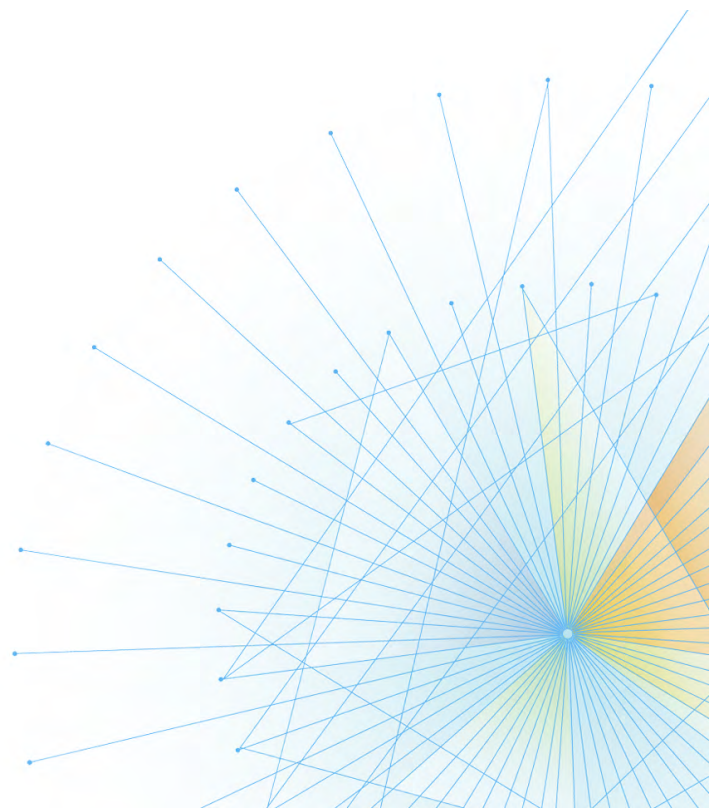




The Mainframe Software Partner For The Next 50 Years

Application Audit Installation and Configuration Guide

Release 17.02



Please direct questions about Application Audit
or comments on this document to:

Compuware Support Center

<https://go.compuware.com/>

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Introduction

This manual provides information about how to install, customize, and maintain Application Audit.

Overview

This document is intended to guide you through installing/updating, configuring, deploying, and troubleshooting Application Audit. Supplemental documentation can be found in the *Application Audit Advanced Configuration Guide*.

Alerts

The alerts found in this guide include:



A note or tip providing additional information.



If a particular milestone or task doesn't apply to your site—or your site is not licensed for a particular option—you can skip ahead to the next milestone or task by clicking the icon.



Information important to remember.



Caution. Failure to follow these instructions can cause problems.



Indicates which skill set is most likely needed to perform the following task(s).

Additional Resources

Refer to these other sources of information on Application Audit.

Related Publications

- *Compuware Installer Mainframe Products SMP/E Installation Guide*
- *Application Audit Advanced Configuration Guide*
- *Application Audit Release Notes*.

Online Documentation

The Application Audit product installation package does not include the product documentation. Access the Application Audit documentation from the Compuware Support Center website at **<https://go.compuware.com>** in the following electronic formats:

- Release Notes in HTML format
- Product manuals in PDF format
- Product manuals in HTML format.

The product documentation is available for viewing or downloading:

- View PDF files with the free Adobe Reader, available at **<http://www.adobe.com>**.
- View HTML files with any standard web browser.

