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For The Next 50 Years

File-AID/EX Installation Guide

Release 18.03

Please direct questions about File-AID/EX or comments on this document to:

Compuware Customer Support

<https://go.compuware.com>

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Introduction

Managing Data with File-AID/EX

File-AID/EX is a data management tool designed to help developers more efficiently manage and prepare data for testing. It allows developers to easily copy, convert, transform, compare and edit data, validate test data results, and restore test data to its baseline state. File-AID/EX provides a familiar interface for accessing many of the major databases and file types across Windows clients and servers. File-AID/EX provides cross-database support for Oracle, Sybase, Microsoft SQL Server, and DB2 Universal Database (UDB) databases. File-AID/EX also supports a range of data types including mainframe data and XML.

File-AID/EX Enterprise Edition, an optional addition to File-AID/EX, allows developers to access mainframe data on z/OS. When coupled with File-AID/EX, File-AID/EX Enterprise Edition enables the movement of test data between mainframe and distributed environments. File-AID/EX Enterprise Edition supports the major z/OS data types including VSAM, QSAM, IMS, and DB2 UDB z/OS.

About This Guide

This guide provides the information needed to install File-AID/EX. It consists of the following chapters and appendixes:

- Chapter 1, “Installing File-AID/EX on Windows” provides system requirements, relational database and flat file support, and installing and uninstalling instructions for Windows.
- Chapter 2, “Installing File-AID/EX Components on UNIX” describes the File-AID/EX installation setup types and provides installation procedures for File-AID/EX on UNIX.
- Chapter 3, “File-AID/EX Enterprise Edition” provides an overview of the Enterprise Edition File-AID/EX Enterprise Edition.
- Appendix A, “File-AID/EX Application Programming Interface (API)” provides information for developing custom applications.
- Appendix B, “File-AID/EX Supported Field Data Types” contains a list of supported field data types by database.
- Appendix C, “Configuring Third-party JDBC Drivers for Use with File-AID/EX” describes how to add additional JDBC drivers after product installation.
- Appendix D, “Maintaining the File-AID Rules Engine” describes how to maintain the File-AID Rules Engine.

Who Should Read This Guide

This guide is written for developers, testers, and database administrators who will install File-AID/EX and File-AID/EX Enterprise Edition.

This guide assumes that users are already familiar with the Windows or UNIX operating systems.

For additional information on Windows, consider the following manuals: *Microsoft Windows XP Inside Out*, **Windows 7 Step by Step**, and *Inside Microsoft Windows*.

For additional information on UNIX or Linux, read any standard text on UNIX or Linux for information.

The following conventions are used to draw your attention to special information:

This convention	Identifies
boldface	Information that you type, choices that you select from a window or menu, and keys that you press. Information should be typed in lowercase letters unless otherwise indicated. Boldface is also used to emphasize important points.
<italic>	Placeholders for items you must supply. For example: when the guide says to type <drive>:\, type the letter of the drive followed by a colon and a slash. Information should be typed in lowercase letters, unless otherwise indicated. Italic is also used to introduce new terms and indicate book titles.
Note:	Information that emphasizes important points.
CAUTION:	Information to prevent data loss or corruption.

Documentation

If you cannot locate the information you need or the information in this guide is not clear, please let us know.

Publications

The File-AID/EX documentation set includes the following references:

- *File-AID/EX Installation Guide* includes system requirements and instructions for installing File-AID/EX and File-AID/EX Enterprise Edition. This guide is provided in PDF format.
- *File-AID/EX Getting Started* includes an overview of File-AID/EX and tutorials that teach you how to use the File-AID/EX component. This guide is provided in PDF format.
- *File-AID/EX Best Practices* includes information on configuring File-AID/EX and benchmarks to help you make the best use of File-AID/EX.
- File-AID/EX online help provides descriptions of the File-AID/EX tools, operating procedures, and reference information. On the **Help** menu:
 - Click **Contents** to view an outline of available topics. This provides information in a logical order to help you perform tasks in the order they need to be performed.
 - Click **Index** and type the term for which you seek information.
 - Click **Find** to search for words and phrases in help topics. This will usually offer several topics from which to choose. Click a topic to select it.
 - Click **Help** on an active window for specific help with that feature.

Viewing the Online Books

File-AID/EX online books are provided in PDF format, and require Adobe Reader 6.0 or more current to view them. The free Adobe Reader is available on the Adobe web site at www.adobe.com.

The online books are available from the Compuware Support Center located at <https://go.compuware.com/>.

Product 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.

Planning

This section provides information related to planning to install File-AID/EX.

For further information about IBM System z software and hardware compatibility—specifically regarding IBM's z/OS Recommended Service Upgrade, IBM's Extended Address Volumes, IBM DB2 for z/OS, and z/OS product compatibility—refer to <https://go.compuware.com/charts/hardware.aspx>.

Prerequisites

File-AID/EX Enterprise Edition (File-AID/EX Executive)

Hardware Platforms

- Mainframe Systems:
 - z800, z890, z900, z990 mainframe systems
 - z13
 - zEC12, zBC12
 - z196, z114
 - z10-EC/BC
 - z9-EC/BC
 - z900, z990
 - z800, z890

Operating Systems

- IBM z/OS V1.13, 2.1, 2.2, 2.3
- IBM ISPF for the supported z/OS releases

File-AID/EX and File-AID/EX Execution Server

Hardware Platforms

- Mainframe Systems:
 - zEC12, zBC12
 - z196, z114
 - z10-EC/BC
 - z9-EC/BC
 - z900, z990
 - z800, z890
- Distributed Systems:
 - AIX Power
 - HP-UX Itanium
 - Linux x86, x64
 - Solaris Sparc
 - Windows x86, x64

Hardware Requirements

- Hardware:
 - Linux x86, x64
 - RISC workstation
 - RS/6000 workstation
 - Sun SPARC workstation

- Windows x86, x64
- Processor: 1 GHz processor minimum; 3 GHz recommended on Linux; 1 GHz minimum; 3 GHz recommended on Windows
- Hard Disk: 700 MB minimum; 1 GB recommended. Additional disk space may be required when extracting large sets of data.
- RAM: 1 GB minimum; 2 GB recommended; 4 GB recommended

Operating Systems

- HP-UX 11iv2 (11.23), 11iv3 (11.31) on Itanium-based machines.
- IBM AIX Enterprise Edition V6.1.0, 7.1.0
- Microsoft Windows 8.1, 10
- Microsoft Windows Server 2012, 2016
- Red Hat Enterprise Linux 6.x, 7.2, 7.3
- Solaris 10 (Sparc processor-based versions only)

Major Subsystems

- IBM DB2 for z/OS: Toleration support for V11.1, 12.1
- IBM IMS Transaction and Database Servers V13.1, 14.1 (only support PSBs generated prior to IMS 11)

Languages

- Oracle Java SE 8 (Java 8 is installed automatically on Windows systems during File-AID/EX installation but must be installed manually on UNIX and Linux.)

Corequisites

- Compuware Products and Components:
 - File-AID/RDX 16.3, 17.2. File-AID/EX can load from an extract file created by File-AID/RDX.
 - File-AID Data Privacy: Refer to the *File-AID Data Privacy Release Notes*.
 - File-AID/EX 18.03 is required for Topaz for Enterprise Data 18.03.

