



# Release Notes for Cisco Network Data Analyzer Release 3.0(2)

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These release notes contain platform and system requirements and instructions for installing and setting up Release 3.0(2) of the Cisco Network Data Analyzer.

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# Platforms Supported

The Cisco Network Data Analyzer (referred to here as the Analyzer) is supported on the following platforms:

- Solaris Version 2.5.1 and Version 2.6
- HP-UX Version 11.0

The Analyzer Display module also runs on Windows NT Version 4.0.

# Workstation Requirements

## Hardware Requirements

The Analyzer requires the following hardware:

- DisplayServer host machine (Solaris or HP-UX):
  - 256 MB of physical memory (RAM)
  - 400 MB of free logical memory
- Solaris:
  - 70 MB of free disk space for tar and uncompressed installation files (which you can delete after installation)
  - 50 MB of free disk space for the installed Analyzer executables
- HP-UX:
  - 120 MB of free disk space for tar and uncompressed installation files (which you can delete after installation)
  - 75 MB of free disk space for the installed Analyzer executables
- Analyzer Display module executables running on a PC:
  - 25 MB of free disk space
  - Pentium class 166-MHz CPU with 64 MB or more of physical memory (RAM)

## Software Requirements

The Analyzer requires the following software:

- The Bourne sh shell (/bin/sh) must be available for execution.
- The following standard utility programs must be in /usr/bin or /bin, or must be set in each user's \$PATH environment variable:
  - awk
  - cat
  - cd
  - chmod
  - echo

- expr
- kill
- ls
- mkdir
- nohup
- ps
- pwd
- rm
- sed
- touch
- unalias
- wc
- whoami

## Installing and Starting the Analyzer for the First Time

To install and start the Analyzer, perform the following steps:

**Step 1** Log in to the workstation as root.

```
$ su root
password: <password>
```

**Step 2** Untar the tar file.

```
Solaris: # tar -xvf NDA3_0.SOL.tar
HPUX: # tar -xvf NDA3_0.HP_11.tar
```

**Step 3** Run the installation script and answer all questions.



**Note**

The installation process prompts you to start the Analyzer user interface. Before you start the installation script, enable remote X connections to your workstation by an **xhost +** command.

```
Solaris: # ./NDA3_0.setup.sh ./NDA3_0.SOL.Z
HPUX: # ./NDA3_0.setup.sh ./NDA3_0.HP_11.Z
```

To install the Analyzer Display module on Windows NT, perform the following steps:

- Step 1** Set protections on the NFADisplay directory and all of its subdirectories by entering the following command at the root level:

```
# chmod -R 777 /opt/CSCOnfa/NFADisplay
```

- Step 2** Copy the /opt/CSCOnfa/NFADisplay directory and all of its subdirectories and files to the target directory on your PC. If desired, you can use the Tar command and WINZIP for this process.



**Note**

Do not use FTP for the copy because recursiveness of the copy and all subdirectories is not guaranteed.

## Stopping and Restarting the Analyzer Servers

To stop or restart the Analyzer servers (UtilityServer and DisplayServer), perform the following steps:

- Step 1** Log in as root.

```
$ su root
password: <password>
```

- Step 2** Stop or restart the servers.

- a. To stop the Analyzer servers, run the stop.All shell script:

```
# /opt/CSCOnfa/stop.All
```

- b. To restart the Analyzer servers, run the start.All shell script:

```
# /opt/CSCOnfa/start.All
```

## Starting the Analyzer Display Module

To start the user interface, enter the appropriate command:

```
Solaris: # /opt/CSCOnfa/NFADisplay/bin/start.Display
```

```
HPUX: # /opt/CSCOnfa/NFADisplay/bin/start.Display
```

```
Windows NT: C:\NFADisplay\bin>startPC_Display
```

## New Features for Release 3.0

This section describes new features for Release 3.0 of the Analyzer.

- NetFlow FlowCollector Control—You can use the Analyzer to create, modify, and delete collections on remote machines running Release 3.0 of the FlowCollector.



Note

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The Analyzer works best if you run the FlowCollector in Release 3.0 mode. The FlowCollector's default mode is set to **NFC20\_COMPATIBLE\_MODE yes**. To run the FlowCollector in Release 3.0 mode, stop the FlowCollector, change the setting in the `nf.resources` file to **NFC20\_COMPATIBLE\_MODE no**, and restart the FlowCollector.

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Note

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To avoid having to log on to a FlowCollector each time you want to modify a NetFlow configuration, run the FlowCollector gateway program (NFCGW) with the `PROGRAMFLAGS` switch set to **-i** (dash, lowercase i).

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- Traffic matrix statistics (TMS) control—You can use the Analyzer to create and delete TMS data collections on UtilityServers. This capability requires that routers be running IOS Release 12.0(6)T or 12.0(5)S.
- Router configuration for data export—You can use the Analyzer to set up collection parameters for exporting NetFlow or TMS data from routers.
- On-router aggregation schemes—You can use the Analyzer to set up routers to collect and display data for five new on-router aggregation schemes. These on-router aggregation schemes require that routers have DNS names and be running IOS Release 12.0(3)T or Release 12.0(6)S.
- Online help system—You can use Netscape Version 4.5 or Internet Explorer Version 5 as the Web browser for viewing the Analyzer help system.