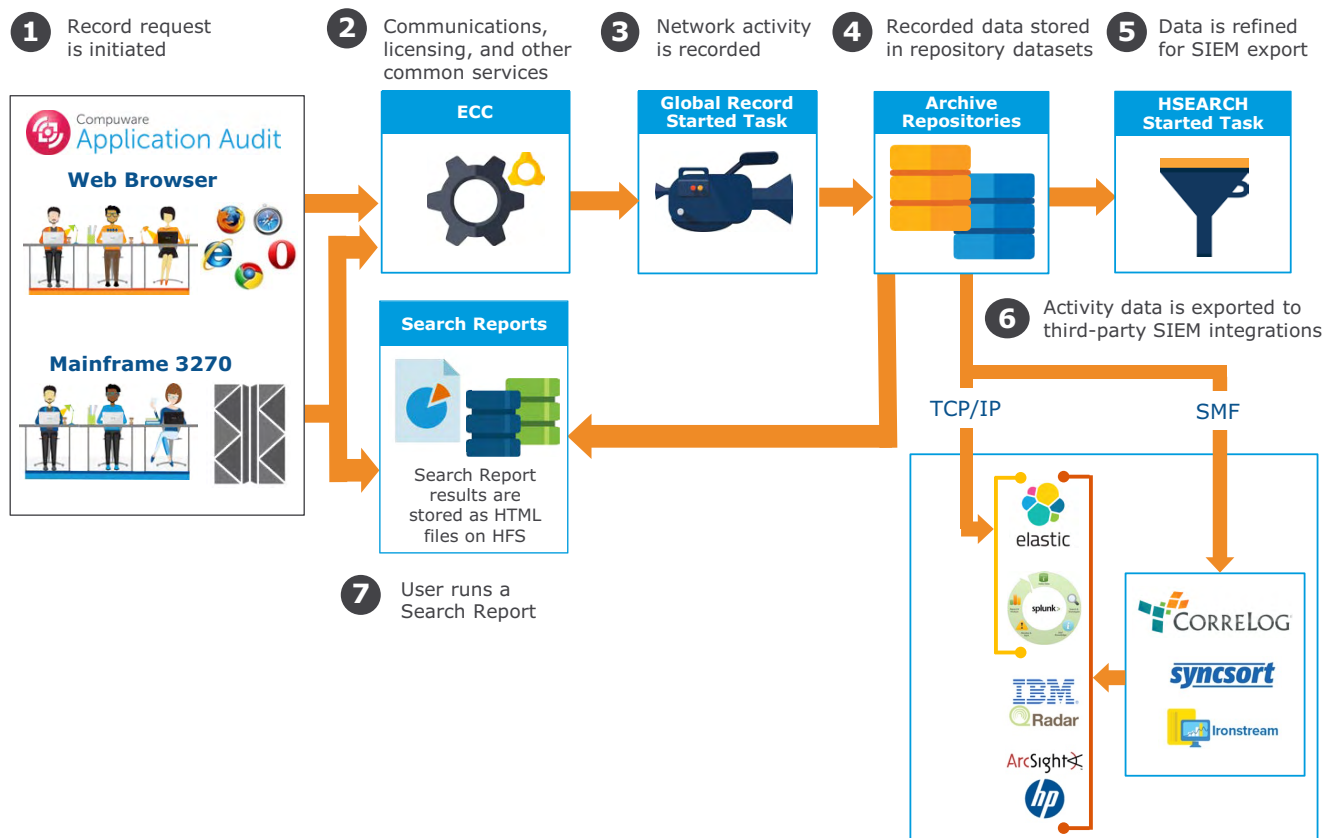
Application Audit Overview

Application Audit is a single SMP/E installed FMID that contains one separately licensed product.

The product components include a Global Recording started task, ISPF Dialog interface, and batch processes, all used to accomplish your archiving and auditing needs:

- The Global Recording started task is used to accomplish recording of desired VTAM, TCP, and IBM MQ communication traffic within an LPAR.
- The Application Audit ISPF dialog is used for starting and stopping Global Recording activity, searching archive record requests, and report maintenance.
- The Application Audit batch processes are used for reporting and directing Global Recording activity.

Product Architecture



Planning

This section provides information related to planning to install or update to Application Audit 17.02.

Steps Involved

1. Order Application Audit and its companion products, including the latest maintenance, via Compuware's Product Ordering web page or by contacting Compuware as described in [Customer Support](#) on page 34.
2. Read this *Installation and Configuration Guide* and complete each of the milestones to:
 - a. Ensure companion products have been installed and configured with the latest maintenance and that the license for Application Audit has been imported.
 - b. Perform the SMP/E installation of Application Audit according to the *Compuware Installer Mainframe Products SMP/E Installation Guide*.
 - c. Implement the Compuware PARMLIB.
 - d. Configure Application Audit for either a new installation or an upgrade.
 - e. Perform additional configuration for Topaz Workbench and other features.
 - f. Verify product installation.
 - g. Deploy Application Audit to additional LPARs.
 - h. Troubleshoot any problems with the installation.

Milestones and Roles

Installation, configuration, verification, and deployment are done in a series of milestones. The rows in [Table 1](#) identify the role or skill set required to perform each milestone. This makes it easier to know which people need to be involved at each milestone along the way. With the proper planning, you may be able to have certain tasks performed at the same time.

Table 1. People Required for Each Milestone

Milestone	Companion Product Installer	Application Audit Installer	z/OS System Programmer	z/OS Security Administrator
Milestone 1: Ensure Installation and Configuration of Companion Products	ECC ●			
Milestone 2: Install Application Audit Using SMP/E		●		
Milestone 3: Configure Application Audit — New Installation		●	●	●
Milestone 4: Configure Application Audit — Upgrade		●	●	●
Milestone 5: Compuware PARMLIB Implementation		●		
Milestone 6: Start the Global Recording Task		●		
Milestone 7: Verify Product Installation		●		

Table 1. People Required for Each Milestone (*Continued*)

Milestone	Companion Product Installer	Application Audit Installer	z/OS System Programmer	z/OS Security Administrator
Milestone 8: Deployment		•	•	•

Checklist of Milestones and Tasks

To keep track of your progress, you may want to print the [Checklist of Milestones and Tasks](#) on page 35 at the end of this manual, then check off each Milestone and task as it gets completed. (The checklist is only available in the PDF version.)

Prerequisites

Supported Hardware and Software

Hardware Platforms

- z13, z14
- zEC12, zBC12
- z196, z114
- z10-EC/BC
- z9-EC/BC
- z900, z990
- z800, z890

Operating Systems

- IBM z/OS V2.2, 2.3
- IBM ISPF for the supported z/OS releases

Major Subsystems

- IBM CICS Transaction Server for z/OS V5.1, 5.2, 5.3, 5.4, 5.5
- IBM DB2 for z/OS V11.1, 12.1
- IBM IMS Transaction and Database Servers V14.1, 15.1
- IBM MQ for z/OS V8.0, 9.0, 9.1

Milestone 1: Ensure Installation and Configuration of Companion Products

Complete the following tasks to install and configure Application Audit companion products.



Roles involved:
ECC Installer

Task 1.1 Install/Upgrade Enterprise Common Components

Enterprise Common Components (ECC) version 17.02 or higher must be installed and configured to support Application Audit 17.02. See the *Enterprise Common Components Installation and Configuration Guide* for instructions on configuring ECC for use with Application Audit.

Task 1.2 Apply ECC Maintenance

Apply the latest maintenance to ECC 17.02.

