IBM Tivoli Composite Application Manager for Internet Service Monitoring agent 7.4.0 Fix Pack 3

Troubleshooting Guide



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Chapter 1. Troubleshooting basics

To troubleshoot a problem, gather information about the problem for IBM® Software Support, use logging data, and consult the lists of identified problems and workarounds.

For general troubleshooting information, see the IBM Tivoli Monitoring Troubleshooting Guide.

You can resolve some problems by ensuring that your system matches the system requirements. The most up-to-date requirements are in the <u>Software product compatibility reports</u> (http://publib.boulder.ibm.com/infocenter/prodguid/v1r0/clarity/index.html).

The following activities can help you find a solution to the problem you are having:

- "Gathering product information for IBM Software Support" on page 1
- "Using logging" on page 2
- "Consulting the lists of identified problems and workarounds" on page 2

Gathering product information for IBM Software Support

Before contacting IBM Software Support about a problem you are experiencing with this product, gather the information shown in Table 1 on page 1.

Table 1. Information to gather before contacting IBM Software Support			
Information type	Description		
Log files	Collect trace log files from failing systems. Most logs are located in a logs subdirectory on the host computer.		
	For general information about the IBM Tivoli® Monitoring environment, see the <i>Tivoli Enterprise</i> <i>Portal User's Guide</i> .		
Internet Service Monitors information	Version number and patch level		
Operating system	Operating system version number and patch level		
Messages	Messages and other information displayed on the screen		
Version numbers for IBM Tivoli Monitoring	Version number of the following members of the monitoring environment:		
	IBM Tivoli Monitoring. Also provide the patch level, if available.		
	ITCAM for Internet Service Monitoring agent		
Screen captures	Screen captures of incorrect output, if any		
(UNIX systems only) Core dump files	If the system stops on UNIX systems, collect the core dump file from the <code>install_dir/bin</code> directory, where <code>install_dir</code> is the directory where you installed the monitoring agent.		

You can use the pdcollect tool to collect the most commonly used information from a system. This tool gathers log files, configuration information, version information, and other data. For more information about using this tool, see "pdcollect tool" in the *IBM Tivoli Monitoring Troubleshooting Guide*.

For information about working with IBM Software Support, see IBM Support Portal
Service Requests and PMRs (http://www.ibm.com/support/entry/portal/Open_service_request/Software/Software_support_(general)).

Using logging

Logging is the primary troubleshooting feature in the monitoring agent. *Logging* refers to the text messages and trace data that is generated by the agent. Messages and trace data are sent to a file.

Trace data captures transient information about the current operating environment when a component or application fails to operate as designed. IBM Software Support personnel use the captured trace information to determine the source of an error or unexpected condition.

Consulting the lists of identified problems and workarounds

Known problems are organized into types such as those in the following list to make them easier to locate:

- Installation, configuration, uninstallation
- · Remote deployment
- Agent
- Workspace
- Situation
- Take Action commands
- · Discovery Library Adapter
- · Tivoli Common Reporting

For general troubleshooting information, see the IBM Tivoli Monitoring Troubleshooting Guide.

Chapter 2. General troubleshooting

Some problems may be common to all ITCAM for Transactions agents.

Agent is not running correctly on Windows

The problem: I installed an agent under an Administrator domain account on a Windows system, but the agent does not run correctly. What do I need to do to install the agent?

The solution:

Important: On Windows systems, install agents using a local Administrator account rather than a domain account, such as an account defined by Active Directory. If the default Administrator account is not available, create a new local user account and add that account to the local Administrators' group. You can then install agents using the new local user account.

Other requirements include:

- 1. Check the prerequisites before installing.
- 2. Do not install agents on a drive that is mapped to another server.
- 3. Restart the Windows computer after installing an ITCAM for Transactions agent. Restarting updates the Windows registry.

Agents cannot send data to the Tivoli Data Warehouse with IBM Tivoli Monitoring 6.2.2 fix pack 3

The problem: For IBM Tivoli Monitoring 6.2.2 fix pack 3 and later, default port numbers for the Tivoli Data Warehouse Warehouse Proxy Agent were introduced. Agents no longer use port 6014 to send data to the Warehouse Proxy Agent.

The solution: Update your agents to send data to the Warehouse Proxy Agent using the following new default listener ports for IBM Tivoli Monitoring 6.2.2 fix pack 3 and later:

- For IP.PIPE, 63358
- For IP.SPIPE, 65100

Cannot install some components

The problem: Cannot install some ITCAM for Transactions components when IBM Tivoli Monitoring V6.3.0.1 is already installed on 64-bit Windows systems.

