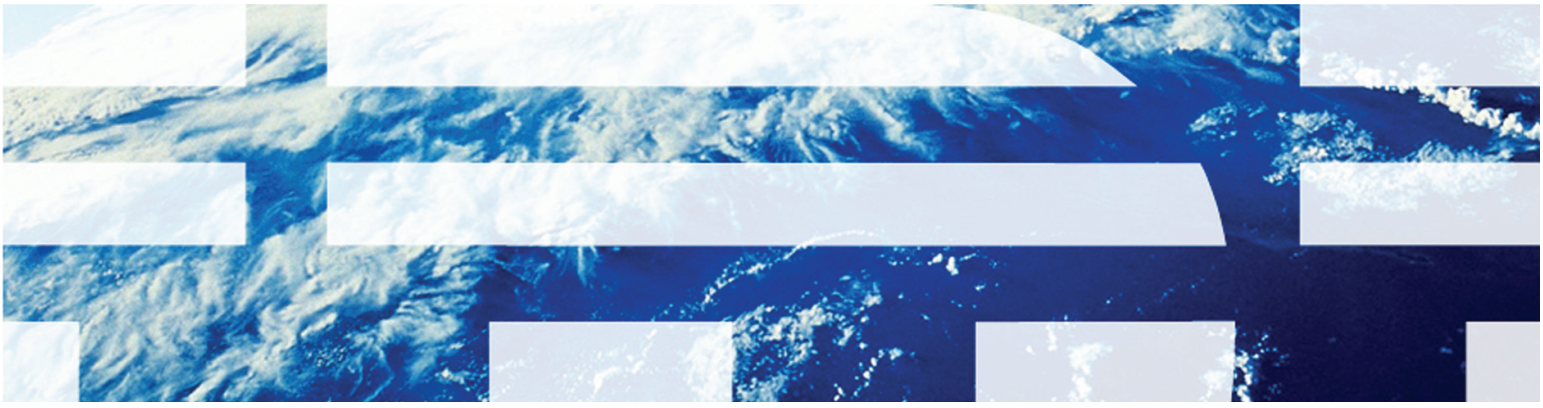

IBM Tivoli NetView for z/OS 6.1: Fundamentals

Student Exercises

Course: TZ203 ERC:1.0

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Student exercises for Unit 1

Introduction

These exercises provide you with experience using IBM Tivoli NetView for z/OS. After completing this unit, you should be able to perform the following tasks:

- Access the NetView 3270 interface.
- View procedures used to run NetView.
- Work with the CNMSTYLE start-up statements.
- Run a report analyzing the CNMSTYLE start-up statements.

Whenever you are unsure of what you see, access the online help and try to discover the answer before you ask the instructor.

For these student exercises, you use the NetView 3270 interface and the IBM Time Sharing Option (TSO) Interactive System Productivity Facility (ISPF) program.

Your instructor provides the following information to use in these exercises:

Connecting to z/OS system _____

Connecting to VTAM _____

NetView VTAM application name _____

Second NetView VTAM application name _____

NetView operator ID and password _____

Second NetView operator ID and password _____

TSO user ID and password _____

Team DSIPARM data set _____

Team CNMSJCRG report data set _____

JCL PROCLIB name _____

NetView application PROC name _____

NetView SSI PROC name _____

Held MSGCLASS used for retrieving and viewing job output _____

Exercise 1-1: The NetView procedures

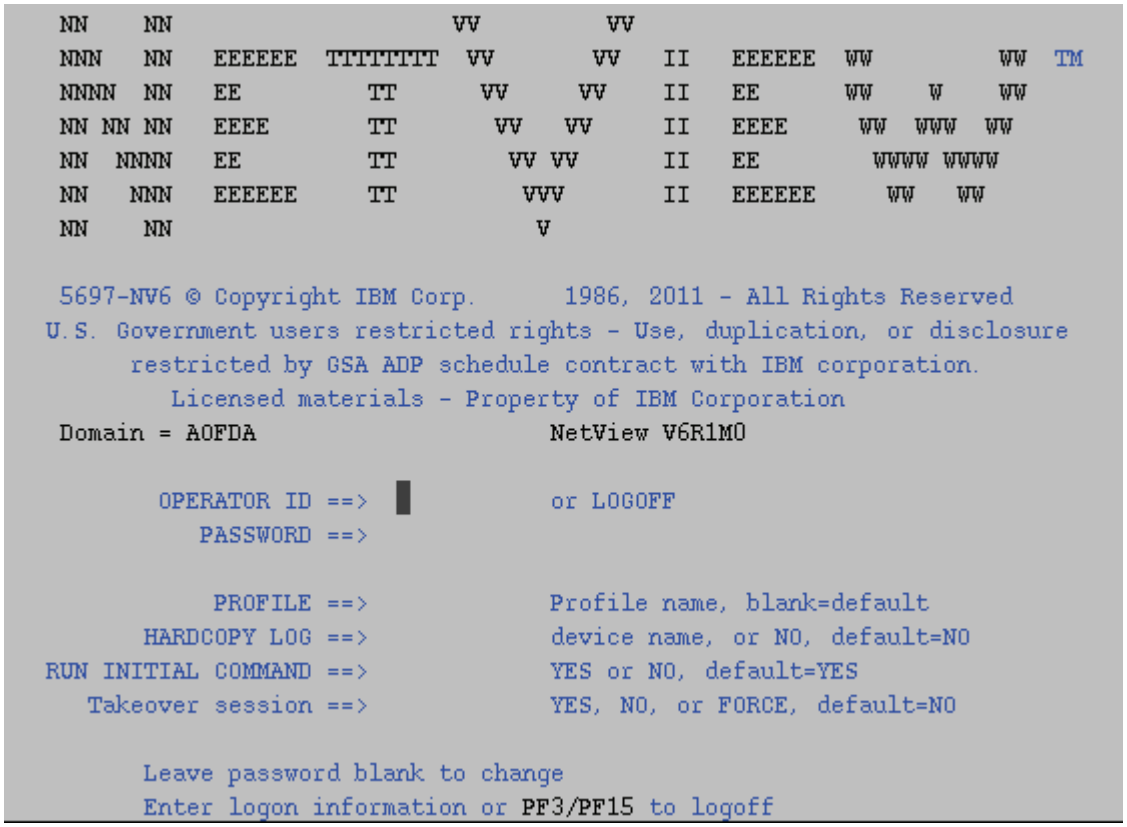
Perform the following steps:

___ 1. Connect to your z/OS operating system and access a VTAM screen. Your instructor provide instructions for this.

___ 2. From the VTAM screen, log on to the NetView application program, and issue the following command:

```
logon applid=netviewapplicationname
```

___ 3. Log on with the NetView operator identification (ID) and password that is assigned to your team.

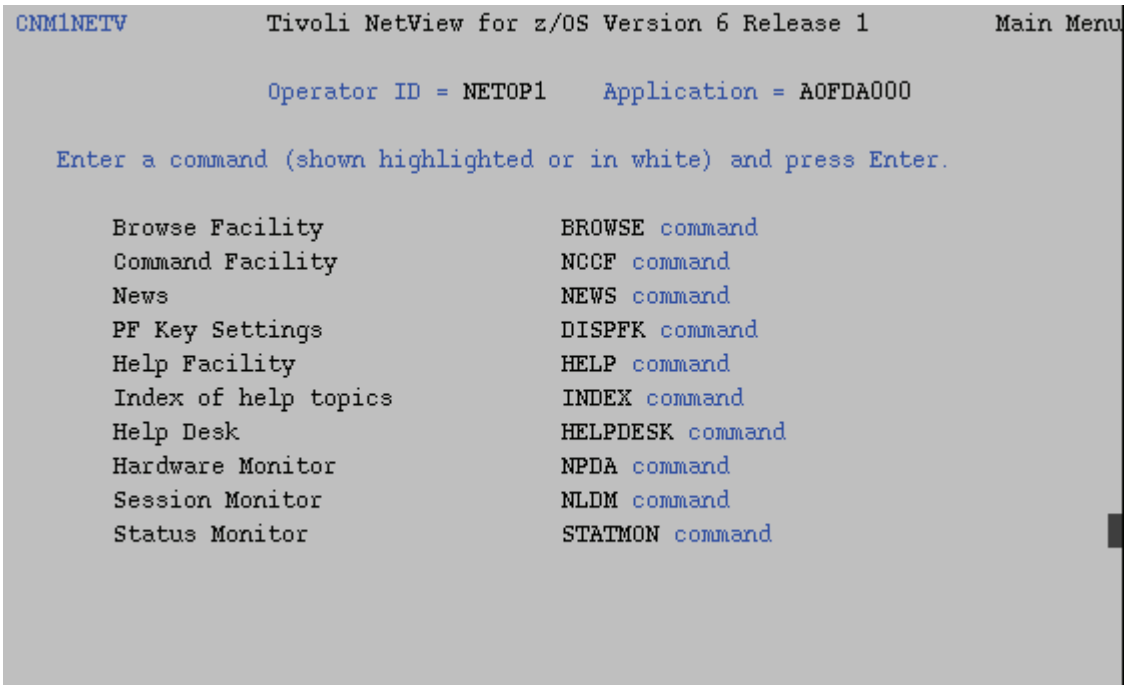


When you first log on, the NetView News displays. Three asterisks at the bottom of the screen means more data is viewable. Press Enter to display the next page. After the News displays content, the main NetView menu opens.

___ 4. If you need to find the menu later, return to it by issuing the following command:

```
mainmenu
```

You can access many NetView functions from the menu. To exit this screen, press PF3.



