

## Tivoli Network Manager IP Edition 4.2 Interim Fix 2 READ ME

This interim fix includes important fixes for the Network Manager core and GUI components. It also adds support for the following products:

- Oracle Database version 11g, Enterprise Edition with Partitioning option

Refer to the following IBM Knowledge Center topic for details on installing and configuring an Oracle database for Network Manager:

[http://www.ibm.com/support/knowledgecenter/SSSHRK\\_4.2.0/itnm/ip/wip/install/task/nmip\\_instns\\_installoracleunix.html](http://www.ibm.com/support/knowledgecenter/SSSHRK_4.2.0/itnm/ip/wip/install/task/nmip_instns_installoracleunix.html)

- Tivoli Netcool/OMNIBus on Windows

A new script called `config_object_server_for_itnm.sh` can be used to configure an existing ObjectServer for use with the Network Manager core processes. This script is run on the Network Manager core server and may be used to configure an ObjectServer on either the locale server or a remote server. The script supports an ObjectServer running on Windows as well as UNIX.

If you want to use the ObjectServer as the user repository, then you must also run the scripts to configure the users and assign roles to these users.

Both of these configuration tasks are described in the following IBM Knowledge Center topic:

[http://www.ibm.com/support/knowledgecenter/SSSHRK\\_4.2.0/itnm/ip/wip/install/task/nmip\\_instns\\_confomn.html](http://www.ibm.com/support/knowledgecenter/SSSHRK_4.2.0/itnm/ip/wip/install/task/nmip_instns_confomn.html)

### *List of fixes included in Interim Fix 2:*

IV83175: Optimize RCA Updates of Network Manager Gateway reduce overhead on the ObjectServer

IV81159: GSKit and Hash Selection Vulnerability - Upgrade to GSKit-8.0.50.57

IV81804: IBM SDK, Java Technology Edition Quarterly CPU - Jan 2016

IV81816: Upgrade PCRE 5.0 to 8.38 due to security issues

IV82944: TopNPerformance chart does not load from Right Click Tool

IV82130: IBM Netcool Operations Insight v1.4 - Network Health Dashboard v4.2 update required to function with Netcool/OMNIBus WebGUI v8.1.0.5

IV81361: Issues with Network View Bookmarks and Libraries in IBM Tivoli Network Manager IP Edition version 4.2.

IV82532: Constantly growing threads from the Network View Tree

### *Network Manager 4.2 documented issues fixed in Interim Fix 2:*

The following issues, documented in the Network Manager 4.2 Release notes, are fixed in Interim Fix 2:

#### **Harmless error messages in the Event Gateway `ncp_g_event` logs**

You are likely to find a large number of error messages with the message identifiers I-GRA-001-037 and I-GRA-001-038 in the `ncp_g_event` log file, `$NCHOME/log/precision/ncp_g_event.DOMAIN_NAME.log`. These error messages look similar to the following message:

I-GRA-001-037: [599385856t] No vertex was found in the graph when adding edge from EntityId=253629 (To EntityId=246607)

### **ncp\_common gives harmless error**

The ncp\_common process gives a harmless error when the ulimit command returns the string unlimited. This error causes errors from some scripts that source ncp\_common.

### **Network Manager reports fail to install properly**

Network Manager reports fail to install properly if the ITNMHOME environment variable is set in the command window that is used to run the Network Manager installer or configTCR.sh script.

### **Cannot store poll data in a distributed environment where the Network Manager core server is not in the same time zone as the topology database server**

If you have a distributed environment where the Network Manager core server is not in the same time zone as the topology database server, then you are unable to store any poll data.

### **Network Views GUI: Move network views feature does not work**

Moving network views between libraries does not work.

### **Path Views GUI: Moving path views moves the parent of the selected path view but the path view itself does not appear in the path view tree**

When you move a path view from one path view library to another, the view is moved, but does not appear in the target path view navigation tree.

