



Release Notes



Note

Before using this information and the product it supports, read the information in Appendix A. "Notices" on page 28.

Edition Notices

This edition applies to Fix Pack Version 2.2.0.5 of IBM Tivoli Netcool/Reporter (5724-S47) and to all subsequent releases and modifications until otherwise indicated in new editions.

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Release Notes

In addition to normal bug fixes, Netcool/Reporter fix pack 2.2.0.5 also incorporates a number of new features. Installation of this new fix pack updates Netcool/Reporter 2.2 to the Apache/Tomcat configuration. These release notes describe the installation and known issues of this new release.

This document contains the following information:

- "Overview" on page 1
- "Identifying the Version of 2.2" on page 2
- "Netcool/Reporter Components" on page 2
- "Apache Considerations" on page 7
- "Accessing Netcool/Reporter over IPV6" on page 9
- "New and Updated Features in Version 2.2" on page 11
- "Operating System, Locale and Charset Configurations" on page 12
- "Installation Procedures" on page 16
- "Running Netcool/Reporter Components" on page 35
- "Reference Information" on page 37
- "General Points to Note" on page 41
- "Resolved Issues" on page 44

Overview

Netcool/Reporter Fix Pack 2.2.0.5 is an accumulated fix pack for Netcool/Reporter 2.2. This fix pack has resolved a selected list of issues found in Netcool/Reporter 2.2, and also provides a number of new features, like support for Internet Protocol Version 6 (IPv6) networking environments, compliance with FIPS 140-2 specifications, AES encryption, HTTPS tunneling and others.

Fix Pack 2.2.0.5 can be applied over any existing Netcool/Reporter 2.2 deployments, for example, fix pack 2.2.0.4.



Note: The JRun application server has been ceased support in Netcool/Reporter 2.2 starting from fix pack 2.2.0.5. Installation of 2.2.0.5 will automatically install Tomcat 5.5.26 for you and complete setting it up with Apache web server. No manual intervention is required in the context of installing and configuring Tomcat.

Netcool/Reporter 2.2.0.5 comprises a number of components, which are applied in the following order during an installation.

1. Netcool/Reporter 2.2 Fix Pack 2.2.0.1
2. Netcool/Reporter 2.2 Fix Pack 2.2.0.2
3. Netcool/Reporter 2.2 Fix Pack 2.2.0.3
4. Netcool/Reporter 2.2 Fix Pack 2.2.0.4
5. Netcool/Reporter 2.2 Interim Fix pack 2.2.0-TIV-NCReporter-IF0002
6. Netcool/Reporter 2.2 Fix Pack 2.2.0.5

Identifying the Version of 2.2

Netcool/Reporter 2.2 is available as two different configurations: on JRun and on Tomcat. You can always tell the version of your 2.2 by checking its `Version.html` file. This file is available in the root installation directory of your Netcool/Reporter, that is `%INFOHOME%` or `$INFOHOME`. For example,

- `C:\http\htdocs\infospc\Version.html`
- `/opt/netcool/reporter/apache/htdocs/infospc/Version.html`

Or, open up the link to this file via the web browser (when the Reporter server is up and running):

```
http://<machine_name>:<port_number>/infospc/Version.html
```

It displays information such as version number, build number, and language of Netcool/Reporter.

Netcool/Reporter Components

This fix pack 2.2.0.5 updates Netcool/Reporter 2.2 to the platform of Apache web server plus Tomcat servlet container. This section provides detailed specifications on the version of these two components. It also covers all the other components that are not specifically changed in this fix pack.

Host Web Server - Apache

The machine that hosts the Netcool/Reporter server needs to run a supported version of the Apache web server. It is better to install the supplied Apache web server.

Netcool/Reporter is supplied with the versions of the Apache web server listed below. If you require more components in your web server, you must match the specifications below and compile in the additional features you require. If you use an alternative web server it must be installed prior to installing the Netcool/Reporter server.

UNIX - Without SSL

Apache web server version 2.0.59 compiled with Apache Tomcat Connector JK V1.2.23.

UNIX - With SSL

Apache web server version 2.0.59.

Compiled with:

- OpenSSL 0.9.8e
- Apache Tomcat Connector JK V1.2.23

Windows - Without SSL

Apache web server version 2.0.59 compiled with Apache Tomcat Connector JK V1.2.23.

Windows - With SSL

Apache web server version 2.0.59.

Compiled with:

- OpenSSL 0.9.8e
- Apache Tomcat Connector JK V1.2.23

LINUX - Without SSL

Apache web server version 2.0.59 compiled with Apache Tomcat Connector JK V1.2.23.

LINUX - With SSL

Apache web server version 2.0.59.

Compiled with:

- OpenSSL 0.9.8e
- Apache Tomcat Connector JK V1.2.23

Tomcat

Tomcat 5.5.26 is an embedded and license-free application within Netcool/Reporter and is installed and configured automatically along with the server. Tomcat is configured to handle communications with a Reporter-specific web server, namely, Apache. It serves as a bridge between the Reporter server and the web server's native calls, allowing the Reporter user to access various services of the web server.

Default settings of the supplied Tomcat server listen to ports 12005 and 12009. If needed, you can change to other port numbers by making changes to the following files:

1. In `$Tomcat_HOME/conf/sever.xml`:

```
<Server port="12005" shutdown="SHUTDOWN">  
Connector port="12009"
```
2. In `$APACHE_HOME/conf/workers.properties`:

```
worker ajp13w.port=12009
```

To change the default 12009 port, fill in a new port number in both files.

Other Netcool/Reporter 2.2 Components (Common for all Fix Packs)

This section describes the system requirements for other Netcool/Reporter components that are common in all fix packs, including:

- "Netcool/Reporter Server" on page 4
- "Required Operating System Patches" on page 4
- "Client for a Web Server to Repository Database Connection" on page 5
- "Netcool/Reporter Client Browser" on page 5
- "Java Plugin for Netcool/Reporter Clients" on page 6
- "Netcool/Reporter Database" on page 6
- "Setting the DISPLAY Variable on UNIX and LINUX" on page 7

Netcool/Reporter Server

The following operating systems are supported:

- Windows Server 2003 (32-bit and 64-bit)
- Sun Solaris 9 Sparc
- Sun Solaris 10 Sparc
- AIX 5.2
- AIX 5.3
- HPUX 11i v.11.23 PA-RISC
- Redhat Linux ES 4.0

Required Operating System Patches

Some UNIX system versions require patches in order to correctly support the Java Runtime Environment (JRE).

For Solaris systems, please refer to Sun Microsystems for a list of required patches. These patches are available from <http://www.sun.com> or obtained from your operating system vendor.

Client for a Web Server to Repository Database Connection

If your Netcool/Reporter server and repository database server are running on separate machines, you need the appropriate client to connect these machines, in line with your database requirements. The client component must be installed on the same machine as your Netcool/Reporter server, and the server component must be installed on the machine running the repository database server. For more information, contact your system administrator or DBA before proceeding.

Netcool/Reporter Client Browser

Users must use a Java-enabled browser in order to use Netcool/Reporter. The following browsers are supported:

- Mozilla Firefox 1.5
- Mozilla Firefox 2.0
- Microsoft Internet Explorer 6.0.x (not supported on Windows Vista operating systems)
- Microsoft Internet Explorer 7.0

The Netcool/Reporter client browser is not supported on the Windows 95 or Windows 98 operating system.

Note about Browser Caches

Web browsers automatically store recent versions of web pages and Java applets. However, this cache capability may prevent Netcool Reporter from displaying correct report output for you. To solve this, it is important that your web browser be configured to disable its cache capability such that it always reads the latest version of a report and does not use an older version in the web browser cache.

The following examples describe how to configure your web browser to refresh its cache. You may see different names on your web browser interface. For correct information on changing the cache settings specific to your web browser, see your web browser documentation.

Internet Explorer

1. On the **Tools** menu select **Internet Options**.
2. Select the **General** tab in the *Internet Options* dialog box.
3. Select **Settings** in the **Temporary Internet Files** section.
4. Select **Every visit to the page** in the *Settings* dialog box.
5. Select the **Advanced** tab in the *Internet Options* dialog box.
6. Check **Use JRE 1.5.0_11 for <applet>(requires restart-ON)** (make sure that JRE 1.5.0_11 has been installed).

Firefox

1. On the **Tools** menu select **Options**.
2. Select the **Content** tab in the *Options* dialog box.
3. Check **Enable Java**.

Java Plugin for Netcool/Reporter Clients

The Netcool/Reporter client web browsers require a Java plugin to operate correctly.

The required version of the Java plugin is listed in the following table.

Table 1. *Java Plugin Versions*

Client Operating System	Java Plugin Version
Windows XP	<ul style="list-style-type: none">• Sun JRE 1.5.0_11_b03• IBM J2RE 1.5.0 (only supported on IBM hardware)
Windows Server 2003	<ul style="list-style-type: none">• Sun JRE 1.5.0_11_b03• IBM J2RE 1.5.0 (only supported on IBM hardware)
Windows Vista	<ul style="list-style-type: none">• Sun JRE 1.5.0_11_b03• IBM J2RE 1.5.0 (only supported on IBM hardware)



Note: Java plugin version 1.4 is not supported in this version of Netcool/Reporter.

Netcool/Reporter Database

Netcool/Reporter supports the following databases:

- Oracle 9.2 (32-bit) - Supported on all Netcool Reporter server operating systems.
- Oracle 9.2 (64-bit) - Supported on all server operating systems except for Windows Server 2003, using a 32-bit library.
- Oracle 10g Release 1 (32-bit) - Supported on Windows and Solaris operating systems.
- Oracle 10g Release 1 (64-bit) - Supported on Solaris operating systems using a 32-bit library.
- IBM DB2 9.1 - Supported on all server operating systems.
- Sybase 12.5 (32-bit) - Supported on all server operating systems except for Redhat Linux.
- Microsoft SQL Server 2000/2005 - Supported on Windows Server 2003 (ODBC support).

Netcool/Reporter provides a script to create the repository schema. This schema contains tables that are used to store information about users, groups, datasources, reports, privileges, preferences, and other defined variables and objects. The tables in the repository schema remains small.