Task 1.3 Import Application Audit License

When you received your Application Audit product, you also received a license key for Application Audit for VTAM, Application Audit for Mainframe Servers, and/or Application Audit for IBM MQ. Import your Application Audit license(s) into the Compuware License Management System.

Milestone 2: Install Application Audit Using SMP/E

Complete the tasks in this chapter to SMP/E-install Application Audit.



Roles involved:
Application Audit Installer

SMP/E Installation

Application Audit is installed using SMP/E.

FMIDs

Application Audit's function modification identifier is MQQF170.

Complete the following task to SMP/E-install Application Audit.

Task 2.1 Follow the Compuware Installation Guide

1. Follow the instructions in the *Compuware Installer Mainframe Products SMP/E Installation Guide* to install the Application Audit SMP/E environment.



Because Application Audit is delivered as an element of FMID QQF170, the Compuware installer will identify the product component as HIPERSTATION release 17.02.00.



Make a note of the dataset name you specify for the Compuware Installer to retain the ISPF tables it creates.

2. Review and submit sample job \$10CPYQF created by the Compuware Installer. This will create a copy of the Application Audit SQQFSAMP target library to use as the Application Audit configuration dataset, also known as the .INSTALL library. The dataset name can be any name that your site requires, but Compuware suggests using your SMP/E environment high-level qualifiers suffixed with the low-level qualifier “.INSTALL”.
3. Once completed, follow the steps in this guide to configure and deploy Application Audit.

Milestone 3: Configure Application Audit — New Installation

This chapter will guide you through configuration of a new installation of Application Audit 17.02.



If you are performing an upgrade instead, skip ahead to [Configure Application Audit — Upgrade](#).



Roles involved:
z/OS Security Administrator
Application Audit Installer
z/OS System Programmer.

Complete the following tasks to configure a new installation of Application Audit.

Task 3.1 Run the Guided Configuration Dialog



Roles involved:
Application Audit Installer

Task 3.1.1 Launch the Guided Configuration Dialog

To launch the Guided Configuration, execute the `$$ASETUP REXX EXEC`.

On the Command line, type `TSO EX` followed by the fully-qualified `.INSTALL` library name and REXX EXEC member name. For example:

```
TSO EX '<h1q>.install.dsn($$ASETUP)
```



Throughout the Guided Configuration Dialog, use the command **HELP** (or press PF1) to display detailed information about the currently displayed panel. PF1 will also show the long text when ISPF short messages are displayed in the upper right corner of a dialog panel.

Task 3.1.2 SMP/E Installation Data Import

Specify the dataset name where the Compuware Installer created the SMP/E ISPF tables. This will inform the Application Audit customization facility about the installation SMP/E environment. When the Install Data Import completes, the Product Suite Guided Configuration Panel is displayed as shown in [Figure 1](#).

Figure 1. Product Suite Guided Configuration Screen

```

----- Product Suite Guided Configuration -----
Option ==>
                Application Audit FMID: MQQF170

Please complete required selections 2 through 6, in order, to
configure Hiperstation

1 Import Parm Settings  Get customization information from a prior install
2 Generate JCL Samples  Generate JCL samples for product usage
3 Product Configuration Select and run automated customization tasks
4 Generate Manual Tasks Create non-product install task instructions based
on selections/values set in "Product Configuration"
5 Track Manual Tasks    Non-product install task tracking checklist
6 Compuware Parmlib Gen Create parmlib sample using selections and values
set during "Product Configuration" tasks.
7 Apply Maintenance    Receive and apply Hiperstation sysmods

```

Task 3.2 Generate JCL Samples

Run option 2 Generate JCL Samples to update product sample JCL and PROC members with the dataset names of your SMP/E target environment. The members will be placed into the .INSTALL library.

Task 3.3 Configure Product

Run option 3 Product Configuration. The Configure Options screen is displayed, allowing you to select guided configuration tasks by technology: VTAM 3270, TCP/IP, and WebSphere MQ. In turn, select each option to configure. For each selected option, a list of automated customization tasks is displayed. Some customization tasks apply to more than one option and will appear in the task list for each of the option to which they apply.

Select each configuration task and enter the information requested on the panel. Some panels will ask you to initiate a process with the GENERATE command. The configuration tasks may allocate datasets, tailor procs, build sample members, etc. They may also store information into a customization database within the .INSTALL library.

As you exit each task, a Set Task Status window is displayed where you can either indicate the status of the task as being **Complete** or, if you must collect information about a task, set the status to **In Progress** or **Pending**. This will help you re-visit the tasks after having collected the requisite information.

After completing all the automated product configuration tasks, return to the Product Suite Guided Configuration screen ([Figure 1](#)) to advance to the next subtask.

Task 3.4 Generate Manual Tasks

Run option 4 Generate Manual Tasks. This process will create two members with specific tasks—based on information from the preceding steps—to configure your system for use with Application Audit.

The names of these members tell you the area to which each task applies:

- TSKMVS
- TSKSECUR.

The Application Audit installer should review these members and distribute them as needed to system specialists to be completed.



For additional information regarding manual task subject matter, refer to the *Application Audit Advanced Configuration Guide*.

The Generate Manual Tasks process also creates a checklist of your tasks for monitoring your progress as you complete your unique set of manual configuration tasks.

Task 3.5 Track Manual Tasks

Run option 5 Track Manual Tasks to display the checklist for your set of manual tasks. All persons involved in completing the tasks can display this list and use the C line command on the tasks to indicate when they are completed. The Application Audit installer can monitor the status of tasks being completed by everyone through this checklist.

