that you want to delete, and press Enter to delete the selected reports.

A **D** placed on a line deletes all of the HFS files related to the selected report and removes it from the list of available reports for the current user.

Unless delete confirmation has been disabled, a popup will appear that shows the name and date/time information for the report to be deleted. Press Enter from this popup to delete the associated report.

To turn off delete confirmation, enter a slash (/) in the **Permanently set delete confirmation off** field.

Index of Search Results

On the “Search Report Management Screen” (Figure 4-8), the Index of Search Results is a display-only field showing the URL path to the HTTP index page that lists the results of both local and global Archive Search requests.

This URL is constructed from several installation variables that are set in the ETRMGPAR member. The HTTPSRVR variable defines the first path qualifier (the location of the HTTP web server holding the Archive Search report files). The next set of path qualifiers, down to but not including the archive directory, are defined via the HFSPATH installation variable. See the example URL components below.

The qualifier between the archive directory and index.xml is your TSO user ID. Your user ID is disguised to provide a more secure directory name in which to store important files such as your Archive Search criteria files and HTTP search output reports. Use this path, up to and including your disguised user ID, to locate these files.

On some 3270 terminal emulators, you can double-click this URL link to open a web browser window and go directly to the HTTP report index page. For other browsers, you may need to copy and paste this link into the browser address field.

Example URL Components

The URL example in Figure 4-8 is comprised of the following parts:

- sysname.compuware.com — The system name specified by the installer.
 - /usr/local/hs/hs078 — The Hiperstation web reports directory specified by the installer.
 - archive — The fixed folder location where all archive search reports go.
 - AZCCO11 — A generated folder containing a disguised user ID based on the user’s TSO user ID.
 - index.xml — The fixed name of the user’s index page.
4. Press END or CANCEL to return to the Hiperstation for WebSphere MQ - Main Menu.

Chapter 5.

Auditing Profile Defaults

This chapter describes how to set up your archive profiles if they were not set at installation time, or if you want to modify them after installation. For additional information about editing your profile settings, see the *Hiperstation Installation and Configuration Guide* or the online help.

3270 Auditing Profile Defaults

The “Auditing Defaults for 3270 Screen” specifies the terminal LU, APPLID, and/or User ID you want to search.

1. Select option **6 Auditing 3270** from the “Hiperstation Profile Screen” (Figure 5-1).

Figure 5-1. Hiperstation Profile Screen

```

Hiperstation ----- Hiperstation Profile -----
OPTION ==>

Primary commands: menu-number, ALL, CANCEL
Line commands: S or / to select options.

Active Profile:
Dataset      ==> 'USER2312.HIPER.PROFILE'
Member       ==> HIPER
Description  ==> changed description

- 1 Domain Traveler Recording and Playback defaults
- 2 APPC           Global Record and Script Create settings
- 3 3270/LU0       Global Record and Script Create settings
- 4 WebSphere MQ   Global Record and Script Create settings
- 5 TCP/IP         Global Record and Script Create settings
- 6 Auditing 3270  Auditing defaults for 3270
- 7 Auditing MQ     Auditing defaults for WebSphere MQ
- 8 Auditing TCP/IP Auditing defaults for TCP/IP
- 9 Playback MQ     MQ Playback parameter defaults
- 10 Playback TCP   TCP Playback parameter defaults
- 11 ATV Manager    Test Vehicle defaults

Should changes made elsewhere to Profile values be saved?
Profile Autosave ==> Y (Y = YES, N = NO OR A = ASK)

Should changes made elsewhere to dataset names be saved?
DSN Autosave     ==> Y (Y = YES, N = NO)

Email address: _____

Codepage: IS08859-1

Job statement information for batch jobs:
==> //XXXXXXXXX JOB ('ACCOUNT',5M-0000),'HIPERSTN',
==> //          CLASS=Q,MSGCLASS=R,NOTIFY=&SYSUID
==> // *

```

The “Auditing Defaults for 3270 Screen” appears (Figure 5-2).

Note: For easier display, the initial Profile screens have been combined. Figure 5-1 shows the profile selection screen. The Auditing screens in this section have been combined. Figure 5-2 shows all of the Auditing profile settings. On your

actual screen, press **FORWARD** (PF8) or **BACKWARD** (PF7) to view all of the fields.