The solution: If you are installing ITCAM for Transactions components on 64-bit Windows systems with IBM Tivoli Monitoring V6.3.0.1 components installed, install the 32-bit V6.3.0.1 Tivoli Enterprise Management Agent Framework from the IBM Tivoli Monitoring V6.3.0.1 installation media before installing ITCAM for Transactions agents.



Chapter 3. Internet Service Monitoring troubleshooting

Use this information to help troubleshoot any problems that you may encounter with Internet Service Monitoring.

Troubleshooting the Internet Service Monitoring installation

If you are experiencing difficulties after installing Internet Service Monitoring check here first to help you resolve any problems.

• The Internet Service Monitoring Configuration icon does not appear in the Tivoli Enterprise Portal.

If the Internet Service Monitoring Configuration icon does not appear in the Tivoli Enterprise Portal toolbar when Internet Service Monitoring installation is complete, do the following:

- Check that Tivoli Enterprise Portal Server, and Tivoli Enterprise Portal desktop or Tivoli Enterprise
 Portal browser support are installed for Internet Service Monitoring on the appropriate machines
- Reconfigure the Tivoli Enterprise Portal Server using the command line or Manage Tivoli Enterprise Monitoring Services
- Clear the Java cache using the Windows Control Panel
- If using the Tivoli Enterprise Portal browser, clear the web browser cache

• A node running the Internet Service Monitors is not displayed in the Navigator.

If the node is not visible at all, the connection between the Internet Service Monitoring Agent and the Tivoli Enterprise Monitoring Server is not configured correctly. Reconfigure the Internet Service Monitors on that node.

The Internet Service Monitoring workspaces are not displayed in the Navigator.

If the Internet Service Monitoring workspaces are not visible at all, check that you have installed the Tivoli Enterprise Portal Server support files on the computer running Tivoli Enterprise Portal Server.

• The Internet Service Monitoring workspaces are displayed in the Navigator, but have unusual names.

If the workspaces are visible, but have names starting with KIS, check that you have installed the Tivoli Enterprise Portal Desktop Client support files on the computer running the client.

• The Internet Service Monitoring workspaces are not available.

If the workspaces are visible but not available, the Internet service monitoring agent has run in the past but conditions have changed: either the agent is not running now or the connection information to the Tivoli Enterprise Monitoring Server has changed.

· When does polling start and when should I see data in the workspaces?

Polling starts when the Internet service monitoring agent starts and at every poll interval specified by the profile element. If you do not see any data, check the poll interval and check that the Databridge and monitors are running.

If you installed on a distributed system, check that you installed the correct support files on each computer.

There is no data in the history workspaces

Check that you have configured the historical data collection for the data source. In addition, if using the Tivoli Data Warehouse for long-term reporting, check that you have configured the pruning and summarization of the data.

If the Internet service monitoring agent is active and historical data is configured, but there is still no data in the history workspaces, check that the Internet service monitoring agent is running.

Troubleshooting the Databridge

Use the following guidelines when troubleshooting problems with the Databridge:

- Check the Databridge error log, \$ISMHOME/log/bridge.err, for messages about errors occurring when the Databridge starts:
 - If the Databridge log file contains the following error:

```
Failed to open Properties file: filename
```

check that the path and filename of the properties file specified in the Databridge properties file are correct. On Windows, specify path separators using \ in place of \ /.

- If the log file indicates that the Databridge cannot load a module, check for errors in the module's shared library name in the Databridge properties file.
- If the Databridge log file contains the following, ObjectServer IBM Tivoli Netcool/OMNIbus related, error:

```
Failed to read rules - aborting
```

- check that the target ObjectServer IBM Tivoli Netcool/OMNIbus ObjectServer is running.
- confirm that property values in the ObjectServer module properties file are correct.
- confirm that the rules files are correct.
- If you have connected the ObjectServer module to the Databridge and the Databridge will not start, confirm that the target ObjectServer IBM Tivoli Netcool/OMNIbus is running before you start the Databridge, or set the ObjectServer module AutoSAF property to 1.

303 status code default data validation condition

The problem: 303 status code default data validation condition is not visible under the DVC tab in old profiles for http and https monitor elements after agent upgrade. HTTP and HTTPS URL responses are not evaluated for 303 status codes.