This checklist is only for keeping track of progress and serves no other technical purpose. You may choose not to use this checklist if you track progress in another way.



You may proceed to the next step while the manual tasks are yet to be completed.

Task 3.6 Perform Compuware PARMLIB Gen

Run option 6 Compuware Parmlib Gen. This will create a sample PARMLIB member for Application Audit using selections and values set during “Product Configuration” tasks. The member name is HSCM00, and it will be written to the .INSTALL library, overwriting the member if it already exists.

Milestone 4: Configure Application Audit — Upgrade

This chapter will guide you through configuration of an upgrade to Application Audit 17.02.



If you are performing a new installation instead, skip ahead to [Compuware PARMLIB Implementation](#).



Roles involved:
z/OS Security Administrator
Application Audit Installer
z/OS System Programmer.

Complete the following tasks to upgrade to Application Audit 17.02.

Task 4.1 Run the Guided Configuration Dialog



Roles involved:
Application Audit Installer

Task 4.1.1 Launch the Guided Configuration Dialog

To launch the Guided Configuration, execute the `$$ASETUP REXX EXEC`.

On the Command line, type `TSO EX` followed by the fully-qualified `.INSTALL` library name and REXX EXEC member name. For example:

```
TSO EX '<h1q>.install.dsn($$ASETUP)
```



Throughout the Guided Configuration Dialog, use the command **HELP** (or press PF1) to display detailed information about the currently displayed panel. PF1 will also show the long text when ISPF short messages are displayed in the upper right corner of a dialog panel.

Task 4.1.2 SMP/E Installation Data Import

Specify the dataset name where the Compuware Installer created the SMP/E ISPF tables. This will inform the Application Audit customization facility about the installation SMP/E environment. When the Install Data Import completes, the Product Suite Guided Configuration Panel is displayed as shown in [Figure 2](#).

Figure 2. Product Suite Guided Configuration Screen

```

----- Product Suite Guided Configuration -----
Option ==>
                Application Audit FMID: MQQF170

Please complete required selections 2 through 6, in order, to
configure Hiperstation

1  Import Parm Settings  Get customization information from a prior install
2  Generate JCL Samples  Generate JCL samples for product usage
3  Product Configuration Select and run automated customization tasks
4  Generate Manual Tasks Create non-product install task instructions based
   on selections/values set in "Product Configuration"
5  Track Manual Tasks   Non-product install task tracking checklist
6  Compuware Parmlib Gen Create parmlib sample using selections and values
   set during "Product Configuration" tasks.
7  Apply Maintenance   Receive and apply Hiperstation sysmods

```

Task 4.2 Import Parameter Settings

If your site used the Guided Configuration dialog in a prior installation of Application Audit, you can import parameters and other customization data from your previous customization database into your new one.

Run option 1 Import Parm Settings to initiate the data import. The Import/Migrate Configure Settings screen will be displayed. Specify the name of the .INSTALL library from which to import the information.

Task 4.3 Generate JCL Samples

Run option 2 Generate JCL Samples to update product sample JCL and PROC members with the dataset names of your SMP/E target environment. The members will be placed into the .INSTALL library.

Task 4.4 Configure Product

Run option 3 Product Configuration. The Configure Options screen is displayed, allowing you to select guided configuration tasks by technology: VTAM 3270, TCP/IP, and WebSphere MQ. In turn, select each option to configure. For each selected option, a list of automated customization tasks is displayed. Some customization tasks apply to more than one option and will appear in the task list for each of the option to which they apply.

Select each configuration task and enter the information requested on the panel. Some panels will ask you to initiate a process with the GENERATE command. The configuration tasks may allocate datasets, tailor procs, build sample members, etc. They may also store information into a customization database within the .INSTALL library.

As you exit each task, a Set Task Status window is displayed where you can either indicate the status of the task as being **Complete** or, if you must collect information about a task, set the status to **In Progress** or **Pending**. This will help you re-visit the tasks after having collected the requisite information.

After completing all the automated product configuration tasks, return to the Product Suite Guided Configuration screen ([Figure 2](#)) to advance to the next subtask.

Task 4.5 Generate Manual Tasks

Run option 4 Generate Manual Tasks. This process will create two members with specific tasks—based on information from the preceding steps—to configure your system for use with Application Audit. Most, but not all, of the tasks will require no action because they were already done during a previous installation.

The names of these members tell you the area to which each task applies:

- TSKMVS
- TSKSECUR.

The Application Audit installer should review these members to confirm which tasks need no action and which must be done, then distribute them as needed to system specialists to be completed.



For additional information regarding manual task subject matter, refer to the *Application Audit Advanced Configuration Guide*.

The Generate Manual Tasks process also creates a checklist of your tasks for monitoring your progress as you complete your unique set of manual configuration tasks.

Task 4.6 Track Manual Tasks

Run option 5 Track Manual Tasks to display the checklist for your set of manual tasks. All persons involved in completing the tasks can display this list and use the C line command on the tasks to indicate when they are completed or validated as needing no action. The Application Audit installer can monitor the status of tasks being completed by everyone through this checklist.

This checklist is only for keeping track of progress and serves no other technical purpose. You may choose not to use this checklist if you track progress in another way.



You may proceed to the next step while the manual tasks are yet to be completed.