The Netcool/Reporter reads data from a data schema. The tables in the data schema expand depending on the number of rows of data and the amount of database optimization. The database administrator (DBA) must be asked to setup and optimize these tables.

Setting the DISPLAY Variable on UNIX and LINUX

If the Netcool Reporter server is deployed on UNIX or LINUX operating systems, the `DISPLAY` variable of the Netcool Reporter server needs to be set to a machine running an X server. This enables chart reports to be run and viewed properly in GIF or PDF format. If this is not the machine running the Netcool Reporter server, then the environment variable `DISPLAY` must be set to a remote machine running an X server.

You have two ways to set the `DISPLAY` variable:

- Type the following command to set a temporary environment variable:

```
xhost + localmachinename
```

Or,

```
xhost + Remotemachinename
```

Where *localmachinename* or *Remotemachinename* is the name of the local machine or remote machine. If setting to the remote machine, the remote machine must be configured to accept connections from the Reporter server machine.

- Edit `$(INFOHOME)/server/infosrvorg` and change the `DISPLAY` environment variable to point to the proper machine.

Apache Considerations

Fix pack 2.2.0.5 requires version 2.0.59 of the Apache web server. This section prepares you with information on what to do for Apache before installing this fix pack.

Apache on Windows

Fix pack 2.2.0.5 requires version 2.0.59 of the Apache web server. If you are installing it on the top of a functioning Netcool/Reporter deployment on Windows, you need to install a copy of this version 2.0.59 prior to installing the fix pack.

The version of Apache used in your existing 2.2 deployment might be lower than the required version 2.0.59. If this is the case, you need to uninstall it before installing the higher version. Specifically, you need to:

1. Back up your existing Apache into a back-up location, for example, `%Apache_home%\apache_old`. Where, `%Apache_home%` represents the Apache installed directory.

Do not delete the whole physical Apache directory, because this is not synonymous to uninstalling the program. Besides, the `httpd.conf` configuration file contains key configuring parameters that can be used for configuring the new Apache install. Make sure this file is properly backed up.

2. The fix pack 2.2.0.5 package provides a standard installation and a secure installation of the Apache web server under the directory:

```
\components\apache\Standard
```

and

```
\components\apache\SSL
```

To install either version, run the Apache .msi file and complete the entire install processes.

3. Configure Apache SSL settings if needed.

There are various ways for configuring Apache SSL, depending on your business requirements. A text file Apache2-SSL-Howto.txt is supplied along with Apache SSL install files, providing an example for the configuration. Specifically, you need to do the followings to install and configure Apache SSL:

- a. Install standard Apache 2.0.59.

- b. Configure SSL.

- c. Edit http.conf for the parameter DocumentRoot.

- d. Edit ssl.conf to set the server name and SSL port number:

- . Add # before <IfDefine SSL> and <IfDefine>.

- . Change Listen 443 to Listen SSL_port.

- . Change <VirtualHost _default_:443> to <VirtualHost SERVERNAME:SSL_port>

- e. Set the cgi-bin directory in ssl.conf. The default-supplied ssl.conf may have set the path to:

```
<Directory "E:/apache_2.0.59-win32-x86-openssl-0.9.8e/cgi">
```

You need to change it to the path where your %Apache_home% is actually located, for example,

```
<Directory "C:/Program Files/Apache Group/Apache2/cgi">
```

4. The Apache %Apache_home%\apache\conf\httpd.conf or ssl.conf configuration file defines many parameters for Apache to run normally. You need to look up this file from the old Apache install which you have backed up, and fill in the same parameter values into the same file in the new Apache install.

Some of the key parameters are Port, ServerName, DocumentRoot, ServerAdmin and others. Make sure that all the key parameters are consistent between the old and new Apache installs, otherwise Netcool/Reporter 2.2.0.5 may fail to run.

Taking the port parameter as an example, it specifies on which port that the Netcool/Reporter service is available. It is part of the URL used to access to Netcool/Reporter, as in the following example:

```
http://<server_name>:7889/infospc
```

Assuming this URL is the one users have been using to access Netcool/Reporter, then you need to fill in 7889 as the port value into httpd.conf, such that the new Apache will still be listening on port 7889 for Netcool/Reporter services.

5. To make Apache work on an IPV6 enabled network, you must configure it to listen on IPV6 addresses. This will involve configuring the `httpd.conf` or `ssl.conf` configuration file, as described in step 2 of "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10.

Apache on UNIX and Linux

Fix pack 2.2.0.5 requires version 2.0.59 of the Apache web server. You do not need to specifically install this version prior to installing the fix pack on UNIX and Linux operating systems. It is already included in the fix pack installer.

Since you are installing this fix pack on top of an existing Netcool/Reporter deployment, a specific version of Apache must have been used in that deployment. No matter what version is being used, the 2.2.0.5 installation will automatically upgrade it to version 2.0.59, and before doing that, it will first make a backup copy of the old Apache to a particular directory.

The installer will also look up relevant configuration parameters from the old Apache configuration files and automatically complete configuring the new Apache using the same information. For example, the old Apache `httpd.conf` (or `ssl.conf`) has defined many parameters such as `ServerName`, `DocumentRoot`, and others. When it comes to Apache upgrade and configuring steps, the installer will:

1. Back up your existing Apache to the backup directory.
2. Upgrade the existing Apache to version 2.0.59, with install files supplied in the fix pack package.
3. Look up the backed up `httpd.conf` or `ssl.conf` for parameter values and write them into the new configuration files, to eliminate manual settings to the new 2.0.59 Apache.
4. Perform other tasks.

If you want to use Netcool/Reporter over an IPV6 enabled network, you need to configure Apache to listen on IPV6 addresses. This will involve configuring the `httpd.conf` or `ssl.conf` configuration file, as described in step 2 of "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10.

Accessing Netcool/Reporter over IPV6

The next-generation IPV6 networks are probably new initiative for many Internet users. No matter your IPV6 deployment is a corporate intranet or extranet, or a dial-up to your service provider, there are various methods that can be adopted to deploy an IPV6 network. In this document, no instructions or examples are provided on how to set up an IPV6 network.

Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is the first initiative that enables Netcool/Reporter accessible over IPV6. This fix pack 2.2.0.5 has continued to provide all IPV6 relevant features, with only a number of manual configuring operations after the fix pack installation.

Prerequisites

Here are a number of prerequisite conditions that must be met to use Netcool/Reporter over IPV6:

1. Netcool/Reporter can operate on a pure IPV4 or dual IPV4/IPV6 network.
2. The Netcool/Reporter 2.2 server machine and all other client machines on the IPV6 network can communicate with each other using IPV6 interfaces. Make sure that ping6 works on each machine.

For example, run the following ping6 command from a client machine to the Netcool/Reporter 2.2 server machine:

```
ping6 3ffe:2101:7:4:2e0:18ff:fe34:150b
```

3. The Netcool/Reporter server reads hosts file or DNS settings for hostname resolution. In either way, there must be a single hostname defined for each host.
4. Installation of the fix pack 2.2.0.5, as detailed in "Installation Procedures" on page 16.
5. Java plug-in with JDK/JRE 5.0 version used on client machines.

Additional Steps for Accessing Netcool/Reporter over IPV6

In addition to installing fix pack 2.2.0.5, there are a number of additional steps for configuring the Netcool/Reporter file system and Apache in order to use Netcool/Reporter on an IPV6 enabled networking environment.



Note: The steps depicted in this section are common for all supported operating systems unless otherwise stated. Before executing these steps, you must have finished installing fix pack 2.2.0.5 over your existing Netcool/Reporter deployment. For detailed information, refer to "Installation Procedures" on page 16.

1. Add an INFOIP parameter into the %INFOHOME%\server\infosrv.conf or \$INFOHOME/server/infosrv.conf configuration file. This new parameter must specify the IP address of the Netcool/Reporter server machine in the IPV6 format.

For example, add the line below:

```
INFOIP|fd00::215:c5ff:fe3c:ca41
```

Where, fd00::215:c5ff:fe3c:ca41 represents the IPV6 address of the server machine. Fill in the correct address specific to your deployment.

2. Configure the `Listen` directive in Apache `httpd.conf` or `ssl.conf`, which are under the directory `Apache_home/conf`, to let Apache listen on both IPV4 and IPV6 addresses. You should provide two `Listen` directives in either `httpd.conf` or `ssl.conf`, otherwise, Apache may fail to identify where the Reporter server is located. For example, set up `Listen` directive as in the following examples:

```
Listen [2001:15f8:106:193:21a:4bff:fe0b:f838]:8080
```

```
Listen 9.180.211.31:8080
```

or

```
Listen [2001:15f8:106:193:21a:4bff:fe0b:f838]:9443
```

```
Listen 9.180.211.31:9443
```

Note that the IPV6 address of the Netcool/Reporter server must be surrounded in square brackets. Be sure to fill in the actual IPV4 and IPV6 addresses specific to your deployment.

For more detailed information on configuring Apache, you may visit Apache website at:

```
http://httpd.apache.org/docs/2.0/bind.html
```

3. There is one more step specific to HPUX operating systems only:

Replace

```
/java
```

with

```
/java -Djava.net.preferIPv4Stack=false
```

in following script files:

- `$INFOHOME/server/ftpserver`
- `$INFOHOME/server/infosrvorg`
- `$INFOHOME/server/startadmin`

```
- $REPORTER_HOME/bin/startadmin
```

Also, edit the file `$TOMCAT_HOME/bin/catalina.sh` (where `$TOMCAT_HOME` is the base directory of your Tomcat server), to add a new line:

```
JAVA_OPTS=-Djava.net.preferIPv4Stack=false
```

before

```
# resolve links - $0 may be softlink.
```

New and Updated Features in Version 2.2

Netcool/Reporter version 2.2 provides the following new and updated features:

- Product GUI fully re-branded to meet new IBM standards.
- Globalization (G11N) support (English, Traditional Chinese, Simplified Chinese, Korean, and Japanese).
- Server operating systems expanded to Windows, Solaris, AIX, HP-UX, and Redhat Linux.
- Databases support expanded to Oracle, DB2, Sybase and MS SQL Server.
- Firefox browser support on client machines.
- Server-side JRE updated to DST-patched 1.4.2.
- Client-side JRE plug-in updated to 1.5.0_11.
- Accessibility support (on limited basis).
- Apache web server version upgraded to 1.3.37.
- Enhanced Administration Guide to provide richer information on logging, troubleshooting, and Q&As.
- Windows authentication support for MS SQL Server.