The solution: The page is already loaded for the old profiles, hence after upgrading the agent, when the profile is opened in edit mode, the old data gets fetched. Hence 303 status condition does not get added after agent upgrade. Add the 303 status code condition under the DVC tab manually for old profiles containing http and https monitor elements as below:

Metric	Operator	Operand	Status
Status	!-	303	Failed

Internet Service Monitoring monitors do not start and cannot save profiles

The problem: There are many problems including that the Internet Service Monitoring monitors do not start, the situations and Take Actions are not working, the profiles do not save to the agent, and resynchronization is failing.

The solution: The system has different versions of the Internet Service Monitoring agent and Internet Service Monitoring support installed. Ensure that all agents are the same version and clear the Java cache.

Old HTTP, HTTPS, ICMP, or TRANSX profiles are not working properly after upgrade

The problem: HTTP, HTTPS, ICMP, or TRANSX profiles do not work as expected after upgrading to Internet Service Monitoring V7.2 or V7.3 and running an ismbatch command, such as -copy, -activate, -monitoring, or -addoidold.

The solution: If you have any old profiles that were not created using the Tivoli Enterprise Portal, run the ismbatch command -updateall. This command updates the profiles and makes them compatible with Internet Service Monitoring V7.2 and V7.3.

HTTP service tests return error code 500

The problem: When testing an HTML page, the monitor returns the HTTP error code 500, even though the target page can be viewed with a browser.

The solution: Using the Internet Service Monitoring Configuration console, open the HTTP element that is causing the error, select the **Parameters** tab, and create an entry as follows:

• Name: User-Agent

• Value: Mozilla/4.0 (compatible; MSIE 5.01; Windows NT 5.0)

• Type: HEAD

Databridge terminates unexpectedly

The problem: The Databridge is correctly configured and has been running for a long period of time, then terminates unexpectedly. The bridge.log file contains the message *TimeStamp* Warning: New value for field Identifier truncated to 255 characters.

The solution: The HTTP or HTTPS rules files may be generating Identifier fields that are too long. To reduce the length of this field, edit the HTTP or HTTPS rules file and remove \$page element from the Identifier rule. The rule for creating a shorter version of the Identifier field is:

@Identifier = \$profile + \$service + \$FQHostname + \$host + \$port + \$message + \$status

Events are not forwarded to the ObjectServer

The problem: After correct operation for some time, the ObjectServer module stops sending events to the target ObjectServer, and the Databridge log file, bridge.log, contains messages of the format *TimeStamp* Error: Queue 0 full, event from *ip_address:port* is lost!

The solution: This problem occurs when the Databridge is unable to process the volume of events received from the monitors. To enable the Databridge to process greater event volumes, increase the value of its QSize property, which is defined in the bridge.props file. Additionally, increase the ObjectServer module's BufferSize property, which is defined in the objectserver.props file.

Internet Service Monitoring remote deployment fails

The problem: Deploying an Internet Service Monitoring agent remotely to a Windows computer fails.

If a remote deployment fails, you might see the following errors:

• Error KDY1024E. Run ./tacmd getDeployStatus to see the following error message:

Error Message : KDY1024E: The agent failed to respond to the command C:\PROGRA11\ISM\installITM\Batch\kincli -startagent -akis did not start or stop agent. The command returned a failure return code.

• Installation log files on the remote agent showing that the installation failed. The log files are in the C:\Program Files\ISM\InstallITM_dir\Abort*.log directory. The log file contains the following message

Java home found at C:\Program Files\IBM\Java50\jre
The system cannot find the path specified

- Java does not exist at the location defined by Java home above.
- The Windows registry at HKLM\Software\IBM\Java2 Runtime Environment contains the key that sets JavaHome to the location of Java home shown above.

The solution: If the JavaHome registry key exists, but is invalid, the remote deployment fails. Delete the registry key at HKLM\Software\IBM\Java2 Runtime Environment. Deleting the key forces the remote deployment to install Java before installing the Internet Service Monitoring agent.

Internet Service Monitoring profiles are Out of Sync

The problem: The Internet Service Monitoring agent detected discrepancies between the Internet Service Monitoring profile definitions on the agent, and the same profile definitions on the Tivoli Enterprise Portal Server.

A status of **Out of Sync** is shown in the Internet Service Monitoring Configuration window.

