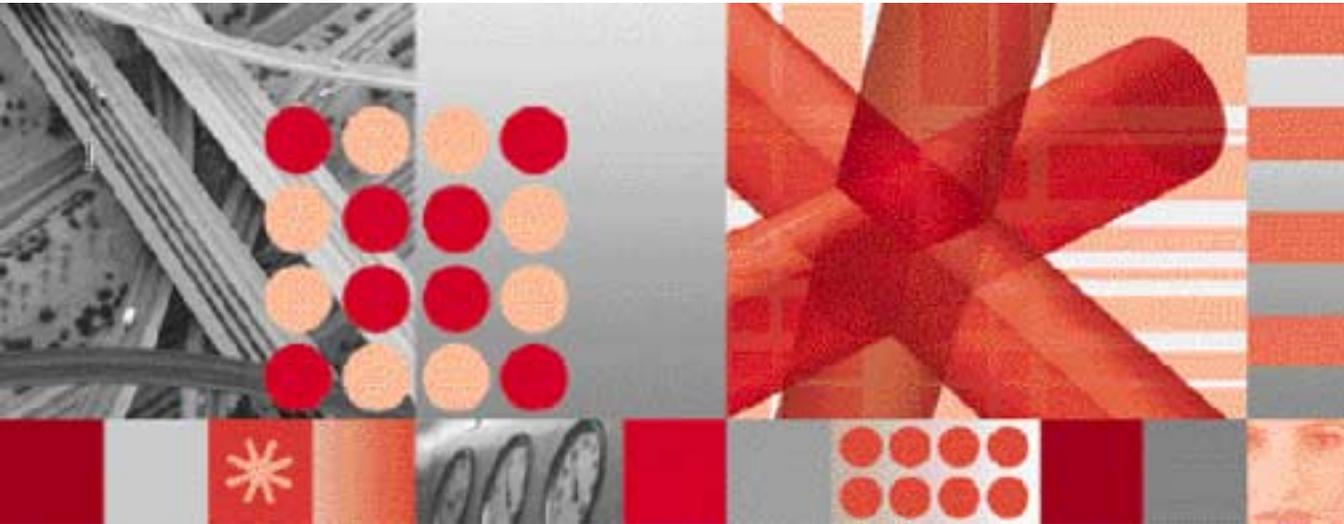


Interim Fix Pack Version 2.2.0-TIV-NCReporter-IF0002



## 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 interim fix pack 2.2.0-TIV-NCReporter-IF0002 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

Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is used to migrate Netcool/Reporter 2.2 from the original Apache plus JRun configuration to Apache plus Tomcat configuration. It also enables Netcool/Reporter to work under the next generation IPV6 networking environments. Netcool/Reporter fix pack 2.2.0.4 is required in order to install 2.2.0-TIV-NCReporter-IF0002.

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 8
- "Installation Procedures" on page 11
- "Running Netcool/Reporter Components" on page 23
- "Reference Information" on page 25
- "General Points to Note" on page 28
- "Resolved Issues" on page 31

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## Overview

Netcool/Reporter 2.2 uses a combination of Apache web server and JRun servlet container. This interim fix pack 2.2.0-TIV-NCReporter-IF0002 migrates Netcool/Reporter 2.2 to Apache web server and Tomcat servlet container, for better web performance, support for Internet Protocol Version 6 (IPV6) networking environments, compliance with FIPS 140-2 specifications, and many more advantages.

The Advanced Encryption Standard (AES) utility has been incorporated within this fix pack to make Netcool/Reporter services over your corporate intranet or extranet safer.

Targeted users of 2.2.0-TIV-NCReporter-IF0002 are Netcool/Reporter 2.2 users with fix pack 2.2.0.4 installed.

---

## 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 interim fix pack 2.2.0-TIV-NCReporter-IF0002 migrates 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.

