Program Directory for
IBM Transaction Analysis Workbench for z/OS

V01.02.00
Program Number 5697-P37
FMID HAHO120

for use with
z/OS

Document Date: October 2014

GI10-8825-02
Before using this information and the product it supports, be sure to read the general information under 7.0, "Notices" on page 27.
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1.0 Introduction

This program directory is intended for system programmers who are responsible for program installation and maintenance. It contains information about the material and procedures associated with the installation of IBM Transaction Analysis Workbench for z/OS. This publication refers to IBM Transaction Analysis Workbench for z/OS as Transaction Analysis Workbench.

The Program Directory contains the following sections:

- **2.0, “Program Materials” on page 6** identifies the basic program materials and documentation for Transaction Analysis Workbench.
- **3.0, “Program Support” on page 9** describes the IBM support available for Transaction Analysis Workbench.
- **4.0, “Program and Service Level Information” on page 11** lists the APARs (program level) and PTFs (service level) that have been incorporated into Transaction Analysis Workbench.
- **5.0, “Installation Requirements and Considerations” on page 12** identifies the resources and considerations that are required for installing and using Transaction Analysis Workbench.
- **6.0, “Installation Instructions” on page 20** provides detailed installation instructions for Transaction Analysis Workbench. It also describes the procedures for activating the functions of Transaction Analysis Workbench, or refers to appropriate publications.

Before installing Transaction Analysis Workbench, read the *CBPDO Memo To Users* and the *CBPDO Memo To Users Extension* that are supplied with this program in softcopy format and this Program Directory; then keep them for future reference. Section **3.2, “Preventive Service Planning” on page 9** tells you how to find any updates to the information and procedures in this Program Directory.

Transaction Analysis Workbench is supplied in a Custom-Built Product Delivery Offering (CBPDO, 5751-CS3). The Program Directory that is provided in softcopy format on the CBPDO tape is identical to the hardcopy format if one was included with your order. All service and HOLDDATA for Transaction Analysis Workbench are included on the CBPDO tape.

Do not use this program directory if you install Transaction Analysis Workbench with a SystemPac or ServerPac. When you use one of those offerings, use the jobs and documentation supplied with the offering. The offering will point you to specific sections of this program directory as needed.

1.1 Transaction Analysis Workbench Description

IBM Transaction Analysis Workbench for z/OS, V1.2 (5697-P37) is a performance management tool that assists in analyzing transaction performance and behavioral problems by providing a platform for investigating the logs and other historical data collected during transaction processing and system operation.
Transaction processing is often complex. Increasingly, applications interact with external subsystems and rely on system services. Pinpointing the cause of a problem can be difficult. Transaction Analysis Workbench extends the scope of traditional analysis techniques, enabling you to more easily identify problems caused by external events.

Transaction Analysis Workbench helps simplify the problem analysis process:

**Session manager**
The session manager is a dialog where problem details can be registered and analysis can be performed. The session manager saves a history of the investigation undertaken by all participants, making it simpler to resume or reassign the analysis. The session manager can be accessed from:
- ISPF dialog
- Eclipse-based GUI

**Automated file selection**
Locating the log files required for analysis can be a tedious manual process. Automated file selection locates the required IMS, DB2, or other log files, and attaches them to your problem session.

**Interactive log file analysis**
Transaction Analysis Workbench can analyze all the log files associated with the problem, presenting them in a unified interactive investigative session. The following types of log data are supported:
- For IMS: The IMS log, IMS monitor, CQS log, and the IMS Connect event journal, as well as the OMEGAMON for ATF journal
- For CICS: The CICS monitoring facility (CMF) records in SMF, as well as the CICS trace
- For DB2: The DB2 log and the DB2 trace, including support for all performance and accounting IFCID events
- The WebSphere MQ log and extract
- Selected SMF record types applicable to problem analysis
- OPERLOG, the MVS SYSLOG log stream, to identify messages that might indicate an exception

**Transaction tracking**
Interactive analysis enables the tracking of an individual transaction, identifying all its log records in all file types to provide the complete lifecycle. For example:
- CICS with DBCTL: From a CICS transaction, view the associated IMS log events.
- CICS or IMS with DB2: From a CICS or IMS transaction, view the associated DB2 accounting and performance trace events.

**Exception analysis**
Exception analysis provides a way of identifying problems based on user-defined thresholds. Locating the offending transaction can be simpler from this reduced set of candidates. Reports and extracts can be requested for the following workloads:
- DB2: Response and CPU times, stored procedure calls, SQL activity, suspend and locking, buffer usage, and other abnormal conditions
- CICS or IMS: Response time and abnormal conditions

**Reporting**
Transaction Analysis Workbench uses its own batch reporting utility and other separately available reporting tools and utilities to help investigate all facets of the problem:
- IMS transaction performance and system analysis, using IBM IMS Performance Analyzer for z/OS
- CICS transaction performance analysis, using IBM CICS Performance Analyzer for z/OS
- Specialized CICS-DBCTL transaction performance analysis, combining CICS CMF and the IMS log
- MVS system-level analysis, including address space activity, system resource utilization for CPU processors, virtual storage and page data sets, as well as MVS system logger and DASD data set performance
- DB2 thread accounting, including SQL call elapsed time breakdown
- WebSphere MQ thread accounting, including GET and PUT call counts and CPU usage
- APPC/MVS transaction performance analysis