Operating System, Locale and Charset Configurations

This section specifies the required configurations on operating system (OS), locale, and charset for each supported language.



Note: The database needs to be properly configured in order to support languages other than English. You must make sure that your database supports local languages. Consult your database administrator for the required operation if needed.

English

English is the default language of Netcool/Reporter 2.2. The following table describes the configuration requirements for English:

Table 2. OS, Locale and Charset Settings for English

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server Side JRE	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 	<ul style="list-style-type: none"> • Sun JRE 1.4.2
Netcool/Reporter Server OS Locale/Charset	English_United_States/ISO-8859-1/UTF8	en_US/ISO-8859-1/UTF8	en_US/ISO-8859-1/UTF8	en_US/ISO-8859-1/UTF8	en_EN/UTF-8
Netcool/Reporter Charset Option (during G11N install)	en iso-8859-1 US				
Netcool/Reporter Client OS Locale	English				

Simplified Chinese

The following table describes the configuration requirements for Simplified Chinese:

Table 3. OS, Locale and Charset Settings for Simplified Chinese Environment

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server Side JRE	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 	<ul style="list-style-type: none"> • Sun JRE 1.4.2
Netcool/Reporter Server OS Locale/ Charset	Chinese_PRC /GB18030 /UTF8	zh_CN /GB18030 /UTF8	Zh_CN /GB18030 /UTF8	zh_CN /GB18030 /UTF8	zh_CN/UTF-8
Netcool/Reporter Charset Option (during G11N install)	GB18030 CN or UTF-8 CN				
Netcool/Reporter Client OS Locale	Simplified Chinese				

Traditional Chinese

The following table describes the configuration requirements for Traditional Chinese:

Table 4. OS, Locale and Charset Settings for Traditional Chinese Environment

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server Side JRE	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 	<ul style="list-style-type: none"> • Sun JRE 1.4.2
Netcool/Reporter Server OS Locale/Charset	Chinese_Taiwan /Big 5/UTF8	zh_TW /Big 5/UTF8	Zh_TW /Big 5/UTF8	zh_TW /Big 5/UTF8	zh_TW/UTF-8
Netcool/Reporter Charset Option (during G11N install)	zh BIG5 TW or zh UTF-8 TW				
Netcool/Reporter Client OS Locale	Traditional Chinese				

Japanese

The following table describes the configuration requirements for Japanese:

Table 5. OS, Locale and Charset Settings for Japanese Environment

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server Side JRE	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 	<ul style="list-style-type: none"> • Sun JRE 1.4.2
Netcool/Reporter Server OS Locale/ Charset	Japanese /UTF8	ja_JP/PCK /UTF8	ja_JP /UTF-8	ja_JP /UTF-8	ja_JP /UTF-8
Netcool/Reporter Charset Option (during G11N install)	ja shift_jis JP or ja UTF-8 JP				
Netcool/Reporter Client OS Locale	Japanese				

Korean

The following table describes the configuration requirements for Korean:

Table 6. OS, Locale and Charset Settings for Korean Environment (1 of 2)

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server Side JRE	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 • IBM JRE 1.4.2 (supported on IBM hardware only) 	<ul style="list-style-type: none"> • Sun JRE 1.4.2 	<ul style="list-style-type: none"> • Sun JRE 1.4.2

Table 6. OS, Locale and Charset Settings for Korean Environment (2 of 2)

	Windows 2003	Solaris	AIX	HP-UX	Redhat Linux
Netcool/Reporter Server OS Locale/ Charset	Korean/UTF-8	ko_KR/UTF-8	KO_KR/UTF-8	ko_KR/UTF-8	ko_KR/UTF-8
Netcool/Reporter Charset Option (during G11N install)	ko UTF-8 KR or ko euc-kr KR				
Netcool/Reporter Client OS Locale	Korean				

Installation Procedures

This section discusses the procedures for installing Netcool/Reporter Fix Pack 2.2.0.5 on Windows, UNIX (Solaris 9 and 10, HP-UX, and AIX), and Linux systems.



Note: Oracle9/10 and Sybase12.5 databases might have problem starting and running normally on an pure IPV6 server machine. On dual IPV4&IPV6 networking environments, Oracle9/10 and Sybase12.5 can be used normally as both the Netcool/Reporter 2.2 repository database and user database.



Note: To avoid impacts to Netcool/Reporter by the DST (Daylight Saving Time) changes issue, it is required that the DST fix/patch for the operating system be applied on each of the supported operating systems before Netcool/Reporter 2.2.0.5 is installed.

Netcool/Reporter 2.2.0.5 Installation on Windows Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.4) installed before applying 2.2.0.5.



Note: Apache web server 2.0.59 must have been installed on the host machine before installing this fix pack. The installation file is supplied within the fix pack, under the directory `\components\apache`, or you can also download it from official Apache web site, at http://archive.apache.org/dist/httpd/binaries/win32/apache_2.0.59-win32-x86-no_ssl.msi. For more information on Apache, refer to "Apache on Windows" on page 7.



Note: The runtime components of the Visual C++ libraries are required on a Windows 2003 server where Netcool/Reporter is installed. Specifically, the following three DLL files must be available within the system directory structure (otherwise, the Apache server may not start correctly): `msvcm80.dll`, `msvcp80.dll`, `msvcr80.dll`. If they are not available, download the Microsoft Visual C++ 2005

SP1 Redistributable Package from the following web address:

<http://www.microsoft.com/downloads/details.aspx?familyid=200B2FD9-AE1A-4A14-984D-389C36F85647&displaylang=en>. Then install the package. This deploys the C Runtime and the other libraries on the server, which will make them available to the applications in Netcool/Reporter that are developed using Visual C++.

To install Netcool/Reporter 2.2.0.5:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server.
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. Ensure the environment variables %INFOHOME% and %ORACLE_HOME% are defined (for Oracle database type only). Sybase-related environment variables must be defined if the database type is Sybase, such as %SYBASE%.
3. The patch is delivered as a zip file:
 - 2.2.0.5-TIV-NCReporter-Win32-FP0001.zip - For 32-bit Windowsor,
 - 2.2.0.5-TIV-NCReporter-Win64-FP0001.zip - For 64-bit WindowsUncompress the file into a temporary directory (for example, C:\temp).
4. A subdirectory, 2.2.0.5-TIV-NCReporter-Win32-FP0001 or 2.2.0.5-TIV-NCReporter-Win64-FP0001 is created under the temporary directory (for example, C:\temp\2.2.0.5-TIV-NCReporter-Win32-FP0001). All files and utilities required to install the fix pack are extracted into this subdirectory.
5. Change to the directory 2.2.0.5-TIV-NCReporter-Win32-FP0001 or 2.2.0.5-TIV-NCReporter-Win64-FP0001, which contains the files to be installed.

6. Launch a DOS prompt window, run `setup.bat` to start the installation, and include the type and version of your Reporter repository database. The usage is:

```
setup "{oracle9i|oracle10g|sybase|mssql|db2} [rollback] [ssl]"
```

For example:

```
setup.bat oracle10g
```

or

```
setup.bat sybase
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment.

For example:

```
setup.bat oracle10g SSL
```

or

```
setup.bat sybase SSL
```

The fix pack installer backs up existing files into the

`INFOHOME\backup\vpatch_2.2.0.5-TIV-NCReporter-Win32-FP0001` or
`INFOHOME\backup\vpatch_2.2.0.5-TIV-NCReporter-Win64-FP0001`
directory before copying the new files.

7. The installer may request the location of Netcool/Reporter directory if the `%INFOHOME%` environment is not defined.

For example, if Netcool/Reporter 2.2 is installed in the `c:\http\htdocs\infospc` directory, then type:

```
c:\http\htdocs\infospc
```

8. Enter the Sybase server IP address and port number if the repository database is Sybase.

The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.

9. Wait until the installation completes.

If the 2.2.0.5 installation ended up in failure, you can revert the Netcool/Reporter file system to the original state by running the following command:

```
setup.bat rollback
```

Refer to "Rolling back Fix Pack 2.2.0.5" on page 37 for detailed description on how to run a rollback.

10. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

11. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
12. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
13. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a zip file `WINDOWS_langpack_setup.zip`.

To run the utility, proceed as follows:

- Extract the zip file into a temporary directory (for example, `C:\temp`). A subdirectory `WINDOWS_langpack_setup` is created.
- Change to the created folder and install the language pack by entering following commands:

```
cd C:\temp\WINDOWS_langpack_setup\nls
```

```
Setuplang.bat
```

14. Start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components.

Netcool/Reporter 2.2.0.5 Installation on Solaris 9 Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.4) installed before applying Netcool/Reporter 2.2.0.5.



Note: There is no need to manually install Apache 2.0.59 before installing this fix pack. The install files of Apache have been supplied within the fix pack package, and the installer will automatically upgrade your existing lower version Apache to the version 2.0.59 and also migrate configurations from the old Apache install to the new install. To understand more about that, refer to "Apache on UNIX and Linux" on page 9.

To install Netcool/Reporter 2.2.0.5 on a Solaris 9 operating system:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server (`stopreporter`).
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. Ensure the environment variables `$ORACLE_HOME` and `$LD_LIBRARY_PATH` are defined if the database type is Oracle. Sybase-related environment variables must be defined if the database type is Sybase, such as `$SYBASE`.
3. The package is delivered as a compressed UNIX tar file, `2.2.0.5-TIV-NCReporter-Sol-FP0001.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp

% gzip -dc 2.2.0.5-TIV-NCReporter-Sol-FP0001.tar.gz | tar xvf -
```
4. A subdirectory, `2.2.0.5-TIV-NCReporter-Sol-FP0001` is created under the temporary directory (for example, `/opt/tmp/2.2.0.5-TIV-NCReporter-Sol-FP0001`). All files and utilities required to install the fix pack are extracted into this subdirectory.
5. Change to the directory `2.2.0.5-TIV-NCReporter-Sol-FP0001`, which contains the files to be installed.