## **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 4
- "Netcool/Reporter Client Browser" on page 4
- "Java Plugin for Netcool/Reporter Clients" on page 5
- "Netcool/Reporter Database" on page 6
- "Setting the DISPLAY Variable on UNIX and LINUX" on page 6

## **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"><li>• Sun JRE 1.5.0_11_b03</li><li>• IBM J2RE 1.5.0 (only supported on IBM hardware)</li></ul>
Windows Server 2003	<ul style="list-style-type: none"><li>• Sun JRE 1.5.0_11_b03</li><li>• IBM J2RE 1.5.0 (only supported on IBM hardware)</li></ul>
Windows Vista	<ul style="list-style-type: none"><li>• Sun JRE 1.5.0_11_b03</li><li>• IBM J2RE 1.5.0 (only supported on IBM hardware)</li></ul>

**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

2.2.0-TIV-NCReporter-IF0002 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-TIV-NCReporter-IF0002 requires version 2.0.59 of the Apache web server. If you are installing it on the top of a functioning Netcool/Reporter 2.2.0.4 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 2.2.0.4 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 2.2.0-TIV-NCReporter-IF0002 package provides a standard installation and a secure installation of the Apache web server under the directory:

`\2.2.0-TIV-NCReporter-Win32-IF0002\components\apache\Standard`  
and

`\2.2.0-TIV-NCReporter-Win32-IF0002\components\apache\SSL`

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

3. Configure Apache SSL if needed.
4. The Apache `%apache_home%\apache\conf\httpd.conf\httpd.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 2.2.0.4 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 9.

## Apache on UNIX and Linux

Fix pack 2.2.0-TIV-NCReporter-IF0002 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 2.2.0.4 deployment, a specific version of Apache must have been used in that deployment. No matter what version is being used, the 2.2.0-TIV-NCReporter-IF0002 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 this directory:

```
$INFOHOME/backup/vpatch_2.2.0-TIV-NCReporter-XXX-IF0002/apache
```

where, XXX indicates the operating system of the server.

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` 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 directory stated above.
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` for parameter values and write them into the new `httpd.conf`, to minimize 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 9.

---

## 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.

With interim fix pack 2.2.0-TIV-NCReporter-IF0002 installed, Netcool/Reporter 2.2 can work over IPV6 enabled networks, with only a few manual steps needed after the fix pack installation.

## Prerequisites

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

1. 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
```

2. Netcool/Reporter server uses hosts or ipnodes file for hostname resolution on UNIX operating systems. If your UNIX server is working on an dual IPV4&IPV6 network, make sure that there is only one hostname defined for the server machine in either of the following files:

- /etc/hosts
- /etc/inet/ipnodes

For example,

```
fc00::a00:20ff:fef5:929a localhost reporter
192.168.0.123 reporter
```

In this example, the Netcool/Reporter server is named `reporter` and two IPs are defined for it, one for IPV6 and the other for IPV4. When there are requests for accessing Netcool/Reporter via either IPV6 or IPV4 networks, the system knows where the requests come from and how to respond as a result.

3. Netcool/Reporter 2.2 plus fix pack 2.2.0.4 installed and working.
4. Installation of the interim fix pack 2.2.0-TIV-NCReporter-IF0002, as detailed in "Installation Procedures" on page 11.
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 2.2.0-TIV-NCReporter-IF0002, 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 2.2.0-TIV-NCReporter-IF0002 over Netcool/Reporter 2.2.0.4. For detailed information, refer to "Installation Procedures" on page 11.

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 Apache httpd.conf or ssl.conf, which are under the directory Apache\_home/conf, to let Apache listen on IPV6 addresses. For example, set up Listen parameter as in the following examples:

```
Listen [fd00::215:c5ff:fe3c:ca41]:80
```

or

```
Listen [fd00::215:c5ff:fe3c:ca41]:9443
```

Note that the IPV6 address of the Netcool/Reporter server must be surrounded in square brackets. Be sure to fill in the actual address 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.
```

---

## Installation Procedures

This section discusses the procedures for installing Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 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 a 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:** The installer will read `$INFOHOME/server/ftpserver` for relevant parameter values. If any of the PATH values defined in that file contains the word Java, then you need to delete that particular path value. The delimiter for separating path values is a colon (:). The deletion will do no harm to Netcool/Reporter functions. If the PATH values do contain the word Java, the installer might halt some where in the process and gives the -1 error message, and thus ends up in failure. If you see this error message, check the `ftpserver` file, removing any PATH values that contain the word Java, then run the installer again.