**New features and enhancements with IBM Transaction Analysis Workbench for z/OS, V1.2**
- **Access to problem session functions through Eclipse-based user interfaces.** Some functions that were previously available only from ISPF dialogs are now available using an Eclipse-based rich client interface. These functions aimed at “first responders” such as help desk staff include registering problem sessions and performing session workflow tasks. The Eclipse-based interface is integrated with IBM Tools Base Connection Server for z/OS, a component of the separately licensed IBM Tools Base for z/OS, V1.4 (5655-V93), as well as other Eclipse-based frameworks such as the IMS Explorer and the CICS Explorer.
- **Improvements to the Problem Session Manager:** New session functions make it easier for the “first responder” to run the preliminary data collection and reporting steps, prior to assigning the problem to the expert:
  - Auto-creation of extract data sets from originals, typically large log files, allows to just keep the data that is needed for analysis.
  - Problem analysis workflows, after being set up by the expert, can be run by the “first responder.”
  - Batch report output is saved in the session and can be viewed by all participants.
  - Task scheduler runs multiple tasks in sequence to streamline the process.
- **Minor enhancements to the Problem Session Manager:** New session functions make it easier for the “first responder” to run the preliminary data collection and reporting steps, prior to assigning the problem to the expert:
  - Templates for extract data set names make it easier to automate extract requests.
  - Log files specified in a session can now be excluded from processing by using the X line action.
– System prompt (F4) in sessions is limited to those systems registered in the session.
– Manual file specification in a session can now support more than one file at a time.
– Explicit filter codes can now specify an optional record type, for example IMS:01 or CMF:6E13.

- **CICS-DBCTL analysis:** New batch reporting that combines CICS (CMF) and IMS (log) data to provide a consolidated picture of the transaction delays inside CICS and IMS.

- **DB2 exception analysis:** New batch reporting helps to analyze the DB2 accounting records (SMF 101) to identify exceptions based on user-defined thresholds for common performance measurement criteria:
  – Exceptions are listed in the report.
  – A recap summarizes the types of problems that were found.
  – Exception records are written to an extract data set for further analysis.

- **DB2 trace:** The DB2 trace can now be used as a diagnostic data source in Transaction Analysis Workbench:
  – DB2 threads can be tracked back to their originating transaction in CICS or IMS.
  – IFCID events are displayed and formatted in greater detail, making it easier to understand their flow and impact on the performance of SQL calls.
  – Stored procedures can be tracked from their calling program and analyzed in greater detail,
  – Both SMF and GTF are supported data sources for the DB2 trace.

- **IMS Version 13 support:** Transaction Analysis Workbench for z/OS includes support for all new IMS V13 features including synchronous program switch.

- **IMS trace:** The IMS trace events in the log are displayed as individual events alongside the standard IMS log records. Now, when the trace is active, each DLI call and the database lock events associated with them can be viewed.

- **CICS Transaction Server, V5.2 support:** The new CMF events in CICS Transaction Server, V5.2 are reported.

- **CICS trace:** The CICS trace can now be used as a diagnostics data source in Transaction Analysis Workbench. Trace events can be tracked by their CICS task number and associated with the CICS transaction in CMF. Both the GTF and the CICS auxiliary trace (DFHAUXT) are supported data sources for the CICS trace.

- **Enhancements to SMF reporting:** Batch SMF reports have been enhanced to provide additional features and improved coverage:
  – New UNSORTED batch command for SMF files with records not in time sequence. Time-based extract (and report) requests now read until the end of the file, rather than stopping when the end time is reached.
  – SMF Recap report to help you understand the contents of the SMF file. This includes record counts and System, CICS, DB2, and WebSphere MQ statistics.
The DASD data set I/O report uses the type 42.6 SMF record to provide an analysis of the performance of data set I/O that is issued by transaction and database subsystems, and other jobs running on z/OS.

1.2 Transaction Analysis Workbench FMID

Transaction Analysis Workbench consists of the following FMID:

HAHO120
2.0 Program Materials

An IBM program is identified by a program number. The program number for Transaction Analysis Workbench is 5697-P37.

Basic Machine-Readable Materials are materials that are supplied under the base license and feature numbers, and are required for the use of the product.

The program announcement material describes the features supported by Transaction Analysis Workbench. Ask your IBM representative for this information if you have not already received a copy.

2.1 Basic Machine-Readable Material

The distribution medium for this program is physical media or downloadable files. This program is in SMP/E RELFILE format and is installed by using SMP/E. See 6.0, "Installation Instructions" on page 20 for more information about how to install the program.

You can find information about the physical media for the basic machine-readable materials for Transaction Analysis Workbench in the CBPDO Memo To Users Extension.

Figure 1 describes the program file content for Transaction Analysis Workbench. You can refer to the CBPDO Memo To Users Extension to see where the files reside on the tape.

Notes:

1. The data set attributes in this table must be used in the JCL of jobs that read the data sets. However, because the data sets are in IEBCOPY unloaded format, their actual attributes might be different.

2. If any RELFILEs are identified as PDSEs, ensure that SMPTLIB data sets are allocated as PDSEs.

<table>
<thead>
<tr>
<th>Name</th>
<th>ORG</th>
<th>RECFM</th>
<th>LRECL</th>
<th>BLK SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMPMCS</td>
<td>SEQ</td>
<td>FB</td>
<td>80</td>
<td>6400</td>
</tr>
<tr>
<td>IBM.HAHO120.F1</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
<tr>
<td>IBM.HAHO120.F2</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
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<tr>
<td>IBM.HAHO120.F3</td>
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<td>8800</td>
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<td>IBM.HAHO120.F4</td>
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<td>U</td>
<td>0</td>
<td>6144</td>
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<td>IBM.HAHO120.F5</td>
<td>PDS</td>
<td>FB</td>
<td>80</td>
<td>8800</td>
</tr>
</tbody>
</table>
2.2 Optional Machine-Readable Material

No optional machine-readable materials are provided for Transaction Analysis Workbench.

2.3 Program Publications

The following sections identify the basic publications for Transaction Analysis Workbench.