- The UNIX user who runs this fix pack should be the same user who starts Netcool/Reporter. For example, if the user is the root user, please also patch Netcool/Reporter as the root account. If you are not logged in as the root user, enter the following command to switch user to root:

```
$ su - root
password:#
```

- Run the `setup.sh` script and include the database type and version. The usage is:

```
setup.sh "{oracle9i|oracle10g|sybase|db2} [rollback] [ssl]"
```

For example:

```
% setup.sh sybase
```

You might need to change the permission to execute the `setup.sh` script using `chmod`. For example:

```
% chmod 755 setup.sh
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment, for example:

```
% setup.sh sybase SSL
```

- The fix pack installer may request the location of the Netcool/Reporter directory if the `$INFOHOME` environment is not defined. For example, if Netcool/Reporter is installed in the `/opt/netcool/reporter/apache/htdocs/infospc` directory, then when the installer asks for the `INFOHOME` location, type:

```
/opt/netcool/reporter/apache/htdocs/infospc
```

The fix pack installer backs up existing files into the `$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-Sol-FP0001` directory before copying the new files.

- Enter the Sybase ASE Server IP address (or hostname) and port number if the repository database is Sybase.

The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.

- Wait until the installation completes.

- If you are not using the default port 7777 for Server Admin, and the `startdmin` script is not installed in the default directory, you will be prompted for the document directory. When this occurs, specify the parent directory in which the `/bin/startdmin` script is located. For example, if your `startdmin` script is installed in `/opt/netcool/reporter/bin`, specify `/opt/netcool/reporter`.

12. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

13. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
14. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
15. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a compressed UNIX tar file `UNIX_langpack_setup.tar.gz`.

To run the utility, proceed as follows:

- Extract it into a temporary directory (for example, `/opt/tmp`):

```
% cd /opt/tmp
```

```
% gzip -dc UNIX_langpack_setup.tar.gz | tar xvf -
```

A subdirectory `UNIX_langpack_setup` is created.

- Change to the created directory and install the language pack by entering following commands:

```
% cd UNIX_langpack_setup/nls
```

```
% Setuplang.sh
```

16. After the language pack is installed completely, start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components.

Netcool/Reporter 2.2.0.5 Installation on Solaris 10 Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.3) installed before applying Netcool/Reporter 2.2.0.5.



Note: There is no need to manually install Apache 2.0.59 before installing this fix pack. The install files of Apache have been supplied within the fix pack package, and the installer will automatically upgrade your existing lower version Apache to the version 2.0.59 and also migrate configurations from the old Apache install to the new install. To understand more about that, refer to "Apache on UNIX and Linux" on page 9.

To install Netcool/Reporter 2.2.0.5:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server (`stopreporter`).
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. Ensure the environment variables `$ORACLE_HOME` and `$LD_LIBRARY_PATH` are defined if the database type is Oracle. Sybase-related environment variables must be defined if the database type is Sybase, such as `$SYBASE`.
3. The package is delivered as a compressed UNIX tar file, `2.2.0.5-TIV-NCReporter-Sol-FP0001.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp
% gzip -dc 2.2.0.5-TIV-NCReporter-Sol-FP0001.tar.gz | tar xvf -
```
4. A subdirectory, `2.2.0.5-TIV-NCReporter-Sol-FP0001` is created under the temporary directory (for example, `/opt/tmp/2.2.0.5-TIV-NCReporter-Sol-FP0001`). All files and utilities required to install the fix pack are extracted into this subdirectory.
5. Change to the directory `2.2.0.5-TIV-NCReporter-Sol-FP0001`, which contains the files to be installed.

6. The UNIX user who runs this fix pack should be the same user who starts Netcool/Reporter. For example, if the user is the root user, please also patch Netcool/Reporter as the root account. If you are not logged in as the root user, enter the following command to switch user to root:

```
$ su - root
password:#
```

7. Run the `setup.sh` script and include the database type and version. The usage is:

```
setup.sh "{oracle9i|oracle10g|sybase|db2} [rollback] [ssl]"
```

For example:

```
% setup.sh sybase
```

You might need to change the permission to execute the `setup.sh` script using `chmod`. For example:

```
% chmod 755 setup.sh
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment, for example:

```
% setup.sh sybase SSL
```

8. The fix pack installer may request the location of the Netcool/Reporter directory if the `$INFOHOME` environment is not defined. For example, if Netcool/Reporter is installed in the `/opt/netcool/reporter/apache/htdocs/infohpc` directory, then when the installer asks for the `INFOHOME` location, type:

```
/opt/netcool/reporter/apache/htdocs/infohpc
```

The installer backs up existing files into the

`$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-Sol-FP0001` directory before copying the new files.

9. Enter the Sybase ASE Server IP address (or hostname) and port number if the repository database is Sybase.

The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.

10. Wait until the installation completes.

11. If you are not using the default port 7777 for Server Admin, and the `startdmin` script is not installed in the default directory, you will be prompted for the document directory. When this occurs, specify the parent directory in which the `/bin/startdmin` script is located. For example, if your `startdmin` script is installed in `/opt/netcool/reporter/bin`, specify `/opt/netcool/reporter`.

12. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

13. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
14. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
15. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a compressed UNIX tar file `UNIX_langpack_setup.tar.gz`.

To run the utility, proceed as follows:

- Extract it into a temporary directory (for example, `/opt/tmp`):

```
% cd /opt/tmp
```

```
% gzip -dc UNIX_langpack_setup.tar.gz | tar xvf -
```

A subdirectory `UNIX_langpack_setup` is created.

- Change to the created directory and install the language pack by entering following commands:

```
% cd UNIX_langpack_setup/nls
```

```
% Setuplang.sh
```

16. After the language pack is installed completely, start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components.

Netcool/Reporter 2.2.0.5 Installation on AIX Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.3) installed before applying Netcool/Reporter 2.2.0.5.



Note: There is no need to manually install Apache 2.0.59 before installing this fix pack. The install files of Apache have been supplied within the fix pack package, and the installer will automatically upgrade your existing lower version Apache to the version 2.0.59 and also migrate configurations from the old Apache install to the new install. To understand more about that, refer to "Apache on UNIX and Linux" on page 9.

To install Netcool/Reporter 2.2.0.5:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server (`stopreporter`).
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. You must set some environment variables depending on the type of database you are working with:
 - For Oracle, set `$ORACLE_HOME`.
In addition, in order to support Oracle 9.2 64-bit via a 32-bit library, you need to add `$ORACLE_HOME/lib32` to the `LIBPATH` environment variable.
 - For Sybase, Sybase-related environment variables must be defined, such as `$SYBASE`.

You may need to consult your database administrator for information on these environment variables.

3. The package is delivered as a compressed UNIX tar file, `2.2.0.5-TIV-NCReporter-Aix-FP0001.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp
% gzip -dc 2.2.0.5-TIV-NCReporter-Aix-FP0001.tar.gz | tar xvf -
```
4. A subdirectory, `2.2.0.5-TIV-NCReporter-Aix-FP0001` is created under the temporary directory (for example, `/opt/tmp/2.2.0.5-TIV-NCReporter-Aix-FP0001`). All files and utilities required to install the fix pack are extracted into this subdirectory.
5. Change to the directory `2.2.0.5-TIV-NCReporter-Aix-FP0001`, which contains the files to be installed.

- The UNIX user who runs this fix pack should be the same user who starts Netcool/Reporter. For example, if the user is the root user, please also patch Netcool/Reporter as the root account. If you are not logged in as the root user, enter the following command to switch user to root:

```
$ su - root
password:#
```

- Run the `setup.sh` script and include the database type and version. The usage is:

```
setup.sh "{oracle9i|oracle10g|sybase|db2} [rollback] [ssl]"
```

For example:

```
% setup.sh sybase
```

You might need to change the permission to execute the `setup.sh` script using `chmod`. For example:

```
% chmod 755 setup.sh
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment, for example:

```
% setup.sh sybase SSL
```

- The fix pack installer may request the location of the Netcool/Reporter directory if the `$INFOHOME` environment variable is not defined. For example, if Netcool/Reporter is installed in the `/opt/netcool/reporter/apache/htdocs/infospc` directory, then when the installer asks for the `INFOHOME` location, type:

```
/opt/netcool/reporter/apache/htdocs/infospc
```

The installer backs up existing files into the `$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-Aix-FP0001` directory before copying the new files.

- Enter the Sybase ASE Server IP address (or hostname) and port number if the repository database is Sybase.

The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.

- Wait until the installation completes.

- If you are not using the default port 7777 for Server Admin, and the `startdmin` script is not installed in the default directory, you will be prompted for the document directory. When this occurs, specify the parent directory in which the `/bin/startdmin` script is located. For example, if your `startdmin` script is installed in `/opt/netcool/reporter/bin`, specify `/opt/netcool/reporter`.

12. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

13. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
14. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
15. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a compressed UNIX tar file `UNIX_langpack_setup.tar.gz`.

To run the utility, proceed as follows:

- Extract it into a temporary directory (for example, `/opt/tmp`):

```
% cd /opt/tmp
```

```
% gzip -dc UNIX_langpack_setup.tar.gz | tar xvf -
```

A subdirectory `UNIX_langpack_setup` is created.

- Change to the created directory and install the language pack by entering following commands:

```
% cd UNIX_langpack_setup/nls
```

```
% Setuplang.sh
```

16. After the language pack is installed completely, start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components.

Netcool/Reporter 2.2.0.5 Installation on HP-UX Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.3) installed before applying Netcool/Reporter 2.2.0.5.



Note: There is no need to manually install Apache 2.0.59 before installing this fix pack. The install files of Apache have been supplied within the fix pack package, and the installer will automatically upgrade your existing lower version Apache to the version 2.0.59 and also migrate configurations from the old Apache install to the new install. To understand more about that, refer to "Apache on UNIX and Linux" on page 9.

To install Netcool/Reporter 2.2.0.5:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server (`stopreporter`).
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. Set the environment variables related to Oracle database and HP-UX, as listed below:
 - `$ORACLE_HOME`
 - `$SHLIB_PATH`
 - In addition, in order to support Oracle 9.2 64-bit via a 32-bit library, you need to add `$ORACLE_HOME/lib32` to the `SHLIB_PATH` environment variable.
3. If database DB2 used for the repository or data source, run following commands before starting the Fix Pack 2.2.0.5 installation, for example:

```
% chatr +s enable $INFOHOME/bin/idb2conn
```

```
% chatr +s enable $INFOHOME/bin/infodb2
```

If your database is Oracle 9i/10g, AFTER the patch is processed, run following commands, for example:

```
% chatr +s enable $INFOHOME/bin/ioraconn
```

```
% chatr +s enable $INFOHOME/bin/infosql
```

4. The package is delivered as a compressed UNIX tar file, `2.2.0.5-TIV-NCReporter-Hpux-FP0001.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp
```

```
% gzip -dc 2.2.0.5-TIV-NCReporter-Hpux-FP0001.tar.gz | tar xvf -
```
5. A subdirectory, `2.2.0.5-TIV-NCReporter-Hpux-FP0001` is created under the temporary directory (for example, `/opt/tmp/2.2.0.5-TIV-NCReporter-Hpux-FP0001`). All files and utilities required to install the fix pack are extracted into this subdirectory.