___ 5. The LISTA command is the next command that you use. To learn about LISTA, issue the following command:

```
HELP LISTA
```

To scroll forward in the help screen, press PF8. To scroll backward, press PF7. To exit, press PF3. You use these three program function keys again. To view all of the key settings, issue the following command:

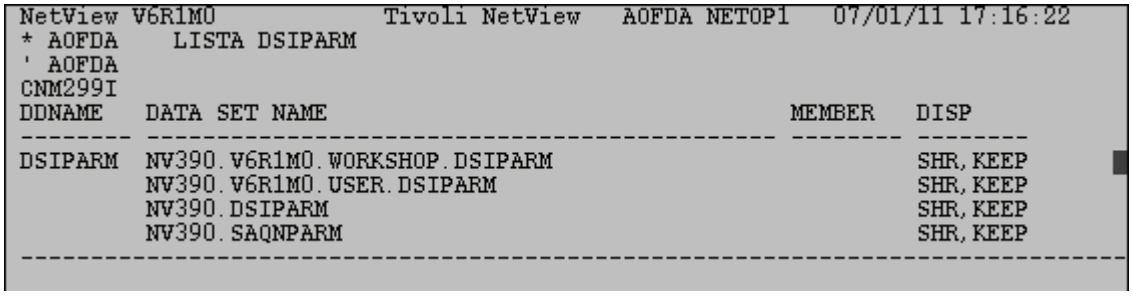
```
DISPFK
```

Press PF3 three times to exit the DISPFK, the HELP LISTA, and the main menu.

___ 6. In the NetView application, you can use one or more data sets for the initialization. These data sets are partitioned data sets (PDS), allocated to the DSIPARM data definition name

(DDNAME). To view the data sets that is being used by this NetView application, issue the following command:

```
LISTA DSIPARM
```



The DSIPARM for your NetView application program has several data setsthat are allocated and concatenated. In a later exercise, you make changes into this data set. Look at the list to ensure that you have one that is named for your team.

___ 7. Some commands might have a lengthy display, resulting in wrapping or requiring you to press the Enter or CTRL key to continue the display. Issue the following command as an example:

```
D NET,APPLS
```

When it is more convenient to scroll command output than to display it in a window, issue the following command:

```
WINDOW D NET,APPLS
```

Press PF8 to scroll forward and PF7 to scroll backward. Another useful command to issue from the CMD==> prompt is FIND. Select some text to look for with the FIND command. Press PF3 to close this screen.

___ 8. Another useful NetViewcommand is BROWSE. Two started tasks make up a typical NetView system. One is the subsystem interface. In your system, it is called AUTOSSI. Ask your instructor for the name of the PROCLIB data set where the NetView procedures are. Issue the following BROWSE command to view the contents of the NetView subsystem interface procedure (proc).

```
BROWSE 'proclibdatasetname(netviewssiproc)'
```

Examine the contents of the sub-system interface proc. You can scroll forward or backward by pressing PF8 and PF7. The procedure has documentation comments for its use. To exit the BROWSE command, press PF3.

___ 9. The second started task in a typical NetView system is the NetView application program. View the contents of this procedure by issuing the following command:.

```
BROWSE 'proclibdatasetname(netviewapplicationproc)'
```

Data sets are typically grouped together by the NetView function that is supported. The NetView logs contain information that can be useful in debugging.

___ 10. To view the logs by using several methods, issue the following command:

```
BLOG
```

The following screen opens.

___ 11. Accept the defaults and press Enter to view the NETLOGA file. You can specify a different log file name on this screen. Press PF7 and PF8 to scroll backward and forward in the log. Press PF3 twice to exit the screen. The second way to browse the NETLOGA file is issuing the two following commands:

```
BLOG NETLOGA

BROWSE NETLOGA
```

Yet antoher way to browse the NetView log and the MVS system log is to use theCANZLOG command, which stands for consolidated audit, NetView, and z/OS log. Browsing both network and system messgaes in one place can sometimes be very helpful. Enter CANZLOG.

___ 12. Accept the defaults and press Enter to view the combined log of NetView and z/OS.

CANZLOG is archived by default, and this is managed by settings in CNMSTYLE.

___ 13. Position the cursor on a message in the log and press Enter. The result is a window with attributes for that specific message.To view the complete message, press PF2. Press PF3 to return to CANZLOG, and press PF3 to exit CANZLOG.

___ 14. Using the MVS command, you can issue a command to the z/OS operating system and receive the results on your NetView 3270 session. Issue the following command to view the time of day:

```
MVS D T
```

The command results are immediate. Next, use an automation command.

The AFTER command accepts a timing operand to cause it to wait before issuing the command. Issue this variation of the previous command, which waits for fifteen seconds:

```
AFTER 00:00:15 MVS D T
```

Other useful commands that are used in automation are CHRON, AT, and EVERY.

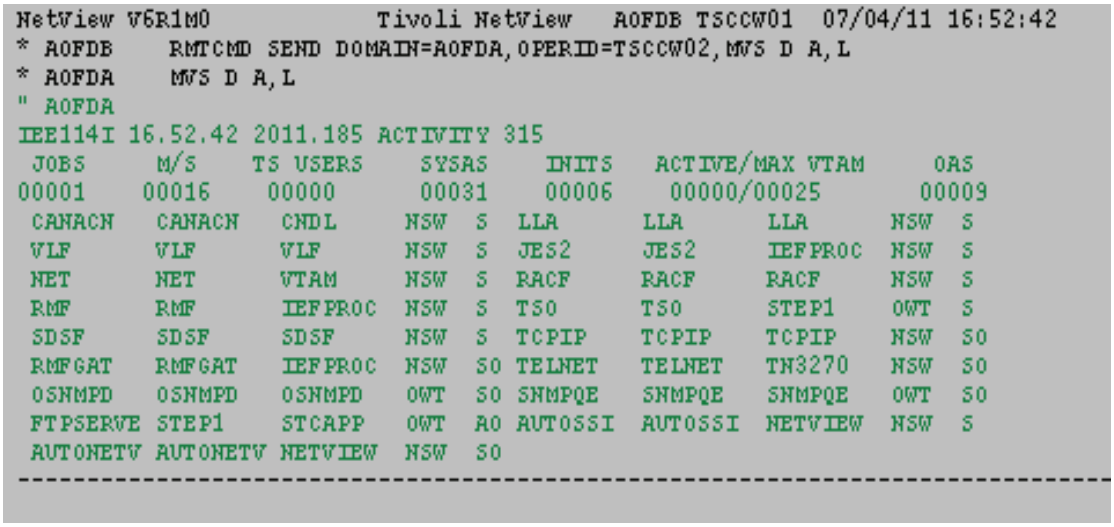
___ 15. The RMTCMD command is used for issuing a command from one NetView logged-on operator to a second logged-on operator. Log on to NetView on each of the two z/OS systems that is assigned to your team, using two different NetView IDs. Issue the following command from the first system and ID:

```
MVS D A,L
```

From the second NetView domain and operator ID, issue a command like the following example:

```
RMTCMD SEND DOMAIN=netviewdomain,OPERID=secondnetviewoper,MVS D
A,L
```

The output should appear similar to the following screen capture, and the output from each of the two z/OS systems should appear slightly different:



___ 16. Some TCP/IP commands are available in NetView. Two common commands are PING and TRACERTE. Issue the following PING command with the host name or IP address of a z/OS system that your instructor provides:

```
PING hostnameoripaddress
```


Issue the following trace route (TRACERTE) command with the same host:

```
TRACERTE hostnameoripaddress
```

___ 17. Issue the following BOOKS command to list the web addresses for accessing the publications:

```
BOOKS
```

Exercise 1-2: CNMSTYLE

Perform the following steps:

___ 1. The BROWSE command is very versatile. Log on to your NetView application 3270 interface. Issue the following command to see the options available with the BROWSE command:

```
HELP BROWSE
```

___ 2. CNMSTYLE members can cause other DSIPARM members to be loaded at NetView Initialization. This is the first of two ways that you browse the CNMSTYLE settings. Issue the following command to find the data set where the CNMSTYLE member is:

```
LISTA DSIPARM CNMSTYLE
```

Issue the following command to browse the data set and member:

```
BROWSE 'CNM.DSIPARM(CNMSTYLE)'
```

___ 3. Use %INCLUDE statements in CNMSTYLE for loading other DSIPARM members. When the CNMSTYLE member is being browsed by the full data set name and member, you can see the %INCLUDE statements. Issue the following command:

```
FIND %INCLUDE
```

You can look for statements where %INCLUDE begins in the first column. If necessary, use the PF5 key as a repeat find key.

___ 4. Try a second way to view the CNMSTYLE settings. The help for the BROWSE command illustrates other usable functions. Using another variation, you can view all of the key initialization statements for starting NetView. Specify the member name with the following command:

```
BROWSE CNMSTYLE
```

Issuing the command results in the %INCLUDE statements being resolved and those members also being included in the view.

___ 5. Find DATASET: at the top of the view. A number following that text represents the data set number in the concatenation where the member and parameter statements were obtained. Issue the following commands.

```
AUTOWRAP OFF
LISTA DSIPARM
```

Viewing the list of displayed data set names, count from the first number down to the number that you recorded in this step. This is the data set that contains the member that you were browsing. When you finish counting, three asterisks appear at the bottom of the screen. Press Enter to return to the browse view.

___ 6. Find the start of the member CNMSTGEN. Issue following command:

```
FIND CNMSTGEN
```

A title displays START OF MEMBER CNMSTGEN FROM CNMSTYLE. The data set number is mot normally n the same place as CNMSTYLE. When you browse

CNMSTYLE by the member name only, you do not see the actual %INCLUDE statements. But you do see the contents of that %INCLUDED member.

Other components and products load during NetView initialization with the use of TOWER statements in CNMSTYLE members.

___ 7. When browsing the CNMSTYLE member, move to the top of the member by using the **TOP** command. Search for the first occurrence of TOWER in the first column:

```
FIND TOWER
```

A list of tower names follows the TOWER = statement. If an asterisk precedes a tower, the tower is not to be activated or enabled at NetView initialization.