Task 4.7 Perform Compuware PARMLIB Gen

Run option 6 Compuware Parmlib Gen. This will create a sample PARMLIB member for Application Audit using selections and values set during “Product Configuration” tasks. The member name is HSCM00, and it will be written to the .INSTALL library, overwriting the member if it already exists. If you already have an HSCM member in your PARMLIB supporting an earlier installation of Application Audit, compare your existing parameter settings to those in the new sample. Because users request PARMLIB changes over time to adjust product behavior to their needs, it’s useful to retain those settings during an upgrade. Update your new member with parameter settings as appropriate.

Milestone 5: Compuware PARMLIB Implementation

This milestone contains tasks that help prepare for configuration of Application Audit for both a new installation and an upgrade.



Roles involved:
Application Audit Installer.

Complete the following tasks to prepare for Application Audit configuration.

Task 5.1 Implement the Compuware PARMLIB

Starting with release 17.02, Compuware mainframe products, including Application Audit, use parameter libraries (PARMLIBs) in conjunction with the Compuware Mainframe Services Controller (CMSC) to configure each product as well as common components. The CMSC was installed as part of the Enterprise Common Components installation.

In this task, you will implement the Compuware PARMLIB for Application Audit.

This task is necessary for both a new installation and an upgrade of Application Audit to release 17.02.



Whenever you modify an existing Compuware PARMLIB member or add a new member, you will need to use the CMSC REFRESH command to update the contents of the CMSC cache.

Task 5.1.1 Create the Default Member

Create your HSCM00 member in your Compuware PARMLIB. Member HSCM00 from the Application Audit customization library, .INSTALL, is typically chosen as the source to be copied to the Compuware PARMLIB. This approach may require little or no modification of parameter values before use. You could, alternatively, choose either of the other samples as a starting point to create your own member and set parameter values as needed.

In the case of a product upgrade, you may already have an HSCM00 in your Compuware PARMLIB. You can choose to simply edit that member, changing parameter settings as needed. Use the generated .INSTALL member HSCM00 as a guide to setting parameter values and identifying any new parameters added to product since your existing member was created.

[Table 2](#) describes sample sources of PARMLIB member HSCM.

Table 2. Application Audit's Compuware PARMLIB Sample Members

Library	Member Name	Contents
Target library SQQFSAMP	HSCM00	Sample Application Audit parameter member with only core parameters that must be set for Application Audit to function.

Table 2. Application Audit's Compuware PARMLIB Sample Members (*Continued*)

Library	Member Name	Contents
Target library SQQFSAMP	HSCMALL	Sample Application Audit Compuware PARMLIB parameter member with every product parameter and descriptions on coding values for them.
Configuration library .INSTALL	HSCM00	Initially this is a copy of member HSCM00 from the SQQFSAMP target library. After running task 3.6 for new installs or 4.6 for upgrades, it contains a sample Compuware PARMLIB member with values collected during import and configuration set as appropriate parameter values.

Task 5.1.2 Update the CMSC with Your PARMLIB Members

Use the z/OS MODIFY (F) command to update the CMSC with the PARMLIB member you created.

Refreshing All PARMLIB Members

```
F cmscname,PARMLIB REFRESH
```

Refreshing a Single Parameter Member

```
F cmscname,PARMLIB REFRESH member_name
```



During the refresh process, parameter values are validated. If they are found to be invalid, an error message is written to the FDBDLOG SYSOUT dataset associated with the ECC CMSC instance where the member is being refreshed. If an error is detected, the contents of the in-core member will not be refreshed. You must correct the error and refresh the member before attempting to use it.

Milestone 6: Start the Global Recording Task

Complete the following tasks to activate the Global Recording facility.



Roles involved:
Application Audit Installer

Task 6.1 Start Global Recording

Computer operators use started task commands and shutdown procedures to control the behavior of the Global Recording started task. Provide your operators with a copy of this section of the manual. It explains how to start the Global Recording started task and how to shut it down.

The TSKMVS task list instructed the system programmer to start the Global Recording task to make the Global Recording facility available to users. If the task is already running, simply review this section before proceeding to the next milestone.



This Milestone describes the essential instructions needed to start and stop the Global Recording facility. Complete instructions regarding Global Recording customization and operation are provided in the *Application Audit Advanced Configuration Guide*.

Task 6.1.1 Start the Global Recording Task

Start the started task after each IPL to enable Global Recording activity. Either:

- Manually start it by issuing the START command described in this section.
- Have your MVS Systems Programmer add the start command to the COMMND00 member to have the MVS Master Scheduler automatically start the task after every IPL.

To start the Global Recording started task, issue the START command on the MVS Console. The syntax of the command is as follows:

```
S GRTASK,P=parm
```

To specify more than one parameter, place the comma-delimited parameter string in single quotes.

```
S GRTASK,P='parm,parm'
```

Control the way the started task behaves with the following start command parameters.

EMERGENC

Shuts down Global Recording started task quickly and performs minimal clean up. All VTAM intercepts are preserved but disabled.

STARTUP

Starts up the Global Recording started task.

SUFFIX=aaaa

Instructs the Global Recording started task to use a suffix other than 00 when requesting parameter member HSCM. **aaaa** can be 1 to 4 valid member name characters.

QUIET

Suppresses the following messages when you start up the Global Recording started task.