### 2.2.0-TIV-NCReporter-IF0002 Installation on Windows

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under  
`%INFOHOME%\util\AESTool\trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a zip file,
  - 2.2.0-TIV-NCReporter-Win32-IF0002.zip - For 32-bit Windowsor,
  - 2.2.0-TIV-NCReporter-Win64-IF0002.zip - For 64-bit WindowsUncompress the file into a temporary directory (for example, C:\temp).
4. A subdirectory, 2.2.0-TIV-NCReporter-Win32-IF0002 or 2.2.0-TIV-NCReporter-Win64-IF0002 is created under the temporary directory, (for example, C:\temp\2.2.0-TIV-NCReporter-Win32-IF0002). All files and utilities required to install the patch are extracted into this subdirectory.
5. Install the Apache server 2.0.59 on the host machine before installing this interim fix pack. The installation file is supplied within the fix pack, under the directory \components\apache, for example, 2.2.0-TIV-NCReporter-Win64-IF0002\components\apache.  
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](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.
6. To begin installing the interim fix pack, change to the directory 2.2.0-TIV-NCReporter-Win32-IF0002 or 2.2.0-TIV-NCReporter-Win64-IF0002, which contains the files to be installed.

7. Launch a DOS prompt window and run `setup.bat` using the following command:

```
setup.bat "{tomcat|rollback}[ssl]"
```

For example:

```
setup.bat tomcat
```

The `rollback` option is used to revert the Netcool/Reporter file system to the original state before this patch is installed. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up `%INFOHOME%` environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

## 2.2.0-TIV-NCReporter-IF0002 Installation on Solaris 9

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.



**Note:** There is no need to 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 of 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 8.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under `$INFOHOME/util/AESTool/trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% trans.sh 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a compressed UNIX tar file, `2.2.0-TIV-NCReporter-Sol-IF0002.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp  
% gzip -dc 2.2.0-TIV-NCReporter-Sol-IF0002.tar.gz | tar xvf -
```

4. A subdirectory, `2.2.0-TIV-NCReporter-Sol-IF0002` is created under the temporary directory (for example, `/opt/tmp/2.2.0-TIV-NCReporter-Sol-IF0002`). All files and utilities required to install the patch are extracted into this subdirectory.
5. Change to the directory `2.2.0-TIV-NCReporter-Sol-IF0002`, which contains the patch files to be installed.
6. The UNIX user who installs this fix pack must be the same user who installed Netcool/Reporter. For example, if the user was the root user, please also use the root account to install this fix pack. 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 using the following command:

```
setup.sh "{tomcat|rollback}[ssl]"
```

For example:

```
% setup.sh tomcat
```

The `rollback` option is used to uninstall this interim fix pack. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up \$INFOHOME environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

## 2.2.0-TIV-NCReporter-IF0002 Installation on Solaris 10

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.



**Note:** There is no need to 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 of 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 8.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under  
`$INFOHOME/util/AESTool/trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% trans.sh 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a compressed UNIX tar file, `2.2.0-TIV-NCReporter-Sol-IF0002.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp  
% gzip -dc 2.2.0-TIV-NCReporter-Sol-IF0002.tar.gz | tar xvf -
```

4. A subdirectory, `2.2.0-TIV-NCReporter-Sol-IF0002` is created under the temporary directory (for example, `/opt/tmp/2.2.0-TIV-NCReporter-Sol-IF0002`). All files and utilities required to install the patch are extracted into this subdirectory.
5. Change to the directory `2.2.0-TIV-NCReporter-Sol-IF0002`, which contains the patch files to be installed.
6. The UNIX user who installs this fix pack must be the same user who installed Netcool/Reporter. For example, if the user was the root user, please also use the root account to install this fix pack. 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 using the following command:

```
setup.sh "{tomcat|rollback}[ssl]"
```

For example:

```
% setup.sh tomcat
```

The `rollback` option is used to uninstall this interim fix pack. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up \$INFOHOME environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

## 2.2.0-TIV-NCReporter-IF0002 Installation on AIX

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.