Figure 2 identifies the basic unlicensed publications for Transaction Analysis Workbench. Publications can be obtained from the IBM Publications Center website at: http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss

<table>
<thead>
<tr>
<th>Name</th>
<th>Form Number</th>
<th>Media Format</th>
</tr>
</thead>
</table>

2.3.1 Optional Program Publications

No optional publications are provided for Transaction Analysis Workbench.
2.4 Program Source Materials

No program source materials or viewable program listings are provided for Transaction Analysis Workbench.

2.5 Publications Useful During Installation

You might want to use the publications listed in Figure 3 during the installation of Transaction Analysis Workbench. To download copies, visit the IBM Publications Center at: http://www.ibm.com/e-business/linkweb/publications/servlet/pbi.wss or contact your IBM representative.

<table>
<thead>
<tr>
<th>Publication Title</th>
<th>Form Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM SMP/E for z/OS Messages, Codes, and Diagnosis</td>
<td>GA22-7770</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS Commands</td>
<td>SA22-7771</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS Reference</td>
<td>SA22-7772</td>
</tr>
<tr>
<td>IBM SMP/E for z/OS User's Guide</td>
<td>SA22-7773</td>
</tr>
<tr>
<td>IBM IMS Connect Extensions for z/OS User's Guide</td>
<td>SC19-4364</td>
</tr>
</tbody>
</table>
3.0 Program Support

This section describes the IBM support available for Transaction Analysis Workbench.

3.1 Program Services

Contact your IBM representative for specific information about available program services.

3.2 Preventive Service Planning

Before you install Transaction Analysis Workbench, make sure that you have reviewed the current Preventive Service Planning (PSP) information. Review the PSP Bucket for General Information, Installation Documentation, and the Cross Product Dependencies sections. For the Recommended Service section, instead of reviewing the PSP Bucket, it is recommended you use the IBM.ProductInstall-RequiredService fix category in SMP/E to ensure you have all the recommended service installed. Use the FIXCAT(IBM.ProductInstall-RequiredService) operand on the APPLY CHECK command. See 6.1.10, “Perform SMP/E APPLY” on page 24 for a sample APPLY command.

If you obtained Transaction Analysis Workbench as part of a CBPDO, HOLDDATA is included.

If the CBPDO for Transaction Analysis Workbench is older than two weeks by the time you install the product materials, you can obtain the latest PSP Bucket information by going to the following website:


You can also use S/390 SoftwareXcel or contact the IBM Support Center to obtain the latest PSP Bucket information.

For program support, access the Software Support Website at http://www-01.ibm.com/software/support/.

PSP Buckets are identified by UPGRADEs, which specify product levels; and SUBSETs, which specify the FMIDs for a product level. The UPGRADE and SUBSET values for Transaction Analysis Workbench are included in Figure 4

<table>
<thead>
<tr>
<th>UPGRADE</th>
<th>SUBSET</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5697P37</td>
<td>HAHO120</td>
<td>Transaction Analysis Workbench</td>
</tr>
</tbody>
</table>

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3.3 Statement of Support Procedures

Report any problems which you feel might be an error in the product materials to your IBM Support Center. You may be asked to gather and submit additional diagnostics to assist the IBM Support Center in their analysis.

Figure 5 on page 10 identifies the component IDs (COMPID) for Transaction Analysis Workbench.

<table>
<thead>
<tr>
<th>FMID</th>
<th>COMPID</th>
<th>Component Name</th>
<th>RETAIN Release</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAHO120</td>
<td>5697P3700</td>
<td>Transaction Analysis Workbench</td>
<td>120</td>
</tr>
</tbody>
</table>

Figure 5. Component IDs
4.0 Program and Service Level Information

This section identifies the program and relevant service levels of Transaction Analysis Workbench. The program level refers to the APAR fixes that have been incorporated into the program. The service level refers to the PTFs that have been incorporated into the program.

4.1 Program Level Information

The following APAR fixes against previous releases of Transaction Analysis Workbench have been incorporated into this release. They are listed by FMID.

- FMID HAHO110
  - PM24037
  - PM26786
  - PM34534
  - PM37914
  - PM39503
  - PM44538
  - PM50250
  - PM54715
  - PM55248
  - PM65784
  - PM65785
  - PM65786
  - PM65787
  - PM69954
  - PM75605
  - PM84327
  - PM97903

4.2 Service Level Information

No PTFs against this release of Transaction Analysis Workbench have been incorporated into the product package.

Frequently check the Transaction Analysis Workbench PSP Bucket for HIPER and SPECIAL attention PTFs against all FMIDs that you must install. You can also receive the latest HOLDDATA, then ensure the FIXCAT(IBM.PRODUCTINSTALL-REQUIREDSERVICE) operand is on your APPLY CHECK command. This will allow you to review the recommended and critical service that should be installed with your FMIDs.
5.0 Installation Requirements and Considerations

The following sections identify the system requirements for installing and activating Transaction Analysis Workbench. The following terminology is used:

- **Driving system**: the system on which SMP/E is executed to install the program.
  
  The program might have specific operating system or product level requirements for using processes, such as binder or assembly utilities during the installation.

- **Target system**: the system on which the program is configured and run.
  
  The program might have specific product level requirements, such as needing access to the library of another product for link-edits. These requirements, either mandatory or optional, might directly affect the element during the installation or in its basic or enhanced operation.

In many cases, you can use a system as both a driving system and a target system. However, you can make a separate IPL-able clone of the running system to use as a target system. The clone must include copies of all system libraries that SMP/E updates, copies of the SMP/E CSI data sets that describe the system libraries, and your PARMLIB and PROCLIB.

Use separate driving and target systems in the following situations:

- When you install a new level of a product that is already installed, the new level of the product will replace the old one. By installing the new level onto a separate target system, you can test the new level and keep the old one in production at the same time.