Figure 5-2. Auditing Defaults for 3270 Screen

```

Hiperstation ----- Auditing Defaults for 3270 -----
Profile: HIPER      Profile Dataset: 'USER2312.HIPER.PROFILE'
OPTION ==> _____
More:      +

Datasets:
Registry DSN      ==> _____
Description       ==> _____
Replace Existing  ==> _          1 = Yes, 2 = Terminate
Repositories?

Archive Request Criteria:
Terminal         ==> _____ Use an asterisk for wildcarding
Application      ==> _____ the Terminal, Application or Userid
User ID         ==> _____ fields.
OR
Global Record
Manager List    ==> _____
Second GRM List ==> _____

Recording Date and Time  HH : MM : SS (Optional)  MM / DD / YYYY
Start Time          ==> __ : __ : __   Start Date   __ / __ / ____
End Time            ==> __ : __ : __   End Date     __ / __ / ____

Search Request Information:
Terminal         ==> _____ Use an asterisk for wildcarding
Application      ==> _____ the Terminal, Application or Userid
Userid          ==> _____ fields.

Search Date and Time  HH : MM : SS (Optional)  MM / DD / YYYY
Start Time          ==> __ : __ : __   Start Date   __ / __ / ____
End Time            ==> __ : __ : __   End Date     __ / __ / ____

```

2. Specify your **Datasets** information.

- **Registry DSN** specifies the name of the dataset that contains the index to this archive recording request. You can enter a fully qualified dataset name up to 35 characters in length to allocate the repository registry. Repositories created by this archive record request will be based on the repository registry dataset name (i.e. a repository registry dataset of A.B.C would result in repositories being created from A.B.C.#0000001 to A.B.C.#9999999).
- **Description** is an optional field that describes the archive record request. This description will be provided to the user when the user specifies an archive record request in the Create Search Reports function.
- **Replace Existing Repositories?** specifies what should occur when archive record attempts to switch to a new repository segment and a dataset already exists that matches that repository segment dataset name. Select **1** or **2**.

1. Yes deletes the existing dataset and creates a new dataset with the same name that is allocated with the same options as the initial repository dataset segment. Specify this option if it is imperative that the archive record request remain active.

2. Terminate terminates the archive record request. The archive record request will not start if any datasets exist that match the repository dataset specification.

3. **Archive Request Criteria** specifies the terminal LU, APPLID and User ID for which you want to create an audit record request.

- **Terminal** is the logical unit name of the VTAM terminal to record.
- **Application** specifies the VTAM Application ID to record.
- **User ID** specifies the mainframe User ID to capture.

For Terminal, Application, and User ID, you can specify one of the following:

- A specific terminal or application up to eight characters or user ID up to seven characters.
 - An asterisk (*) to select all terminals, applications, or user IDs.
 - A terminal, application, or user ID prefix followed by an asterisk to select a group. For example, H8606* selects all terminals beginning with H8606.
4. **Global Record Manager List** and **Second GRM List** specify the name of a Global Record Manager INCLUDE or EXCLUDE list. If the specified name does not exist, the user will be presented with the “Global Record Manager * Add List Screen” to create the list before the search criteria is accepted. These fields can only be specified if the Terminal, Application and Userid fields are left blank.
 5. The **Recording Start and End Date and Time** fields are optional. For a user profile, leaving the date and time blank is most useful. When a user specifies a time frame for the request, it becomes active at the designated start time. If no time frame is specified, it becomes active immediately. Capture begins when all of the criteria for an active request are met. If you enter a Start Time, you must enter a Start Date. If you enter an End Time, you must enter an End Date. Times are entered in a 24-hour clock. The range of acceptable year values is 2000 to 2040, and the end date and time must be later than the start date and time.
 6. **Search Request Information** allows you to subset the Archive Search to either an individual session or a specific group of sessions, rather than the thousands of sessions a long-running archive might potentially contain. The three filter criteria provided match those available on the originating archive capture request. They are:
 - **Terminal** - The VTAM LU name of the terminal session.
 - **Application** - The VTAM LU name of the in-session application associated with a terminal session.
 - **Userid** - The signed on user ID of the user associated with a session. The user ID tracking facility of Global Recording must be active for user IDs to be captured in an Archive.All filter criteria can be completely wildcarded by specifying just an asterisk (*). Criteria can also be partially wildcarded by using an asterisk suffix (for example, Application: H01AC* selects those application names beginning with H01AC).
 7. The **Search Start and End Date and Time** fields are optional. See step 5 above. For more details, see the online help.