**Note:** There is no need to 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 of 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 8.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under `$INFOHOME/util/AESTool/trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% trans.sh 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a compressed UNIX tar file, `2.2.0-TIV-NCReporter-Aix-IF0002.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp  
% gzip -dc 2.2.0-TIV-NCReporter-Aix-IF0002.tar.gz | tar xvf -
```

4. A subdirectory, `2.2.0-TIV-NCReporter-Aix-IF0002` is created under the temporary directory (for example, `/opt/tmp/2.2.0-TIV-NCReporter-Aix-IF0002`). All files and utilities required to install the patch are extracted into this subdirectory.
5. Change to the directory `2.2.0-TIV-NCReporter-Aix-IF0002`, which contains the patch files to be installed.
6. The UNIX user who installs this fix pack must be the same user who installed Netcool/Reporter. For example, if the user was the root user, please also use the root account to install this fix pack. 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 using the following command:

```
setup.sh "{tomcat|rollback}[ssl]"
```

For example:

```
% setup.sh tomcat
```

The `rollback` option is used to uninstall this interim fix pack. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up \$INFOHOME environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

## 2.2.0-TIV-NCReporter-IF0002 Installation on HP-UX

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.



**Note:** There is no need to 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 of 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 8.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under `$INFOHOME/util/AESTool/trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% trans.sh 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a compressed UNIX tar file, `2.2.0-TIV-NCReporter-Hpux-IF0002.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

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

```
% gzip -dc 2.2.0-TIV-NCReporter-Hpux-IF0002.tar.gz | tar xvf -
```

4. A subdirectory, `2.2.0-TIV-NCReporter-Hpux-IF0002` is created under the temporary directory (for example, `/opt/tmp/2.2.0-TIV-NCReporter-Hpux-IF0002`). All files and utilities required to install the patch are extracted into this subdirectory.
5. Change to the directory `2.2.0-TIV-NCReporter-Hpux-IF0002`, which contains the patch files to be installed.
6. The UNIX user who installs this fix pack must be the same user who installed Netcool/Reporter. For example, if the user was the root user, please also use the root account to install this fix pack. 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 using the following command:

```
setup.sh "{tomcat|rollback}[ssl]"
```

For example:

```
% setup.sh tomcat
```

The `rollback` option is used to uninstall this interim fix pack. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up \$INFOHOME environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

## 2.2.0-TIV-NCReporter-IF0002 Installation on Linux

Installation of Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002 is an upgrade installation, not a full installation. Users must have Netcool/Reporter version 2.2 GA with at least fix pack 2.2.0.4 installed before applying this fix pack.



**Note:** There is no need to 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 of 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 8.

To install 2.2.0-TIV-NCReporter-IF0002:

1. Before running the installer program, you need to do the following:
  - Exit any Netcool/Reporter clients.
  - Shut down the Netcool/Reporter server.
  - Stop all running Netcool/Reporter processes on the server machine.
  - Do not access or open any Netcool/Reporter directory.
  - Back up your repository system (recommended).
  - Back up your Netcool/Reporter file system (recommended).

2. Netcool/Reporter 2.2.0.4 can be set to work on the 128-bit Advanced Encryption Standard (AES), instead of the default 64-bit Data Encryption Standard (DES). The utility designed for this purpose is available under `$INFOHOME/util/AESTool/trans.sh`.

To use AES Encryption, type the following command (taking Oracle as database example):

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

You can also switch it back to use DES Encryption, by running the following command (taking Oracle as database example):

```
% trans.sh 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 26.

3. This interim fix pack 2.2.0-TIV-NCReporter-IF000 is delivered as a compressed UNIX tar file, `2.2.0-TIV-NCReporter-Linux-IF0002.tar.gz`. Extract it into a temporary directory (for example, `/opt/tmp`) as follows:

```
% cd /opt/tmp  
% gzip -dc 2.2.0-TIV-NCReporter-Linux-IF0002.tar.gz | tar xvf -
```

4. A subdirectory, `2.2.0-TIV-NCReporter-Linux-IF0002` is created under the temporary directory (for example, `/opt/tmp/2.2.0-TIV-NCReporter-Linux-IF0002`). All files and utilities required to install the patch are extracted into this subdirectory.
5. Change to the directory `2.2.0-TIV-NCReporter-Linux-IF0002`, which contains the patch files to be installed.
6. The UNIX user who installs this fix pack must be the same user who installed Netcool/Reporter. For example, if the user was the root user, please also use the root account to install this fix pack. 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 using the following command:

```
setup.sh "{tomcat|rollback}[ssl]"
```

For example:

```
% setup.sh tomcat
```

The `rollback` option is used to uninstall this interim fix pack. For more information on that, refer to "Rolling back 2.2.0-TIV-NCReporter-IF0002" on page 25.