The agent compares the Internet Service Monitoring profile definitions on the Tivoli Enterprise Portal Server with the active Internet Service Monitoring profile XML files in the ISMHOME\profiles\active directory on the agent. Discrepancies can occur for the following reasons:

- The **ismbatch** command was used to create or modify a profile, so the profile was not saved to the Tivoli Enterprise Portal Server.
- The local XML profile files on the agent were manually edited.
- A configuration action failed. For example, an attempt was made to modify the configuration when the agent where the profile is deployed was offline.

The solution: Resynchronize the agent to replace the active profile XML files on that agent with the current definitions of those profiles on the Tivoli Enterprise Portal Server database.

To resynchronize the profiles on an agent:

- 1. In the Systems list in the Internet Service Monitoring Configuration window, select an agent with a status of Out of Sync.
- 2. Click **Resync Agent**.
- 3. Click **OK** to confirm that you want to replace the local profiles with those profiles stored on the Tivoli Enterprise Portal Server.

Error KFWITM393E

The problem: When I run the **ismconfig** command, the command fails with the error message "KFWITM393E User ID or password is invalid".

The solution: An administrator's user name and password is required. When you first log into Internet Service Monitoring Configuration command-line interface, you will be prompted for your Tivoli Enterprise Portal user credentials.

You can include an administrator ID in each **ismconfig** command, or configure the ismconfig.props file with the credentials.

For example, use the **-u** parameter to specify the user name when you log in:

\$CANDLE_HOME/arch/cj/lib/ismconfig.sh [-u username] -command[parameter=value ...]

Tip: To update your password, delete the password entry from the ismconfig.props file. You will be prompted for your new password when you next log in.

SOAP monitor fails to connect to **SOAP** service

The problem: The SOAP monitor fails to connect to the SOAP service and the the following error message can be seen in the soap.log file.

```
Error: SoapFaultException: ARERR [9200]
User has no access permission to transaction_name
```

The solution: In Internet Service Monitoring V7.2 and V7.3, SOAP monitors only support HTTP authentication, not SOAP Header authentication. Configure your web server to use HTTP authentication.

ismconfig does not process SOAP input correctly

The problem: On Windows systems, when using ismconfig.cmd, the string '\" \"' will be parsed as '\"'.

For example:

```
C:\IBM\ITM\CNP>ismconfig.cmd -u sysadmin -p g0vmware -config "-add monitor=SOAP
profile=SOAPO3 @SOAPInputs [ symbol:string='\" IBM \"' ]"
```

will yield the following record:

```
(Profile: SOAP03)
 Index 0
 Checksum guicli_1374815981423_408_2d08
 Arguments: {
  timeout = '10'
   failureretests = '0'
   operationnamespace = ''
   wsdl = '
   location = ''
   username = ''
   operation = ''
   retestinterval = '10'
   password =
   description = 'SOAP element.'
   poll = '300'
 SOAP Parameters:
   Inputs:
     symbol:string='\ IBM "'
]
```

The solution: Either correct the error in the Internet Service Monitoring Configuration, or use the following string in the input:

```
'\\\""" '
```

For example:

```
ismconfig.cmd -config "-add monitor=SOAP profile=SOAP01 @SOAPInputs
[ symbol:string='\\\""" IBM \"' ] "
```

Cannot uninstall Internet Service Monitoring

The problem: If Internet Service Monitoring is installed on a system with IBM Tivoli Monitoring V6.2.3, it cannot be uninstalled using the uninstall.sh script supplied.

The solution: To uninstall Internet Service Monitoring, first update the uninstall.sh script by completing the following steps:

- 1. Copy \$CANDLEHOME/bin/uninstall.sh to \$CANDLEHOME/bin/uninstall.sh.safe.
- 2. Edit \$CANDLEHOME/bin/uninstall.sh:
 - a. Locate the line containing the string "grep -v \${pc}t"
 - b. Modify the string to be "grep -v registry/\${pc}t"
 - c. Save \$CANDLEHOME/bin/uninstall.sh
- 3. Run the uninstall.sh script.

ISM with new line or carriage return in regular expression not working

The problem: It is not possible to configure a profile element to handle a multi-line response from a server (embedded CR/LF).

The solution: This is a design restriction. Use multiple regular expression checks combined in SLC.

ISM agent doesn't start after upgrading the Windows Box

The problem: The Windows ISM agent is stopped after an upgrade.

The solution: The installer does not support changes to the release information and registry keys. Support should be in the installer, however, older installers did not support these actions. Reconfigure the ISM agent after the upgrade to resolve the problem.

Bad data is shown for Radius monitor on UNIX/LINUX platforms.