## **Prerequisites**

- Tivoli Network Manager IP Edition 4.2
- Tivoli Netcool/OMNIBus\_GUI 8.1.0 Fix Pack 5, or later

## **Pre-installation steps**

### **Mandatory step required before applying Interim Fix 2**

The following tnm.properties file is overwritten during the Interim Fix 2 installation. If you have customized this file, you must back up your customized version before applying Interim Fix 2, and copy your version back after installing Interim Fix 2:

*\$NCHOME/precision/platform/java/lib/ncp\_topoviz/etc/tnm/tnm.properties*

## **Installation**

Follow these steps to install Interim Fix 2:

1. Stop the Network Manager core processes, Network Manager GUI processes and DASH.
2. Install Interim Fix 2 on both the Network Manager core and GUI servers using Installation Manager.
3. If you are using an Oracle database, then you must update the database schema as described in the *Required Database Schema Updates* section below. You can update the database schema

either before or after applying Interim Fix 2, but you must update the schema before restarting the Network Manager GUI.

4. All non-root users must run the following script as root after installing 4.2 Interim Fix 2:  
`$NCHOME/precision/scripts/setup_run_as_setuid_root.sh`
5. Restart the Network Manager core processes, Network Manager GUI processes and DASH.

### **Required database schema updates**

The database schema has changed in this interim fix for Oracle. These database schema updates must be applied either before or after installing Network Manager 4.2 Interim Fix 2, but before starting the Network Manager GUI.

Install the database schema update script in the same manner that the Network Manager 4.2 GA database scripts were installed:

- If the Network Manager core component is on the same machine as the Oracle server, then Interim Fix 2 will install the new `updateOracle_42_IFIX2.sh` script into the `$NCHOME/precision/scripts/sql/oracle` directory.
- If the Network Manager core component is on a different machine than the Oracle server, then there are two options, depending on how the database scripts were installed for 4.2 GA :
  - a. If the database scripts were installed during 4.2 GA using the *Network Manager topology database creation scripts* package, then Interim Fix 2 can be installed on the Oracle database server to install the new `updateOracle_42_IFIX2.sh` script in the directory specified during the 4.2 GA installation (`<MYDIR>/precision/scripts/sql/oracle`).
  - b. If you manually copied the `$NCHOME/oracle_creation_scripts.tar.gz` file to the Oracle database server for the 4.2 GA installation, then you must copy the updated `oracle_creation_scripts.tar.gz` file from the core server to the Oracle server after installing Interim Fix 2, and then `unzip/untar` it as the database user.

### **Updating an Oracle Database**

Navigate to the directory containing the `updateOracle_42_IFIX2.sh` script and perform the following steps to update the database schema:

1. Ensure the shell script has execute permission:  
`$ chmod +x updateOracle_42_IFIX2.sh`
2. Run the script:

```
$ ./updateOracle_42_IFIX2.sh <username> <password>
```

Where `username` is a database user who has CREATE TABLE privileges.

You can also run the SQL script `updateOracle_42_IFIX2_PollData.sql` contained in this directory separately within SQLPLUS. If you choose this installation method, then you must run the script against the appropriate poll data schema.

**Additional help can be found using the `-help` option of the script:**

```
$. /updateOracle_42_IFIX2.sh -help
```

*Usage:* `./updateOracle_42_IFIX2.sh <user> <password> [ -pdb <name> ] [-help]`

*<user>* - The Oracle user running the SQL. This is typically user 'system'

*<password>* - Password of <user>

*[-pdb <name>]* - Name of the pluggable database if one is used

*[-help]* - Display help text

*This script will apply the database changes for IFIX2. It must be executed as an Oracle admin user.*

*Examples:*

*(1) Basic usage:*

```
./updateOracle_42_IFIX2.sh system password
```

*(2) If using an Oracle pluggable database then supply its name as an argument:*

```
./updateOracle_42_IFIX2.sh system password -pdb pdbname
```

**Note: If you have a large amount of data in the polldata table then the update script may take some time to complete.**

### Post-installation steps

The following tasks need to be performed after installing 4.2 Interim Fix 2:

#### Applying Reports updates

The Reporting Services `trcmd` script must be run to apply updates to the Network Manager reports. To apply these updates, run the following command after installing Network Manager 4.2 Interim Fix 2:

```
$. /JazzSM_HOME/reporting/bin/trcmd.sh -import -bulk $NMGUI_HOME/reports/itnmcognos.zip -username <JAZZADMIN> -password <JAZZADMINPASSWD>
```

Where JAZZADMIN and JAZZADMINPASSWD are the username and password for the JazzSM Admin user.