6. Change to the directory 2.2.0.5-TIV-NCReporter-Hpux-FP0001, which contains the files to be installed.
7. The UNIX user who runs this fix pack should be the same user who starts Netcool/Reporter. For example, if the user is the root user, please also patch Netcool/Reporter as the root account. If you are not logged in as the root user, enter the following command to switch user to root:

```
$ su - root
password:#
```

8. Run the `setup.sh` script and include the database type and version. The usage is:

```
setup.sh "{oracle9i|oracle10g|sybase|db2} [rollback] [ssl]"
```

For example:

```
% setup.sh oracle9i
```

You might need to change the permission to execute the `setup.sh` script using `chmod`. For example:

```
% chmod 755 setup.sh
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment, for example:

```
% setup.sh oracle9i SSL
```

9. The fix pack installer may request the location of the Netcool/Reporter directory if the `$INFOHOME` environment variable is not defined. For example, if Netcool/Reporter is installed in the `/opt/netcool/reporter/apache/htdocs/infospc` directory, then when the installer asks for the `INFOHOME` location, type:

```
/opt/netcool/reporter/apache/htdocs/infospc
```

The installer backs up existing files into the

`$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-Hpux-FP0001` directory before copying the new files.

10. Enter the Sybase ASE Server IP address (or hostname) and port number if the repository database is Sybase.
The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.
11. Wait until the installation completes.
12. If you are not using the default port 7777 for Server Admin, and the `startdmin` script is not installed in the default directory, you will be prompted for the document directory. When this occurs, specify the parent directory in which the `/bin/startdmin` script is located. For example, if your `startdmin` script is installed in `/opt/netcool/reporter/bin`, specify `/opt/netcool/reporter`.

13. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

14. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
15. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
16. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a compressed UNIX tar file `UNIX_langpack_setup.tar.gz`.

To run the utility, proceed as follows:

- Extract it into a temporary directory (for example, `/opt/tmp`):

```
% cd /opt/tmp
```

```
% gzip -dc UNIX_langpack_setup.tar.gz | tar xvf -
```

A subdirectory `UNIX_langpack_setup` is created.

- Change to the created directory and install the language pack by entering following commands:

```
% cd UNIX_langpack_setup/nls
```

```
% Setuplang.sh
```

17. After the language pack is installed completely, start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components. In addition, increase the `kernel` parameter value for `max_thread_proc`.

Netcool/Reporter 2.2.0.5 Installation on Linux Operating Systems

The Netcool/Reporter Fix Pack 2.2.0.5 installation is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA (with or without any of the previous 2.2 fix packs, such as 2.2.0.3) installed before applying Netcool/Reporter 2.2.0.5.



Note: There is no need to manually install Apache 2.0.59 before installing this fix pack. The install files of Apache have been supplied within the fix pack package, and the installer will automatically upgrade your existing lower version Apache to the version 2.0.59 and also migrate configurations from the old Apache install to the new install. To understand more about that, refer to "Apache on UNIX and Linux" on page 9.

To install Netcool/Reporter 2.2.0.5:

1. Before running the installer program, you need to do the following:
 - Exit any Netcool/Reporter clients.
 - Shut down the Netcool/Reporter server (`stopreporter`).
 - Back up your repository system (recommended).
 - Back up your Netcool/Reporter file system (recommended).
2. Make sure that the environment variables listed below have been set on the server (Refer to the Netcool/Reporter 2.2.0.0 Administration Guide for complete definitions of these variables).
 - `$INFOHOME`
 - `$LD_LIBRARY_PATH`
 - `$ODBCINI`
3. The package is delivered as a compressed UNIX tar file, `2.2.0.5-TIV-NCReporter-Linux-FP0001.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp
% gzip -dc 2.2.0.5-TIV-NCReporter-Linux-FP0001.tar.gz | tar xvf -
```
4. A subdirectory, `2.2.0.5-TIV-NCReporter-Linux-FP0001` is created under the temporary directory (for example, `/opt/tmp/2.2.0.5-TIV-NCReporter-Linux-FP0001`). All files and utilities required to install the fix pack are extracted into this subdirectory.
5. Change to the directory `2.2.0.5-TIV-NCReporter-Linux-FP0001`, which contains the files to be installed.

- The user who runs this fix pack should be the same user who starts Netcool/Reporter. For example, if the user is the root user, please also patch Netcool/Reporter as the root account. If you are not logged in as the root user, enter the following command to switch user to root:

```
$ su - root
password:#
```

- Run the `setup.sh` script and include the database version. The usage is:

```
setup.sh "{oracle9i|oracle10g|db2} [rollback] [ssl]"
```

For example:

```
% setup.sh oracle9i
```

You might need to change the permission to execute the `setup.sh` script using `chmod`. For example:

```
% chmod 755 setup.sh
```

Include the parameter `SSL` on an SSL-configured Netcool/Reporter environment, for example:

```
% setup.sh oracle9i SSL
```

- The fix pack installer may request the location of the Netcool/Reporter directory if the `$INFOHOME` environment variable is not defined. For example, if Netcool/Reporter is installed in the `/opt/netcool/reporter/apache/htdocs/infospc` directory, then when the installer asks for the `INFOHOME` location, type:

```
/opt/netcool/reporter/apache/htdocs/infospc
```

The installer backs up existing files into the `$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-Linux-FP0001` directory before copying the new files.

- The installer begins to install the Netcool/Reporter Fix Pack 2.2.0.5 files.
- Wait until the installation completes.
- If you are not using the default port 7777 for Server Admin, and the `startdmin` script is not installed in the default directory, you will be prompted for the document directory. When this occurs, specify the parent directory in which the `/bin/startdmin` script is located. For example, if your `startdmin` script is installed in `/opt/netcool/reporter/bin`, specify `/opt/netcool/reporter`.

12. If you need to switch Netcool/Reporter to the 128-bit Advanced Encryption Standard (AES), run `INFOHOME\util\AESTool\trans.bat`. The command usage is:

```
trans {oracle|sybase|mssql|db2} {toAES|toDES}
```

To use AES Encryption, type the following command:

```
% trans.bat oracle toAES
```

You can also use the following command to switch back to use DES Encryption:

```
% trans.bat oracle toDES
```

And then remove the following line:

```
encryptFTP=true
```

from

```
$INFOHOME/Universal.conf
```

For detailed information about the usage of this utility, refer to "Running the AES Utility" on page 38.

13. A few more steps are needed to make Netcool/Reporter 2.2 services accessible over IPV6 networking environments. Refer to "Additional Steps for Accessing Netcool/Reporter over IPV6" on page 10 for the details.
14. The FIPS 140-2 mode utility is supplied along with 2.2.0.5 which turns on a few security features all at once. If needed, run that utility by referring to "Running the FIPS 140-2 Mode Utility" on page 40.
15. If your Netcool/Reporter 2.2 works under other languages than English, you must reset the language settings by running the Language Pack utility. This utility is delivered as a compressed UNIX tar file `UNIX_langpack_setup.tar.gz`.

To run the utility, proceed as follows:

- Extract it into a temporary directory (for example, `/opt/tmp`):

```
% cd /opt/tmp
```

```
% gzip -dc UNIX_langpack_setup.tar.gz | tar xvf -
```

A subdirectory `UNIX_langpack_setup` is created.

- Change to the created directory and install the language pack by entering following commands:

```
% cd UNIX_langpack_setup/nls
```

```
% Setuplang.sh
```

16. After the language pack is installed completely, start Netcool/Reporter.



Note: Web browsers store recent versions of web pages and Java applets. If you need to clear the browser cache and Java Plug-in cache on the client machine, do it before accessing any Netcool/Reporter components. In addition, increase the `kernel` parameter value for `max_thread_proc`.

Running Netcool/Reporter Components

This section describes the process of starting and stopping Netcool/Reporter server and ftp server.

Running Netcool/Reporter Server on UNIX and Linux Systems

This section describes the starting and stopping processes for the Netcool/Reporter server on UNIX and Linux systems.

Starting the Netcool/Reporter Server

To start the Netcool/Reporter server on UNIX and Linux systems, first ensure that the repository database is up and running.

Run the following command:

```
$REPORTERHOME/bin/startreporter
```

This command will start the Apache web server , Tomcat, and the Netcool/Reporter server all at a time.



Note: Starting the Netcool/Reporter server also starts the Netcool/Reporter FTP server.

Stopping the Netcool/Reporter Server

To stop the Netcool/Reporter server on UNIX and Linux systems, run the following command:

```
$REPORTERHOME/bin/stopreporter
```

This command will stop the Apache web server , Tomcat, and the Netcool/Reporter server all at a time.