WebSphere MQ Auditing Profile Defaults

This section defines the auditing defaults for WebSphere MQ.

1. Select option 7 **Auditing MQ** from the “Hiperstation Profile Screen”.

Note: For easier display, the initial Profile screens have been combined. Figure 5-3 shows the profile selection screen. On your actual screen, press **FORWARD** (PF8) or **BACKWARD** (PF7) to view all of the fields.

Figure 5-3. Hiperstation Profile Screen

```

Hiperstation ----- Hiperstation Profile -----
OPTION ==>
More: +

Primary commands: menu-number, ALL, CANCEL
Line commands: S or / to select options.

Active Profile:
Dataset      ==> 'USER2312.HIPER.PROFILE'
Member       ==> HIPER
Description  ==> changed description

_ 1 Domain Traveler Recording and Playback defaults
_ 2 APPC           Global Record and Script Create settings
_ 3 3270/LUO       Global Record and Script Create settings
_ 4 WebSphere MQ   Global Record and Script Create settings
_ 5 TCP/IP         Global Record and Script Create settings
_ 6 Auditing 3270  Auditing defaults for 3270
_ 7 Auditing MQ    Auditing defaults for WebSphere MQ
_ 8 Auditing TCP/IP Auditing defaults for TCP/IP
_ 9 Playback MQ    MQ Playback parameter defaults
_ 10 Playback TCP  TCP Playback parameter defaults
_ 11 ATV Manager   Test Vehicle defaults

Should changes made elsewhere to Profile values be saved?
Profile Autosave ==> Y (Y = YES, N = NO OR A = ASK)

Should changes made elsewhere to dataset names be saved?
DSN Autosave     ==> Y (Y = YES, N = NO)

Email address: _____

Codepage: IS08859-1

Job statement information for batch jobs:
==> //XXXXXXXXX JOB ('ACCOUNT',5M-0000),'HIPERSTN',
==> // CLASS=Q,MSGCLASS=R,NOTIFY=&SYSUID
==> /**
  
```

The “Auditing Defaults for WebSphere MQ Screen” appears (Figure 5-4).

Figure 5-4. Auditing Defaults for WebSphere MQ Screen

```

Hiperstation ----- Auditing Defaults for WebSphere MQ -----
Profile: HIPER Profile Dataset: 'USER2312.HIPER.PROFILE'
OPTION ==> _____

_ Create Recording Filters (/ for Filter Create panel)

Datasets:
Registry DSN      ==> _____
Description      ==> _____
Replace Existing
Repositories?    ==> _ 1 = Yes, 2 = Terminate

Archive Request Criteria:
_ Exclude SYSTEM traffic ('/')

Recording Date and Time HH : MM : SS (Optional) MM / DD / YYYY
Start Time           ==> 00 : 00 : 00 Start Date 00 / 00 / 0000
End Time             ==> 00 : 00 : 00 End Date 00 / 00 / 0000
  
```

2. Enter a slash (/) to select **Create Recording Filters** and display the “WebSphere MQ Data Collect - Filtering Screen”. This screen specifies the Queue Managers, Queue Names, and Jobnames to capture. It also provides the ability to filter events by completion and reason codes. See the *Hiperstation for WebSphere MQ User Guide* or the online help for information about creating filters.
3. Specify your **Datasets** information.