- SVMAN601I APPLICATION AUDIT SUBSYSTEM IS ALREADY ACTIVE
- SVMAN602I IT MUST BE SHUTDOWN FOR A STARTUP TO TAKE PLACE
- SVMAN603I START APPLICATION AUDIT USING SHUTDOWN AS THE EXEC PARAMETER
- SVMAN604I WHEN SHUTDOWN COMPLETES, RESTART NORMALLY

It also suppresses all console messages or TSO TPUT messages, as well as the following recording request initiation messages:

- ETGRPX103I GR INITIATED FOR REQUEST nnnnn
- ETGRPX104I SIDE A: netida.lunamea SIDE B: netidb.lunameb
- ETGRPX105I LOGMODE: 11111111
- ETGRPX106I TP: tttttttt

Task 6.1.2 Shut Down the Global Recording Started Task

Shut down the Global Recording started task with either:

- the Modify command (F GRTASK, SHUTDOWN)
- the MVS STOP command.

It can take several minutes after issuing the command before the Global Recording started task ends completely. If the started task does not end after several minutes, enter the MVS CANCEL command to finish the shutdown.

Never use the MVS FORCE command to shut down the Global Recording started task. An IPL may be required if the FORCE command is used.

Always issue a SHUTDOWN or MVS STOP command and wait several minutes for the started task to end completely before issuing a CANCEL command.

Do not issue the CANCEL command more than once. An IPL may be required if the CANCEL command is issued more than once.



The started task termination and cleanup activity are bypassed if you use the FORCE command or issue the CANCEL command more than once.

If, for some reason, you use the FORCE command or issue the CANCEL command more than once, use the START command with the SHUTDOWN parameter to clean up the data areas used by Global Recording.

```
S GRTASK,P=SHUTDOWN
```

If this technique is not successful, an IPL may be required.

Milestone 7: Verify Product Installation

This milestone contains tasks to verify that Application Audit is usable.



Figures shown below are representative of 3270 archive recording via Application Audit being used for validation. Keep in mind that these figures will differ for other recording technologies.



Roles involved:
Application Audit Installer

Complete the following tasks to verify product execution.

Task 7.1 Start Global Record Started Task

The purpose of this task is to ensure the global record started task starts and remains running. If improperly configured or running in an unsupported VTAM version, the global record started task will shut down.

1. Issue the start command to start the Application Audit global recording task. This allows for the capturing of 3270, TCP, and MQ data.
2. Look at the **SVMAP195I** and **SVMAP196I** messages in the message log of the global record started task ([Figure 3](#)) to ensure that parameters are coming from the correct Compuware PARMLIB member and dataset.

Figure 3. Application Audit Global Record Started Task Job Output

```

Display Filter View Print Options Search Help
-----
SDSF OUTPUT DISPLAY HS      STC89780  DSID      2 LINE 0      COLUMNS 02- 81
COMMAND INPUT ==>          SCROLL ==> CSR
***** TOP OF DATA *****
              J E S 2  J O B  L O G  --  S Y S T E M  A C 0 6  --  N O

14.11.53 STC89780 ---- MONDAY,    13 NOV 2017 ----
14.11.53 STC89780 IEF695I START HS      WITH JOBNAME HS      IS ASSIGNED TO U
14.11.53 STC89780 $HASP373 HS          STARTED
14.11.53 STC89780 IEF403I HS - STARTED - TIME=14.11.53
14.11.53 STC89780 SVMAP195I PARAMETERS LOADED FROM MEMBER: HSCMXML
14.11.53 STC89780 SVMAP196I DATASET: AC06.CMSC.PARMLIB
14.11.53 STC89780 SVMAP00II SCANNING GLOBAL RECORD INITIALIZATION PARAMETERS
14.11.53 STC89780 SVMAP10II SECSYS(RACF)
14.11.53 STC89780 SVMAP10II ALLNET
14.11.53 STC89780 SVMAP10II ALLNBUFS(200)
14.11.53 STC89780 SVMAP10II ALLNBUFL(1024)
14.11.53 STC89780 SVMAP10II SESSCNT(2000)
14.11.53 STC89780 SVMAP10II SCREATE(HC172717)
14.11.53 STC89780 SVMAP10II REGISTRY(HSRGSTRY)
14.11.53 STC89780 SVMAP10II SWITCH(HSEARCH)
14.11.53 STC89780 SVMAP10II TCPIP(TCPIP)
14.11.53 STC89780 SVMAP10II OMVS(OMVS)

```

3. Look further in the message log and find the ETGRM001I HIPERSTATION GLOBAL RECORDING ACTIVATED message.
4. Ensure the global recording started task remains active.

Task 7.2 Start Archive Record Capture Request

The purpose of this task is to ensure the global record started task records activity.

1. Enter Application Audit. See [Figure 4](#).

Figure 4. Application Audit – Main Menu

```

----- Application Audit - Main Menu -----
Option ==> 1

                                Product Release: 17.02.00
0 Application Audit Profiles      Set user profiles
1 Archive Requests               Add, Review or Terminate your requests
2 Create Search Reports          Search archive requests
3 Search Report Management       Search report maintenance
4 Include/Exclude Lists         Manage Include/Exclude filter lists (3270)

Profile          ==>
Profile dataset  ==>

Leave Profile blank for selection list
Leave Profile dataset blank to create new dataset
Leave both blank to run with no Profile

See Application Audit frequently asked questions at:
http://go.compuware.com

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Type LEGAL on the command line for Copyright/Trade Secret Notice information

```

2. Enter 1 in the Option field to select Archive Requests, then go to the step associated with the screen displayed:
 - If you see [Figure 5](#), go to [Step 3](#).
 - If you see [Figure 6](#), go to [Step 4](#).

Figure 5. Archive Recording – Add Requests Screen

```

Application Audit --- Archive Recording - Add Requests -----
Command ==>

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

Press ENTER to continue, or END to return.