The problem: Bad data is shown for radius monitor for all UNIX/LINUX platforms after upgrading ISM agent to 740 Fix Pack 3.

The solution: ISM agent has been converted from 32 bit to 64 bit. Hence the size of a few data types is changed which is causing this issue. ISM agent can be installed on Windows platform for monitoring of Radius server.

Bad data is shown for SIP monitor on AIX

The problem: Bad data is shown for SIP monitor after upgrading ISM agent to 740 Fix Pack 3.

The solution: Third party library reSIProcate which is being used by SIP monitor has been upgraded from 1.0 to 1.12 version. The upgrade in library causes this issue. ISM agent can be installed on RHEL, Solaris or Windows platform for monitoring of SIP server.

Remote deployment to Windows running MTEMS

The problem: Attempting to remotely deploy the ISM agent to a Windows machine actively running the Manage Tivoli Enterprise Monitoring Services (MTEMS) program fails.

The solution: Before remote deploying, close the MTEMS program on the target machine.

SOAP monitor does not support nested arrays or multiRef values

The problem: The SOAP monitor is unable to handle parameters containing nested (two or more dimension) arrays or those that are referenced externally in the 'multiRef' style.

The solution: This is a limitation. There is no solution for this.

Omnibus Connectivity from ISM agent's nco_m_bridge process is not supported on windows 64-bit platform

The problem: Connectivity to omnibus server from ISM agent's bridge module is not supported on windows 64-bit platform.

The solution: There is no solution for omnibus connectivity from windows 64-bit ism agent as 64-bit omnibus libraries are not available for windows platform. As a workaround, you can use 32-bit ISM agent's installer for 64-bit windows platform to use omnibus connectivity feature.

Need to run DB2 commands in-case the monitor elements are not loaded in ISM config panel after upgrade to 7.4.0.3 FP

The problem: Some monitor elements like HTTPS are not loaded when ISM agent's supports is upgraded to 7.4.0.3 FP from older version.

The solution:

You have to run db2 commands listed in the following technote link to create the tablespaces greater than 4k. Refer https://supportcontent.ibm.com/support/pages/itcam-transactions-internet-service-monitoring-agent-profile-element-values-config-panel-are-missing.

ISM agent's upgrade from 32-bit to 64-bit is not supported for windows platform

The problem: ISM agent cannot be upgraded from 32-bit to 64-bit for windows platform due to limitation in installer framework.

The solution: 740 Fix Pack 3 ISM agent should be directly installed on windows platform.

Remote deployment of 32-bit ISM agent is not working with 32-bit windows OS agent

The problem: Remote deployment of 32-bit ISM agent is not working with 32-bit windows OS agent.

The solution:

Use 64-bit windows OS agent for remote deployment of 32-bit ISM agent. Add bundles for 32-bit ISM agent only. Do not add bundles for 64-bit ISM agent. If both 32-bit and 64-bit ISM agent bundles are present it will try to install 64-bit ISM agent as target OS agent is 64-bit. To avoid that you need to add only 32-bit ISM agent bundles.

Bridge process does not start on Solaris platform when you remotely deploy with omnibus configuration

The problem: Bridge process does not start on Solaris platform when you remotely deploy with omnibus configuration

The solution: Remote deployment for Solaris platform should be tried without specifying omnibus configuration details.

In upgrade of 740 Fix Pack 3 and above, newly added property SSLDisableTLS13 for TLS 1.3 support is missing in .props file

The problem: When you upgrade from previous version to 740 Fix Pack 3, newly added property for TLS 1.3 support SSLDisableTLS13 is not present in https, impa4, pop3, smtp, tcpport monitor props files.

The solution: This is by design. You need to add SSLDisableTLS13 property manually in https, impa4, pop3, smtp, tcpport monitors .props file while upgrading.

In upgrade to 740 Fix Pack 3 and above, newly added properties for TCPPORT monitor to enable TLS are missing in tcpport.props file

The problem: In upgrade to 740 Fix Pack 3 and above, newly added properties for TCPPORT monitor to enable TLS are missing in tcpport.props file.

The solution: This is by design. You need to add newly added properties in tcpport.props file manually during upgrade. Refer the 740 Fix Pack 3 Readme (https://www.ibm.com/support/pages/node/6450747) to manually update the tcpport.props file.

ISM folder is not deleted when you select the modify option while uninstalling the agent

The problem: ISM folder is not deleted when you select the modify option while uninstalling the agent

The solution: You have to delete the ISM folder manually.

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