

NonStop NET/MASTER Tips and Techniques

by John New

Gresham Software Labs

Email: jnew@greshamsoftwarelabs.com.au

This article originally appeared in *The Tandem Connection*, Volume 19, No. 3 - May/June 1998, and is reproduced with permission from the International Tandem Users' Group (ITUG).

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.

Securing ICE Access From NonStop NET/MASTER

Intersystem Communications Environment (ICE) is a popular software package available from Insession Pty. Ltd. This column discusses how you can secure ICE Node Operator Facility (NOF) commands from NonStop NET/MASTER Management Services (MS).

Intersystem Communications Environment (ICE)

ICE is a family of Tandem-based software products that enables a broad range of end users access to a variety of applications on Tandem computers.

Node Operator Facility (NOF), which is provided with ICE, is the tool that is used by system administrators and operators to configure and manage ICE resources. Resources include command security, passwords, lines (either a physical connection to your Tandem system or a logical connection between two ICE systems), Pathway terminals, Pathway programs, TACL processes, and so on.

Using NOF, resources can be dynamically added, displayed, altered or deleted on-line.

NOF Commands

NOF commands consist of two parts: an action and the resource to which the action applies.

Action keywords include ABORT, ADD, ALTER, DELETE, INFO, LISTOPENS, SET, START, STATUS, STOP. Resource keywords include ALIAS, APPL, ASSIGN, CMDSECURITY, LINE, MODE, PASSWORD, PROCESS, PU, and TASK.

Some commands are regarded as sensitive, such as ABORT, ADD, ALTER, DELETE, PTRACE, READ TRACE, RESUME TRACE, SUSPEND TRACE, START, and STOP. Some commands affect system security, such as SET CMDSECURITY, ADD PASSWORD, ALTER PASSWORD, DELETE PASSWORD, and INFO PASSWORD. Other commands, which are available to all users, include ENV, HISTORY, INFO, LISTOPENS, and STATUS.

Customizing NonStop NET/MASTER MS For Access To NOF Commands

To enable access to NOF from NonStop NET/MASTER MS you must define NOF as an external utility. You must have UMS authority and Utility Definition Maintenance authority to do this. After logging on to NonStop NET/MASTER MS, follow these steps:

1. From the NonStop NET/MASTER MS Primary Menu, type M in the Select Option field and press the Enter key. The User ID Management Services : Primary Menu appears.
2. Type Y in the Select Option field and press Enter. The UMS : Utility Definition Maintenance panel appears.
3. Type the following values in the displayed fields and press Enter:

Field	Value
Select Option	A
Enter Utility Name	NOF
OPSYS or PROGRUN	O

The UMS : Utility Details panel appears.

Note: You do not have to specify a Utility Name of NOF, but it is usually convenient to choose a utility name that matches the name of the file or TACL macro on your Tandem computer system to which the definition refers.

4. Create the NOF utility definition (fields not listed are blank) and press the F3 function key to save the definition.

You can specify either a file name or macro name in the definition. The name of the TACL macro is NOF; the name of the object file is NOFO.

The following definition shows how to specify the NOF TACL macro:

Field	Type
Utility Name	NOF
OPSYS or PROGRUN	O
File/Macro Name	\$volume.subvolume.NOF
TACL Macro?	Y
Reads IN File?	Y

The following definition shows how to specify the NOFO object file:

Field	Type
Utility Name	NOF
OPSYS or PROGRUN	O
File/Macro Name	\$volume.subvolume.NOFO
TACL Macro?	N
Reads IN File?	Y

After you press the F3 function key to save the definition, the UMS : Utility Definition Maintenance panel appears.

5. Press F3. The User ID Management Services : Primary Menu appears.
6. Type W in the Select Option field and press Enter. The UMS : Utility Command Set Maintenance Menu appears.
7. Type the following values in the displayed fields and press Enter:

Field	Value
Select Option	A
Enter Utility Name	NOF
OPSYS or PROGRUN	O

The UMS : Utility Command Set Details panel appears.

8. Create the NOF utility command set with the following command and (recommended) authority level and press F3 to save the definition:

Command	Authority Level
*	255

The asterisk (*) represents undefined NOF commands. Assigning the high authority level of 255 to the asterisk (and no other NOF commands) effectively limits access to all NOF commands to NonStop NET/MASTER MS users who have an authority level of 255.

9. Add other NOF commands to which you want to explicitly assign an authority level. For example:

Command	Authority Level
ABORT	4
ADD	4
ALTER	4
DELETE	4
ENV	0
HELP	0
HISTORY	0
INFO	0
LISTOPENS	0
LOG	4
OBEY	255
PTRACE	255
READ	255
RESUME	255
SET	255
START	3
STATUS	0
STOP	3
SUSPEND	255
TIME	0
VERSION	0
VOLUME	0

10. Press F3. The User ID Management Services : Primary Menu appears.

You have now created a utility definition called NOF for NonStop NET/MASTER MS to access ICE resources using NOF commands.

NOF Command Security

All NOF commands are subject to ICE security in addition to NonStop NET/MASTER MS command authority checking. This means that you may be allowed to use a NOF command from NonStop NET/MASTER MS but disallowed from executing it from ICE. It means that you may be disallowed from using a NOF command from NonStop NET/MASTER MS but allowed to use it from ICE.

Therefore, it is essential to ensure that you have synchronized command checking from both NonStop NET/MASTER MS and ICE.

Note: The author would like to acknowledge the assistance given by Tim Fleming, Neil Coleman, and Peter Shell in the preparation of this article.