8. The installer might prompt for setting up \$INFOHOME environment variable if not already set. If you are running the setup over a functioning Netcool/Reporter 2.2.0.4 deployment, there will be no such prompt.
9. Follow the on-screen instructions to complete installing the interim fix pack.
10. 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 9 for the details.
11. 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.

---

## 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 2.2.0-TIV-NCReporter-IF0002

If your installation of the interim fix pack 2.2.0-TIV-NCReporter-IF0002 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-TIV-NCReporter-IF0002 installation is finished, and it will revert the Netcool/Reporter file system to the original state before 2.2.0-TIV-NCReporter-IF0002 was installed. It recovers back-up files from directory `$INFOHOME/backup/vpatch_2.2.0-TIV-NCReporter-XXX-IF0002` or `%INFOHOME%\backup\vpatch_2.2.0-TIV-NCReporter-WinXX-IF0002`, which has been automatically created at the time of the interim fix pack installation.

Before executing rollback, you must check which encryption mode that your Netcool/Reporter 2.2.0.4 is using now and which was being used before 2.2.0-TIV-NCReporter-IF0002 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 2.2.0.4 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 2.2.0.4 and the backed up Netcool/Reporter 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 2.2.0.4 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 26.

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 2.2.0.4 has worked on the same encryption mode as it was using before 2.2.0-TIV-NCReporter-IF0002 is installed, you can begin uninstalling this interim fix pack by running the rollback command.

## Running the AES Utility

The AES utility, ITNR-2.2-UNIX\_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=S40c4b8bda12cfd4131ccbd53733c7d3&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 2.2.0.4, 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`.

---

## 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 not supported 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.
- It is a known issue that when Netcool/Reporter 2.2.0.4 is running under AES, an error will occur when uploading files to the portal if those files have a description and keyword specified. To work around this issue, do not enter the description or keyword when uploading; enter the description and keyword for the file after completing the upload using the Managing Folder Contents module.
- 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-TIV-NCReporter-IF0002 (Total: 7)" on page 32
- "Problems Resolved in Netcool/Reporter 2.2.0.4 (Total: 11)" on page 33

- "Problems Resolved in Netcool/Reporter 2.2.0.3 (Total: 11)" on page 34
- "Problems Resolved in Netcool/Reporter 2.2.0.2 (Total: 48)" on page 35
- "Problems Resolved in Netcool/Reporter 2.2.0.1 (Total: 10)" on page 38

## Problems Resolved in Netcool/Reporter 2.2.0-TIV-NCReporter-IF0002 (Total: 7)

The following table describes the problems that are resolved in Netcool/Reporter interim fix pack 2.2.0-TIV-NCReporter-IF0002.

**Table 2.** *Problems Resolved in Netcool/Reporter 2.2.0-TIV-NCReporter-IF0002*

No.	Issue	Applied Operating System
1.	Reporter adjusted to adapt to IPv6 standard in any places where IP address is used.	All supported operating systems
2.	Upgrade from Jrun3 to Tomcat5 for compliance of FIPS and IPV6.	All supported operating systems
3.	Implement FIPS 140-2 verification after the interim patch installation.	All supported operating systems
4.	Failed to create file types in User Admin after adjustments made for IPv6 standard.	All supported operating systems
5.	Tmp.sh file is not created under the INFOHOME directory because relative path is used in java code.	UNIX only
6.	The default URL (for example, http://<hostname>:port) is not redirecting to Login Page.	UNIX only
7.	HTTP Status 500 error is displayed after clicking on any links on an expired session window.	All supported operating systems

## 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 3.** *Problems Resolved in Netcool/Reporter 2.2.0.4*

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
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 4.** *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, HP-UX, 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 5.** *Problems Resolved in Netcool/Reporter 2.2.0.2 (1 of 3)*

<b>No.</b>	<b>Issue</b>	<b>Applied Operating System</b>
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 5. Problems Resolved in Netcool/Reporter 2.2.0.2 (2 of 3)**

<b>No.</b>	<b>Issue</b>	<b>Applied Operating System</b>
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 5. Problems Resolved in Netcool/Reporter 2.2.0.2 (3 of 3)**

<b>No.</b>	<b>Issue</b>	<b>Applied Operating System</b>
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 6.** *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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