- When you install a product that shares libraries or load modules with other products, the installation can disrupt the other products. By installing the product onto a separate target system, you can assess these impacts without disrupting your production system.

5.1 Driving System Requirements

This section describes the environment of the driving system required to install Transaction Analysis Workbench.

5.1.1 Machine Requirements

The driving system can run in any hardware environment that supports the required software.

5.1.2 Programming Requirements
5.2 Target System Requirements

This section describes the environment of the target system required to install and use Transaction Analysis Workbench.

Transaction Analysis Workbench can be installed in any of the following SRELs.
- z/OS (Z038)
- DBS (P115)
- CICS (C150)

5.2.1 Machine Requirements

The target system can run in any hardware environment that supports the required software.

5.2.2 Programming Requirements

5.2.2.1 Installation Requisites: Installation requisites identify products that are required and must be present on the system or products that are not required but should be present on the system for the successful installation of this product.

Mandatory installation requisites identify products that are required on the system for the successful installation of this product.

Transaction Analysis Workbench has no mandatory installation requisites.

Conditional installation requisites identify products that are not required for successful installation of this product but can resolve such things as certain warning messages at installation time.
Transaction Analysis Workbench has no conditional installation requisites.

### 5.2.2.2 Operational Requisites:

Operational requisites are products that are required and must be present on the system or products that are not required but should be present on the system for this product to operate all or part of its functions.

Mandatory operational requisites identify products that are required for this product to operate its basic functions.

Transaction Analysis Workbench has no mandatory operational requisites.

Conditional operational requisites identify products that are not required for this product to operate its basic functions but are required at run time for this product to operate specific functions.

#### Figure 7 (Page 1 of 2). Target System Conditional Operational Requisites

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>5655-V93</td>
<td>IBM Tools Base V01.05.00 or higher</td>
<td>For Transaction Analysis Workbench GUI function (Eclipse-based Plug-in)</td>
</tr>
</tbody>
</table>

**Transaction Analysis Workbench is designed to utilize the reporting capabilities of the following products:**

- **5655-Y23** IBM CICS Performance Analyzer for z/OS V05.01.00 or higher
  - For running in-depth CICS CMF reporting

  Any one of the following:

- **5655-R36** IBM IMS Performance Analyzer for z/OS V04.03.00 or higher
  - For creating the Transaction Index and for in-depth IMS log and monitor reporting

- **5655-S42** IBM IMS Performance Solution Pack for z/OS V01.02.00 or higher
  - For creating the Transaction Index and for in-depth IMS log and monitor reporting

**Transaction Analysis Workbench is designed to analyze the data collected by the following products:**

Any one of the following:

- **5698-A34** IBM Tivoli OMEGAMON XE for IMS on z/OS V04.02.00
  - For collecting OMEGAMON ATF data

- **5698-T02** IBM Tivoli OMEGAMON XE for IMS on z/OS, V05.01.00 or higher
  - For collecting OMEGAMON ATF data

Any one of the following:

- **5655-S56** IBM IMS Connect Extensions for z/OS, V02.03.00 or higher
  - For collecting IMS Connect event data

- **5655-S42** IBM IMS Performance Solution Pack for z/OS V01.02.00 or higher
  - For collecting IMS Connect event data

**Transaction Analysis Workbench is designed to operate with WebSphere, CICS, DB2, and IMS and their supported versions as follows:**

- **5655-R36** IBM WebSphere MQ for z/OS, V07.01.00, or higher
  - For operating with WebSphere
Figure 7 (Page 2 of 2). Target System Conditional Operational Requisites

<table>
<thead>
<tr>
<th>Program Number</th>
<th>Product Name and Minimum VRM/Service Level</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Any one</strong> of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5655-S97</td>
<td>IBM CICS Transaction Server for z/OS, V04.02.00</td>
<td>For operating with CICS</td>
</tr>
<tr>
<td>5655-Y04</td>
<td>IBM CICS Transaction Server for z/OS, V05.01.00, or higher</td>
<td>For operating with CICS</td>
</tr>
<tr>
<td>5722-DFJ</td>
<td>IBM CICS Transaction Server for z/OS Value Unit Edition, V05.01.00, or higher</td>
<td>For operating with CICS</td>
</tr>
<tr>
<td><strong>Any one</strong> of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5605-DB2</td>
<td>IBM DB2 for z/OS, V10.01.00</td>
<td>For operating with DB2</td>
</tr>
<tr>
<td>5697-P31</td>
<td>IBM DB2 for z/OS Value Unit Edition, V10.01.00</td>
<td>For operating with DB2</td>
</tr>
<tr>
<td>5615-DB2</td>
<td>IBM DB2 for z/OS, V11.01.00 or higher</td>
<td>For operating with DB2</td>
</tr>
<tr>
<td>5697-P43</td>
<td>IBM DB2 for z/OS Value Unit Edition, V11.01.00 or higher</td>
<td>For operating with DB2</td>
</tr>
<tr>
<td><strong>Any one</strong> of the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5635-A03</td>
<td>IBM IMS, V12.01.00</td>
<td>For operating with IMS</td>
</tr>
<tr>
<td>5655-DSQ</td>
<td>IBM IMS Database Value Unit Edition, V12.01.00 with PTF UK93908</td>
<td>For operating with IMS</td>
</tr>
<tr>
<td>5655-TM1</td>
<td>IBM IMS Transaction Manager Value Unit Edition V12.01.00</td>
<td>For operating with IMS</td>
</tr>
<tr>
<td>5635-A04</td>
<td>IBM IMS, V13.01.00 or higher</td>
<td>For operating with IMS</td>
</tr>
<tr>
<td>5655-DSM</td>
<td>IBM IMS Database Value Unit Edition, V13.01.00 or higher</td>
<td>For operating with IMS</td>
</tr>
<tr>
<td>5655-TM2</td>
<td>IBM IMS Transaction Manager Value Unit Edition V13.01.00</td>
<td>For operating with IMS</td>
</tr>
</tbody>
</table>

