Logging and Troubleshooting

This chapter describes how to set TES log levels and provides troubleshooting information:

- TES Logging, page 3-1
- Troubleshooting TES when the Master or Client Manager Will Not Start, page 3-4

TES Logging

TES supports logging of all actions by all TES components. This section provides the location of the log files, and describes how to control the logging levels for each:

- Log Files and Location, page 3-1
- Controlling the Logging Levels, page 3-2

Log Files and Location

Here is the location of the log files for TES components:

Master Logs
<master install dir>\logs

Client Manager process logs:
<CM install dir>\logs\n
Client Manager sync logs (for information between the CM and it's cache DB):
<CM install dir>\plugins\tes-6.0\logs

Adapter Host logs:
<master install dir>\logs\n
Adapter logs:
<master install dir>\services\<GUID of adapter name, found in the adapter button in the client>\log\n
Agent logs:
<agent install dir>\<agent instance name>\logs\ES_<name of master>_<date optional>.log
Controlling the Logging Levels

Logging is controlled in different ways depending on the TES component as described in these sections:

- Setting the Logging Level for the Master, page 3-2
- Setting the Logging Level for the Client Manager, page 3-2
- Setting the Logging Level for Agents, page 3-3
- Setting the Logging Level for Adapters, page 3-3
- Setting the Logging Level for Transporter, page 3-3
- Setting the Logging Level for Fault Monitor, page 3-4

Setting the Logging Level for the Master

To set the logging level for the Master:

1. Open the TES Web or Java Client.
2. Select Activities > System Configuration.
3. Select the Logging tab.
4. Choose the logging level from the drop down menus for each of the objects listed below. Logging levels include: None, Severe, Warning, Info, Low Debug, Medium Debug, or High Debug.
   - Schedule Log
   - Client Manager Log
   - Agent Manager Log
   - Compiler Log
   - Job Manager Log
   - Event Manager Log
   - Queue Manager Log
   - Database Log
   - Communication Log

Setting the Logging Level for the Client Manager

To set the logging level for the Client Manager:

1. Add the following to the bottom of the ClientManager/config/tesXXX.dsp:
   
   #AND clientmgr.props files
   
   DspLog=FINEST
   
   CacheLog=FINER
   
   RequestLog=FINE
   
   RpcLog=WARNING
   
   ClientLog=SEVERE
   
   MaxLogFiles=1000 #allocates a gig

2. Restart the Client Manager.
Setting the Logging Level for Agents

To set the logging level for Windows agents:

Step 1  Open the TIDAL Service Manager on the agent machine.
Step 2  Select the agent in the drop down list.
Step 3  Click on the dots [...].
Step 4  In the Service tab, change the path to include the DEBUG option to read "DEBUG=HIGH".
Step 5  Click OK to save changes.
Step 6  Restart the agent.

To set the logging level for Unix agents:

Step 1  Go to the agent machine and go to the directory the agent is installed in.
Step 2  Go to "Bin/" and edit "tagent.ini".
Step 3  Under "[config]" put "ovb=tidaldebug".
Step 4  Restart the agent.

Setting the Logging Level for Adapters

To set the logging level for adapters:

Step 1  Open the TES Web or Java Client.
Step 2  In the Navigator, click Connections.
Step 3  Locate and double-click the Master connection (Type=Master) to open its editor.
Step 4  For Host Environment Log, choose the logging level.

Setting the Logging Level for Transporter

To set the logging level for Transporter:

Step 1  Edit transporter.props in the Transporter’s config directory:

```
XPORTER_DEBUG=YES
TransporterLog=FINEST
TransporterUILog=FINEST
TransporterJobLog=FINEST
TransporterDataLog=FINEST.
```
### Setting the Logging Level for Fault Monitor

To set the logging level for Fault Monitor:

**Step 1**
Edit Primary Master and Backup Master master.props file.
```
FaultToleranceLog=INFO
```

**Step 2**
Edit Fault Monitor master.props file:
```
FaultMonitorLog=INFO
FaultToleranceLog=INFO
```

### Troubleshooting TES when the Master or Client Manager Will Not Start

If your Master or Client Manager will not start and no logs are created in the logs directories, your system probably has a problem loading the Java Virtual Machine (JVM). Java uses a JVM to execute its processes inside, so if the system cannot launch the JVM, then the TES code cannot run.

**To troubleshoot and resolve a Java problem**

**Step 1**
Make sure Java is installed and in the PATH. Run this on a command line:
```
java -version
```

**Step 2**
Find where your java lives:

Unix:
```
which java
```

Windows:
```
where.exe java (only works on win 2003 and later)
```

**Step 3**
Make sure that your master.props or clientmgr.props files match this location.

Unix:
```
No further Unix troubleshoot should be required. Open a TAC case if you still have no success running the master or Client Manager.
```

Windows:
```
Make sure regedit matches this location in the following keys:

a. Launch regedit.exe

b. HKEY_LOCAL_MACHINE\SOFTWARE\JavaSoft\Java Runtime Environment\1.7*

The JavaHome and the RuntimeLib should have their locations verified for accuracy. Make sure that "client" and "server" in the RuntimeLib string are correct. This is often the issue.

*If you have multiple 1.7 and 1.7.0.X keys here, make sure that both are correct.
If you are trying to install the Java client, edit the tesclient.bat file and verify the paths inside. These can be edited if they are incorrect as discovered in steps 1 and 2.
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