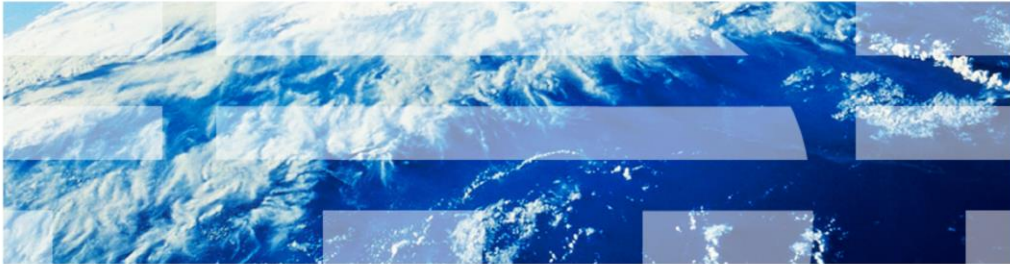IBM Tivoli Business Service Manager V6.1

Modify trace levels from command line

© 2012 IBM Corporation

IBM Tivoli® Business Service Manager V6.1, modify trace levels from the command line.

When you work with a Tivoli Support engineer, you might be asked to set specific tracing on the IBM Tivoli Business Service Manager servers. This presentation provides the necessary steps to view and set these trace levels.

Assumptions

- Environmental variable <TBSM_HOME> is set
- Tivoli Business Service Manager servers run in a Tivoli Integrated Portal environment, which is based on WebSphere® Application Server Express 7.0 (eWAS)
- WebSphere Application Server Express 7.0 user ID and password
- WebSphere Application Server Express 7.0 profiles are created:
  - TBSMProfile
  - TIPProfile

Before you proceed, make note of these assumptions:

1. The environmental variable $TBSM_HOME (for UNIX®) or %TBSM_HOME% (for Windows®) is set. By default, <TBSM_HOME> is **opt/IBM/tivoli/tbsm** for UNIX and **C:\IBM\tivoli\tbsm** for Windows.

2. The Tivoli Business Service Manager data and dashboard servers both run in a Tivoli Integrated Portal environment, which is based on WebSphere Application Server Express 7.0.

3. The Tivoli Business Service Manager user ID that is running the commands to modify trace levels must know the WebSphere Application Server Express 7.0 administrative user ID and password. Typically, the user ID is **tipadmin**.

4. This user ID is the administrator ID that is set during the installation of Tivoli Business Service Manager. It is also the same user ID and password for all Tivoli Business Service Manager data and dashboard servers in a Tivoli Business Service Manager system.

5. During the installation, two WebSphere Application Server profiles are created. **TBSMProfile** on the data server and **TIPProfile** on the dashboard server. You use the administrator (tipadmin) user account to modify trace specifications for these two profiles.

Objectives

When you complete this module, you can perform these tasks:

- Use **setTraceLevel** command to determine the current trace settings
- Use **setTraceLevel** command to set the correct trace settings for a Tivoli Business Service Manager server

Modify trace levels from command line

When you complete this module, you can use the setTraceLevel command to determine the current Tivoli Business Service Manager server trace settings and set the correct trace settings for a Tivoli Business Service Manager server.

Running the tool

- UNIX: $TBSM_HOME/bin/**setTraceLevel**.sh
- Windows: %TBSM_HOME%\bin**setTraceLevel**.bat

SetTraceLevel is a tool for modifying Tivoli Business Service Manager trace specifications for either TIPProfile or TBSMProfile.

You run the tool from the <TBSM_HOME>/bin directory.

On a UNIX server, **SetTraceLevel** is a script ending in **.sh**, and on a Windows server the file ends with **.bat**.

Both of these commands call a **Jython** script named **setTraceLevel.jy** to invoke WebSphere Application Server Express 7.0 administrative functions.

Usage

setTraceLevel <eWAS userID> <eWAS password> <dashboard | data> [options]

Use **dashboard** if modifying Tivoli Integrated Portal dashboard settings.

Use **data** if modifying data server settings.

The syntax is **SetTraceLevel** *<tipadmin> <password for tipadmin>*, and either **data** or **dashboard**. The choice of data or dashboard depends on whether you are setting the trace level for the data server, which is the TBSMProfile, or for the dashboard server, which is the TIPProfile. Next, are some available options.