**Note:**

1. IMS Performance Solution Pack for z/OS, V1.2 (5655-S42) contains IMS Connect Extensions for z/OS and IMS Performance Analyzer for z/OS and satisfies the conditional operational requirements stated in [Figure 7 on page 14](#).
5.2.2.3 Toleration/Coexistence Requisites: Toleration/coexistence requisites identify products that must be present on sharing systems. These systems can be other systems in a multisystem environment (not necessarily sysplex), a shared DASD environment (such as test and production), or systems that reuse the same DASD environment at different time intervals.

Transaction Analysis Workbench has no toleration/coexistence requisites.

5.2.2.4 Incompatibility (Negative) Requisites: Negative requisites identify products that must not be installed on the same system as this product.

Transaction Analysis Workbench has no negative requisites.

5.2.3 DASD Storage Requirements

Transaction Analysis Workbench libraries can reside on all supported DASD types.

Figure 8 lists the total space that is required for each type of library.

<table>
<thead>
<tr>
<th>Library Type</th>
<th>Total Space Required in 3390 Trks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>1977 Tracks</td>
</tr>
<tr>
<td>Distribution</td>
<td>1977 Tracks</td>
</tr>
</tbody>
</table>

Notes:

1. For non-RECFM U data sets, IBM recommends using system-determined block sizes for efficient DASD utilization. For RECFM U data sets, IBM recommends using a block size of 32760, which is most efficient from the performance and DASD utilization perspective.

2. Abbreviations used for data set types are shown as follows.

   U Unique data set, allocated by this product and used by only this product. This table provides all the required information to determine the correct storage for this data set. You do not need to refer to other tables or program directories for the data set size.

   S Shared data set, allocated by this product and used by this product and other products. To determine the correct storage needed for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.

   E Existing shared data set, used by this product and other products. This data set is not allocated by this product. To determine the correct storage for this data set, add the storage size given in this table to those given in other tables (perhaps in other program directories). If the data set already exists, it must have enough free space to accommodate the storage size given in this table.
If you currently have a previous release of this product installed in these libraries, the installation of this release will delete the old release and reclaim the space that was used by the old release and any service that had been installed. You can determine whether these libraries have enough space by deleting the old release with a dummy function, compressing the libraries, and comparing the space requirements with the free space in the libraries.

For more information about the names and sizes of the required data sets, see 6.1.8, “Allocate SMP/E Target and Distribution Libraries” on page 23.

3. All target and distribution libraries listed have the following attributes:
   - The default name of the data set can be changed.
   - The default block size of the data set can be changed.
   - The data set can be merged with another data set that has equivalent characteristics.
   - The data set can be either a PDS or a PDSE.

4. All target libraries listed have the following attributes:
   - These data sets can be SMS-managed, but they are not required to be SMS-managed.
   - These data sets are not required to reside on the IPL volume.
   - The values in the “Member Type” column are not necessarily the actual SMP/E element types that are identified in the SMPMCS.

5. All target libraries that are listed and contain load modules have the following attributes:
   - These data sets can be in the LPA, but they are not required to be in the LPA.
   - These data sets can be in the LNKLST.
   - Target library SFUWLINK must be APF-authorized when it is included in the STEPLIB concatenation of the IBM Tools Base Connection Server for z/OS component for use by the Eclipse-based GUI.

The following figures describe the target and distribution libraries required to install Transaction Analysis Workbench. The storage requirements of Transaction Analysis Workbench must be added to the storage required by other programs that have data in the same library.

**Note:** Use the data in these tables to determine which libraries can be merged into common data sets. In addition, since some ALIAS names may not be unique, ensure that no naming conflicts will be introduced before merging libraries.

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Volume</th>
<th>T Y</th>
<th>O R E C E L</th>
<th>No. of Trks</th>
<th>No. of Blks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFUWBASE</td>
<td>Sample</td>
<td>Any U PDS</td>
<td>FB</td>
<td>80</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>SFUWEXEC</td>
<td>Exec</td>
<td>Any U PDS</td>
<td>FB</td>
<td>80</td>
<td>34</td>
<td>3</td>
</tr>
<tr>
<td>SFUWGENU</td>
<td>Data</td>
<td>Any U PDS</td>
<td>VB</td>
<td>255</td>
<td>26</td>
<td>5</td>
</tr>
</tbody>
</table>
5.3 FMIDs Deleted

Installing Transaction Analysis Workbench might result in the deletion of other FMIDs. To see which FMIDs will be deleted, examine the ++VER statement in the SMPMCS of the product.

If you do not want to delete these FMIDs at this time, install Transaction Analysis Workbench into separate SMP/E target and distribution zones.