Note: Stopping the Netcool/Reporter server using these commands, also stops the Netcool/Reporter FTP server.

Running Netcool/Reporter Server on Windows Systems

This section describes the starting and stopping processes for the Netcool/Reporter server on Windows systems.

Starting the Netcool/Reporter Server

To start the Netcool/Reporter server on a Windows System:

1. Ensure the repository database is available.
2. Start the Apache web server.
3. Start Tomcat using **Start**→ **Programs**→ **Netcool Reporter 2.2**→ **Tomcat 5.5**→ **Start Tomcat Default Server**.

4. Start the Netcool/Reporter server using **Start**→ **Programs**→ **Netcool Reporter 2.2** → **Reporter Server**→ **Start Reporter**.
5. If you need to access the *Server Administrator* window you must first start the Netcool/Reporter Administration Server using **Start**→ **Programs**→ **Netcool Reporter 2.2** → **Reporter Admin Server**→ **Start Reporter Admin Server**.



Note: Starting the Netcool/Reporter server also starts the Netcool/Reporter FTP server.

Stopping the Netcool/Reporter Server

To stop the Netcool/Reporter server on a Windows System:

1. Stop the Netcool/Reporter server using **Start**→ **Programs**→ **Netcool Reporter 2.2** → **Reporter Server**→ **Shut Down Reporter**.
2. If you started the Netcool/Reporter Admin server in order to access the Administration tools, you must also stop this server using **Start**→ **Programs**→ **Netcool Reporter 2.2** → **Reporter Admin Server**→ **Shut Down Reporter Admin Server**.
3. To stop Tomcat, close the command window running the Tomcat server directly.



Note: Stopping the Netcool/Reporter server also stops the Netcool/Reporter FTP server.

Running the Netcool/Reporter Administration Server

You must start the Netcool/Reporter Administration server before you can access the *Server Administrator* window.

An error message is displayed if you attempt to start the *Server Administrator* window when the Administration server is not running.

Windows Systems

To start the Netcool/Reporter Administration server on a Windows system, select the menu option **Start**→ **Programs**→ **Netcool Reporter 2.2**→ **Reporter Admin Server**→ **Start Reporter Admin Server**.

To stop the Netcool/Reporter Administration server on a Windows system, select the menu option **Start**→ **Programs**→ **Netcool Reporter 2.2**→ **Reporter Admin Server**→ **Shut Down Reporter Admin Server**.

Unix and Linux Systems

To start the Netcool/Reporter Administration server on UNIX and Linux, run the script:

```
$REPORTERHOME/bin/startadmin
```

To stop the Netcool/Reporter Administration server on LINUX and Linux, run the script:

```
$REPORTERHOME/bin/stopadmin
```

Running the Netcool/Reporter Client

The default URL of the Netcool/Reporter client is:

```
http://hostname:portnumber/infospc/index.jsp
```

or,

```
http://[ipv6_address]:portnumber/infospc/index.jsp
```

Where *hostname* is the name of the machine that hosts the Netcool/Reporter server. Depending on the installation, it may be necessary to enter the fully qualified domain name, for example, *name.yourcompany.com*. An IP address can also be used. *portnumber* is the HTTP port number of the Netcool/Reporter web server.



Note: The IPV6 address of the Netcool/Reporter server must be surrounded in square brackets.

Reference Information

Rolling back Fix Pack 2.2.0.5

If your installation of the fix pack 2.2.0.5 ended up in failure and you want to revert Netcool/Reporter file system to the original state, run the following command:

```
setup.sh rollback
```

or

```
setup.bat rollback
```

This command can be used after 2.2.0.5 installation is finished, and it will revert the Netcool/Reporter file system to the original state before 2.2.0.5 was installed. It recovers back-up files from directory `$INFOHOME/backup/vpatch_2.2.0.5-TIV-NCReporter-XXX-FP0001` or `%INFOHOME%\backup\vpatch_2.2.0.5-TIV-NCReporter-XXX-FP0001`, which has been automatically created at the time of the fix pack installation.

Before executing rollback, you must check which encryption mode that your Netcool/Reporter 2.2.0.5 is using now and which was being used before 2.2.0.5 was installed, by comparing two files:

1. `$INFOHOME/backup/vpatch_2.2.0-TIV-NCReporter-XXX-IF0002/universal.conf`
2. `$INFOHOME/universal.conf`

or

1. `%INFOHOME%\backup\vpatch_2.2.0-TIV-NCReporter-XXX-IF0002/universal.conf`
2. `%INFOHOME%\universal.conf`

There must be `DOAES=false`, `DOAES=true`, or no `DOAES` parameter within the configuration files, meaning:

- `DOAES=false` - Netcool/Reporter is not AES enabled, so it is working on DES.
- `DOAES=true` - Netcool/Reporter is AES enabled.
- No `DOAES` parameter - Equal to `DOAES=false`, meaning DES. This parameter is not present in a fresh installed Netcool/Reporter 2.2.0.5 deployment. It will be written into the configuration file after you have run the AES utility once.

The prerequisite of executing a rollback is that both your current Netcool/Reporter 2.2.0.5 and the backed up Netcool/Reporter deployment (for example 2.2.0.4) are using the same type of encryption mode, that is to say, the two configuration files must both have defined `DOAES=false` (or no `DOAES` parameter) or `DOAES=true`.

If different values, you need to switch Netcool/Reporter 2.2.0.5 to the original encryption mode, as in the backed up directory, by running the AES utility, as described in "Running the AES Utility" on page 38.

Do not simply modify that parameter in either configuration file for consistency. It will not work to actually change the encryption mode.

After Netcool/Reporter has worked in the same encryption mode as it was using before fix pack 2.2.0.5 is installed, you can begin uninstalling this fix pack 2.2.0.5 by running the rollback command.

Running the AES Utility

The AES utility, `ITNR-2.2-XXX_AES`, allows you to switch Netcool/Reporter 2.2 between running in 128 bit Advanced Encryption Standard (AES) mode and 64 bit Data Encryption Standard (DES) mode. By default, Netcool/Reporter 2.2 uses standard DES encryption.

Compared with DES, the AES encryption method provides better confidentiality for your business data within Netcool/Reporter, such as login user accounts, database user names and passwords, report link URLs, ftp commands, user input messages, and so on.

To run the AES utility:

(All references to `INFOHOME` indicate the root directory where Netcool/Reporter is installed.)

1. Shut down the Netcool/Reporter server.
2. Back up the Netcool/Reporter file system and repository database (optional).

3. This utility is supplied within Netcool/Reporter fix pack 2.2.0.4 and is also available as a stand-alone delivery.

- The utility files are provided in the Netcool/Reporter 2.2.0.4 file system:

```
%INFOHOME%\util\AESTool
```

or

```
$INFOHOME/util/AESTool
```

- The stand-alone delivery of this utility is a compressed UNIX tar file or Windows zip file, ITNR-2.2.0.2-UNIX_AES.tar.gz or ITNR-2.2.0.2-WINDOWS_AES.zip. Extract it into a temporary directory (for example, /opt/tmp or C:\temp) as follows:

```
% cd /opt/tmp
```

```
% gzip -dc ITNR-2.2.0.2-UNIX_AES.tar.gz | tar xvf -
```

A subdirectory, ITNR-2.2.0.2-UNIX_AES or ITNR-2.2.0.2-WINDOWS_AES is created under the temporary directory (for example, /opt/tmp/ITNR-2.2.0.2-UNIX_AES). All files of this utility are extracted into this subdirectory.

4. Change to the directory which contains the trans.sh or trans.bat script.

5. Run trans.sh or trans.bat using one of the following commands:

- trans.sh "{oracle|sybase|db2|odbc} {toAES|toDES}" - (On UNIX)

- trans.bat {oracle|sybase|mssql|db2} {toAES|toDES} - (On Windows)

- trans.sh "{odbc} {toAES|toDES}" - (On Linux)

To use AES Encryption, type the following command:

```
% trans.sh oracle toAES
```

To use DES Encryption, type the following command:

```
% trans.sh oracle toDES
```

The utility backs up files into the

```
$INFOHOME/backup/vpatch_2.2.0.2_patch_aes or
```

```
%INFOHOME%\backup\vpatch_2.2.0.2_patch_aes directory before copying new files.
```

6. If you have switched Netcool/Reporter to running in AES mode, an extra manual step is required to enable the Netcool/Reporter FTP server to use AES Encryption. To do this, edit the file \$INFOHOME/Universal.conf or %INFOHOME%\Universal.conf to add a new line, as follows:

```
encryptFTP=true
```

Note that this new parameter is case sensitive. Add it as shown in above example.

When you want to switch Netcool/Reporter back to the 64-bit Data Encryption Standard (DES) mode, after running the trans.sh or trans.bat script, you must also remove this same line:

```
encryptFTP=true
```

```
from $INFOHOME/Universal.conf or %INFOHOME%\Universal.conf.
```

7. After you have finished setting to AES or DES, start Netcool/Reporter as usual and it is working on the expected encryption mode.

After switching to AES, there are many changes you can see from the program GUI which tell that AES has been implemented and is functioning. For example, the URL of a report will appear as follows:

```
http://doc/servlet/InfoServlet?ISSESSIONID=1507533520896&obj=FILE&id=S40c4b8bda12cfdd4131ccbd53733c7d3&action=RUN
```

While, it is in a much shorter form when in DES mode:

```
http://doc/servlet/InfoServlet?ISSESSIONID=1455993913344&obj=FILE&id=E517DD296BB51C0B&action=RUN
```

Also, as highlighted in red in the first of the two examples, a letter S is added as the leading character prior to the report ID in an AES encrypted report running URL. This is the most visible way to tell if your Netcool/Reporter is working under AES or DES.

In addition, the `$INFOHOME/universal.conf` or `%INFOHOME%\universal.conf` configuration file has defined a new parameter called `DOAES`; its value is either of the following values:

- `DOAES=false` - Netcool/Reporter is running in DES mode.
- `DOAES=true` - Netcool/Reporter is running in AES mode.