Distributed

- IBM DB2 for Linux, UNIX, and Windows (LUW): V9.5, 9.7, 10.1, 10.5. DB2 LUW requires IBM DB2 Connect Unlimited Edition for System z for Windows or the type-4 JDBC drivers.
- Microsoft Internet Explorer 10, 11 for the supported Windows releases (for using the installation media and viewing online help)

ISV Software

- Microsoft Access 2010
- Microsoft Excel 2010
- Microsoft SQL Server:
 - Microsoft SQL Server 2012 Standard Edition
 - Microsoft SQL Server 2014 Standard Edition
 - Microsoft SQL Server 2016 Standard Edition
- Oracle JDBC 11.2.0, 12.1.0
- SAP Adaptive Server Enterprise 15

Supported File Types by File-AID/EX Component

The table below indicates which file types are supported by the various File-AID/EX components. File types are supported for the supported versions of third-party products

listed above.

File Type	ConverterPro	ComparePro	Related Extract	Related Loader
IBM AS/400	Yes			
IBM DB2 for z/OS	Yes	Yes		
IBM DB2 Load Utility				Yes
IBM DB2 for Linux, UNIX, and Windows	Yes	Yes	Yes	Yes
File-AID/RDX				Yes
IBM IMS Transaction and Database Servers	Yes (source only)			
Microsoft Access	Yes	Yes		
Microsoft Excel	Yes	Yes		
Microsoft SQL Server	Yes	Yes	Yes	Yes
MVS				
— <i>VSAM ESDS</i>	Yes			
— <i>VSAM KSDS</i>	Yes			
— <i>QSAM</i>	Yes			
Oracle JDBC	Yes	Yes	Yes	Yes
Oracle SQL Loader				Yes
Sybase Adaptive Server Enterprise	Yes	Yes	Yes	Yes
Teradata — ConverterPro support for Teradata requires that the specification source and target be different. Use null source if necessary.	Yes			
Windows/Unix Files				
— <i>Delimited</i>	Yes	Yes		
— <i>Fixed</i>	Yes	Yes		
— <i>Text</i>		Yes		
XML	Yes	Yes		

Chapter 1.

Installing File-AID/EX on Windows

This chapter describes the File-AID/EX installation setup types and provides installation and migration procedures for File-AID/EX on Windows. For instructions on maintaining a current version of File-AID/EX, refer to “Maintaining File-AID/EX”.

Note: Due to current registry update requirements, an installer must have Administrator authority or be a member of the Administrator group. Any other authority level may cause the installation to fail.

Note: Alternatively, File-AID/EX may be installed silently on Windows. Refer to Appendix E, “Installing File-AID/EX Silently on Windows”.

Installing File-AID/EX

File-AID/EX executes on Windows operating systems. Administrator privileges are required to install File-AID/EX.

Full installations of File-AID/EX are performed for first-time installations and when upgrading to a later major release. For instance, Compuware recommends running a full install would when going from version 16.00 to version 17.00, while a service pack can be applied to the product for updates of the product within a release. Conversely, applying a service pack would be appropriate when upgrading within a major release, as in an upgrade from 16.03.00 to 16.03.09. Contact Customer Support for guidance if circumstances make it unclear which method to apply. Applying a service pack is described in “Maintaining File-AID/EX”.

Note: For a list of other hardware, software, and other requirements necessary to install File-AID/EX, refer to the Release Notes. Also listed in the Release Notes are database versions and file types for Windows and UNIX that are supported by File-AID/EX. The latest version of the release notes can be found on the File-AID/EX documentation page on the Compuware Support Center.

Note: To use the Oracle Database Client (which is required only if using SQL*Loader or for repositories that were configured in File-AID/CS 4.3 or earlier) ensure the following:

- A `tnsnames.ora` file is present and configured to point to a valid Oracle database.
- The path name for the `OCI.dll` is added to the `PATH`. The default location is `c:\oracle\product\10.1.0\Client_1`.
- The `TNS_ADMIN` environment variable is set to the path where the `tnsnames.ora` file resides.

Note: When an RFN order for Compuware products includes File-AID/EX, a link to the File-AID/EX and File-AID Distributed Components media *image* is provided via email. Alternatively, File-AID/EX may also be distributed on the File-AID EP and Topaz for Enterprise Data EP *physical* media. This manual presumes you are installing using the File-AID/EX and File-AID Distributed Components media *image*. Both the media browsers contain links related to the installation and maintenance of the File-AID Rules Engine used with Dynamic Data Privacy.

To install File-AID/EX:

1. Refer to the Release Notes for any installation-related requirements.
2. Preserve any custom configurations to an existing installation of the product. Refer to “*Preserving Custom Configuration Settings*” for details.
3. Close any open applications, including the Execution Server and Communication Manager.
4. Launch the media browser by running setup.exe from either the extracted electronically downloaded media image or physical media you received.
5. On the **Windows Products** tab of the media browser, click **Install File-AID/EX**. A **Preparing to install** dialog box appears.
 - If this is the first time File-AID/EX is installed, the **Welcome to the InstallShield Wizard for Compuware File-AID/EX** dialog box appears.
 - If a prior release of File-AID/EX is already installed, the **Program Maintenance** dialog box appears. Select **Modify** to make changes to the current installation, select **Repair** to fix missing or corrupt files, shortcuts, and registry entries, or select **Remove** to uninstall File-AID/EX. See “Uninstalling File-AID/EX” on page 18 for more information.
6. Click **Next**. The **License Agreement** dialog box appears.
7. Read the license agreement, select **I accept the terms in the license agreement** to accept, and click **Next**. Another license agreement window appears permitting the installation of the Oracle JDBC driver.

Note: The license agreement must be accepted to continue with installation.

8. The Oracle license agreement must be accepted to install the Oracle driver, otherwise the Oracle driver will not be installed. Select whether to install the driver and click **Next**. The **Customer Information** dialog box appears.
9. Type your name and the name of your company, and click **Next**. The **Destination Folder** dialog box appears.
10. Do one of the following:
 - To use the default destination folder, click **Next**.
 - To change the destination folder, click **Change**, navigate to the folder to use, and click **OK**. Then click **Next** on the **Destination Folder** dialog box.

Note: Do not install File-AID/EX to a network shared drive.

The **Custom Setup** dialog box appears.

11. Verify features to be installed. By default, File-AID/EX, a repository, and an execution server are installed. File-AID/EX includes Homebase and all of the application components and supporting utility programs of the File-AID/EX suite. The installation can, however, be customized by deselecting features, as follows:
 - Deselect **Repository** if a repository is already set up. This will install only File-AID/EX and the Execution Server. Normally, a user would not select only **Repository** for installation.

Note: For production environments, Compuware recommends that users set up a shared repository in an industry-standard RDMS rather than using the local repository created when File-AID/EX is installed. The local repository is not managed or backed up, and is meant only to provide a starting point for small testing scenarios, not production environments.

 - To install only the Execution Server, deselect **File-AID/EX** and **Repository**. Generally, select only this option when you are installing the Execution Server

on a separate server machine. Users would then remotely connect to the Execution Server from their workstations.