### Figure 9 (Page 2 of 2). Storage Requirements for Transaction Analysis Workbench Target Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Member Type</th>
<th>Target Type</th>
<th>Volume</th>
<th>T</th>
<th>O</th>
<th>E</th>
<th>C</th>
<th>R</th>
<th>E</th>
<th>L</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFUWLINK</td>
<td>LMOD</td>
<td>Any U PDS</td>
<td>U</td>
<td>0</td>
<td>1757</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFUWMENU</td>
<td>Message</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>14</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFUWPENU</td>
<td>Panel</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>118</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFUWSAMP</td>
<td>Sample</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFUWSENU</td>
<td>Skeleton</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>11</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFUWTENU</td>
<td>Table</td>
<td>Any U PDS FB</td>
<td>80</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Figure 10. Storage Requirements for Transaction Analysis Workbench Distribution Libraries

<table>
<thead>
<tr>
<th>Library DDNAME</th>
<th>Target Type</th>
<th>Volume</th>
<th>T</th>
<th>C</th>
<th>L</th>
<th>No. of 3390 Trks</th>
<th>No. of DIR Blocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFUWBASE</td>
<td>U PDS FB</td>
<td>80</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWEXEC</td>
<td>U PDS FB</td>
<td>80</td>
<td>34</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWGENU</td>
<td>U PDS VB</td>
<td>255</td>
<td>26</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWLINK</td>
<td>U PDS U</td>
<td>0</td>
<td>1757</td>
<td>280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWMENU</td>
<td>U PDS FB</td>
<td>80</td>
<td>14</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWPENU</td>
<td>U PDS FB</td>
<td>80</td>
<td>118</td>
<td>50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWSAMP</td>
<td>U PDS FB</td>
<td>80</td>
<td>6</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWSENU</td>
<td>U PDS FB</td>
<td>80</td>
<td>11</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AFUWTENU</td>
<td>U PDS FB</td>
<td>80</td>
<td>8</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Note: These FMIDs are not automatically deleted from the Global Zone. If you want to delete these FMIDs from the Global Zone, use the SMP/E REJECT NOFMID DELETEFMID command. See the SMP/E Commands book for details.

5.4 Special Considerations

Transaction Analysis Workbench for z/OS provides access to problem session functions through Eclipse-based user interfaces. Some functions that were previously available only from ISPF dialogs are available using an Eclipse-based rich client interface. These functions aimed at "first responders" such as help desk staff, include registering problem sessions and performing session workflow tasks.

The IBM Tools Base Connection Server for z/OS component delivered with IBM Tools Base for z/OS, V1.3 and V1.4 is not delivered as part of IBM Tools Base for z/OS, V1.5. If your Tools Base release level is to be V1.5, then you need to install IBM Functional Support Library Server, FMID H30S240, to have access to the server needed by the Transaction Analysis Workbench Eclipse-based GUI Plug-in.

FMID H30S240 is delivered with Tools Base for z/OS, V1.5 and also with the separately licensed IBM IMS Connect Extensions for z/OS, V2.4 (5655-S56).

Review the PSP Bucket for the latest information with regard to the Eclipse-based GUI Plug-in, to the Transaction Analysis Workbench for z/OS User's Guide, SC19-4006, and to member FUWREAD in the SFUWGENU library for information on how to install and use the the Eclipse-based GUI Plug-in.
6.0 Installation Instructions

This chapter describes the installation method and the step-by-step procedures to install and to activate the functions of Transaction Analysis Workbench.

Please note the following points:

- If you want to install Transaction Analysis Workbench into its own SMP/E environment, consult the SMP/E manuals for instructions on creating and initializing the SMPCSI and the SMP/E control data sets.

- You can use the sample jobs that are provided to perform part or all of the installation tasks. The SMP/E jobs assume that all DDDEF entries that are required for SMP/E execution have been defined in appropriate zones.

- You can use the SMP/E dialogs instead of the sample jobs to accomplish the SMP/E installation steps.

6.1 Installing Transaction Analysis Workbench

6.1.1 SMP/E Considerations for Installing Transaction Analysis Workbench

Use the SMP/E RECEIVE, APPLY, and ACCEPT commands to install this release of Transaction Analysis Workbench.

6.1.2 SMP/E Options Subentry Values

The recommended values for certain SMP/E CSI subentries are shown in Figure 11. Using values lower than the recommended values can result in failures in the installation. DSSPACE is a subentry in the GLOBAL options entry. PEMAX is a subentry of the GENERAL entry in the GLOBAL options entry. See the SMP/E manuals for instructions on updating the global zone.

<table>
<thead>
<tr>
<th>Subentry</th>
<th>Value</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSSPACE</td>
<td>(200,200,500)</td>
<td>3390 DASD tracks</td>
</tr>
<tr>
<td>PEMAX</td>
<td>SMP/E Default</td>
<td>IBM recommends using the SMP/E default for PEMAX.</td>
</tr>
</tbody>
</table>
6.1.3 SMP/E CALLLIBS Processing

Transaction Analysis Workbench uses the CALLLIBS function provided in SMP/E to resolve external references during installation. When Transaction Analysis Workbench is installed, ensure that DDDEFs exist for the following libraries:

- SCEELKED

**Note:** CALLLIBS uses the previous DDDEFs only to resolve the link-edit for Transaction Analysis Workbench. These data sets are not updated during the installation of Transaction Analysis Workbench.

6.1.4 Sample Jobs

The following sample installation jobs are provided as part of the product to help you install Transaction Analysis Workbench:

<table>
<thead>
<tr>
<th>Job Name</th>
<th>Job Type</th>
<th>Description</th>
<th>RELFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUWALA</td>
<td>SMP/E</td>
<td>Sample job to allocate and initialize a new SMP/E CSI data set <em>(Optional)</em></td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWALB</td>
<td>SMP/E</td>
<td>Sample job to allocate SMP/E data sets <em>(Optional)</em></td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWRECEV</td>
<td>RECEIVE</td>
<td>Sample RECEIVE job</td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWALLOC</td>
<td>ALLOCATE</td>
<td>Sample job to allocate target and distribution libraries</td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWDDDEF</td>
<td>DDDEF</td>
<td>Sample job to define SMP/E DDDEFs</td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWAPPLY</td>
<td>APPLY</td>
<td>Sample APPLY job</td>
<td>IBM.HAHO120.F2</td>
</tr>
<tr>
<td>FUWACCEP</td>
<td>ACCEPT</td>
<td>Sample ACCEPT job</td>
<td>IBM.HAHO120.F2</td>
</tr>
</tbody>
</table>

You can access the sample installation jobs by performing an SMP/E RECEIVE (refer to 6.1.7, "Perform SMP/E RECEIVE" on page 23) then copy the jobs from the RELFILEs to a work data set for editing and submission. See Figure 12 to find the appropriate relfile data set.