Options

- **-display**   Shows current runtime trace settings
- **-resetall**   Sets all runtime tracing to the default installation level
- **-setstartup**   Uses the current runtime trace settings to set the startup trace settings
- **-addtrace**   Adds these trace specifications to the runtime trace settings
- **-setTraceOutputToFile**   <tracefilesizeMB> <tracefilecount>

6   Modify trace levels from command line   © 2012 IBM Corporation

For a full list of **SetTraceLevel** options, see the *Tivoli Business Service Manager 6.1 Troubleshooting Guide* or the online help. This presentation reviews the most common options, which might be requested by a Tivoli Support engineer. These options include:

<dash>display

<dash>resetall

<dash>setstartup

<dash>addtrace and

<dash>setTraceOutputToFile, which is used with two numeric parameters: *<trace file size MB>* and *<trace file count>*.

setTraceLevel with -display

setTraceLevel.<sh/bat> tipadmin tipadmin data -display

Type either setTraceLevel.sh or setTraceLevel.bat depending on whether you run on UNIX or Windows

```
WASX7209I: Connected to process "server1" on node TBSMNode using SOAP connector;  The type of pro
cess is: UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and are available as arg
uments that are stored in the argv variable: "[-display]"
Current runtime trace specifications ...
Trace specification is:
*=info
com.ibm.tbsm.*=fine
com.micromuse.*=fine
[tbsmadm@nc049102 bin]$
```

The **-display** options output shows current runtime trace settings.

The screen capture shows the results of running the **setTraceLevel** command on a Tivoli Business Service Manager data server with the **-display** option.

You must type either setTraceLevel with a .sh extension (for UNIX) or type .bat when running on Windows.

The remaining examples in this presentation use .sh because the commands and their outputs are from a Linux® server.

In this case, the results show that the trace specification for the TBSMProfile are currently set to:

*=info

com.ibm.tbsm.*=fine

and **com.micromuse.*=fine**

setTraceLevel with -resetall

- setTraceLevel.sh tipadmin tipadmin data –resetall
- Default data and dashboard server trace specification:
  - com.ibm.tbsm.*=fine
  - com.micromuse.*=fine

```
WASX7209I: Connected to process "server1" on node TBSMNode using SOAP connector;  The type of
process is: UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and are available as
arguments that are stored in the argv variable: "[-resetall]"
Trace specification is:
*=info
com.ibm.tbsm.*=fine
com.micromuse.*=fine
[tbsmadm@nc049102 bin]$
```

8   Modify trace levels from command line   © 2012 IBM Corporation

You use the **-resetall** option to set all runtime tracing to the default installation level.

The screen capture shows the results from running the **setTraceLevel** command on a Tivoli Business Service Manager data server with the Tivoli Business Service Manager **-resetall** option.

The results return the trace specifications:

*=info

com.ibm.tbsm.*=fine

and **com.micromuse.*=fine**

setTraceLevel (trace specification)

- eWAS profile
  *=info

- Tivoli Business Service Manager default specification
  =info:com.ibm.tbsm.=fine:com.micromuse.*=fine

A colon is used to separate each trace item

Modify trace levels from command line
© 2012 IBM Corporation

A trace specification is a colon-separated list that assigns logging levels to an individual logger or a group of loggers.

The default trace specification for each eWAS profile is ***=info**.

However, in Tivoli Business Service Manager, the default trace specification is ***=info:com.ibm.tbsm.*=fine:com.micromuse.*=fine**.

This trace level creates the **trace.log** file so that it contains a modest level of tracing from components that are specific to Tivoli Business Service Manager.

setTraceLevel with -setstartup

setTraceLevel.sh tipadmin tipadmin data –setstarup

```
WASX7209I: Connected to process "server1" on node TBSMNode using SOAP connector;
  The type of process is: UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and are available
 as arguments that are stored in the argv variable: "[-setstartup]"
Trace specification is:
*=info
com.ibm.tbsm.*=fine
com.micromuse.*=fine
[tbsmadm@nc049102 bin]$
```

The **-setstartup** option holds current runtime trace settings after a restart. You might run this option after updating trace settings to ensure that the new settings are available after you restart a Tivoli Business Service Manager server.

The screen capture shows the results from running the **setTraceLevel** command on a Tivoli Business Service Manager data server with the **-setstartup** option.