To deselect a choice, click the icon next to the option and select **This feature will not be available**. A red X appears beside the deselected option.

12. Click **Next**. The **Ready to Install the Program** dialog box appears.

Note: If making a choice that does not include a repository, a default repository must be set up before using File-AID/EX. When Homebase is first launched, a prompt appears for specifying a default repository.

13. Click **Install** to begin installation. The **Installing Compuware File-AID/EX** status window appears showing progress and displaying status messages during installation. It may take several minutes for installation to complete. When the installation is finished, the **InstallShield Wizard Completed** dialog box appears.

14. Click **Finish** to exit the installation window and return to the media browser installation window.

15. Exit the media browser installation window.

16. Reboot to complete the installation.

Execution Server Notes

- The File-AID/EX Execution Server quickly executes complex conversions, extracts, and loads.
- The File-AID/EX Execution Server can be ported to a supported Windows, UNIX, or Linux platform. Note that whenever a remote execution server is installed, it should be configured. Once the Execution Server is installed and started, launch File-AID/EX Homebase and add this Execution Server to the list of valid execution servers in the default repository or any other repositories that have been configured. Refer to the *Default Execution Server* topic in the Homebase help.
- It is desirable for the File-AID/EX Execution Server to reside on the same machine as the source or target data to reduce network traffic. However, using high performance servers is another option. Since transformations are CPU-intensive, this is another benefit to using File-AID/EX when the mapping specifications are complex.
- The File-AID/EX Execution Server can connect directly to a variety of relational data environments and z/OS data types through MVS Access Modules. It enables data conversion between the major z/OS data types, and between mainframe and distributed data types. It can also read existing File-AID/RDX extract files and import record layouts from the extract file.

Changing the Port Number for the Execution Server

The Execution Server port number can be changed from the default that File-AID/EX originally sets, if desired.

To change to a new port:

1. From the Homebase **Tools** menu, select **Execution Server**. The **File-AID/EX Execution Server** dialog box appears.
2. Click **Stop** and then click **Close** to shut down the currently running engine.

Note: Failure to first stop the execution server will result in having an engine running on both the old port and the new port, and it is then difficult to determine which engine to shut down since there is no port designation to indicate which engine goes with which port.

3. Open the engine.properties file, which is located by default at \ProgramData\Compuware\FAEX\Cfg (Windows Vista and later) or at \Documents and Settings\All Users\Compuware\FAEX\Cfg (prior to Windows Vista).
4. Change:


```
port = 4900
```

 to the desired port number.
5. Save and close the file.
6. From the Homebase **Tools** menu, select **Execution Server**. The **File-AID/EX Execution Server** dialog box appears.
7. Click **Start** and then click **Close**. The new engine is restarted.

Additional information can be found in the engine.properties file.


Changing the Port Number for the Communication Manager

The default Communication Manager port is 4901. The user can change the port by editing the manager.properties file located at /ProgramData/Compuware/FAEX/Cfg folder according to the instructions in the manager.properties document.

Setting the Location for File-AID Services Server

This section applies only if the optional File-AID Services Engine for Dynamic Data Privacy is installed.

To use File-AID Data Privacy's dynamic privacy rules with File-AID/EX, the DataPrivacy.properties file must be set up. The following steps must be performed for each execution server that will be used for dynamic privacy rules:

1. In Homebase, click  or, from the **Tools** menu, select **Dynamic Data Privacy**. The **Dynamic Data Privacy** dialog box appears.
2. From the **Source Repository** drop-down list, select the source repository that stores the information about the execution server for which to set values. The drop-down list shows all available repositories. <Local Repository> is the default.
3. From the **Execution Server** drop-down list, select the execution server for which to set values. The drop-down list shows all available execution servers for the chosen repository.
4. In the **File-AID Services Location** field, enter or modify the value to indicate the server name or IP address of the File-AID Services server.
5. In the **File-AID Services Port** field, enter or modify the value to indicate the port number of the File-AID Services server. The default value is 4180 and valid values are 1-65535.
6. Optionally, click **Test** to test the connection. A message indicates success or failure of the connection.
7. Click **Save**. The values are saved in the DataPrivacy.properties file, which is located by default at \ProgramData\Compuware\FAEX\Cfg (Windows Vista and later) or at \Documents and Settings\All Users\Compuware\FAEX\Cfg (prior to Windows Vista).

Enabling DB2 JDBC Repository and Database Access Support

DB2 JDBC support is not enabled by default, and JDBC drivers are not provided with the product. Prior to the release of DB2v8, there were no JDBC type 4 drivers. File-AID/EX currently supports JDBC type 2 DB2 drivers as well as JDBC type 4 drivers. As a result, enabling DB2 use requires the following steps.

Note: For Windows, DB2 Client must be installed to use all File-AID/EX features.

DB2 Type 2 Driver

1. If <db2 installation directory>\IBM\SQLLIB\java12 directory is present, run java12\usejdbc2.bat. Copy the db2java.zip created to <File-AID/EX installation directory>\drivers.
2. If only <db2 installation directory>\IBM\SQLLIB\java directory is present, copy the db2java.zip file from the <db2 installation directory>\IBM\SQLLIB\java to the <File-AID/EX installation directory>\drivers folder.
3. Copy the DB2 license file (db2jcc_license_cu.jar [or db2jcc_license_cisuz.jar depending on platform]) to the same directory where the driver was copied.

Note: This must be done any time the DB2 version is upgraded.

4. Edit the repositoryJDBC.properties file (located by default at \ProgramData\Compuware\FAEX\Cfg [Windows Vista and later] or at \Documents and Settings\All Users\Compuware\FAEX\Cfg [prior to Windows Vista]) and uncomment the DB2 driver registration entry "COM.ibm.db2.jdbc.app.DB2Driver".
5. Stop the currently running Communication Manager and Execution Server via Homebase. From the **Tools** menu, select **Communication Manager** or **Execution Server**. Stop, then restart both components. DB2 support should now be enabled.

DB2 Type 4 Driver

1. If <db2 installation directory>\IBM\SQLLIB\java directory is present, copy the db2jcc.jar file from the <db2 installation directory>\IBM\SQLLIB\java to the <File-AID/EX installation directory>\drivers folder.
2. Copy the DB2 license file (db2jcc_license_cu.jar (or db2jcc_license_cisuz.jar depending on platform)) to the same directory where the driver was copied.

Note: This must be done anytime the DB2 version is upgraded.

3. Edit the repositoryJDBC.properties file (located by default at \ProgramData\Compuware\FAEX\Cfg [Windows Vista and later] or at \Documents and Settings\All Users\Compuware\FAEX\Cfg [prior to Windows Vista]) and uncomment the DB2 driver registration entry "COM.ibm.db2.jdbc.app.DB2Driver".
4. Stop the currently running Communication Manager and Execution Server via Homebase. From the **Tools** menu, select **Communication Manager** or **Execution Server**. Stop, then restart both components. DB2 support should now be enabled.

Installing a File-AID/EX Client Edition License

To install the license for File-AID/EX Client Edition, license information from Compuware and a license file configured in DLM are needed. There are three types of licenses:

- **Temporary:** The default license shipped with the product.
- **Permanent:** A license that gives the user access to the product under the terms of the contract with Compuware.
- **Trial:** A license that enables the user to evaluate the product for 30 days.