___ 8. Some towers have subtowers that are enabled or disabled when NetView starts. These statements contain the name of the tower, a period, the name of the subtower, an equal sign, and the name of the value. Browse CNMSTYLE and find the subtowers for the Tivoli Enterprise Monitoring Agent tower by issuing the following command:

```
FIND 'TOWER.TEMA'
```

You can issue the following command to determine if TEMA subtowers are active on the running system:

```
NACTL LISTINFO
```

___ 9. Changes that users make should not be made in CNMSTYLE. One of the %INCLUDE statements causes CNMSTGEN to load. This is the member intended to contain customizations. When NetView loads parameters from the various included members, it can encounter a repeated statement. If it does, the last occurrence is used. Compare changes on this NetView system to originally provided material.

___ 10. A default logon profile can be defined in CNMSTYLE for userids not defined to NetView but defined in SAF. Logon to NetView domain AOFDA with user TSCCW20, the result is a normal logon with profile DSIPROFB.

Browse DSIOPF. TSCCW20 is not defined as an operator.

Browse CNMSTGEN to find the default logon profile defined as follows:

```
DEFAULTS.LogProf = DSIPROFB
```

This is the how to define the default logon profile. The default value is *NONE*.

Exercise 1-3: CNMSTYLE Report CNMSJCRG

Perform the following steps:

___ 1. Log on to TSO by following the instructions that your instructor provides you.

Because several members are processed for the CNMSTYLE initialization, you can run a batch job for producing a report that shows all of the CNMSTYLE statements. This report shows the CNMSTYLE statements that are used and the members that the statements came from.

___ 2. From ISPF, copy member CNMSJCRG from NETV610.CNMSAMP data set to the JCL data set assigned to your team, and edit the member.

___ 3. Change the job name on the job card to contain your user ID.

___ 4. Add the NOTIFY parameter with your user ID. If your system contains a held MSGCLASS, change the MSGCLASS to that class.

Two DDNAMEs are important for running this job. The first is DSIPARM. This DDNAME must match the name that is used in the NetView application DSIPARM on your z/OS system. The reason is that the loading order of members must be the same for the report to be accurate.

One of the data sets in both this job and the NetView application procedure is a DSIPARM library that is designated for the workshop. This library is normally very early in the concatenation.

The second DDNAME that is important is DSIWRIT. The output from the CNMSJCRG job is directed into that PDS. The member name is CNMCRG.

___ 5. Make any necessary changes to the DSIPARM and DSIWRIT DDNAMEs and submit the CNMSJCRG job.

___ 6. Use System Display and Search Facility (SDSF) to view the output of the job. From SDSF, issue the ST command to view the jobs that have run pertaining to your TSO user ID. Select the job that ran for CNMSJCRG. Ensure that the return code is 0. If not, correct the problem and re-run the job.

___ 7. Using NetView, browse the member CNMCRG from the report PDS assigned to your team. The member CNMCRG contains the output of the CNMSTYLE report.

___ 8. Four reports are in CNMCRG. The first report lists information about the CNMSTYLE including order and active towers. Also, the first report includes the general NetView statements. Issue the following command to see where this report starts:

```
FIND 'Statements for function: NetView General'
```

___ 9. Several CNMSTYLE members have the same statements that are defined with different assigned values. If more than one member has the same statement, the value that is used is from the last member.

Issue the following command to find the DOMAIN statement:

```
FIND 'DOMAIN ='
```

What was the original value for DOMAIN? _____

Which member was the original member defined in? _____

Which data set contains this member? _____

What is the changed value for DOMAIN? _____

Which member is this new value defined in? _____

Which data set contains this member? _____

(The answers are not provided, as these can be different on your system.)

___ 10. Repeat this process for the TOWER statement. The TEMA must be enabled for a later exercise to work correctly.

The second report lists statements that pertain to the various functions and Towers. Each tower, such as SA, AON, and MSM, have their own section. Find any TOWER.TEMA statements. The TEMA subtowers must be enabled for a later exercise to work correctly.

___ 11. The third report lists statements used for two types of automated commands. Find where *auxInitCmd statements* begins. This is the first kind of automated command.

The fourth and last report lists the data REXX statements that are used in CNMSTYLE members.

___ 12. To run the NetView EMA, two additional started tasks must be active. From NetView, issue the following command to see jobs, started tasks, and TSO users that are active:

```
MVS D A,L
```

CANSDSST is the default started task name that operates the Tivoli Enterprise Management System database. On our system, we have changed it to CANADSST. If CANADSST is not active, issue the following command:

```
MVS S CANADSST
```

CANSNA is the default started task nTivoli Enterprise Monitoring Serverame that runs the NetView EMA data collectors. On our system, it is changed to CANANA.If CANANA is not active, issue the following command:

```
MVS S CANANA
```

If you want NetView to start the Tivoli Enterprise Monitoring Server and EMA, use additional EMAAUTO statements in CNMSTYLE to accomplish that. The Tivoli Enterprise Monitoring Server and EMA can automatically be started from the *COMMNDxx* member in PARMLIB. NetView automation issues the NACMD command when the agent starts.

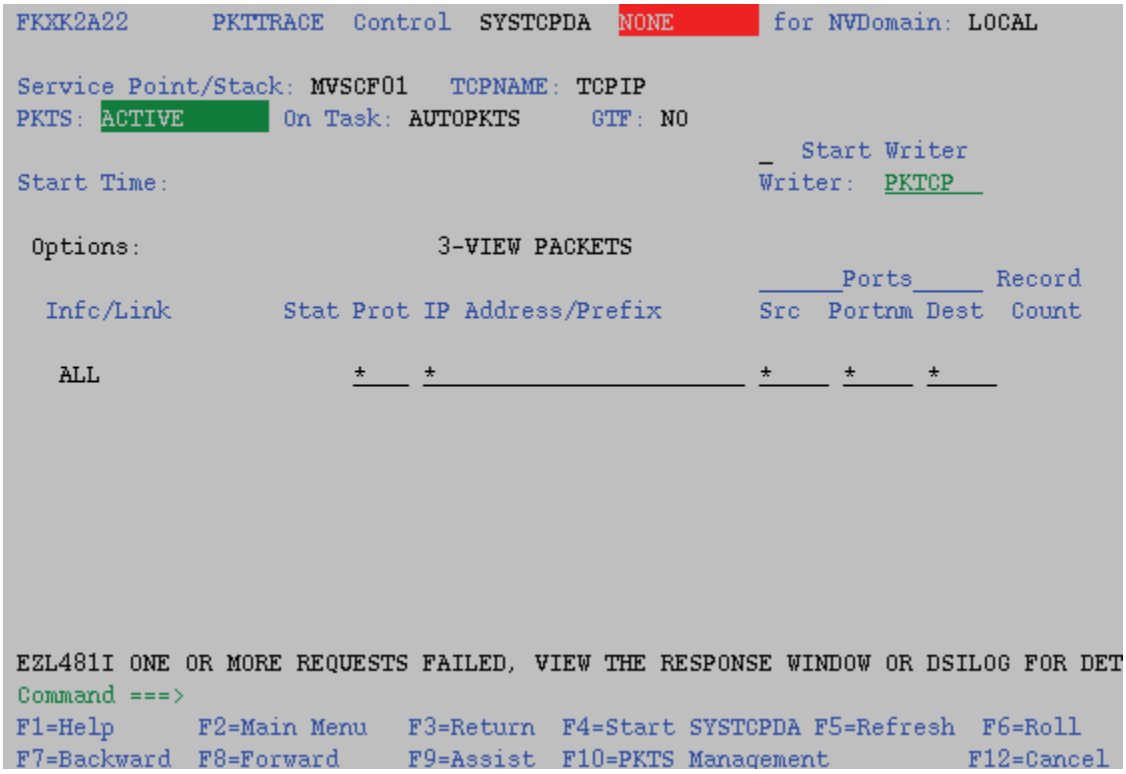
With the NetView EMA now running, you access data from the NetView EMA in a later exercise.

Exercise 1-4: IPTRACE and IPSTAT

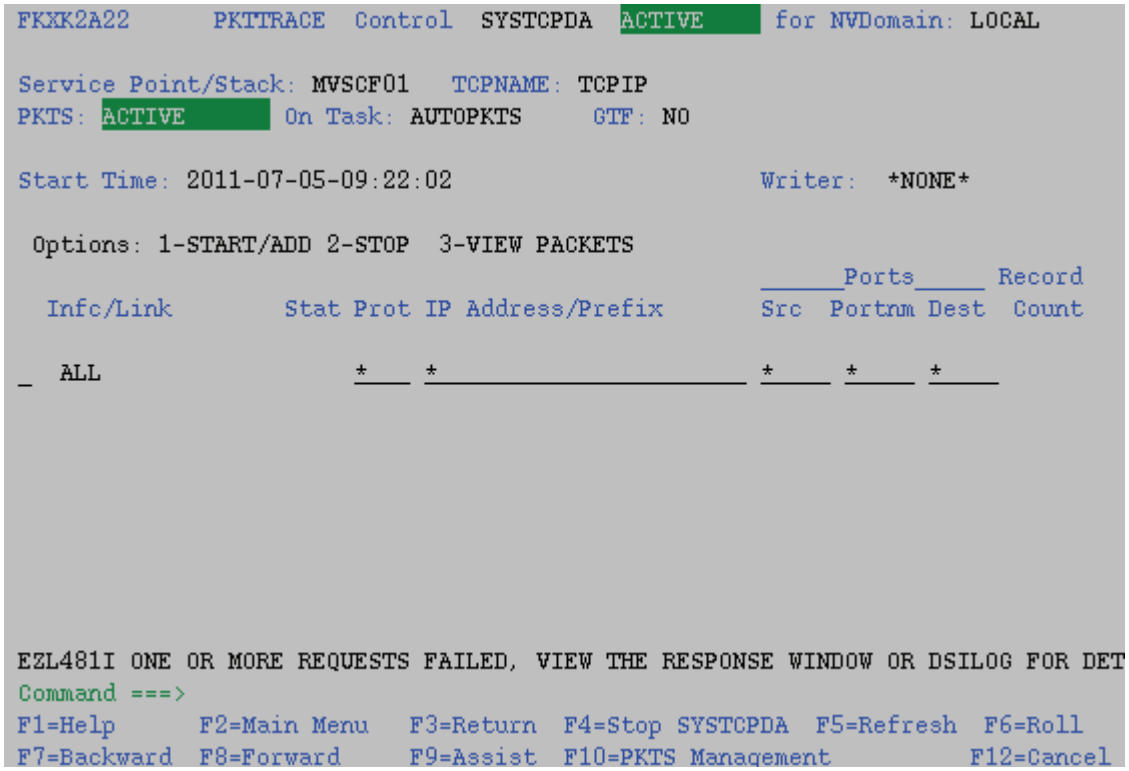
This exercise familiarizes you with IP management in NetView for z/OS. Perform the following steps:

___ 1. Log on to the master domain with the NetView operator identification (ID) and password that is assigned to your team.