You can also copy the sample installation jobs from the tape or product files by submitting the following job. Depending on your distribution medium, use either the //TAPEIN or the //FILEIN DD statement and comment out or delete the other statement. Before you submit the job, add a job card and change the lowercase parameters to uppercase values to meet the requirements of your site.

```
//STEP1 EXEC PGM=IEBCOPY
//SYSPRINT DD SYSOUT=*
//******************************************************************************
/* Make the //TAPEIN DD statement below active if you install*  
/* from a CBPDO tape by uncommenting the DD statement below. */
//******************************************************************************
/*TAPEIN DD DSN=IBM.HAHO120.F2,UNIT=tunit,
```
Make the //TAPEIN DD statement below active if you install from a product tape received outside the CBPDO process (using the optional SMP/E RECEIVE job) by uncommenting the DD statement below.

TAPEIN DD DSN=IBM.HAHO120.F2,UNIT=\texttt{\texttt{tunit}},
/* VOL=SER=\texttt{\texttt{volser}},LABEL=(\texttt{x},SL),
/* DISP=(OLD,KEEP)

FILEIN DD DSN=IBM.HAHO120.F2,UNIT=SYSALLDA,DISP=SHR,
/* VOL=SER=\texttt{\texttt{filevol}}
/OUT DD DSNAME=\texttt{jcl-library-name},
/* DISP=(NEW,CATLG,DELETE),
/* VOL=SER=\texttt{\texttt{dasdvol}},UNIT=SYSALLDA,
/* SPACE=(TRK,(2/\texttt{x})),
SYSUT3 DD UNIT=SYSALLDA,SPACE=(CYL,(1,1))
/* SYSIN DD *
COPY INDD=\texttt{\texttt{xxxxIN}},OUTDD=OUT
/*

See the following information to update the statements in the previous sample:

**TAPEIN:**
- \texttt{\texttt{tunit}} is the unit value that matches the product package.
- \texttt{\texttt{volser}} is the volume serial that matches the product package.
- \texttt{x} is the tape file number that indicates the location of the data set name on the tape.

See the documentation that is provided by CBPDO for the location of IBM.HAHO120.F2 on the tape.

**FILEIN:**
- \texttt{\texttt{filevol}} is the volume serial of the DASD device where the downloaded files reside.

**OUT:**
- \texttt{jcl-library-name} is the name of the output data set where the sample jobs are stored.
- \texttt{\texttt{dasdvol}} is the volume serial of the DASD device where the output data set resides.

**SYSIN:**
- \texttt{\texttt{xxxxIN}} is either TAPEIN or FILEIN depending on your input DD statement.
6.1.5 Allocate SMP/E CSI (Optional)

If you are using an existing CSI, do not execute this job.

If you are allocating a new SMP/E data set for this install, edit and submit sample job FUWALA to allocate the SMP/E data set for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

6.1.6 Initialize CSI zones (Optional)

If you are using an existing CSI, do not execute this job.

Edit and submit sample job FUWALB to initialize SMP/E zones for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

6.1.7 Perform SMP/E RECEIVE

If you have obtained Transaction Analysis Workbench as part of a CBPDO, use the RCVPDO job in the CBPDO RIMLIB data set to receive the Transaction Analysis Workbench FMIDs, service, and HOLDDATA that are included on the CBPDO package. For more information, see the documentation that is included in the CBPDO.

You can also choose to edit and submit sample job FUWRECEV to perform the SMP/E RECEIVE for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

6.1.8 Allocate SMP/E Target and Distribution Libraries

Edit and submit sample job FUWALLOC to allocate the SMP/E target and distribution libraries for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.

6.1.9 Create DDDEF Entries

Edit and submit sample job FUWDDEF to create DDDEF entries for the SMP/E target and distribution libraries for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

**Expected Return Codes and Messages:** You will receive a return code of 0 if this job runs correctly.
6.1.10 Perform SMP/E APPLY

1. Ensure that you have the latest HOLDDATA; then edit and submit sample job FUWAPPLY to perform an SMP/E APPLY CHECK for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

The latest HOLDDATA is available through several different portals, including http://service.software.ibm.com/holdata/390holddata.html. The latest HOLDDATA may identify HIPER and FIXCAT APARs for the FMIDs you will be installing. An APPLY CHECK will help you determine if any HIPER or FIXCAT APARs are applicable to the FMIDs you are installing. If there are any applicable HIPER or FIXCAT APARs, the APPLY CHECK will also identify fixing PTFs that will resolve the APARs, if a fixing PTF is available.

You should install the FMIDs regardless of the status of unresolved HIPER or FIXCAT APARs. However, do not deploy the software until the unresolved HIPER and FIXCAT APARs have been analyzed to determine their applicability. That is, before deploying the software either ensure fixing PTFs are applied to resolve all HIPER or FIXCAT APARs, or ensure the problems reported by all HIPER or FIXCAT APARs are not applicable to your environment.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do not bypass the PRE, ID, REQ, and IFREQ on the APPLY CHECK. The SMP/E root cause analysis identifies the cause only of errors and not of warnings (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings, instead of errors).

Here are sample APPLY commands:

a. To ensure that all recommended and critical service is installed with the FMIDs, receive the latest HOLDDATA and use the APPLY CHECK command as follows

   APPLY S(fmid,fmid,...) CHECK
   FORFMID(fmid,fmid,...)
   SOURCEID(RSU/c5197)
   FIXCAT(IBM.ProductInstall-RequiredService)
   GROUPEXTEND(NOAPARS,NOUSERMODS)
   RETRY(YES)
   BYPASS(HOLDSYSTEM,HOLDUSER).