Refer to the *Distributed License Management Installation Guide* for instructions on installing a temporary or permanent license. The Distributed License Management online help also provides license installation information.

Starting File-AID/EX

1. To start File-AID/EX, do one of the following:
 - Launch Homebase like any other application based on your operating system.
 - Double-click the File-AID/EX Homebase shortcut on the desktop.

When File-AID/EX is started for the first time after installation without a license already installed, a message appears asking whether to configure a license now or use File-AID/EX for an evaluation period.

2. Do one of the following:
 - Click **Yes** to configure the license now. Refer to the *Distributed License Management Installation Guide* for information.
 - Click **No** to configure the license later. The evaluation period lets users try the product for 30 days without configuring a license.

Uninstalling File-AID/EX

1. From the **Control Panel**, double-click **Add or Remove Programs** (on Windows XP) or **Programs and Features** (on Windows 7 or Windows 10).
2. Select **Compuware File-AID/EX**.
3. Click **Remove** or **Uninstall**. The **Add or Remove Programs** dialog box appears.
4. Click **OK** to confirm the uninstallation.
5. If prompted, restart the machine when the uninstall is complete.

Note: The uninstaller does not uninstall all of the installed files. The File-AID/EX directory may need to be deleted manually.

Maintaining File-AID/EX

1. Log in to the Compuware Support Center (<https://go.compuware.com>) and, from the **Product Support** drop-down list, select **File-AID/EX**. The File-AID/EX product home page appears.
2. Click **Fixes/Downloads**, select the Full Install (Windows) link, then select the 32-bit or 64-bit link, whichever is appropriate.
3. Download the appropriate service pack file (.msp or .exe, depending on version).
4. Before installing the service pack, stop the Execution Server and Communication Manager.
5. Install the service pack by executing the service pack installation file xxx.exe.

Note: The service pack install may reset the Execution Server port to port 4900. If the port settings for the install were customized as described in “Changing the Port Number for the Execution Server” on page 15, re-enter the customized port number in the engine.properties file or, prior to installation, perform the steps in “Preserving Custom Configuration Settings”.

Note: The service pack may also reset the dataprivacy.properties configured for use with Dynamic Data Privacy. Check and reset this configuration for each execution server to which a service pack is applied. Refer to “Setting the Location for File-AID Services Server” on page 16. This may also be migrated prior to installation by using the technique described in “Preserving Custom Configuration Settings”.

Preserving Custom Configuration Settings

Many users make changes to the product configuration to suit their needs. Examples of this are described in “Changing the Port Number for the Execution Server” and “Setting the Location for File-AID Services Server”. Since the installation program will overwrite the configuration files associated with these user modifications under normal circumstances, preserve these settings as follows:

1. Locate the file(s) that have been modified (for example, the engine.properties file if the execution server port number was changed).
2. Copy the file to a safe location outside of the File-AID/EX configuration folder (C:\Program Data\Compuware\FAEX\cfg by default).
3. Perform the installation of File-AID/EX.
4. Once the installation is complete. Copy the original files back to the File-AID/EX configuration folder.

Running the File-AID/EX Execution Server as a Windows Service

Windows services, formerly known as NT services, enable users to create long-running executable applications that run in their own Windows sessions. These services can be automatically started when the computer boots, can be paused and restarted, and do not show any user interface. These features make services ideal for use on a server or whenever there is a need for long-running functionality that does not interfere with other users who are working on the same computer.

The Execution Server as a Service feature was intended to automatically start a remote Execution Server on a machine not used as a workstation. Some users not only want this but additionally want to use the File-AID/EX tools on the same machine. This can be accomplished by doing the following:

1. Use the **Default Execution Server Settings** dialog box to add a new entry defining the system the service is installed on as a remote execution server. Select the new entry as the default execution server. Refer to the Homebase online help for instructions.
2. Use the **Shared Repository Connection** dialog box to add a new shared repository using the repository on the system the service is installed on. Make this “shared” repository the default repository. Refer to the Repository Management Utility online help for instructions.

This feature requires Microsoft .NET version 2.0.

Four batch files, located in the <FAEX_INSTALL_DIR>\dme folder are supplied to support installing and running the File-AID/EX Execution Server as a Windows Service:

1. **InstallExpressAsService** — This batch file will install the File-AID/EX Execution Server Service. After the service is installed, the File-AID/EX Execution Server will be started. On subsequent rebooting of the machine, the File-AID/EX Execution Server will be automatically started. After this batch file is successfully run, the File-AID/EX Execution Server will be listed in the Windows Services dialog window and provides the ability to Start/Restart/Stop the File-AID/EX Execution Server.
2. **UnInstallExpressAsService** — This batch file will stop the File-AID/EX Execution Server, then uninstall it as a Windows Service.
3. **StartExpressAsService** — If not running, this batch file will start the File-AID/EX Execution Server but will not perform an install.

4. *StopExpressAsService* — If running, this batch file will stop the File-AID/EX Execution Server but will not perform an uninstall.

Scheduling Agent and Return Codes

File-AID/EX can be run through the use of a Scheduler on z/OS. When a conversion completes, a Return Code is sent to the system. The following sections detail the File-AID/EX Scheduling Agent and Return Codes.

File-AID/EX Scheduling Agent

The File-AID/EX Scheduling Agent is named FEAGENT and is automatically installed on z/OS during the File-AID Common installation. FEAGENT provides an interface to the File-AID/EX Execution Server from a Scheduler. Upon initialization, sends a message to an active File-AID/EX Execution Server requesting it to start a File-AID Ex process.

Requirements for calling FEAGENT:

- The selected Execution Server is running in daemon mode.
- Valid specification file of type ConverterPro, Related Extract or Related Load. For assistance in saving specifications as files, refer to the online help for each component.
- The Data Files required to execute the specification reside on the same machine as the Execution Server.

Starting FEAGENT

To execute FEAGENT on the mainframe you must submit JCL that will execute program = 'XVJXIAGT'. This program resides in XVJ load library which must be specified on your STEPLIB DD statement.

The following PARM information is required:

```
PARM='<TCP/IP Address><IP Address Port><Specification Type><File Path><File Name>'
```

- *<TCP/IP Address>* is the TCP/IP address that the File-AID/EX Execution Server is running on
- *<IP Address Port>* is the port that the File-AID/EX Execution Server is running on
- *<Specification Type>* can be ConverterPro, Extract, or Loader
- *<File Path>* is the absolute path of the directory where the specification file resides. If the directory path contains spaces, add double quotes around it. Please note that this parameter is optional, and if supplied the program would look for the specification file in the below location:

```
<File-AID/EX install path>/Conversion/
```

- *<File Name>* is the name of the specification with its file extension.

Note: The above parameters need to be separated by space and enclosed within a pair of single quotes.