___ 2. Issue the IPTRACE command, select PKTTRACE, and press Enter.



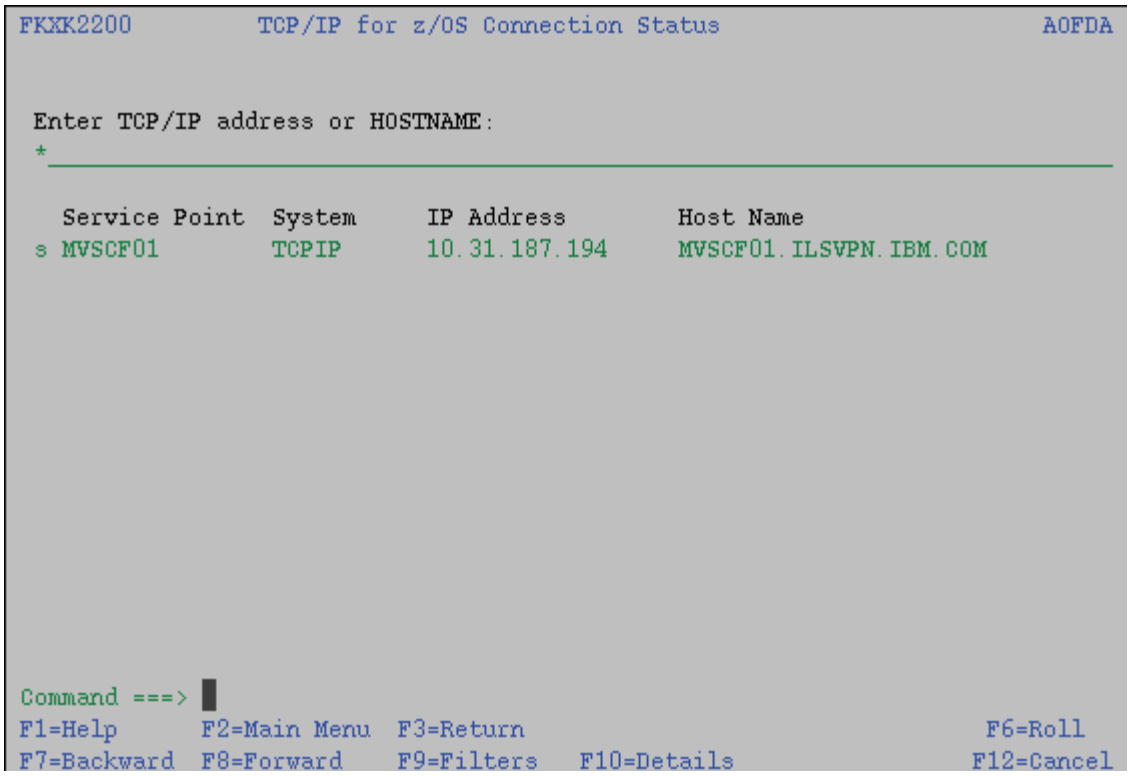
___ 3. Note that the component SYSTCPDA is not active, marked red at the top. Start SYSTCPDA by selecting ALL and press F4 (Start SYSTCPDA). Wait for the red SYSTCPDA to become green.



Exit by pressing F3 two times.

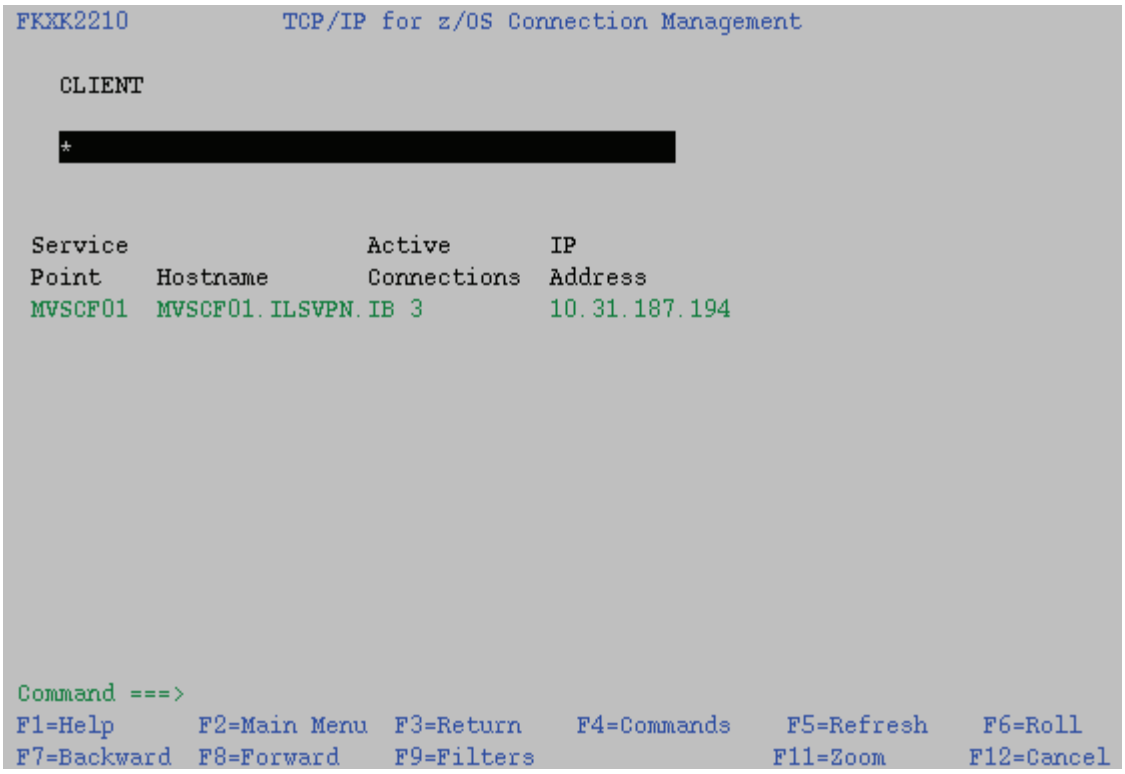
___ 4. Enter IPSTAT

On the panel that is presented, enter an asterisk for Hostname and select MVSCFxx.

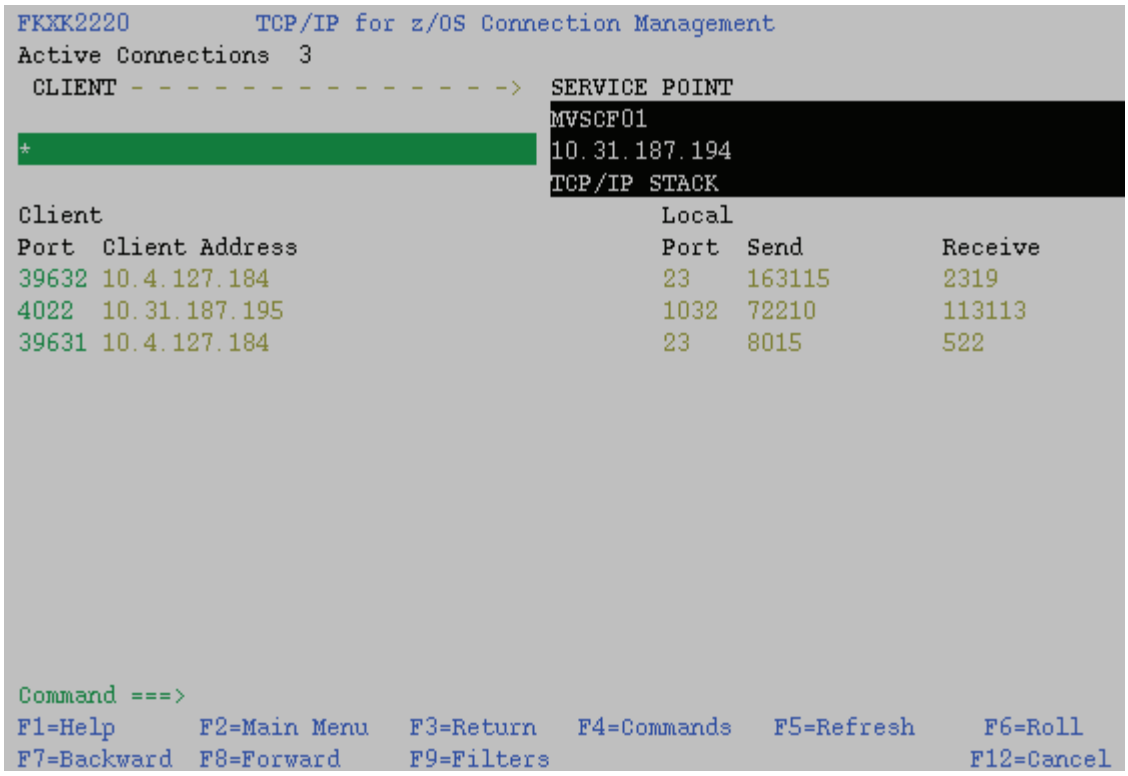


___ 5. Press Enter.

The next screen lists some active TCPIP sessions for your host.