   Some HIPER APARs might not have fixing PTFs available yet. You should analyze the symptom flags for the unresolved HIPER APARs to determine if the reported problem is applicable to your environment and if you should bypass the specific ERROR HOLDs in order to continue the installation of the FMIDs.

   This method requires more initial research, but can provide resolution for all HIPERs that have fixing PTFs available and are not in a PE chain. Unresolved PEs or HIPERs might still exist and require the use of BYPASS.

b. To install the FMIDs without regard for unresolved HIPER APARs, you can add the BYPASS(HOLDCLASS(HIPER)) operand to the APPLY CHECK command. This will allow you to install FMIDs even though one or more unresolved HIPER APARs exist. After the FMIDs are installed, use the SMP/E REPORT ERRSYSMODS command to identify unresolved HIPER APARs and any fixing PTFs.
APPLY S(fm1d,fm1d,...) CHECK
FORFMID(fm1d,fm1d,...)
SOURCEID(RSU*)
FIXCAT(IBM.ProductInstall-RequiredService)
GROUPEXTEND(NOAPARS,NOUSERMODS)
RETRY(YES)
BYPASS(HOLDSYSTEM,HOLDUSER,HOLDCLASS(HIPER)).
..any other parameters documented in the program directory

This method is the quicker, but requires subsequent review of the Exception SYSMOD report produced by the REPORT ERRSYSMODS command to investigate any unresolved HIPERs. If you have received the latest HOLDDATA, you can also choose to use the REPORT MISSINGFIX command and specify Fix Category IBM.ProductInstall-RequiredService to investigate missing recommended service.

If you bypass HOLDs during the installation of the FMIDs because fixing PTFs are not yet available, you can be notified when the fixing PTFs are available by using the APAR Status Tracking (AST) function of ServiceLink or the APAR Tracking function of ResourceLink.

2. After you take actions that are indicated by the APPLY CHECK, remove the CHECK operand and run the job again to perform the APPLY.

**Note:** The GROUPEXTEND operand indicates that SMP/E applies all requisite SYSMODs. The requisite SYSMODs might be applicable to other functions.

**Expected Return Codes and Messages from APPLY CHECK:** You will receive a return code of 0 if this job runs correctly.

**Expected Return Codes and Messages from APPLY:** You will receive a return code of 0 if this job runs correctly.

### 6.1.11 Perform SMP/E ACCEPT

Edit and submit sample job FUWACCEP to perform an SMP/E ACCEPT CHECK for Transaction Analysis Workbench. Consult the instructions in the sample job for more information.

To receive the full benefit of the SMP/E Causer SYSMOD Summary Report, do *not* bypass the PRE, ID, REQ, and IFREQ on the ACCEPT CHECK. The SMP/E root cause analysis identifies the cause of only errors but not warnings (SMP/E treats bypassed PRE, ID, REQ, and IFREQ conditions as warnings rather than errors).

Before you use SMP/E to load new distribution libraries, it is recommended that you set the ACCJCLIN indicator in the distribution zone. In this way, you can save the entries that are produced from JCLIN in the distribution zone whenever a SYSMOD that contains inline JCLIN is accepted. For more information about the ACCJCLIN indicator, see the description of inline JCLIN in the SMP/E Commands book for details.

After you take actions that are indicated by the ACCEPT CHECK, remove the CHECK operand and run the job again to perform the ACCEPT.
Note: The GROUPEX Tenn operand indicates that SMP/E accepts all requisite SYSMODs. The requisite SYSMODS might be applicable to other functions.

Expected Return Codes and Messages from ACCEPT CHECK: You will receive a return code of 0 if this job runs correctly.

If PTFs that contain replacement modules are accepted, SMP/E ACCEPT processing will link-edit or bind the modules into the distribution libraries. During this processing, the Linkage Editor or Binder might issue messages that indicate unresolved external references, which will result in a return code of 4 during the ACCEPT phase. You can ignore these messages, because the distribution libraries are not executable and the unresolved external references do not affect the executable system libraries.

Expected Return Codes and Messages from ACCEPT: You will receive a return code of 0 if this job runs correctly.

6.1.12 Run REPORT CROSSZONE

The SMP/E REPORT CROSSZONE command identifies requisites for products that are installed in separate zones. This command also creates APPLY and ACCEPT commands in the SMPPUNCH data set. You can use the APPLY and ACCEPT commands to install those cross-zone requisites that the SMP/E REPORT CROSSZONE command identifies.

After you install Transaction Analysis Workbench, it is recommended that you run REPORT CROSSZONE against the new or updated target and distribution zones. REPORT CROSSZONE requires a global zone with ZONEINDEX entries that describe all the target and distribution libraries to be reported on.

For more information about REPORT CROSSZONE, see the SMP/E manuals.

6.1.13 Cleaning Up Obsolete Data Sets, Paths, and DDDEFs

The following data sets, which were allocated and used by previous releases of this product, are no longer used in this release. You can delete these obsolete data sets after you delete the previous release from your system.

- AFUWLOAD

The following DDDEF entries, which were created and used by previous releases of this product, are no longer used in this release. You can delete these obsolete DDDEF entries after you delete the previous release from your system.

- AFUWLOAD

6.2 Activating Transaction Analysis Workbench

The publication IBM Transaction Analysis Workbench for z/OS User’s Guide, (SC19-4006) contains the necessary information to customize and use Transaction Analysis Workbench.
7.0 Notices

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Program Directory for IBM Transaction Analysis Workbench for z/OS, October 2014

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