Sample JCL:

```
//FEAGENT JOB ('OFABAS9.0.1DEV',M05,1,1),'FEAGENT',
//      CLASS=E,MSGCLASS=X,NOTIFY=&SYSUID,REGION=0M
/*JOBPARM  SYSAFF=CW01
//FEAGENT  EXEC PGM=XVJXIAGT,REGION=0M,
```

```
//      PARM='10.10.10.10 4900 ConverterPro c:\MyFolder MyConvProSpec.xml'
//STEPLIB DD DISP=SHR,DSN=<File-AID Common LOAD LIB>
```

Return Code Processing

When the specification completes, the File-AID/EX Execution Server sends a Return Code to the FEAGENT, which sends the code back to the calling operation and FEAGENT terminates. The following are the Return codes returned by the File-AID/EX Execution Server:

Table 1-1. File-AID/EX Return Code Values

Code Value	Code String
0	"Success: Batch Execution has been successfully completed."
4	"Warning: Warnings have occurred with possible database errors."
8	"Warning: Warnings have occurred with possible database errors." 8 "ABEND:" The message received is ABEND-specific. Examples of this magnitude include: File not found, Parser Exception, Engine could not be started, etc

Chapter 2.

Installing File-AID/EX Components on UNIX

This section describes the File-AID/EX installation setup types and provides installation procedures for File-AID/EX on UNIX.

Installing File-AID/EX Components

This section describes the steps required to install the File-AID/EX components on UNIX or Linux, including the Execution Server and the File-AID Rules Engine

Note: Before installing File-AID/EX on UNIX or Linux, Java must be installed. Refer to the File-AID/EX Release Notes for additional requirements. The most current Release Notes can be found on the File-AID/EX documentation page on the Compuware Support Center.

To install File-AID/EX:

1. Log on to the UNIX or Linux workstation as a user ID that has the authority to read from the device where the File-AID/EX installation image is mounted and that has the authority to create the directory where File-AID/EX is to be installed.
2. Create an installation media mount point directory if one does not already exist.

Note: In the following steps, this directory is referred to as *<media_mount_point>*.

3. Insert the installation media containing the File-AID/EX software in the appropriate drive and mount the media device.

The mount commands vary from platform to platform. The following are examples, where *<media_dev_name>* is the device name and *<media_mount_point>* is the mount point of the device:

– AIX

```
mount -vr cdrfs <media_dev_name> /<media_mount_point>
```

– HP-UX

```
mount cdfs <media dev name> /<media_mount_point>
```

– Solaris (if using Volume Manager, media mounts automatically mount)

```
mount -F hsfs <media_dev_name> /<media_mount_point>
```

– Red Hat Linux

```
mount <media_dev_name>
```

where *<media_dev_name>* matches the device or mount point of the device in the */etc/fstab* file. Typically, the *<media_dev_name>* is */dev/cdrom*

4. Navigate to the installation directory for the selected platform.

Example: *<media_mount_point>/File-AID_EX_Installer/FG/cpwr/FAEX_Unix/platform/install/*

– For AIX: Install from the FAEX_AIX directory

- For HP-UX: Install from the FAEX_HP-UX directory
 - For Solaris: Install from the FAEX_Solaris directory
 - For Red Hat Linux: Install from FAEX_Linux directory
5. Make sure the copied files are executable by issuing the command (where <directory> is the directory in the step above:

```
chmod -R 777 <directory>.
```
 6. Execute `./faexinst.ins`. The **Welcome to the installation for File-AID/EX Server** dialog box appears.
 7. Press **Enter**. The default pathname message appears.
 8. Type **y** to accept the default or type **n** to specify a different path. Press **Enter**. The copyright message appears, and a prompt to accept the terms appears.
 9. Type **y** and press **Enter**. The Java command prompt appears.
 10. Do one of the following:
 - Press **Enter** to accept the default Java location.
 - Type the fully qualified path of the Java command and press **Enter**.
 11. Type **y** to install the selected components in the default directory, and press **Enter**. The default installation directory path appears.
 12. Do one of the following:
 - Type **y** and press **Enter** to accept the default path.
 - Type the full installation path and directory and press **Enter**.
 Space is validated and then the current settings message appears.
 13. Type **y** to continue with the installation and press **Enter**.
 14. When the installation completes, a prompt appears asking to view the readme file. Type **y** or **n** and press **Enter**.

The File-AID/EX UNIX components are now installed.

Note: The File-AID Rules Engine will not be upgraded by File-AID/EX service packs. See Appendix D, “Maintaining the File-AID Rules Engine” for how to upgrade the File-AID Rules Engine.

Note: When planning to work with DB2 Databases, make sure that the DB2 JDBC drivers are installed with the Execution Server in the DME directory. See “Enabling DB2 JDBC Repository and Database Access Support” on page 16.

Installing a File-AID/EX Server Edition License

To install the license for File-AID/EX Server Edition, license information from Compuware and a license file configured in DLM are needed. There are two types of licenses:

- **Temporary:** The default license shipped with the product.
- **Permanent:** A license that gives the user access to the product under the terms of the contract with Compuware.

Refer to the *Distributed License Management Installation Guide* for instructions on installing a permanent Client license. DLM is automatically installed when File-AID/EX is installed in Unix. The default location is `/usr/faex/dlm`. A temporary license is automatically created. To install a permanent license, use the DLMLCV (command line version) utility (`./dlmsh`).

Starting the File-AID/EX Execution Server

The File-AID/EX Execution Server is installed automatically during the installation of File-AID/EX.

To start the Execution Server:

1. Navigate to the **DME** directory where File-AID/EX is installed, and type: `./go.sh`
2. Press **Enter**. A message appears stating that the engine has compiled or the Daemon is waiting for connection.

Stopping the File-AID/EX Execution Server

- Do one of the following, depending on platform:
 - For all platforms except HP, stop (Ctrl+C) the terminal session from which the Execution Server was started.
 - For HP, it may be necessary to locate the task and KILL it.

Configuring the File-AID/EX Execution Server

Once the Execution Server is installed and started, launch File-AID/EX Homebase and add this execution server to the list of valid execution servers in the default repository or any other repositories that have been configured. Refer to the Default Execution Server topic in the Homebase help.

Note: For production environments, Compuware recommends that users set up a shared repository in an industry-standard RDMS rather than using the local repository created when File-AID/EX is installed. The local repository is not managed or backed up, and is meant only to provide a starting point for small testing scenarios, not production environments.

If the File-AID Rules Engine has been installed, configure the Execution Server for it. Refer to “Setting the Location for File-AID Services Server” on page 16.

Optionally, users can edit the `dataprivacy.properties` file (located by default at `\ProgramData\Compuware\FAEX\Cfg` [Windows Vista and later] or at `\Documents and Settings\All Users\Compuware\FAEX\Cfg` [prior to Windows Vista]).

Changing the Port Number for the Execution Server

To change the port number from the default that File-AID/EX originally sets, do the following:

1. Shut down the Execution Server
2. Open the `engine.properties` file (located by default at `\ProgramData\Compuware\FAEX\Cfg` [Windows Vista and later] or at `\Documents and Settings\All Users\Compuware\FAEX\Cfg` [prior to Windows Vista]).
3. Change `port = 4900` to the desired port number.
4. Save and close the file.
5. Restart the Execution Server

Additional information can be found in the `engine.properties` file.

Uninstalling File-AID/EX

To remove the File-AID/EX Execution Server and File-AID Rules Engine:

1. Log on to the UNIX or Linux workstation with the same user ID that was used to install File-AID/EX.
2. Make the current working directory one level above the directory into which File-AID/EX was installed.
3. Remove the File-AID/EX installation directory using the `rm` command to first remove the contents of the installation, then use `rmdir` to delete the installation directory itself.