Note that in a fresh installed Netcool/Reporter 2.2.0.5, `DOAES` is not a default parameter in `universal.conf`. It will be written into this configuration file after you have run the AES utility once. If you find no such parameter available in the configuration file, it means that Netcool/Reporter is working on the default DES encryption mode, equal to `DOAES=false`.

Running the FIPS 140-2 Mode Utility

Fix pack 2.2.0.5 provides the FIPS 140-2 mode utility to make sure more secured Netcool/Reporter services over the network. After the FIPS 140-2 mode is turned on, a number of safety features will be activated, as listed below:

- HTTP Tunneling
- HTTPS secure protocol will be used in Apache and Netcool/Reporter.
- Netcool/Reporter server will be switched to AES mode. This eliminates you from running the AES utility separately.
- Netcool/Reporter FTP service will work under the AES mode.



Note: On Windows systems, the FIPS 140-2 mode utility will not automatically update Apache to work with HTTPS secure protocol if it has not been set so. You will need to set up Apache to use SSL before running the utility. Always make a backup copy of your Apache before making any changes. Some reference information about setting up Apache SSL can be found at:

<http://raibledesigns.com/wiki/Wiki.jsp?page=ApacheSSL>.

The FIPS utility tool is located in %INFOHOME%\util\Utility.bat or \$INFOHOME/util/Utility.sh. To turn on the FIPS 140-2 mode (the mode is turned off by default), run either of the following commands:

```
Utility.bat repository_database ON port_number
```

or

```
Utility.sh repository_database ON port_number
```

where, repository_database represents the database type of your Reporter repository, for example, oracle; port_number is the required HTTPS port number of Apache.

For example, run

```
Utility.bat oracle ON 9443
```

or

```
Utility.sh oracle ON 9443
```

To turn off the FIPS 140-2 mode, use the following command (taking Oracle as database example):

```
Utility.bat oracle OFF 80
```

or

```
Utility.sh oracle OFF 80
```

where, 80 refers to the port that Apache listens.



Note: Note that turning off the mode on Windows system will not recover Apache server to non-SSL. Manual operation is required after running the OFF option.

The FIPS 140-2 mode enhances information safety and reduces server vulnerabilities, however, the turning on of HTTP tunnelling may slightly lower the system performance due to lengthened communications time.

If you have set up IPV6 in Apache and Reporter before using the FIPS utility to turn ON the FIPS mode features, you need to check `ssl.conf` to make sure that the `Listen` directive is correctly set by the FIPS utility. The correct setting of `Listen` is as follows:

```
Listen [2001:15f8:106:193:21a:4bff:fe0b:f838]:9443  
  
Listen 9.180.211.31:9443
```

If you run the FIPS utility to turn OFF the FIPS mode features, you need to check `httpd.conf` to make sure that its `Listen` directive is correctly updated by the utility. The correct setting of `Listen` in `httpd.conf` is as follows:

```
Listen [2001:15f8:106:193:21a:4bff:fe0b:f838]:8080  
  
Listen 9.180.211.31:8080
```

General Points to Note

- Globalization (G11N) is supported in this version with limitations. Please contact IBM Support for details.
- Server Admin can use default port no. 7777 or any other available ports.
- The solution to the `runreport.jsp` and `viewsnapshot.jsp` tools exception issues has been included in this release.
- For Solaris install, the `jikesw` compiler has been replaced with newer version `jikesw 1.15` for `JRUN` to fix the `jsp` scripts compilation issues.
- The Netcool/Reporter server side JRE has been upgraded to the latest DST-patched 1.4.2 release for each of the supported operating systems.
- To avoid problems with Daylight Savings Time (DST) changes, apply the operating system fix or patch on each of the supported operating systems, and on all clients. It is also required that the client side JRE plug-in be upgraded to the 1.5.0 release.
- Three-letter timezone changes have no impact on any of Netcool/Reporter's functions. The JRE which Netcool/Reporter uses has the sole responsibility for the timezone manipulation and time generation.

- For the Crosstab report, the limitation for the combined total number of horizontal and vertical axes is seven columns.
- Users who use IBM JRE 1.5 in web browser are required to select the Enable Java Console radio button in the IBM Java Plug-in window. If Java Console is disabled, IBM JRE 1.5 will not support some Java Swing plug-ins, which may cause Freeform Report Designer and reports unable to run and show properly.
- Excel output in Lightweight Chart (LChart) is disabled temporarily in this release, because we are updating the underlying engine. All LChart outputs in Excel format from previous versions of Netcool/Reporter will be automatically converted to GIF images during the migration.
- After the migration from earlier versions of Netcool/Reporter to 2.2, images either exported from reports or included in PDF report snapshots will not be updated. For instance, the Netcool/Reporter logo image has different design in Netcool/Reporter 2.0 and in 2.2; assume that the old logo is included in a PDF report snapshot saved from the 2.0 server; after migrated to 2.2, this same snapshot file will still use the old logo image, not the new 2.2 logo.
- Scheduler requires necessary environment variables set up on the server machine before the 2.2 installation, especially those variables required for database connection. If they are not properly set up before the installation, scheduled jobs may fail to run under languages other than English.
- You might see the following warning message in Apache `error.log` file when Netcool/Reporter is running. This is a non-critical message that does not cause Apache and Netcool/Reporter to crash. This warning message does not impact Netcool/Reporter's operation.

```
[warn] Loaded DSO C:/JRun30/connectors/apache/intel-win/mod_jrun136.dll
uses plain Apache 1.3 API, this module might crash under EAPI! (please
recompile it with -DEAPI)
```

- The Firefox browser does not show CSV report preview results properly. All report data will be squeezed into the first column. This problem is caused by Firefox, not a product defect of Netcool/Reporter. To work around it, you can save the report preview result onto your local machine as a CSV file, and then open that file using Excel. You will see the data is properly displayed in columns.
- The Firefox browser has options for saving files (Tools->Option->Download). When you save report preview results onto your machine, you may want to specify a file format so next time you open that same file, you will not be prompted for choosing an application to open it. To do this, you can check the "Ask me where to save every file" option. If you check the "Ask me where to save every file" option instead, you are not prompted for when saving report files; but when you try to open it locally, you will have to choose an application.
- On HP-UX operating systems, there is a limitation that only 15 applets can run simultaneously. Applets may include Report Designer, HTML Customizer, Information Designer and Easy Reporter. You may close applets no longer in use to release more memory for other users.

- The server that hosts the Netcool/Reporter server is required to have a minimal of 512MB physical memory for reports to run faster and more effectively.
- On AIX operating systems, if you change the system time of the Netcool/Reporter server frequently, a JVM signal error and Java core file might be generated. This is a known issue with IBM JRE1.4.2 bundled with the Netcool/Reporter server, and it does not affect the Netcool/Reporter functions. To resolve this issue, create an environment variable `JAVA_COMPILER=NONE` and then restart the Netcool/Reporter server.
- The `OutOfMemory` exception might occur when extremely large reports (35M+) are run through Scheduler. If it occurs, reports might still run but will not be sent to email recipients and the runjob process will not stop. You might also see the `infosql` process hangs on Solaris. Try the following solutions to avoid it:
 - Increase the JVM memory size of runjob. To do this, edit `$INFOHOME/bin/runjob.sh` or `$INFOHOME\bin\runjob.bat` and locate this line: `$JAVA_HOME/bin/java -ms4m-mx512m`. Change the default 512m to a larger number, for example, 640m.
 - In addition, improve the memory size of your Netcool/Reporter server, if possible. Increased memory size enhances the capability of the Netcool/Reporter server to handle large workloads. For example, install a 2048 MB memory for your server. Better hardware configuration of the server supports larger report running (installation of other software applications on the same machine could have impacts on the performance). For example, taking a 1024 MB Solaris9 box as an example, it might allow 40M+ reports running smoothly via Scheduler.
- When the Netcool/Reporter Server Admin page is viewed on client machines using JRE 1.5, the time displayed might be one hour ahead of the server time. This problem does not occur when using JRE 1.4.2.
- Users using the Firefox 1.5.0.12 browser might have minor viewing problems. For example, new users who have no published channels or channels of their own might see their channels list showing XX instead of blanks in portal utilities like Publish Folder Content. It will disappear after they have channels either of their own or published. This same problem does not exist with a higher version of Firefox, like 2.0.x.
- Firefox 1.5.0.x has not been maintained with security and stability updates starting from June 2007. All users are recommended to upgrade to Firefox 2. See details at <http://www.mozilla.com/en-US/firefox/>.
- Uninstall could fail to remove all files from the Reporter server. For example, the following files may remain after uninstallation:
 - `INFOHOME/tools/data1.cab`
 - `INFOHOME/tools/Uninstall.exe`
 - `INFOHOME/toolsISSetup.dll`

Those are usually DLL files and other file types used by the uninstall program. It is safe to manually delete those remaining files from the hard disk.

- Due to security considerations and limitations, the FTP client (FTP command) direct access to Netcool/Reporter FTP server is not supported. The server side FTP console will still start during start up time for Netcool/Reporter portal communication purposes.

Resolved Issues

This section provides tables listing issues fixed in Netcool/Reporter 2.2 since the 2.2.0.0 version, including:

- "Problems Resolved in Netcool/Reporter 2.2.0.5 (Total: 13)" on page 44
- "Problems Resolved in Netcool/Reporter 2.2.0.4 (Total: 11)" on page 45
- "Problems Resolved in Netcool/Reporter 2.2.0.3 (Total: 11)" on page 46
- "Problems Resolved in Netcool/Reporter 2.2.0.2 (Total: 48)" on page 47
- "Problems Resolved in Netcool/Reporter 2.2.0.1 (Total: 10)" on page 50

Problems Resolved in Netcool/Reporter 2.2.0.5 (Total: 13)

The following table describes the problems that are resolved in Netcool/Reporter 2.2.0.5.