```

3. Press Enter. The 3270 - Archive Criteria screen ([Figure 7](#)) is displayed. Go to [Step 5](#).

Figure 6. Archive Recording - Monitor 3270 Requests Screen

```

Application Audit Archive Recording - Monitor 3270 Requests  --- Row 1 of 59
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
-  -
1  SIEM0001  Payroll System
   SIEM0002  Accounts Receivable
   SIEM0003  Credit Card Processing
   SIEM0006  Employee Database System
   SIEM0007  Project Maize
   SIEM0008  Private Medical Information System
   SIEM0009  Project Hail
   SIEM0010  Customer Account Information System
   SIEM0011  Project Victors
   SIEM0012  Auditors
   SIEM0020  Super-user tracking
   SIEM0022  Credit Bureau Monitoring System
   SIEM0025  Project Blue
   SIEM0200  Patient Care System
   SIEM1817  Project Wolverine Data 200

```

4. Enter the **1** line command (Add 3270) in the S column next to the first entry in the list to create a new archive record request. The 3270 - Archive Criteria screen ([Figure 7](#)) is displayed.

Figure 7. 3270 - Archive Criteria Screen

```

Application Audit ----- 3270 - Archive Criteria -----
Command ==>

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

Name . . . . . MYSIEM01
Description. . . . . My test SIEM request

Repository Registry Dataset. . . MY.SIEM.REPOS

Terminal . . . . . *           Use an asterisk for wildcarding
Application. . . . . *         the Terminal, Application or Userid
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)

Send screens to SIEM tool (Enter "/" to select)

```

5. Enter a name for the archive and optionally a description. Enter your userID in the Userid field with an asterisk (*) in both Application and Terminal fields. In the Repository Registry Dataset field, enter the dataset name of a dataset that does *not* exist in your environment.
6. Log off your TSO session, then log back on.
7. Return to the Archive Recording - Monitor 3270 Requests screen, find your request, and scroll right (PF11 key). The Users count for your request should be 1.
8. Enter the **9** line command (Switch Repositories) next to your request on the Archive Recording - Monitor 3270 Requests screen.
9. Browse the archive recording segment (the repository registry dataset with the #0000001 low level qualifier) dataset to validate that data has been recorded.

Task 7.3 Additional Verification

You may want to perform further verification by exercising additional features of Application Audit (for example: archive record for TCP and MQ, search, search on switch, sending data to SIEM tool, writing SIEM data to SMF, and so on). For details on these features and how to perform them, see the appropriate section in the *Application Audit User Guide*.

Milestone 8: Deployment

This chapter contains considerations to be aware of and tasks to perform during deployment of Application Audit.

Depending on your environment, you should review [Configure Application Audit — New Installation](#) if you are deploying a new install or [Configure Application Audit — Upgrade](#) if you are deploying an upgrade.

As an alternative to completing an entire Application Audit installation on each LPAR on which you plan to use Application Audit, the product contains two sample batch jobs to assist in copying the Application Audit installation from the current LPAR location to another LPAR. The batch jobs are in the .INSTALL library used during the original installation and are to be used after the original installation has been completed.

The sample batch jobs are named QQFCOPY1 and QQFCOPY2. They utilize the Batch TSO Transmit function to send the identified datasets to the LPAR/UserID specified. QQFCOPY1 is dynamically built and uses the high-level qualifier specified for the SMP/E Target libraries. QQFCOPY2 is a static sample that requires editing of the datasets before submission.

Both samples require editing of the Batch TSO Transmit command (XMIT) to identify the destination LPAR and TSO UserID that will receive the identified datasets. See IBM documentation *TSO/E Primer* for further explanation.



Roles involved:
z/OS Security Administrator
Application Audit Installer
z/OS System Programmer.

Complete the following task to deploy Application Audit.

Task 8.1 Target Library Deployment

After the product installation is complete, edit the sample jobs according to their Usage Notes. When submitted for execution, the jobs will package the specified datasets and transmit them to the specified LPAR and TSO userID. The specified userID will have to log on to the specified LPAR and use the TSO RECEIVE command to receive the datasets onto their new location. If desired, the TSO RECEIVE command allows for renaming the datasets.

The customizations needed to use the newly transmitted libraries include, but are not limited to, those in the following tasks.

Task 8.1.1 Create Global Recording Request File

Use .INSTALL library member GRDBDEF to create and initialize a unique Global Recording request file for the new LPAR.

This file may not be shared across multiple LPARS.

Task 8.1.2 Install HSCM Compuware PARMLIB Member

1. Copy the PARMLIB member to new LPAR.
2. Update the following:

- a. The product file specifications if they were renamed.
 - b. The specifications needed for web-based reporting and Reporting.
 - c. The product default jobcard.
 - d. The Global Recording Request File specification.
3. Install the HSCM member into the CMSC on the new LPAR.

Task 8.1.3 Create Web-Based Reporting Elements

Copy all elements installed on USS HFS/ZFS paths. This is needed only if Web-Based Reporting and Archiving were installed. If either function is used, elements needed would have to be verified on the new location.

Task 8.1.4 Review Manual Tasks

All tasks detailed in the Manual Tasks list need to be validated for the new LPAR location.

Task 8.1.5 Install PROCLIB Members

All elements installed into the original LPAR's PROCLIB dataset may need to be updated, validated, and installed into the PROCLIB on the new LPAR.