Maintaining the File-AID/EX Execution Server

1. Access the Compuware Support Center (<https://go.compuware.com>) to get the current maintenance files for the platform. For example, when running Solaris, select "FAEX_SOLARIS_5.xx.x.nnn.tar". The .tar file contains replacement files for the installed File-AID/EX system.
2. Download the .tar file to the installation directory (which, by default is `/usr/faex`).
3. Copy the FACS script (`faexspxxx.ins`) provided on the Compuware Support Center to the installation directory (where `xxx` is the service pack number).
4. Before installing the service pack, stop the Execution Server (stop the terminal session or, for HP, kill the task).
5. Install the service pack by executing the service pack installation script (`./faexspxxx.ins`).

Note: The service pack install may reset the port to port 4900. If the port settings for the install were customized as described in "Changing the Port Number for the Execution Server" on page 25, re-enter the customized port number in the `engine.properties` file.

6. Restart the Execution Server as described in "Starting the File-AID/EX Execution Server" on page 25.

Running a 64-bit Execution Server on HP-UX, AIX, and Solaris

After installing File-AID/EX, a change must be made to `go.sh` in the `dme` folder to turn on 64-bit mode.

In the `go.sh` line similar to this:

```
JAVA_PGM="/usr/java/1.x.x/15/bin/java"
```

(where `x.x` refers to the appropriate Java version)

change the Java JRE path to point to a JRE that has 64-bit support.

JREs can be downloaded at <http://java.sun.com>. Contact your system administrator for assistance in locating and installing an appropriate JRE.

HP-UX

1. On 64-bit HP-UX, in the `go.sh` line similar to this:

```
JAVA_PGM="/usr/java/1.x.x/08/bin/java"
```

(where `x.x` refers to the appropriate Java version)

add the `'-d64'` command-line parameter to Java to start it in 64-bit mode. For instance, the line above can simply be changed to:

```
JAVA_PGM="/usr/java/1.x.x/08/bin/java -d64"
```

2. To verify that Java is running in 64-bit mode, run it with the '-version' parameter. For instance:

```
->/usr/java/1.x.x/08/bin/java -d64 -version
java version "1.x.x.08"
Java(TM) 2 Runtime Environment, Standard Edition (build 1.x.x.08-
_04_may_2007_06_31)
Java HotSpot(TM) 64-Bit Server VM (build 1.x.x.08 jinteg:05.04.07-09:34 PA2.0W
(aCC_AP), mixed mode)
```

(where *x.x* refers to the appropriate Java version)

The text, 64-Bit Server, indicates that it is running in 64-bit mode.

Note: If the HP-UX Java installation does not support the '-d64' parameter, point to a separate 64-bit Java JRE. Contact the system administrator for assistance in locating such a version of Java.

AIX

On 64-bit AIX, it is necessary to point to a separate 64-bit Java JRE.

1. To verify that Java is running in 64-bit mode, run it with the '-version' parameter. For instance:

```
->/usr/java/1.x.x_64/10/bin/java -version
java version "1.x.x"
Java(TM) 2 Runtime Environment, Standard Edition (build pap64dev-20090707
(SR10))
IBM J9 VM (build 2.3, J2RE 1.x.x IBM J9 2.3 AIX ppc64-64 j9vmap6423-20090707
(JIT enabled)
J9VM - 20090706_38445_BHdSMr
JIT - 20090623_1334_r8
GC - 200906_09)
JCL - 20090705
```

(where *x.x* refers to the appropriate Java version)

The text, ppc64-64, indicates that it is running in 64-bit mode.

2. Update the location of Java in `dme/go.sh` to point to this 64-bit Java.

Solaris

1. On 64-bit Solaris, in the `go.sh` line similar to this:

```
JAVA_PGM="/usr/java/1.x.x/15/bin/java"
```

(where *x.x* refers to the appropriate Java version)

add the '-d64' command-line parameter to Java to start it in 64-bit mode. For instance, the line above can simply be changed to:

```
JAVA_PGM="/usr/java/1.x.x/15/bin/java -d64"
```

2. To verify that Java is running in 64-bit mode, run it with the '-version' parameter. For instance:

```
->/usr/java/1.x.x/15/bin/java -d64 -version
java version "1.x.x_15"
Java(TM) 2 Runtime Environment, Standard Edition (build 1.x.x_15-b04)
Java HotSpot(TM) 64-Bit Server VM (build 1.x.x_15-b04, mixed mode)
```

(where *x.x* refers to the appropriate Java version)

The text, 64-Bit Server, indicates that it is running in 64-bit mode.

Note: If the Solaris Java installation does not support the '-d64' parameter, point to a separate 64-bit Java JRE. Contact the system administrator for assistance in locating such a version of Java.

Restart and Verify the Execution Server

After this change to `dme/go.sh` is complete, stop the Execution Server and restart it. When the Execution Server restarts, it should display this text to stdout along with other logging information:

```
sun.arch.data.model: 64
```

If the number displayed is 64, the Execution Server is running in 64-bit mode. If the number displayed is 32, it is still running in 32-bit mode.

Chapter 3.

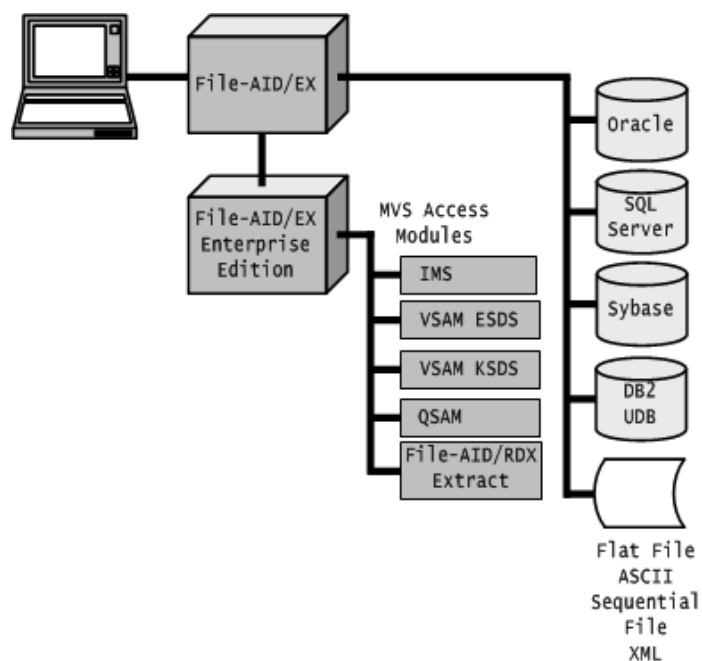
File-AID/EX Enterprise Edition

File-AID/EX Enterprise Edition is an optional addition to File-AID/EX. It provides the MVS Access Modules that enable a developer to access mainframe data on z/OS. Sites must set up a license in the License Management System (LMS) license file on the mainframe LPAR before they can use the MVS Access Modules.