Table 7. *Problems Resolved in Netcool/Reporter 2.2.0.5 (1 of 2)*

No.	Issue	Applied Operating System
1.	round() and concat() functions in canned reports for DB2 caused SQL exception in specific time point.	All supported operating systems
2.	The patch installer needs to log the occupied port number and host name when a specific port is used during patch installation.	All supported operating systems
3.	The patch number and path should be written to a log file if there is an exception when rolling back a patch.	All supported operating systems
4.	Update Repository SQL files to meet AES security standards.	All supported operating systems
5.	To run setrelogin utility with AES mode, the Infopw file did not convert to AES encryption.	All supported operating systems
6.	Tunneling utility should be provided to turn AES and FIPS on in the same time.	All supported operating systems
7.	Merge the Interim patch IF0002 into Fix Pack 2.2.0.5.	All supported operating systems
8.	Error occurred when entering content in the description or keyword textbox.	All supported operating systems

Table 7. Problems Resolved in Netcool/Reporter 2.2.0.5 (2 of 2)

No.	Issue	Applied Operating System
9.	IPV6 address can not be displayed fully in user admin address field.	All supported operating systems
10.	Name of Group Option is displayed using corrupt characters.	All supported operating systems
11.	The message returned by the FTP tool is not descriptive.	All supported operating systems
12.	Applets failed to load if there is no ipv6 entries in the /etc/hosts file.	UNIX
13.	To preclude the Apache component from accessing the /opt directory.	HPUX only

Problems Resolved in Netcool/Reporter 2.2.0.4 (Total: 11)

The following table describes the problems that are resolved in Netcool/Reporter 2.2.0.4.

Table 8. Problems Resolved in Netcool/Reporter 2.2.0.4 (1 of 2)

No.	Issue	Applied Operating System
1.	The 3D chart type option is shown as "2D" incorrectly in Easy Report menu.	All supported operating systems
2.	The Reporter 2.2 Admin Guide column listings for the audit tables (page 180 onwards) does not mention the AuditKey field.	All supported operating systems
3.	AES utility is provided in this fix pack. The physical location of files for the tool should be under the \$INFOHOME/util/AESTool directory.	All supported operating systems
4.	Cannot correctly display result page in Report Designer if data contains a semicolon.	All supported operating systems
5.	Semicolon is shown as "&semi" using tabular report if the output format is PDF, CSV, or XML.	All supported operating systems
6.	String index out of range: -1 when drilling through a parameterized report that has data with two or more semicolons.	All supported operating systems
7.	When previewing a crosstab from the Report Designer, the second and subsequent semicolons are shown as "&semi".	All supported operating systems
8.	Semicolons listed in the last column shown as "&semi".	All supported operating systems

Table 8. *Problems Resolved in Netcool/Reporter 2.2.0.4 (2 of 2)*

No.	Issue	Applied Operating System
9.	Drill-down report presents semicolons as "&semi" when drilling through a column that ends with a semicolon.	All supported operating systems
10.	Cannot display row based xml crosstab when the horizontal axis contains a semicolon.	All supported operating systems
11.	Server admin failed to start when not using the default port 7777.	UNIX

Problems Resolved in Netcool/Reporter 2.2.0.3 (Total: 11)

The following table describes the problems that are resolved in Netcool/Reporter 2.2.0.3.

Table 9. *Problems Resolved in Netcool/Reporter 2.2.0.3*

No.	Issue	Applied Operating System
1.	Save option does not save the existing files into their original location by default.	All supported operating systems
2.	Scheduler cannot work if changing server port 6889.	All supported operating systems
3.	Closing the quick start window should not close Reporter application windows.	All supported operating systems
4.	Chart export from Easy Reporter failed to work if using a non-6889 server port.	All supported operating systems
5.	Error occurred saving a chart in Report Designer if using a non-6889 server port.	All supported operating systems
6.	Print and Print Preview in Easy Reporter failed to work if using a non-6889 server port.	All supported operating systems
7.	Drill-charts failed to preview in Report Designer if using a non-6889 server port.	All supported operating systems
8.	Reporter fix packs patching failed if Reporter was installed to use a non-6889 server port. Possible cause is patch_util.jar hard coded 6889 port.	All supported operating systems
9.	Update ldapimport script to let Ldap run well after installation.	All supported operating systems
10.	Enhance Oracle 10g drivers for AIX, HPUX, and Linux.	UNIX and Linux
11.	Error occurred exporting a chart into the PDF format.	Windows

Problems Resolved in Netcool/Reporter 2.2.0.2 (Total: 48)

The following table describes the problems that are resolved in Netcool/Reporter 2.2.0.2.

Table 10. *Problems Resolved in Netcool/Reporter 2.2.0.2 (1 of 3)*

No.	Issue	Applied Operating System
1.	Netcool/Reporter User Guide documentation contains ambiguous description regarding folder functionality.	All supported operating systems
2.	The size of buttons should be expanded in the Report Designer Presentation Tab.	All supported operating systems
3.	The exact value of measure does not display 0 for corresponding data.	All supported operating systems
4.	Scheduled job works fine but process is still running.	All supported operating systems
5.	An error was generated in the PDF file when "Reset" was clicked in runreport.jsp.	All supported operating systems
6.	Crosstab in CSV format is loaded within Netscape browser but not in Excel when unencrypted option is checked.	All supported operating systems
7.	In Freedom Report Designer, add a chart, change the font or font size and then undo; a different chart is displayed.	All supported operating systems
8.	The pane controls in the Publish Folder Content utility window cannot fully display long file names and the vertical scrollbar cannot adjust flexibly.	All supported operating systems
9.	In Report Designer Properties window, it is difficult to select values by dragging the scrollbar of property options.	All supported operating systems
10.	Parameterized crosstab in PDF cannot preview when added in the presentation.	All supported operating systems
11.	Use SaveFilesIntoRepository utility to import LChart files into the destination repository.	All supported operating systems
12.	Use SaveFilesIntoRepository utility to import freeform report into the destination repository.	All supported operating systems
13.	Upgrade JRE versions for the New Zealand DST issue.	All supported operating systems
14.	The maximum length of a password that you can include in the data source has been extended from 14 to 30 characters.	All supported operating systems

Table 10. *Problems Resolved in Netcool/Reporter 2.2.0.2 (2 of 3)*

No.	Issue	Applied Operating System
15.	Scheduler does not work in dual IP environment.	All supported operating systems
16.	User login authentication made case-sensitive.	All supported operating systems
17.	Failed to run canned reports when reporter_status.summary field contains specific dataset.	All supported operating systems
18.	PDF reporter generates a null pointer exception.	All supported operating systems
19.	Excel link does not work properly in html page.	All supported operating systems
20.	Clicking on the Excel link on a report, the gif image is broken in the PDF output.	All supported operating systems
21.	Data truncated in Excel output because of carriage return characters.	All supported operating systems
22.	4 level-break report breaks the formatting of the PDF report.	All supported operating systems
23.	Freeform report fails if some of the reports embedded contain no data.	All supported operating systems
24.	Netcool/Reporter Admin Guide documentation contains incorrect upgrade instructions.	All supported operating systems
25.	Missing scroll bar in Report Composer and Report Designer.	All supported operating systems
26.	Normal user cannot delete published report from Inbox.	All supported operating systems
27.	The 2D chart does not show the chart title inside the applet if any descriptor other than 'none' is selected.	All supported operating systems
28.	Connecting to the search page generates a java exception.	All supported operating systems
29.	Tabular reports with xml as output type with 1 break, 1 level and 1 summary will fail to preview.	All supported operating systems
30.	LDAP user authentication fails without ldapjdk.jar file.	All supported operating systems
31.	Failed to generate report in Oracle_Events_by_AlertGroup.par.	All supported operating systems
32.	Reporter 2.1 fails to produce PDF reports in large numbers of data.	All supported operating systems
33.	Cancel button does not work in presentation.	All supported operating systems

Table 10. *Problems Resolved in Netcool/Reporter 2.2.0.2 (3 of 3)*

No.	Issue	Applied Operating System
34.	There is no prompted error message when preview drill-chart report in Report Designer.	All supported operating systems
35.	The limitation that more than 15 applets cannot be opened simultaneously is not documented.	HP-UX
36.	Changing FTP listening port during installation breaks Upload Content.	All supported operating systems
37.	Infosql processes are not being deleted.	All supported operating systems
38.	* not allowed as a password character even though not excluded in documentation.	All supported operating systems
39.	Incorrect word order in Condition Builder panel.	All supported operating systems
40.	Time delay in returning crosstab in PDF format with unencrypted option checked.	All supported operating systems
41.	Parameter report with break cannot export current report.	All supported operating systems
42.	Set text alignment as right/fill/center, tab could not work.	All supported operating systems
43.	Open report by user has no privilege to access the data source.	All supported operating systems
44.	Easy Reporter licenses not being fully released.	All supported operating systems
45.	Form based report Sybase_Top_Nodes fails.	All supported operating systems
46.	Unable to log back into Reporter after being disconnected.	All supported operating systems
47.	The Sybase canned reports fail to run against Sybase 12.	All supported operating systems
48.	Design a pallet to configure the color definitions for report.	All supported operating systems

Problems Resolved in Netcool/Reporter 2.2.0.1 (Total: 10)

The following table describes the problems that are resolved in Netcool/Reporter 2.2.0.1.

Table 11. *Problems Resolved in Netcool/Reporter 2.2.0.1*

No.	Issue	Applied Operating System
1.	Crosstab in CSV format is loaded within Netscape browser but not in Excel when unencrypted option is checked.	All supported operating systems
2.	In Freedom Report Designer, add a chart, change the font or font size and then undo; a different chart is displayed.	All supported operating systems
3.	The pane controls in the Publish Folder Content utility window cannot fully display long file names and the vertical scroll bar cannot adjust flexibly.	All supported operating systems
4.	In Report Designer Properties window, it is difficult to select values by dragging the scroll bar of property options.	All supported operating systems
5.	Parameterized crosstab in PDF cannot preview when added in the presentation.	All supported operating systems
6.	Upgrade JRE versions for the New Zealand DST issue.	All supported operating systems
7.	Tab flyover should be consistent.	All supported operating systems
8.	Some image flyovers were not translated.	All supported operating systems
9.	Help links that need modification.	All supported operating systems
10.	Applets are not showing in any subsequent browser opened.	All supported operating systems

Appendix A. Notices

This appendix contains the following:

- "Notices" on page 28
- "Trademarks" on page 30

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