Task 8.1.6 Create Security Rules

All Security Rules need to be re-created and validated on the new LPAR if the Security Package database (RACF/ACF2/Top Secret) is not shared across LPARs.

Troubleshooting

This troubleshooting information can help you diagnose some common installation problems. For most situations, start troubleshooting by running the procedures in [Verify Product Installation](#) and checking the log for any diagnostic messages describing errors.

Typical Errors

U123 Abend Encountered

Indicates the VTAM release is not supported by Application Audit Global Record.

Suggestions

- Either go to our Compuware Support Center website at <https://go.Compuware.com> or contact Compuware Customer Solutions to determine if there is a PTF available for Application Audit to support the VTAM release.
- If the VTAM release is not GA, contact Compuware Customer Solutions.

S047 Abend Encountered

The Application Audit load library, SQQFLOAD, is not APF authorized.

Suggestion

Make the Application Audit load library, SQQFLOAD, APF authorized.

Informational Messages "SVMAN601I APPLICATION AUDIT SUBSYSTEM IS ALREADY ACTIVE" and "SVMAN602I IT MUST BE SHUTDOWN FOR A START UP TO TAKE PLACE"

There can only be one global record started task running at a time on an LPAR. This can happen when there are production and test global record started tasks.

Suggestion

To avoid this error, add the following to all global record started tasks in the LPAR:

```
//ENQUEUE DD DSN=MY.EMPTY.DATASET,DISP=OLD
```

This will provide an exclusive lock on the dataset MY.EMPTY.DATASET. If one of the global records is running, the other global record job will not run until the one currently running has been brought down.

Global Record Shuts Down Immediately

This can occur when either there are errors on the initial refresh of the Application Audit Compuware PARMLIB member or Application Audit is not configured to record *any* technology.

Suggestions

- Ensure there are no errors with any of the parameters in the Application Audit Compuware PARMLIB member by checking the output of the CMSC job. Correct any issues and refresh the Application Audit Compuware PARMLIB member.
- Edit the Compuware PARMLIB member for Application Audit. Ensure that **at least one** of the following is in the PARMLIB member:
 - TCPIP_JOBNAMEs
 - MQ_QUEUE_MANAGER_NAME
 - ENABLE_3270=YES
 - ENABLE_APPC=YES
 - ENABLE_LUO=YES

Customer Support

Visit the Compuware Support Center, <https://go.compuware.com>, to find product documentation, knowledge articles, and other technical resources. You can open a case with the Customer Solutions team, order products, and much more.

Contact Customer Solutions by 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 <https://go.compuware.com>.

Visit Compuware on the web at <http://www.compuware.com> for additional product information.

Checklist of Milestones and Tasks

- ❑ Milestone 1: Ensure Installation and Configuration of Companion Products
 - ❑ Task 1.1 Install/Upgrade Enterprise Common Components
 - ❑ Task 1.2 Apply ECC Maintenance
 - ❑ Task 1.3 Import Application Audit License
- ❑ Milestone 2: Install Application Audit Using SMP/E
 - ❑ Task 2.1 Follow the Compuware Installation Guide
- ❑ Milestone 3: Configure Application Audit — New Installation
 - ❑ Task 3.1 Run the Guided Configuration Dialog
 - ❑ Task 3.1.1 Launch the Guided Configuration Dialog
 - ❑ Task 3.1.2 SMP/E Installation Data Import
 - ❑ Task 3.2 Generate JCL Samples
 - ❑ Task 3.3 Configure Product
 - ❑ Task 3.4 Generate Manual Tasks
 - ❑ Task 3.5 Track Manual Tasks
 - ❑ Task 3.6 Perform Compuware PARMLIB Gen
- ❑ Milestone 4: Configure Application Audit — Upgrade
 - ❑ Task 4.1 Run the Guided Configuration Dialog
 - ❑ Task 4.1.1 Launch the Guided Configuration Dialog
 - ❑ Task 4.1.2 SMP/E Installation Data Import
 - ❑ Task 4.2 Import Parameter Settings
 - ❑ Task 4.3 Generate JCL Samples
 - ❑ Task 4.4 Configure Product
 - ❑ Task 4.5 Generate Manual Tasks

- ❑ Task 4.6 Track Manual Tasks
- ❑ Task 4.7 Perform Compuware PARMLIB Gen
- ❑ Milestone 5: Compuware PARMLIB Implementation
 - ❑ Task 5.1 Implement the Compuware PARMLIB
 - ❑ Task 5.1.1 Create the Default Member
 - ❑ Task 5.1.2 Update the CMSC with Your PARMLIB Members
- ❑ Milestone 6: Start the Global Recording Task
 - ❑ Task 6.1 Start Global Recording
 - ❑ Task 6.1.1 Start the Global Recording Task
 - ❑ Task 6.1.2 Shut Down the Global Recording Started Task
- ❑ Milestone 7: Verify Product Installation
 - ❑ Task 7.1 Start Global Record Started Task
 - ❑ Task 7.2 Start Archive Record Capture Request
 - ❑ Task 7.3 Additional Verification
- ❑ Milestone 8: Deployment
 - ❑ Task 8.1 Target Library Deployment
 - ❑ Task 8.1.1 Create Global Recording Request File
 - ❑ Task 8.1.2 Install HSCM Compuware PARMLIB Member
 - ❑ Task 8.1.3 Create Web-Based Reporting Elements
 - ❑ Task 8.1.4 Review Manual Tasks
 - ❑ Task 8.1.5 Install PROCLIB Members
 - ❑ Task 8.1.6 Create Security Rules