The MVS Access Modules supply many z/OS data sources to the File-AID/EX Execution Server. The access modules can accept requests from a File-AID/EX Execution Server running locally or from a remote File-AID/EX Execution Server connected over the network. The MVS Access Modules use TCP/IP communications connections to communicate over the network. The supported z/OS data sources are: IMS, QSAM, VSAM ESDS, and VSAM KSDS. By moving related DB2 data types to a distributed database, File-AID/RDX extract files are also supported.

Figure 3-1 represents the flow of communication among the facilities of the File-AID/EX Enterprise Edition.

Figure 3-1. File-AID/EX Enterprise Edition Communication Flow



Installing File-AID/EX Enterprise Edition

Refer to the *File-AID Single Install Image Installation and Configuration Guide* for instructions on installing and configuring File-AID/EX Enterprise Edition.

Appendix A.

File-AID/EX Application Programming Interface (API)

File-AID/EX API

File-AID/EX API lets users customize their own applications to make use of File-AID/EX Communication Manager and Execution Server functionality. Via the API, a user's applications can access objects in the repository, execute Extract, Load, ConverterPro and Compare Specifications, and retrieve execution results. Users can develop the applications in Java.

Java-Specific Information

Detailed Java API documentation:

`<FAEX_Install_Dir>\FACSAPI\Java\Doc\index.html`

Java sample programs can be found in:

`<FAEX_Install_Dir>\FACSAPI\Java\Samples`

To use the File-AID/EX Java API, add FACSAPI.jar to the class path. FACSAPI.jar is located in the product install directory in the Dme folder.

Appendix B.

File-AID/EX Supported Field Data Types

This appendix lists the field data types by database that File-AID/EX supports.

Table B-1. Supported Field Data Types

DB2 UDB	Microsoft SQL Server	Oracle	Sybase	Microsoft Access
BIGINT	BIGINT			
	BINARY*		BINARY*	
	BINARY(n)*		BINARY(n)*	
	BIT*		BIT*	
BLOB*		BLOB*		
				BYTE
CHARACTER	CHAR	CHAR	CHAR	
CHARACTER(n)	CHAR(n)		CHAR(n)	
CLOB		CLOB		
				CURRENCY
DATE		DATE	DATE	
	DATETIME		DATETIME	DATE/TIME
DECIMAL	DECIMAL		DECIMAL	DECIMAL
DECIMAL(p,s)	DECIMAL(p,s)		DECIMAL(p,s)	DECIMAL(p,s)
DOUBLE			DOUBLE PRECISION	DOUBLE
FLOAT	FLOAT	FLOAT	FLOAT	FLOAT
FLOAT(n)	FLOAT(n)	FLOAT(n)	FLOAT(n)	
	IMAGE*		IMAGE*	
INTEGER	INT		INT	INTEGER
				LONG INTEGER
LONG VARCHAR				
				MEMO
	MONEY		MONEY	
	NCHAR	NCHAR	NCHAR	
	NTEXT	NCLOB		
NUMERIC	NUMERIC	NUMBER	NUMERIC	NUMBER
NUMERIC(p)		NUMBER(p)	NUMERIC(p)	
NUMERIC(p,s)		NUMBER(p,s)	NUMERIC(p,s)	
	NVARCHAR	NVARCHAR2	NVARCHAR	
	NVARCHAR(MAX)			
		RAW*		
REAL	REAL		REAL	

Table B-1. Supported Field Data Types *(Continued)*

DB2 UDB	Microsoft SQL Server	Oracle	Sybase	Microsoft Access
		ROWID (read only)		
				SINGLE
	SMALLDATETIME		SMALLDATETIME	
SMALLINT	SMALLINT		SMALLINT	
	SMALLMONEY		SMALLMONEY	
	TEXT		TEXT	TEXT
TIME			TIME	
TIMESTAMP	TIMESTAMP*	TIMESTAMP	TIMESTAMP	
		TIMESTAMP WITH LOCAL TIME ZONE		
		TIMESTAMP WITH TIME ZONE		
	TINYINT		TINYINT	
			UNICHAR	
			UNIVARCHAR	
			UNITEXT	
	UNIQUEIDENTIFIER			
	VARBINARY*		VARBINARY*	
	VARBINARY(n)*		VARBINARY(n)*	
	VARBINARY(MAX)*			
DISTINCT UDTs**	DISTINCT UDTs**	STRUCT Type**	DISTINCT UDTs**	
VARCHAR	VARCHAR	VARCHAR2	VARCHAR	
VARCHAR(n) n=1-4000	VARCHAR(n)	VARCHAR2(n)	VARCHAR(n)	
	VARCHAR(MAX)			
XML***	XML***	XMLTYPE***		
				Yes/No*
<p>*Not supported by Dynamic Data Privacy.</p> <p>**STRUCT Type support is limited to one attribute of numeric or a primitive type.</p> <p>*** XML support in File-AID/EX excludes Related Extract and Related Loader.</p> <p>(p) Precision. Indicates the number of digits contained within the Decimal or Numeric data type.</p> <p>(s) Scale. Indicates the number of digits following the decimal point within the Decimal or Numeric data type.</p>				

Appendix C.

Configuring Third-party JDBC Drivers for Use with File-AID/EX

Following is an example of how to configure a third-party JDBC driver to use with File-AID/EX. Some third-party JDBC drivers will work with File-AID/EX, but they are not supported by Compuware. This example is based on a Microsoft-provided MS SQL Server driver, which is considered a third-party driver to File-AID/EX.

Notes:

1. Within ConverterPro, it is possible to configure third-party drivers for use as a SOURCE ONLY. It is not possible to write to these databases. Creating target tables will not work.
2. File-AID/EX does not fully support third-party drivers and there is no guarantee that following these steps will be successful.

Configure the Driver

1. From the Homebase **Tools** menu, select **Execution Server**. Click **Stop** to stop the Execution Server.
2. Put the JDBC driver files for the database to be used in the File-AID/EX “drivers” subdirectory.

Note: The driver may consist of one or more .jar files or a single .zip file. For example, a Microsoft SQL Server driver consists of three files named: Msbase.jar, Mssqlserver.jar, and Msutil.jar.

3. Do one of the following:
 - To run as a batch job, edit the BatchEngine.bat file (located in the “Dme” subdirectory). Locate the parameter “FACS_CLASSPATH” at the top of the file. Using a semicolon delimiter, add the names of the driver file(s) from step 2 and save your changes.

For example, for the aforementioned Microsoft SQL Server driver files named: Msbase.jar, Mssqlserver.jar, and Msutil.jar, change:

```
SET FACS_CLASSPATH=sumatra.jar
```

to:

```
SET FACS_CLASSPATH=sumatra.jar;Msbase.jar;Mssqlserver.jar;Msutil.jar
```

- To run via the GUI, define the driver CLASSPATH by inserting the path and name of the driver .jar file(s) at the front of the Windows System CLASSPATH environment variable.
4. Edit the engineJDBC.properties file (located by default at \ProgramData\Compuware\FAEX\Cfg (Windows Vista and later) or at \Documents and Settings\All Users\Compuware\FAEX\Cfg (prior to Windows Vista) and register the driver by appending it using proper syntax. For example, the syntax for driver string com.microsoft.jdbc.sqlserver.SQLServerDriver is obtained by unzipping the Mssqlserver.jar file and locating the embedded Sqlserverdriver.class file. The class file path is displayed as “com\microsoft\jdbc\sqlserver\”. The driver string is created by changing the backslash characters to periods and adding the class filename.