The results return the trace specifications:

*=info

com.ibm.tbsm.*=fine

and **com.micromuse.*=fine**

setTraceLevel with -addtrace

```
setTraceLevel.sh tipadmin tipadmin data –addtrace
"com.ibm.tbsm.*=finer:com.micromuse.*=finer"
```

```
WASX7209I: Connected to process "server1" on node TBSMNode using SOAP connec
tor;  The type of process is: UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and
 are available as arguments that are stored in the argv variable: "[-addtrac
e, com.ibm.tbsm.*=finer:com.micromuse.*=finer]"
Trace specification is:
*=info
com.ibm.tbsm.*=finer
com.micromuse.*=finer
[tbsmadm@nc049102 bin]$
```

Modify trace levels from command line   © 2012 IBM Corporation

The screen capture shows the results from running the **setTraceLevel** command on a Tivoli Business Service Manager data server with the **-addtrace** option. The details to modify are between double quotation marks, and each trace component is separated with a colon.

The resulting trace specifications are returned:

*=info

com.ibm.tbsm.*=finer

and **com.micromuse.*=finer**

This example is the most common trace specification that is requested by Tivoli support engineers for a data server.

setTraceLevel with -addtrace

Most of the examples use *data*, however, here you use dashboard to modify the TIPProfile trace levels

setTraceLevel.sh tipadmin tipadmin **dashboard** –addtrace
"com.ibm.isclite.*=all:com.ibm.isc.*=all:com.ibm.iscportal.*=all"

```
WASX7209I: Connected to process "server1" on node TIPNode using SOAP connector;  The type of pr
ocess is: UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and are available as a
rguments that are stored in the argv variable: "[-addtrace, com.ibm.isclite.*=all:com.ibm.isc.*
=all:com.ibm.iscportal.*=all]"
Trace specification is:
*=info
com.ibm.isc.*=all
com.ibm.isclite.*=all
com.ibm.iscportal.*=all
com.ibm.tbsm.*=fine
com.micromuse.*=fine
[tbsmadm@nc049102 TIPProfile]$
```

12   Modify trace levels from command line   © 2012 IBM Corporation

This screen capture shows the results from running the **setTraceLevel** command on a Tivoli Business Service Manager dashboard server with the **-addtrace** option.

The results return trace specifications:

 *=info

com.ibm.isclite.*=all

com.ibm.isc.*=all

com.ibm.iscportal.*=all

com.ibm.tbsm.*=fine

and **com.micromuse.*=fine**

This example is the most common trace specification requested by Tivoli support engineers for a Tivoli Integrated Portal dashboard server.

setTraceLevel with -setTraceOutputtoFile

- -setTraceOutputtoFile <tracefilesizeMB> <tracefilecount>
- setTraceLevel.sh tipadmin tipadmin data **-setTraceOutputtoFile 20 50**

```
WASX7209I: Connected to process "server1" on node TBSMNode using SOAP connector;  The type of process is:
UnManagedProcess
WASX7303I: The following options are passed to the scripting environment and are available as arguments th
at are stored in the argv variable: "[-setTraceOutputToFile, 20, 50]"
ENTER setTraceOutputToFile()...
    mbyteSize = 20
    numFiles = 50
    tracetype='basic'

Get runtime trace file name ...
... trace file name = /opt/IBM/tivoli/tip/profiles/TBSMProfile/logs/server1/trace.log
Invoking: setTraceOutputToFile('/opt/IBM/tivoli/tip/profiles/TBSMProfile/logs/server1/trace.log', 20 , 5
0 , 'basic')
setTraceOutputToFile() returned
[tbsmadm@nc049102 bin]$
```

13   Modify trace levels from command line   © 2012 IBM Corporation

For this example, the **-setTraceOutputtoFile** option uses two additional parameters: *<trace file size in megabytes>* and *<trace file count>*.

In this case, the trace file size is set to **20 MB**, and the number of trace files to create before rollover is increased to **50** files.

The screen capture shows the results from running the **setTraceLevel** command on a Tivoli Business Service Manager data server with the **-setTraceOutputtoFile** option.

The output also returns the **trace.log** name and directory location.

Now that you completed this module, you can use the setTraceLevel command to determine the current Tivoli Business Service Manager server trace settings and set the correct trace settings for a Tivoli Business Service Manager server.