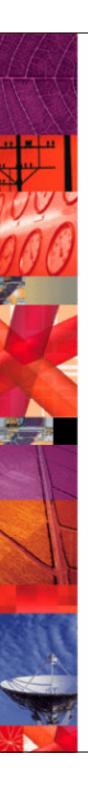






# **Troubleshooting**





# **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
    - -IdapConfig.stdout/IdapConfig.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



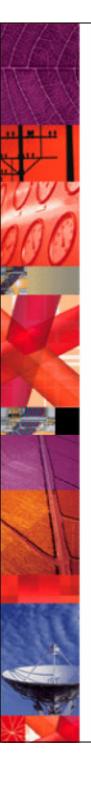


# **Server Tracing**

- Provides method to capture in-depth information
- Configuring with enRoleLogging.properties
  - Trace levels
    - -DEBUG\_MIN
    - -DEBUG\_MID
    - $-\mathsf{DEBUG\_MAX}$
  - 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





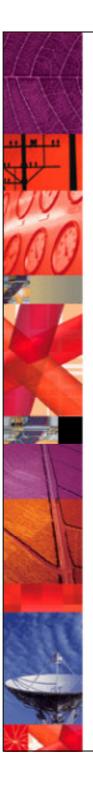


### **Audit Log**

- 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





#### 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



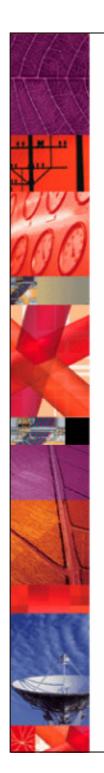


### **Script Node**

- 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



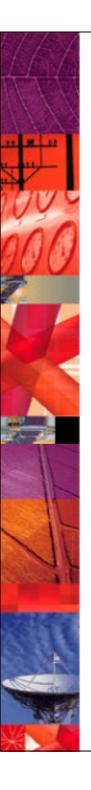


# Information Resources

- Information Center
  - http://publib.boulder.ibm.com/tividd/td/ITIM/wwhelp46/en\_US/HTML/en/w whelp/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





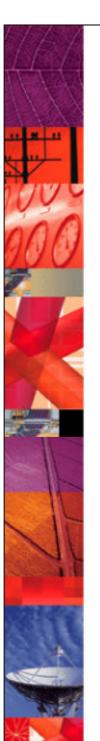


# **Summary**

#### You should now be able to:

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





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