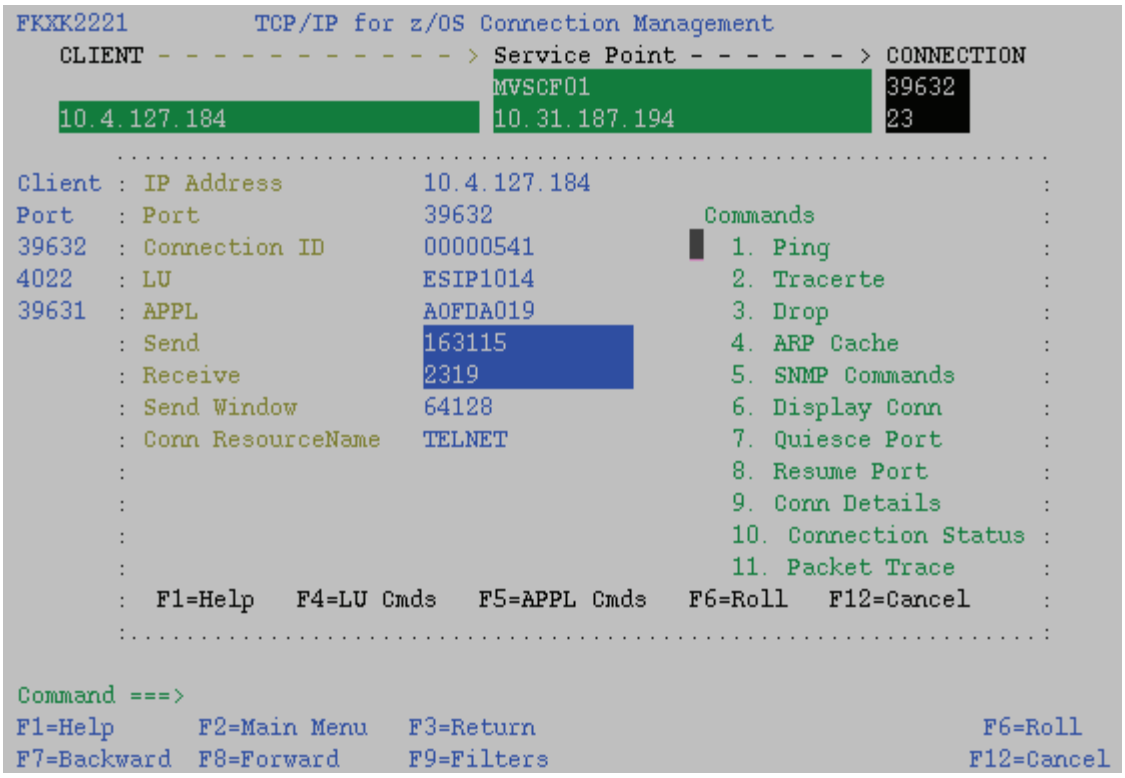


___ 6. Position the cursor on the MVSCFxx and press F11 for Zoom.



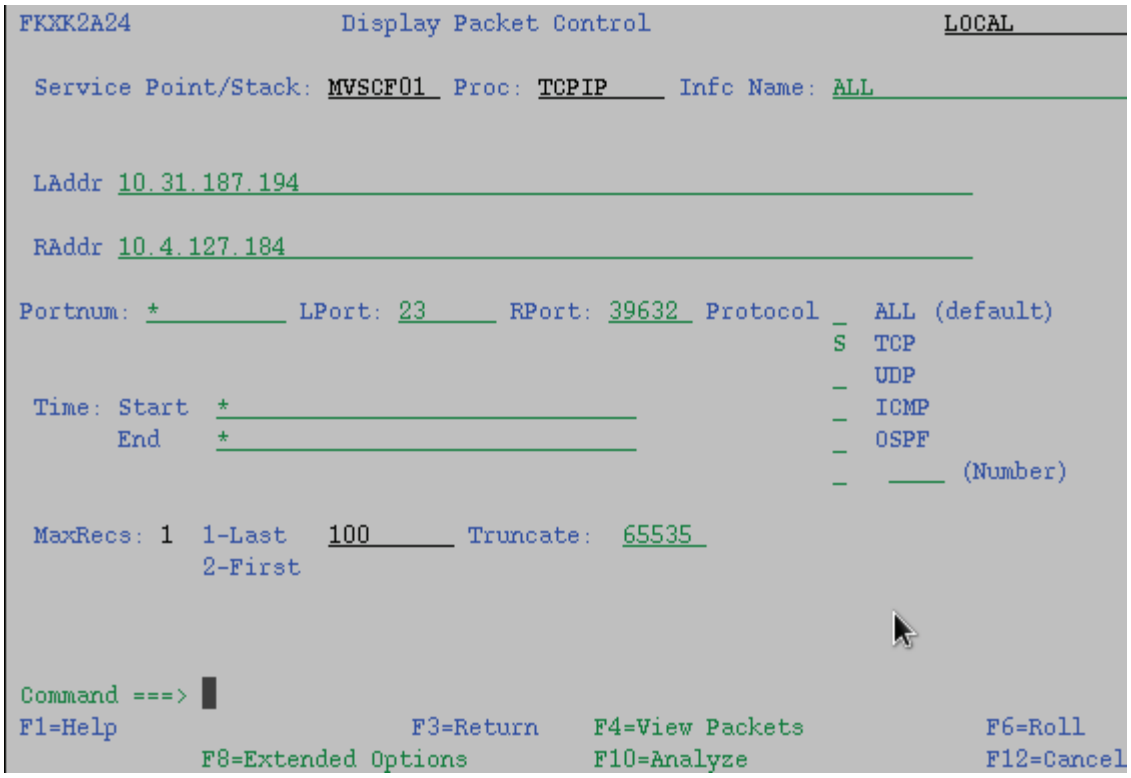
This screen shows the current active TCPIP sessions.

___ 7. Position your cursor on the first client and press F4 for commands.



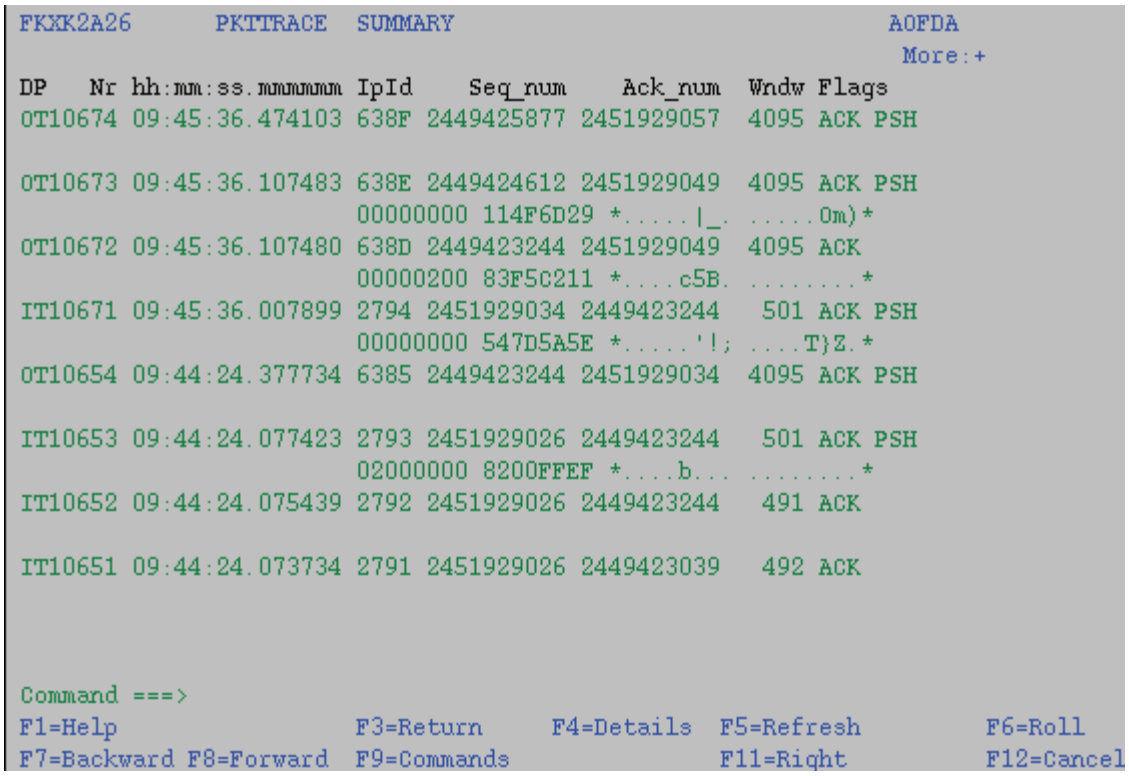
On this panel, you can issue several commands in context.

___ 8. Enter “11 Packet Trace” and press Enter.



Pressing F10 (Analyze) opens a panel with stastistics on error flags. If additional errors are displayed, information is available.

___ 9. To view the packets being traced, press F4.



___ 10. Position the cursor on a packet, and press F4 (Details).

___ 11. Exit by pressing F3 several times, answer Y to the question if trace should be stopped.

You should now be familiar with accessing TCP/IP session and tracing data.

Student exercises for Unit 2

Introduction

These exercises provide hands-on experience using IBM Tivoli Monitoring, the Tivoli Enterprise Portal, and the NetView Enterprise Management Agent. After completing this unit, you should be able to perform the following tasks:

- Open the Tivoli Enterprise Portal client.
- Describe the components of the Tivoli Enterprise Portal application window.
- Switch Navigator views.
- Navigate workspaces by using Navigator items and links.
- Open the NetView Enterprise Management Agent workspaces.

During these exercises, you navigate many of the options that are available in the Tivoli Enterprise Portal application window. Whenever you are unsure of what you see, access the online help and try to discover the answer before you ask the instructor.