- **Registry DSN** specifies the name of the dataset that contains the index to this archive recording request. You can enter a fully qualified dataset name up to 35 characters in length to allocate the repository registry. Repositories created by this archive record request will be based on the repository registry dataset name (for example, a repository registry dataset of A.B.C would result in repositories being created from A.B.C.#0000001 to A.B.C.#9999999).
- **Description** is an optional field that describes the archive record request. This description will be provided to the user when the user specifies an archive record request in the Create Search Reports function.
- **Replace Existing Repositories?** specifies what should occur when archive record attempts to switch to a new repository segment and a dataset already exists that matches that repository segment dataset name. Select **1** or **2**.
 - 1 (Yes)** deletes the existing dataset and creates a new dataset with the same name that is allocated and with the same options as the initial repository dataset segment. Specify this option if it is imperative that the archive record request remain active.
 - 2 (Terminate)** terminates the archive record request. The archive record request will not start if any datasets exist that match the repository dataset specification.
- 4. **Archive Request Criteria** specifies whether to exclude SYSTEM queue traffic (excluding the SYSTEM.DEFAULT queues). This traffic can be associated with your WebSphere MQ sessions, and it is recommended to filter it out to avoid obscuring your application flow. Enter a slash (/) to filter out SYSTEM queue traffic.
- 5. The **Recording Start and End Date and Time** fields are optional. For a user profile, leaving the date and time blank is most useful. When a user specifies a time-frame for the request, it becomes active at the designated start time. If no time-frame is specified, it becomes active immediately. Capture begins when all of the criteria for an active request are met. If you enter a Start Time you must enter a Start Date. If you enter an End Time you must enter an End Date. Times are entered in a 24-hour clock. The range of acceptable year values is 2000 to 2040, and the end date and time must be later than the start date and time.

TCP/IP Auditing Profile Defaults

This section specifies the TCP/IP auditing defaults.

1. Select option **8 Auditing TCP/IP** from the Hiperstation Profile screen.

Note: For easier display, the initial Profile screens have been combined. Figure 5-5 shows the profile selection screen. On your actual screen, press **FORWARD** (PF8) or **BACKWARD** (PF7) to view all of the fields.

Figure 5-5. Hiperstation Profile Screen

```

Hiperstation ----- Hiperstation Profile -----
OPTION ==>
More: +

Primary commands: menu-number, ALL, CANCEL
Line commands: S or / to select options.

Active Profile:
Dataset      ==> 'USER2312.HIPER.PROFILE'
Member       ==> HIPER
Description   ==> changed description

_ 1 Domain Traveler  Recording and Playback defaults
_ 2 APPC              Global Record and Script Create settings
_ 3 3270/LUO         Global Record and Script Create settings
_ 4 WebSphere MQ     Global Record and Script Create settings
_ 5 TCP/IP           Global Record and Script Create settings
_ 6 Auditing 3270    Auditing defaults for 3270
_ 7 Auditing MQ      Auditing defaults for WebSphere MQ
_ 8 Auditing TCP/IP  Auditing defaults for TCP/IP
_ 9 Playback MQ      MQ Playback parameter defaults
_ 10 Playback TCP    TCP Playback parameter defaults
_ 11 ATV Manager     Test Vehicle defaults

Should changes made elsewhere to Profile values be saved?
Profile Autosave ==> Y (Y = YES, N = NO OR A = ASK)

Should changes made elsewhere to dataset names be saved?
DSN Autosave     ==> Y (Y = YES, N = NO)

Email address: _____

Codepage: IS08859-1

Job statement information for batch jobs:
==> //XXXXXXXXA JOB ('ACCOUNT',5M-0000),'HIPERSTN',
==> // CLASS=Q,MSGCLASS=R,NOTIFY=&SYSUID
==> /**
      \

```

The “Auditing Defaults for TCP/IP Screen” appears (Figure 5-6).

Figure 5-6. Auditing Defaults for TCP/IP Screen

```

Hiperstation ----- Auditing Defaults for TCP/IP -----
Profile: HIPER Profile Dataset: 'USER2312.HIPER.PROFILE'
OPTION ==> _____

_ Create Recording Filters (/ for Filter Create panel)

Datasets:
Registry DSN      ==> _____
Description       ==> _____
Replace Existing  ==> _ 1 = Yes, 2 = Terminate
Repositories?

Archive Request Criteria:
Recording Date and Time HH : MM : SS (Optional) MM / DD / YYYY
Start Time           ==> 00 : 00 : 00 Start Date 00 / 00 / 0000
End Time             ==> 00 : 00 : 00 End Date 00 / 00 / 0000

```

2. Enter a slash (/) to select **Create Recording Filters** and display the “TCP/IP Collect Data - Filtering Screen”. This screen specifies the IP addresses and ports for filtering traffic.
3. Specify your **Datasets** information.
 - **Registry DSN** specifies the name of the dataset that contains the index to this archive recording request. You can enter a fully qualified dataset name up to 35 characters in length to allocate the repository registry. Repositories created by this archive record request will be based on the repository registry dataset name

(for example, a repository registry dataset of A.B.C would result in repositories being created from A.B.C.#0000001 to A.B.C.#9999999).

