

NonStop NET/MASTER Tips and Techniques

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Introduction

This is an ongoing column with NonStop NET/MASTER tips and techniques. Each column is also accessible from <http://www.greshamsoftwarelabs.com.au/> (Gresham Software Labs). Please send all comments and suggestions to John New at jnew@greshamsoftwarelabs.com.au.

Biography

John New is a technical writer. He has written and updated various Tandem manuals. He currently writes hard-copy, online, and web documents for a variety of software products.

How To Access NonStop NET/MASTER Directly Using Telnet Server

Many operators want to use NonStop NET/MASTER as the single point of access into their Tandem system but find it inconvenient to log on to TACL before logging on to NonStop NET/MASTER. This article discusses how to bypass TACL and access NonStop NET/MASTER directly using Telnet server (Telserv).

The article describes the Telnet protocol and Telserv. It describes the advantages of enabling Telserv access to NonStop NET/MASTER. It describes the function of the NNM program, which is used to log on to NonStop NET/MASTER from a Telserv menu. It lists the steps for adding the NNM program as a Telserv service. It explains how to log on, how to obtain information about the service, and how to delete the service.

The Telnet Protocol and Telserv

The *Tandem Glossary* describes the Telnet protocol and Telserv in the following way:

The Telnet protocol is the Internet standard protocol for remote terminal connection service. Telnet allows a user at one site to interact with remote timesharing systems at another site as if the user's terminal is connected directly to the remote machine. Telnet server (Telserv) is a Tandem product that provides the Telnet protocol for remote terminal connection service.

Advantages of Enabling Telserv Access

After Telserv access is enabled for NonStop NET/MASTER, users can log on to NonStop NET/MASTER without first logging on to TACL. For NonStop NET/MASTER system administrators, this has the advantage of effectively establishing dedicated access to NonStop NET/MASTER. All commands, including NonStop Kernel system commands, are subject to NonStop NET/MASTER command security. All system commands and responses can be recorded in the NonStop NET/MASTER activity log, providing a historical record of user activity.

The NNM Program

The NNM program (located by default in \$SYSTEM.SYSTEM) is distributed with NonStop NET/MASTER and has three main functions:

- To enable an authorized user to log on to NonStop NET/MASTER from TACL.
- To enable an authorized user to shut down NonStop NET/MASTER from TACL rather than from NonStop NET/MASTER.
- To enable a user to log on to NonStop NET/MASTER from Telserv. This involves adding NonStop NET/MASTER as a Telserv service.

Adding NonStop NET/MASTER As A Telserv Service

You add NonStop NET/MASTER as a service to the Telserv subsystem by using the ADD SERVICE command from SCF. ADD is a sensitive command; therefore you must be a privileged user to add the service.

To add NonStop NET/MASTER as a Telserv service, follow these steps:

1. Log on to your Tandem system as a privileged user.
2. Start SCF. (For more information about the SCF commands described in this article, refer to the *Tandem SCF Reference Manual for Telserv*.)

- Specify the name of the Telserv process to which subsequent SCF Telserv commands will apply. For example:

```
ASSUME PROCESS $ZTN0
```

- Add NonStop NET/MASTER as a service by entering the following command. (Note that the command is displayed here on multiple lines but you should enter it as a single command, even though it is likely to wrap over line boundaries).

```
ADD SERVICE NNM,
PROGRAM $SYSTEM.SYSTEM.NNM,
PARAM "$ZNNM SERVICE",
TYPE CONVERSATION,
SUBTYPE DYNAMIC,
ACCESS ALL
```

This command adds the default NonStop NET/MASTER system (\$ZNNM) as a Telserv service that is available to all users. To specify a different NonStop NET/MASTER system, replace \$ZNNM by the correct process name. To restrict access, follow ACCESS by a keyword other than ALL (other keywords include SYSTEM, GROUP, OWNER, and NONE).

Note: Do not use the SERVICE parameter when executing the NNM program from TA CL. This usage is not supported and will cause unpredictable results when TA CL and NonStop NET/MASTER both attempt to access the terminal.

Logging On To The NonStop NET/MASTER Service

After the NonStop NET/MASTER service is added, a message similar to the following is displayed when you connect to your Tandem system using Telnet:

```
WELCOME TO ISSDEV.ISS.COM [PORT $ZTC0 #23 WINDOW $ZTN0.#PTY0044]
TELSERV - T9553D40 - (01NOV95) - (31OCT95)

Available Services:
NNM      TA CL      EXIT
Enter Choice>
```

Type NNM as your choice to start NonStop NET/MASTER, then log on normally. There are no architectural limits to the number of times that users can log on to NonStop NET/MASTER using the NNM program as a Telserv service.

Obtaining Information About the NonStop NET/MASTER Service

To obtain detailed general information about the NonStop NET/MASTER Telserv service, use the following SCF command:

```
INFO SERVICE NNM, DETAIL
```

Information such as the following is displayed:

```
TELSERV Detailed Info SERVICE \ISSDEV.$ZTN0.NNM
*Type..... CONVERSATION *Subtype..... DYNAMIC
*Display..... ON          *Autodelete..... OFF
*Owner..... N/A          *Access..... ALL
*CPU..... N/A           *Pri..... N/A
*Swap..... N/A
*Program..... $SYSTEM.SYSTEM.NNM
*Lib..... N/A
*Resilient..... OFF
*Param..... $ZNNM SERVICE
```

To obtain statistical information about the NonStop NET/MASTER Telserv service, use the following SCF command:

```
STATS SERVICE NNM
```

Information such as the following is displayed:

```
TELSERV Stats SERVICE \ISSDEV.$ZTN0.NNM
Sample time..... 02 Jun 1998, 13:12:32.369
Reset time..... 02 Jun 1998, 13:10:18.645
Sessions..... 0 Windows..... 0
Aborts..... 0 Inuses..... 0
```

Deleting the NonStop NET/MASTER Service

To delete NonStop NET/MASTER as a Telserv service, use the following SCF command:

```
DELETE SERVICE NNM
```

Conclusion

Adding NonStop NET/MASTER as a Telserv service is very easy. It enables operators to log on to NonStop NET/MASTER more conveniently. It can assist NonStop NET/MASTER system administrators by providing additional command security. This mechanism provides direct access to NonStop NET/MASTER MS by allowing users to bypass TACL.