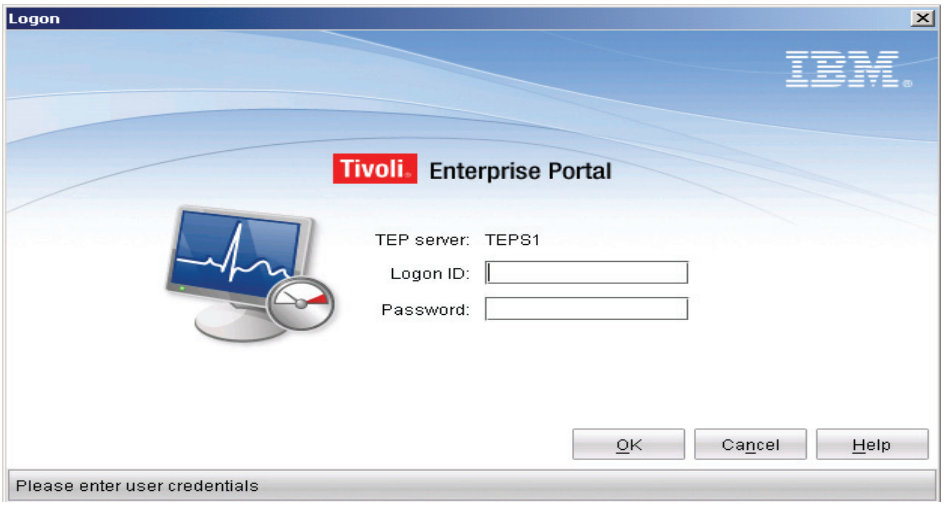
For these student exercises, you primarily use the Windows desktop to access Tivoli Enterprise Portal. However, you can perform all exercises in browser mode as well.

Exercise 2-1: Launching the Tivoli Enterprise Portal client in desktop mode

Browser mode is the most common access method for Tivoli Enterprise Portal. It provides the ability to use workspaces as web addresses. It can simplify maintenance of clients. It detects a missing client or a server release change, and installs or updates clients at connection time. Perform the following steps:

___ 1. Start the Tivoli Enterprise Portal desktop on the VMWare guest desktop.

___ 2. The logon screen prompts for a user ID and password.



___ 3. In your environment, enter **student user** ID and RACF password.

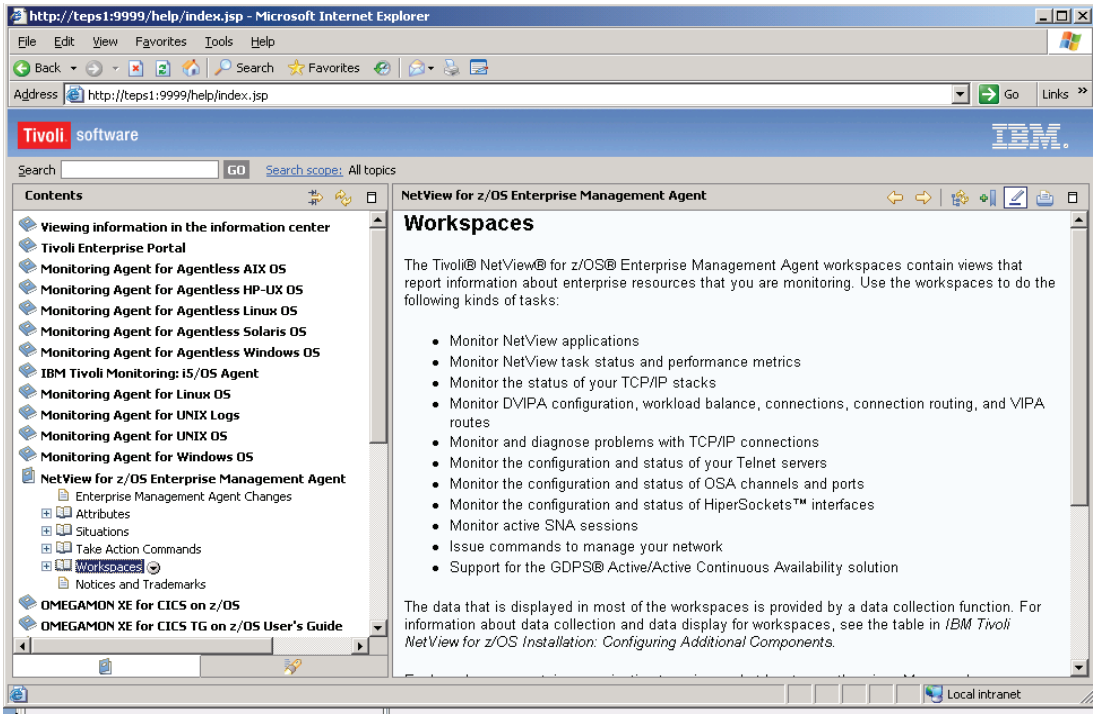
Exercise 2-2: Using the online documentation and help

___ 1. Access and explore the online help window by pressing F1.

When you access the help from the main Tivoli Enterprise Portal window, it opens to a default page. You can also press F1 on specific menus to open the context help that applies to the specific area of interest.

When using new functions in Tivoli Enterprise Portal for NetView, use the online documentation to get started. You can learn all about the advanced options that are available.

___ 2. Access and explore the **IBM Tivoli NetView for z/OS Enterprise Management** Agent area to see more information about the use of the product. For example, click **Workspaces** to see the various types of NetView workspaces.



Note: When accessing help in browser mode, you might want to use the **Help** menu item of the Tivoli Enterprise Portal pane. By pressing F1, you can also access the Microsoft help for Internet Explorer.

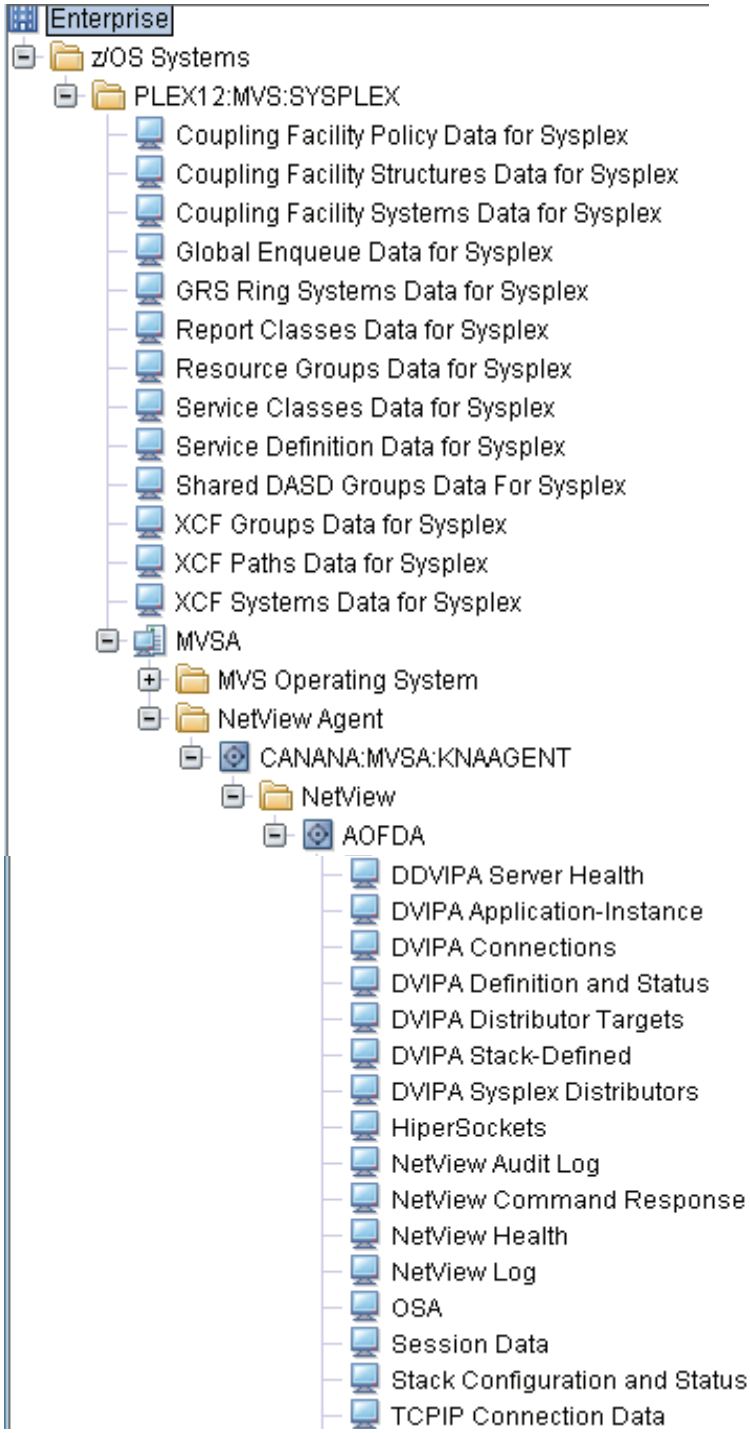
Exercise 2-3: Navigating workspaces

Accessing default workspaces

Each Navigator view contains Navigator items that are associated with workspaces. Use Navigator items to navigate to those workspaces. To view the full structure of a navigator, click the plus sign (+) to expand. Click the minus sign (-) to collapse subtrees.

To access the default workspace associated with a particular Navigator item, click the item.

___ 1. Click the navigator physical view to access product-provided workspaces.



___ 2. Access the NetView Navigator items by expanding the z/OS Systems tree. Continue to expand at each level. **NetView Agent** is below your host name.

___ 3. Expand the NetView Agent information. Expand the navigator entry, beginning with **CANANA**. Expand the navigator beginning with **NetView**. Finally, expand the Navigator item that references your NetView application domain name.

___ 4. Open a workspace by clicking it. For example, click the **NetView Health** workspace. Each workspace contains views. The NetView Health workspace contains bar chart views for **CPU Utilization >= Critical CPU Util Threshold** and **Storage >= Critical Storage Threshold**. A table view opens for the **NetView Applications Summary**.

Navigating workspaces by using links

Some product-provided workspaces have table links. From these links, you can navigate to other workspaces that have related or more detailed information. The link icon displays as a yellow part of a chain.