- **Description** is an optional field that describes the archive record request. This description will be provided to the user when the user specifies an archive record request in the Create Search Reports function.
 - **Replace Existing Repositories?** specifies what should occur when archive record attempts to switch to a new repository segment and a dataset already exists that matches that repository segment dataset name. Select 1 or 2.
 - 1 (Yes)** deletes the existing dataset and creates a new dataset with the same name that is allocated and with the same options as the initial repository dataset segment. Specify this option if it is imperative that the archive record request remain active.
 - 2 (Terminate)** terminates the archive record request. The archive record request will not start if any datasets exist that match the repository dataset specification.
4. **Archive Request Criteria** specifies whether to exclude SYSTEM traffic. Enter a slash (/) to exclude SYSTEM traffic.
 5. Specify a **Recording Start and End Date and Time** if desired. These fields are optional. For a user profile, leaving the date and time blank is most useful. When a user specifies a time-frame for the request, it becomes active at the designated start time. If no time-frame is specified, it becomes active immediately. Capture begins when all of the criteria for an active request are met. If you enter a Start Time you must enter a Start Date. If you enter an End Time you must enter an End Date. Times are entered in a 24-hour clock. The range of acceptable year values is 2000 to 2040, and the end date and time must be later than the start date and time.

Appendix A. Customer Support Diagnostics

The Customer Support Diagnostic Report produces a list of PTFs that have been applied to your installation. Customer Support may ask you to generate the report to aid in diagnosing an issue.

Note: Generating this report requires READ access to the SMP/E datasets. Consult with your Security Administrator if you do not have the proper authority.

To generate the Customer Support Diagnostic:

1. On the Hiperstation Product Menu, type **PTFS** on the Option Line and press Enter. The “Hiperstation - Diagnostics Screen” appears (Figure A-1).

Figure A-1. Hiperstation - Diagnostics Screen

```

----- Hiperstation - Diagnostics -----
Command ==>

Specify the install and output datasets, then press ENTER to continue.

Input datasets to use:
  Global CSI dataset . . 'COMPWARE.QQF160.GLOBAL.CSI'
  Target Zone . . . . . QQF160

Output datasets to use:
  PTF output list . . . . 'JSMITH.PTFS.REPORT'

Job statement information for batch job:
==> //USER05 JOB ('ACCOUNT',99),'J.SMITH',REGION=OM,
==> //   NOTIFY=&SYSUID,CLASS=A,MSGCLASS=R,USER=JSMITH
==> /**
==> /**
  
```

The **Global CSI dataset** is the SMP/E Global CSI dataset. The **Target Zone** is the SMP/E Target Zone. These fields default to the dataset name and target zone established by your installer. The **PTF output list** is the sequential dataset to contain the report.

2. Complete the **PTF output list** field, insert a job card, and press Enter. Hiperstation submits the job.
3. Once the job has completed, view the report with ISPF. Figure A-2 shows a sample report.

Figure A-2. Customer Support Diagnostic Report

```
***** Top of Data *****  
+-----+  
|                Hiperstation PTF list 05/10/07 15:32:08                |  
|                Loadlib: SYS2.HIPER.SQQFLOAD                          |  
+-----+  
QF43181 QF44415 QF45463 QF46350 QF47331 QF47364 QF47687 QF47857  
QF48238 QF48264 QF48286 QF48302 QF48428 QF48749 QF48753 QF48864  
QF48915 QF48950 QF48953 QF49143 QF49175 QF49197 QF49312 QF49420  
QF49423 QF49451 QF49580 QF49647 QF50149 QF50220 QF50276 QF50354  
QF50457 QF50731  
***** Bottom of Data *****
```

Index

Special Characters

\$\$\$INDEX member, 3270, 2-18

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