Note: The driver string is case-sensitive.

5. Within ConverterPro, use the Connector Type “JDBC Connect String” and enter the proper JDBC URL for the driver of the particular database being accessed. For example:

```
jdbc:microsoft:sqlserver://<server name>:<port number>;DATABASENAME=<database name>
```

Note: The URL is case-sensitive.

Examples

The following list is a compilation of cases where File-AID/EX has successfully connected to the unsupported databases using a third party JDBC driver.

Teradata

Connection String

```
"jdbc:teradata://<servername>"
```

See connect string from Teradata driver.

DB2 on AS400

Connection String

```
jdbc:AS400://[ServerName]/[schemaname]
```

Note: Compuware was successful using a JT400.JAR driver.

INFORMIX

Connection String

```
jdbc:informix-sqli://<HOST>:<PORT>/<DB>;INFORMIXSERVER=<SERVER_NAME>
```

Register the Driver for usage within File-AID/CS

Add the following line to the engineJDBC.properties file:

```
com.informix.jdbc.IfxDriver
```

.jar Files that Make Up the Driver

```
ifxjdbc.jar
```

```
ifxjdbcx.jar
```

Intersystems Caché

Connection String

```
jdbc:Cache:// <server name>:1972/SAMPLES
```

```
User ID: _SYSTEM
```

```
Password: sys
```

Register the Driver for usage within File-AID/CS

Add the following line to the engineJDBC.properties file:

```
com.intersys.jdbc.CacheDriver
```

.jar file

```
CacheDB.jar
```

Add to the CLASSPATH system variable

```
C:\InterSystems\Cache\dev\java\lib\JDK15\CacheDB.jar
```


Appendix D.

Maintaining the File-AID Rules Engine

The File-AID Rules Engine is installed with the Execution Server unless the installer explicitly chooses not to install it.

Installing the File-AID Rules Engine from the Topaz for Enterprise Data EP Media

Windows

1. Launch the media browser from either the email link or physical media you received.
2. Select the **Windows Products** tab, then select **File-AID Rules Engine for Windows**. The installation program for the File-AID Rules Engine for Windows launches.
3. Follow the prompts to install the FARE.

Unix Platforms

1. Launch the media browser from either the email link or physical media you received.
2. Select the **UNIX** tab.
3. Select the **File-AID Rules Engine** link for the appropriate platform:
 - File-AID Rules Engine for AIX
 - File-AID Rules Engine for HP-UX
 - File-AID Rules Engine for Linux
 - File-AID Rules Engine for Solaris
4. Copy the **Disk1** folder and all its subfolders and files to a directory on the Unix machine.
5. Issue the command `java -version` to verify that Java is in the path.
6. If Java is not in the path, use these commands to modify the path to reference Java:
 - `export JAVA_HOME=<java path>`
For example, `export JAVA_HOME= opt/compilers/java/1.7`

Note: `java path` does NOT include `/bin/java`.

Note: For Solaris, the "export" word is not required to set variables.

 - `export PATH=$JAVA_HOME/bin:$PATH`
7. Make sure the copied files are executable by issuing the command `chmod -R 777 Disk1`.
8. Navigate to the executable file directory `cd Disk1/InstData/NoVM`.
9. Execute the installer `./installfare.bin`.

Note: The location of the Execution Server, required during the installation, is `/usr/faex` by default.

Note: When working with Dynamic Data Privacy projects that use DB2 translate tables, make sure that the DB2 JDBC drivers are installed with the Execution Server. See “Enabling DB2 JDBC Repository and Database Access Support” on page 16.

Maintaining the FARE

When new maintenance is available, do the following:

1. Log in to the Compuware Support Center (<https://go.compuware.com>) and, from the **Product Support** drop-down list, select **File-AID/EX**. The File-AID/EX product home page appears.
2. Click **Fixes/Downloads**.
3. Click File-AID Rules Engine (FARE) for the appropriate release of File-AID/EX (5.2.1 or higher).
4. Select the correct release of the rules engine from the links provided.

Note: Releases of the FARE are associated with corresponding releases of the Compuware Data Privacy plug-in and the Compuware File-AID Services Server.

5. Extract the zip file to a folder from the appropriate fareXXXmaint link (where XXX is AIX, HPUX, Linux, Solaris, or Windows).
6. Open the downloaded zip file and follow the instructions in the readme faremaint PPP.htm file (where PPP is unix or windows).
7. Repeat this process for each platform on which the FARE is installed.

Identifying the Version of the Installed File-AID Rules Engine

This facility is available only for FARE version 5.0 and above.

On Windows

1. From the install location of the File-AID Rules Engine, modify version.bat to provide the path if JAVA_HOME is not set. The default install location is ../File-AID_EX/Dme/dp.
2. Run version.bat. A one-line output such as, "Compuware File-Aid Rules Engine : 5.0.0", appears indicating the FARE version that is installed.

In Unix Environments

1. From the install location of the File-AID Rules Engine, modify version.sh to add the java path. The default install location is ../usr/faex dme/dp.
2. Run version.sh. A one-line output such as, "Compuware File-Aid Rules Engine : 5.0.0", appears indicating the FARE version that is installed.

Appendix E.

Installing File-AID/EX Silently on Windows

Refer to the following to install or uninstall File-AID/EX silently on Windows.

Silent Install File-AID/EX Full Product to default directory

```
CompuwareFileAIDEX32.exe /w /s /v/qn /vALLUSERS=1 /vADDLOCAL=A11
/vAGREETOORACLELICENSE=yes /vAgreeToLicense=yes /vREPOSITORY_RESULT=keepon

CompuwareFileAIDEX64.exe /w /s /v/qn /vALLUSERS=1 /vADDLOCAL=A11
/vAGREETOORACLELICENSE=yes /vAgreeToLicense=yes /vREPOSITORY_RESULT=keepon
```

Note: The executables are located at <install media root dir>\FG\cpwr\FAEX
Windows\FullInstall.

Silent Install File-AID/EX Execution Server to non-default directory

```
CompuwareFileAIDEX32.exe /w /s /v/qn /vALLUSERS=1
/vADDLOCAL=Core,Execution_Server /vAGREETOORACLELICENSE=yes
/vAgreeToLicense=yes /vREPOSITORY_RESULT=keepon /vINSTALLDIR=c:\fex

CompuwareFileAIDEX64.exe /w /s /v/qn /vALLUSERS=1
/vADDLOCAL=Core,Execution_Server /vAGREETOORACLELICENSE=yes
/vAgreeToLicense=yes /vREPOSITORY_RESULT=keepon /vINSTALLDIR=c:\fex
```

Note: The executables are located at <install media root dir>\FG\cpwr\FAEX
Windows\FullInstall.

Silent Uninstall

To run a silent uninstall, find the PRODUCT CODE for the product to be uninstalled.

1. Open a command prompt as administrator
2. Enter `MsiExec.exe /I<GUID> /qn REMOVE=ALL`

The <GUID> value may be found in the registry under
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\<
GUID>

where <GUID> corresponds to the product to be uninstalled.