___ 5. Open the NetView Health workspace. On the bottom of this workspace, find a table view called NetView Applications Summary.

NetView Applications Summary

	Update Time	Domain Name	Role	Sysplex Role	Sysplex Rank	XCF Group List	Total CPU	Total Storage	zOS Image Name	Status	Network ID	RMTCMD IP Address	RMTCMD Port	NetVi Versi
	11/02/10 02:52:16	AOFDA	NETWORK	MASTER	1	(DSIPLX01)	0	18665	MVSA	ACTIVE	USIBMES	10.31.186.57	4022	V5R4

___ 6. Click the link to the left of the first row.This action opens a list of tasks and links that are associated with every entry.

NetView Tasks Summary

	Collection Time	Domain Name	Task Name	Status	CPU Utilization	Storage	Message Queue Count	Output Message Rate	Input Message Rate	I/O Rate	Critical CPU Util Threshold	Critical Storage Threshold
	11/02/10 03:06:13	AOFDA	MAINTASK	ACTIVE	0	3078	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	AOFDAPPT	ACTIVE	0	603	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSIMONIT	ACTIVE	0	4	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSITIMMT	ACTIVE	0	24	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSIDCBMT	ACTIVE	0	3	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSIHLLMT	ACTIVE	0	4	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSISTMMT	ACTIVE	0	3	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSILOGMT	ACTIVE	0	4	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSILOG	ACTIVE	0	65	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSITRACE	INACTIVE	0	0	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSIELTSK	INACTIVE	0	0	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	DSICORSV	INACTIVE	0	0	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	INSTZ24	ACTIVE	0	312	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	AUTIPMGT	ACTIVE	0	468	0	0	0	0	95	0
	11/02/10 03:06:13	AOFDA	AUTOAON	ACTIVE	0	773	0	0	0	0	95	0

___ 7. Hover your mouse pointer over the *link to* symbol in one row of the table. Do not click the link yet.

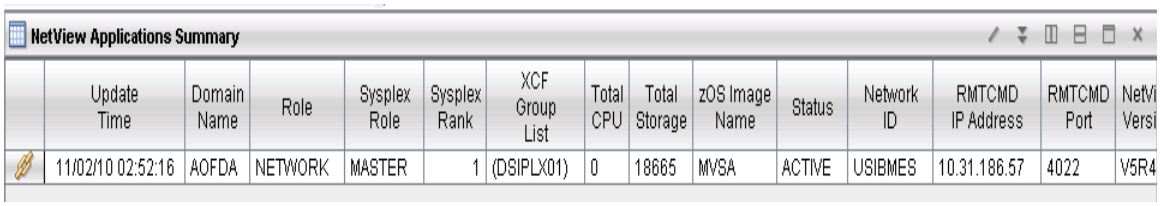
The name of the link representing the workspace name is displayed.

___ 8. Click the link to access the workspace that it points to. This workspace has views for the specific task: CPU Utilization, Storage, Message Queue Count, Message Rate, and I/O Rate.

Accessing other workspaces that a Navigator item associates with

___ 9. Click the TCPIP Connection Data workspace.

___ 10. Right-click the **TCPIP Connection Data** item in the Navigator.



NetView Applications Summary

	Update Time	Domain Name	Role	Sysplex Role	Sysplex Rank	XCF Group List	Total CPU	Total Storage	zOS Image Name	Status	Network ID	RMTCMD IP Address	RMTCMD Port	NetVi Versi
	11/02/10 02:52:16	AOFDA	NETWORK	MASTER	1	(DSIPLX01)	0	18665	MVSA	ACTIVE	USIBMES	10.31.186.57	4022	V5R4

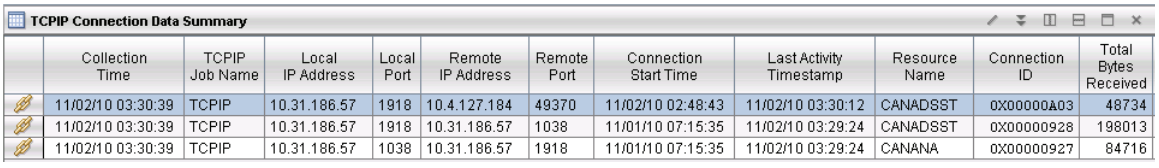
___ 11. Click the **Workspace** option. A list menu displays more workspaces.

___ 12. Click the **Inactive TCP/IP Connection Data** workspace. Each of the items in the table represent an inactive connection. If your table is empty, go to item 14.

___ 13. To see information for a single entry in that table, click the **Link To** icon at the beginning of the row. A filter window opens. Accept the defaults. The window filters the information for this local IP address, local port, remote IP address, and remote port.

___ 14. Access the default workspace for **TCP Connection Data**. A table and rows within the table have a link associated with them.

___ 15. From the **TCPIP Connection Data Summary**, follow the links to more detailed workspace views by right clicking the **Link To** symbol.



TCPIP Connection Data Summary

	Collection Time	TCPIP Job Name	Local IP Address	Local Port	Remote IP Address	Remote Port	Connection Start Time	Last Activity Timestamp	Resource Name	Connection ID	Total Bytes Received
	11/02/10 03:30:39	TCPIP	10.31.186.57	1918	10.4.127.184	49370	11/02/10 02:48:43	11/02/10 03:30:12	CANADSST	0X00000A03	48734
	11/02/10 03:30:39	TCPIP	10.31.186.57	1918	10.31.186.57	1038	11/01/10 07:15:35	11/02/10 03:29:24	CANADSST	0X00000928	198013
	11/02/10 03:30:39	TCPIP	10.31.186.57	1038	10.31.186.57	1918	11/01/10 07:15:35	11/02/10 03:29:24	CANANA	0X00000927	84716

On our system, we have installed Application Support for all the other OMEGAMON XE products. Currently the agents are not installed. If the OMEGAMON Extended Edition (XE) products are installed and properly configured, links to those products and their workspaces are available if the agents are running.

Exercise 2-4: Working with NetView Health

Changing Situation values

In this exercise, modify a threshold to cause an event to occur. Set an artificially low value to generate the event. Perform the following steps:

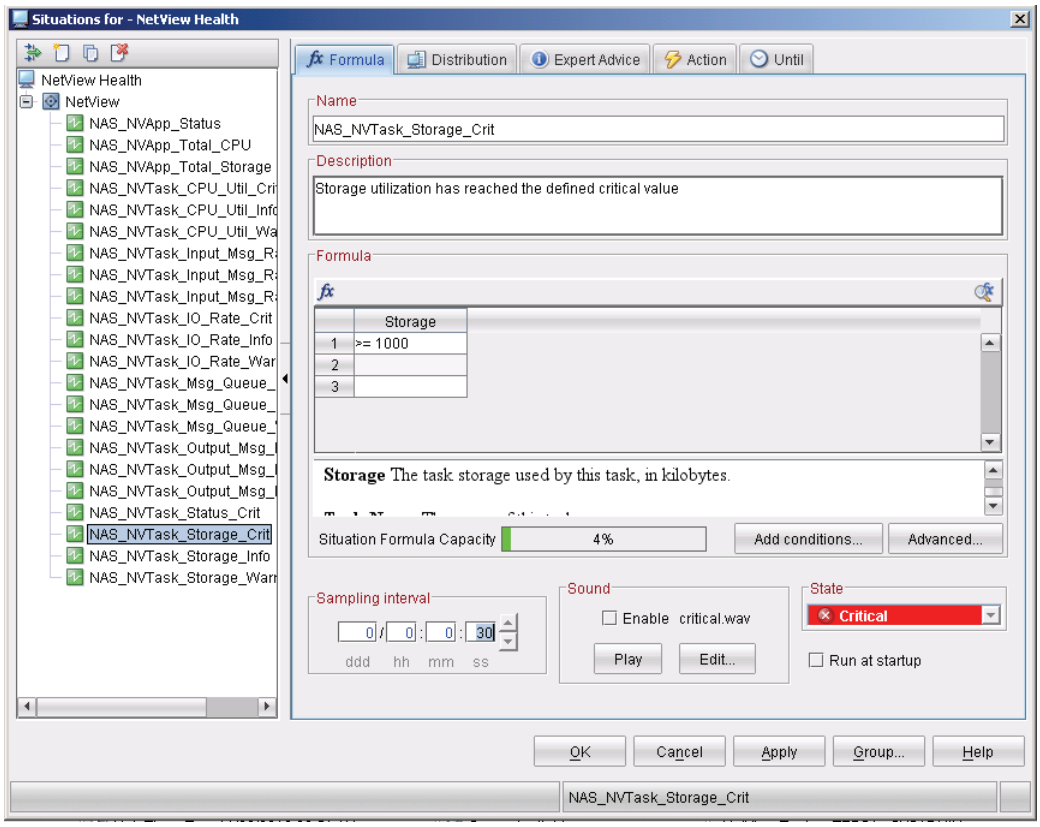
___ 1. From the navigator, click **NetView Health** to see the current health. View the numbers from the **Storage >= Critical Storage Threshold** view**.** Consider a number that selects only a few tasks if it is used as a high threshold value. For example, 1000 kilobytes can do this.