## New Features for Release 3.0(2)

Release 3.0(2) of the Analyzer has these new features:

- Support—The Analyzer is supported on HP-UX Version 11.0.
- Compressed data files—The Analyzer can read compressed files that the FlowCollector created. NetFlow collection control can also set or unset compression.
- Traffic Matrix Statistics (TMS) histogram charts—Histogram charts can be generated for traffic matrix statistics data.

# Operating Suggestions

Here are some suggestions for using the Analyzer:

- To run the Display module from a Windows NT platform, use this procedure:
  - a. Set protections on the NFADisplay directory and all of its subdirectories by entering the following command at the root level:
 

```
# chmod -R 777 /opt/CSCOnfa/NFADisplay
```
  - b. Copy the /opt/CSCOnfa/NFADisplay directory and all of its subdirectories and files to the target directory on your PC. If desired, you can use Tar and WINZIP for this process.




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**Note** Do not use FTP for the copy because recursiveness of the copy and all subdirectories is not guaranteed.

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- c. Change directory (**cd**) to NFADisplay/bin.
  - d. Enter **startPC\_Display.bat**
- Make sure one UtilityServer at a time is collecting TMS data from a given router.
  - If you are working in the AS Drill Down window and the Search window, you must use the DetailASMatrix aggregation scheme.
  - Use the Router Configuration option on the Tools menu to configure TMS data collection, and then use the TMS Collection Control window to start a collection on the UtilityServer. The router configuration process recognizes only those routers that have DNS entries.
  - If the UtilityServer is stopped and then restarted, TMS collections are not resumed.
  - To enable the router configuration process to reread the router configuration files, restart the Display module.
  - To navigate in the router-based aggregations table in the RouterConfig window, do the following:
    - To advance to the next cell, press **Tab**.
    - To advance to the next row, press **Return**.
  - To display the Contents, Index, and Search functions of online Help, enable Java and Javascript in your browser. In Netscape, use the Advanced option under **Edit > Preferences**.

## Known Bugs and Restrictions for Release 3.0

This section describes known bugs and restrictions for Release 3.0 of the Analyzer.

- The UtilityServer might fail to start. When this happens, wait 3 to 4 minutes and try to restart the UtilityServer by executing the start.UtilityServer script.
- If you cannot invoke the Analyzer Help system while running under Windows NT, do the following:
  - a. Open Windows Explorer.
  - b. Find the script startPC\_Display in the NFADisplay\bin directory.
  - c. Click the right mouse button over the script and select **Edit**. An editor window appears with the script in it.
  - d. Move the mouse over the icon that corresponds to your Internet browser.

- e. Click the right mouse button and select **Properties**.
  - f. Go to the field labeled **Target**, press the right mouse button, and select **Copy**.
  - g. Go to the editor window. Place the cursor after the **-browser** command line option.
  - h. Delete the argument that follows the **-browser** command line option.
  - i. Select **Edit** and **Paste**. This places the correct browser path\program name in your script. Make sure that the path\program name is enclosed within quotes.
  - j. Select **File** and **Save**.
  - k. Run the script.
- If a window is blank or all blue/grey, resize the window or minimize the window and then restore it.
  - If the Display module runs out of memory, an **Out of Memory** message appears on the terminal window from which the Analyzer Help system was invoked. If that happens, edit the start\_Display file and place the -ss, -oss, and -mx options before the Java call, as shown below:

```
/opt/CSCOnfa/NFADisplay/RunTimeJava/bin/java -ss2m -oss2m -mx32m -cp ...
```

- RouterConfig cannot configure routers that prompt for a user name or contain an “enable secret” password.
- TMS collections are not resumed if the UtilityServer is stopped and then restarted.
- If you cannot change the TMS internal/external setting for the router interfaces, the IOS software on the selected router does not support that functionality.
- If you delete a TMS collection, you must wait approximately 15 seconds before starting a new collection on that router. Otherwise, a **router in use** error message is displayed.
- Although the Display module can run on a UNIX platform and can send output to an X server running on a PC using an X windows emulator, this configuration is not supported.
- The Display module does not run under OpenWindows unless OpenWindows is installed with the motif libraries.
- During the installation of NDA on HPUX, after you answer **y** to **Do you want to start the servers?**, ignore the syntax error message regarding the following:

```
/opt/CSCOnfa/NFAUtility/bin/start.UtilityServer [90]:  
Syntax error
```

The Analyzer servers were successfully started.

## Corrected Release 3.0 Bugs and Restrictions

The following bugs and restrictions from Release 3.0 are corrected in Release 3.0(2) of the Analyzer:

- The AnalyzerDisplay generated pie charts, bar graphs, and histograms for columns other than the selected columns for the Call Record aggregation scheme.
- When you requested that the Analyzer display traffix matrix statistics data from a directory that contained zero length files, a **Get Data** error message occurred.

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