#### Manually updating customizable GUI configuration files

The following files have been updated in Interim Fix 2. If you have customized any of these files, then you must manually merge the changes for Interim Fix 2 into your customized file. If you have not customized these files, then they are updated in the working directory by the Interim Fix 2 installer.

The new version of these files for Interim Fix 2 is located in a subdirectory called "default" at each of the previous locations (for example, in `$NCHOME/etc/precision/default`). If you have made customizations to the version of these files in the working directories (ie. `$NCHOME/etc/precision`), then they will not be updated by Interim Fix 2 and they will still contain your manual customizations.

If you have modified any of these files, then you must check for any differences in each file and then incorporate the changes contained in the corresponding *default* directory for the associated file.

- \$NMGUI\_HOME/profile/etc/tnm/topoviz.properties
- \$NMGUI\_HOME/profile/etc/tnm/tools/showPerformanceChartByView.xml
- \$NCHOME/etc/precision/NcPollerSchema.cfg
- \$NCHOME/precision/storm/conf/NMStormTopology.properties

As an example, the following command will show the differences between the existing customized version (tools subdirectory) and the new version for Interim Fix 2 (tools/default subdirectory):

```
diff $NMGUI_HOME/profile/etc/tnm/tools/showPerformanceChartByView.xml  
$NMGUI_HOME/profile/etc/tnm/tools/default/showPerformanceChartByView.xml
```

## Known issues

### **Event status not shown in Aggregated Network Views**

When using a cross-domain discovery, events from all domains that comprise the aggregated domain are not shown; only the events from one domain are visualized in the aggregated domain network view. This issue occurs when the WEBTOPDATASOURCE database field is set to a single domain in NCIM. When this field is set, the Network Manager GUI only displays events from the aggregations domain defined by this field. Otherwise, the GUI will display events from all domains. The workaround for this issue is to set the WEBTOPDATASOURCE database field to null.

To check if this field is defined, query the NCIM database using ncp\_oql on the server where the core processes are installed, or the Management Database Access window in the Network Manager GUI:

```
select WEBTOPDATASOURCE from domainMgr where DOMAINMGRID=0;
```

If this field is defined, set it to null using the following command:

```
update domainMgr set WEBTOPDATASOURCE=NULL where DOMAINMGRID=0;
```

After you set this field to null, the Network Manager GUI will display events from all domains.

### **Percentage Availability and Network Polling Chart widgets display errors**

The Percentage Availability and Network Polling Chart widgets display an intermittent error message: Data Retrieval Error. When this error is displayed, these widgets refresh every 10 seconds. To work around this issue, click the view again in the Network View Tree. In general, it is a good practice to clear the browser cache after a product upgrade to ensure that the client and server code are synchronized.

### **Percentage Availability widget does not refresh correctly when using Internet Explorer**

Netcool Operations Insight users might see an intermittent issue where the Percentage Availability widget in the Network Health Dashboard does not refresh correctly when using Internet Explorer. Internet Explorer might cache results when the widgets are manually refreshed, which can result in old

data being displayed. Clicking on a network view manually refreshes the Network Health Dashboard. To work around this issue, modify the following Internet Explorer setting:

Navigate to the Internet Options page. On the General tab under Browsing History, click on Settings. Select the "Every time I visit the webpage" radio button (the default is "Automatically").

### **Slow initial response from Top Performers widget in large scale environments with Oracle 11g**

In very large scale network environments, Netcool Operations Insight users might experience the initial query response for the Top Performers widget in the Network Health Dashboard taking several minutes to display when using an Oracle 11g database. This delayed initial response has not been seen with Oracle 12c. Database performance depends on many factors, including your data usage, network environment, Network Manager configuration, and database tuning. For advice on your specific requirements, consult your database administrator or IBM Services.

### **Uninstalling Interim Fix 2**

To remove Interim Fix 2, select Uninstall from the Installation Manager home page, select IF00002 from the list of Packages to uninstall, and proceed to uninstall. If the Network Manager GUI Components IF00002 package is selected for uninstall, any dependent packages such as the Network Manager Reports and Network Health Dashboard (for Netcool Operations Insight users) are also selected for removal.