

Tivoli. software

IBM.



Troubleshooting

@business software

IBM Software Group

Objectives

Upon completion of this unit, you will be able to:

- Identify new logging and serviceability functions.
- Identify new information resources.

Diagnostic Tools

• Logs

- Installation
- Application server
- IBM Tivoli Identity Manager server
- Web server
- Directory server
- Database server
- Adapter
- IBM Tivoli Directory Integrator

• Traces

- Server
- Applet

• Diagnostic utilities

- Audit log
- Log file viewer
- Serviceability tool

Installation Logs

- **Troubleshooting installation failures**

- **Location**

- System root
- *ITIM_HOME*
- *ITIM_HOME/install_logs*

- **Key logs**

- General Installation
 - Tivoli_Identity_Manager_InstallLog.log
 - itim_install.stdout/itim_install.stderr
 - itim_installer_debug.txt
- Installation Configuration
 - dbConfig.stdout/dbConfig.stderr
 - ldapConfig.stdout/ldapConfig.stderr
 - runConfig.stdout/runConfigTmp.stdout
- Application Server
 - setupEnrole.stdout
 - StartStopWas.stdout

Application Server Logs

- **Troubleshooting communication errors between IBM WebSphere Application Server and IBM Tivoli Identity Manager**
- **Location**
 - WebSphere Single Server–*WAS_HOME*/logs/server_name
 - WebSphere Deployment Manager–*WAS_NDM_HOME*/logs/dmgr_name
 - Embedded Messaging–*MQM_HOME*/errors
- **Key logs**
 - SystemOut.log
 - SystemErr.log
 - AMQERR01.LOG

Identity Manager Logs

- Troubleshooting processing errors in IBM Tivoli Identity Manager
- Location
 - *TIVOLI_COMMON_DIRECTORY/CTGM/logs*
- Key logs
 - msg.log
 - access.log

Web Server Logs

- Troubleshooting access requests through HTTP server from clients
- **Location**
 - Varies by Web server
 - Apache—`APACHE_HOME/logs`
- **Key logs**
 - Varies by Web server
 - Apache
 - `Access_log`
 - `Error_log`

Directory Server Logs

- **Troubleshooting communication problems between directory server and IBM Tivoli Identity Manager**
- **Location**
 - Varies by directory server and operating system
- **Key logs**
 - Varies by directory server
 - IBM Tivoli Directory Server
 - ibmslapd.log
 - audit.log

Database Server Logs

- **Troubleshooting database errors**
- **Location**
 - Varies by database and operating system
- **Key logs**
 - Varies by database
 - DB2
 - db2diag

Adapter and IBM Tivoli Directory Integrator

- **Troubleshooting failures at the adapter level**
- **Logs**
 - AgentStartError.log
 - *Adapter_Name*.log
- **Configure**
 - Base logging enabled
 - Detailed logging enabled on all components
 - AssemblyLines
 - Connectors

Server Tracing

- Provides method to capture in-depth information
- Configuring with `enRoleLogging.properties`
 - Trace levels
 - `DEBUG_MIN`
 - `DEBUG_MID`
 - `DEBUG_MAX`
 - Trace components
 - `logger.trace.com.ibm.itim.component_name`

Applet Tracing

- Provides method to capture in-depth information separately for applets
- Configuring with `enRoleLogging.properties`
 - `logger.trace.com.ibm.itim.applet.logging = true or false`
 - `logger.trace.com.ibm.itim.applet.level = LogLevel`
- Viewing trace
 - Java plug-in control panel console in client browser

Audit Log

- **Provides diagnostic information for completed requests**
 - Adapter communication
 - Policy enforcement
 - Request approval
- **Location**
 - IBM Tivoli Identity Manager user interface
 - Home tab
 - View completed requests on the task bar
 - Request detail icon
 - Audit log tab on the request header page
 - Request details icon on the audit record row
- **Available to IBM Tivoli Identity Manager administrators**

Log File Viewer

- **Allows filtering of messages from one or more logs by time window, severity, thread identifier, or component**
- **Converts log data into ASCII or HTML**
- **Location**
 - *ITIM_HOME*/bin/logviewer
 - Windows systems: viewer.bat
 - UNIX systems: viewer.sh

Serviceability Tool

- **Collects information for support**

- Collects logs
- Inspects product JAR files
- Gathers some configuration information
- Creates a compressed file with this information to be sent to support
- No sensitive data collected

- **Location**

- *TIVOLI_COMMON_DIRECTORY/scripts*

- **Command**

- Window systems: *serviceability.cmd*
- UNIX systems: *serviceability.sh*

- **Environment variables set during installation**

- *WAS_HOME*
- *ITIM_HOME*
- *PRODUCT_ROOT*

Script Node

- **Helps troubleshoot JavaScript problems**

- **API**

- Enrole.log()
 - Write message to msg.log
- Error Object and Method
 - Report an error from JavaScript and stop the transaction
 - Results can be seen in completed request header
 - Methods
 - setMessage()
 - getMessage()
 - setErrorCode()
 - getErrorCode()
 - Properties
 - Message
 - errorCode

Information Resources

• Publications

- *Read This First*
- *Release Notes*
- *Planning for Deployment Guide*
- *Server Installation and Configuration Guide for WebSphere Environments*
- *Problem Determination Guide*
- *IBM Tivoli Identity Manager Database and Schema Reference Version 4.6*

Information Resources

• Information Center

- http://publib.boulder.ibm.com/tividd/td/ITIM/wwhelp46/en_US/HTML/en/wwhelp/wwhelp/wwhimpl/js/html/wwhelp.htm
- Table of contents, index, search to quickly locate information
- Information for all administrative tasks
- Contextual online help
 - Information formerly contained in hard copy books such as *Policy and Organization Administration Guide*, *End User Guide*
 - Enhanced JavaScript information
 - Enhanced examples

Summary

You should now be able to:

- Identify new logging and serviceability functions.
- Identify new information resources.

© Copyright IBM Corporation 2000 - 2006. All rights reserved.

U.S. Government Users Restricted Rights - Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

IBM web site pages may contain other proprietary notices and copyright information which should be observed.

IBM trademarks

<http://www.ibm.com/legal/copytrade.shtml#ibm>

Fair use guidelines for use and reference of IBM trademarks

<http://www.ibm.com/legal/copytrade.shtml#fairuse>

General rules for proper reference to IBM product names

<http://www.ibm.com/legal/copytrade.shtml#general>

Special attributions

IBM, the IBM logo and DB2 are trademarks of International Business Machines Corporation in the United States, other countries, or both.

MMX, Pentium, and ProShare are trademarks of Intel Corporation in the United States, other countries, or both.

Microsoft and Windows NT are trademarks of Microsoft Corporation in the United States, other countries, or both.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Other company, product or service names may be trademarks or service marks of others.