___ 2. From the navigator, right-click **NetView Health.**

___ 3. From the list menu, click **Situations.**

___ 4. In the list of situations, click **NAS_NVTask_Storage_Crit**. Information for this situation is displayed.

___ 5. Click the **Formula** tab to see the formula that is used for determining a critical alert. Click the number in the box to edit it. To ensure that a situation event is generated, change the number to something very low, for example, to **>= 1000.**



___ 6. Change the sampling interval default (15 minutes) to 30 seconds.

___ 7. Enable the sound for this warning. If you want to hear this sound, click **Play**.

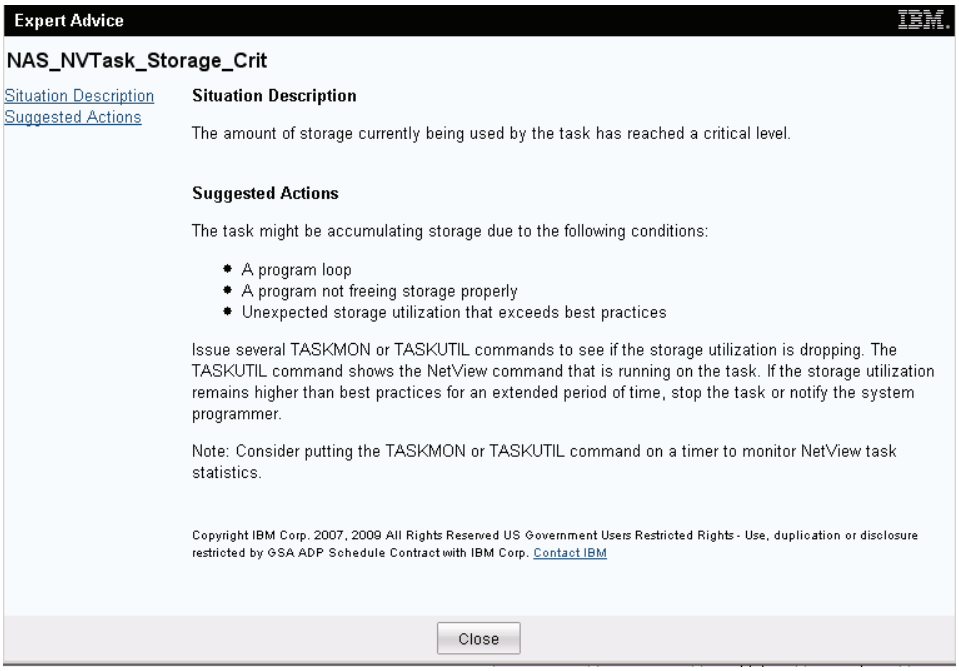
___ 8. Click **Apply** to save the changes, and click **OK** to leave the Situation editor.

___ 9. Check that the situation is running. If a situation is running before you change it, it restarts with the new values. Right-click **AOFDA** in the Navigation tree and click **Manage Situations**. Find the **NAS_NVTask_Storage_Crit** situation in the list and start it by marking it and clicking the green arrow icon at the top left corner.

Using Expert Advice

___ 10. Around 30 seconds later, the red critical icon displays over many items in the Navigator. The audible alert sounds. Hover the cursor over one of these icons to cause a fly-over box to display.

___ 11. In the fly-over box, click the yellow link icon. This action opens a workspace to display the task that exceeded the threshold. The deployable views are Initial Situation Values, Current Situation Values, Command View, and Expert Advice.



If this is a production situation that is being analyzed, the expert advice can lead you to a solution. From the **Command** view, you can issue a **Take Action** command. When the situation resolves, the critical event is no longer displayed in the Situation views.

Issuing a command and viewing the command response

___ 12. In this artificial example, try issuing the **TASKMON** or **TASKUTIL** commands to monitor the storage. In the **Command** view, click the **Action Name** list. Click **Issue NetView Commands**.

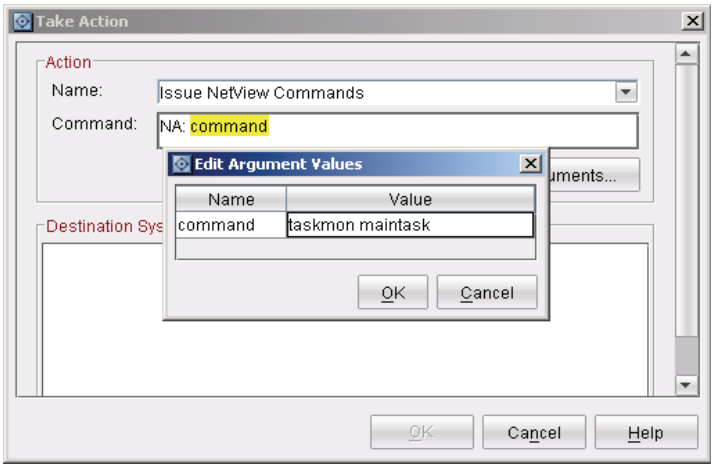
___ 13. In the Edit Argument Values window that opens, perform the following steps:

___ a. For Name, type TASKMON.

___ b. For Value, type MAINTASK, which is the name of the task to monitor.

___ c. Click **OK** to accept the command.

___ 14. In the **Command** view, click **Run** to issue the command. In the Action Status window, click **OK**.



___ 15. To view the results of the command, in the Navigator, click the **NetView Command Response** workspace. The command and the response are displayed in the **NetView Command Response Summary** view. It might be necessary to change the page number in the upper right part of the view to see the last page.

Exercise 2-5: Refreshing workspaces

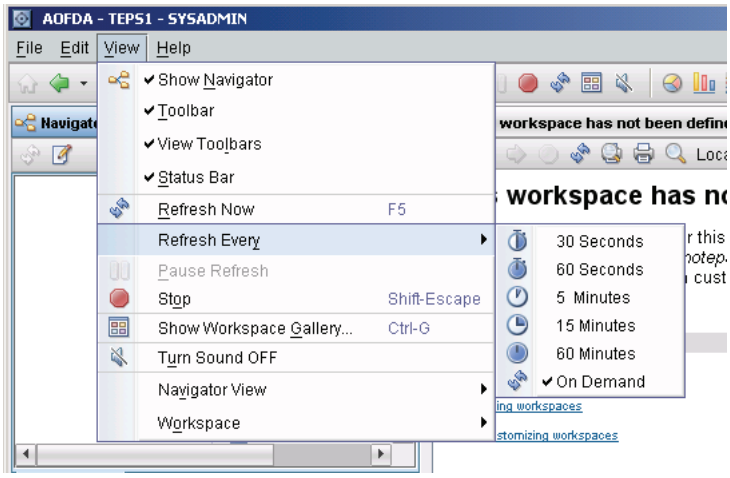
Manually refreshing workspaces

If no automatic refresh interval is specified, you can refresh a workspace by pressing F5**.** You can also click the refresh icon to view the most current values. Click the icon and look for refreshed data in a view.

Automatically refreshing workspaces

Perform the following steps:

___ 1. To automatically refresh a workspace, click **View > Refresh Every**, and click a time interval from the list.



___ 2. Click **30 Seconds**, and monitor the changes.The interval changes apply for the active workspace.

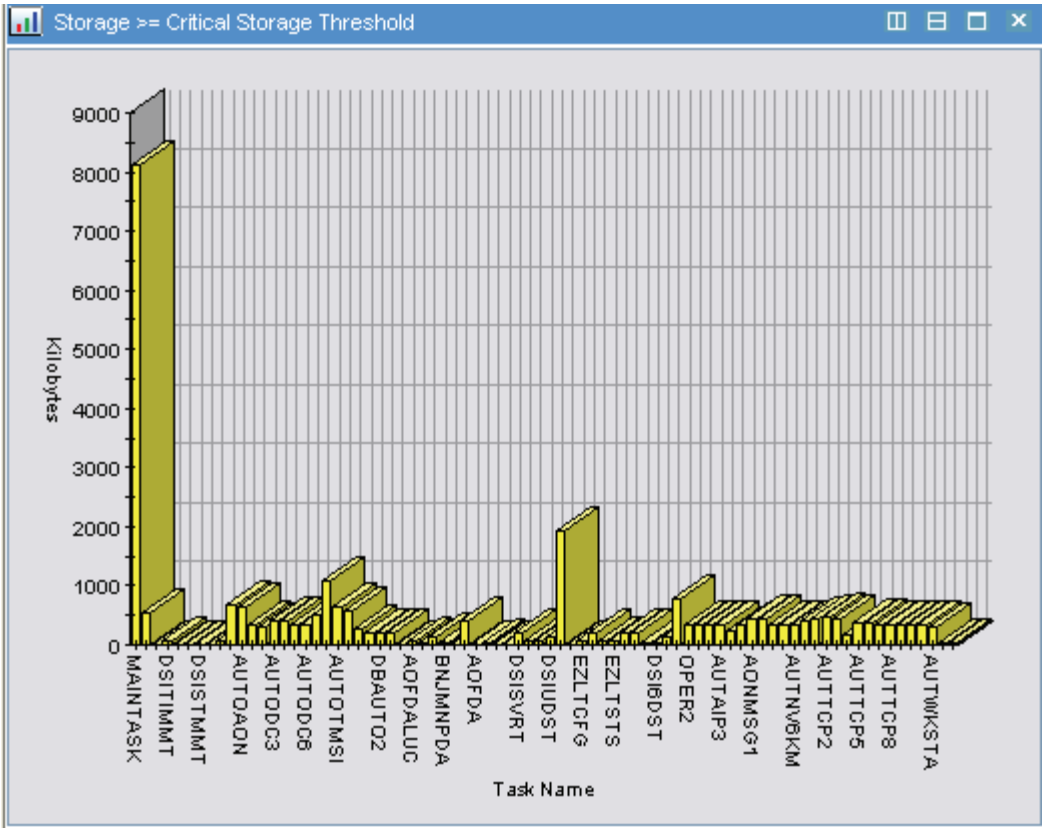
___ 3. To keep changes to your workspace, save the workspace. Give the workspace a meaningful name to easily identify it. Open the workspace again to see that the changes remain.

Exercise 2-6: Using a 3270 view

There might be times when you want to use a 3270 application. You can do that in a workspace view. Perform the following steps:

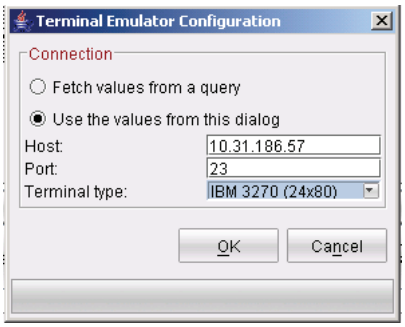
___ 1. Access the **NetView Health** navigator and the workspace for NetView Tasks.

The upper right part of the screen displays a bar chart in the **Storage >= Critical Storage Threshold** view.

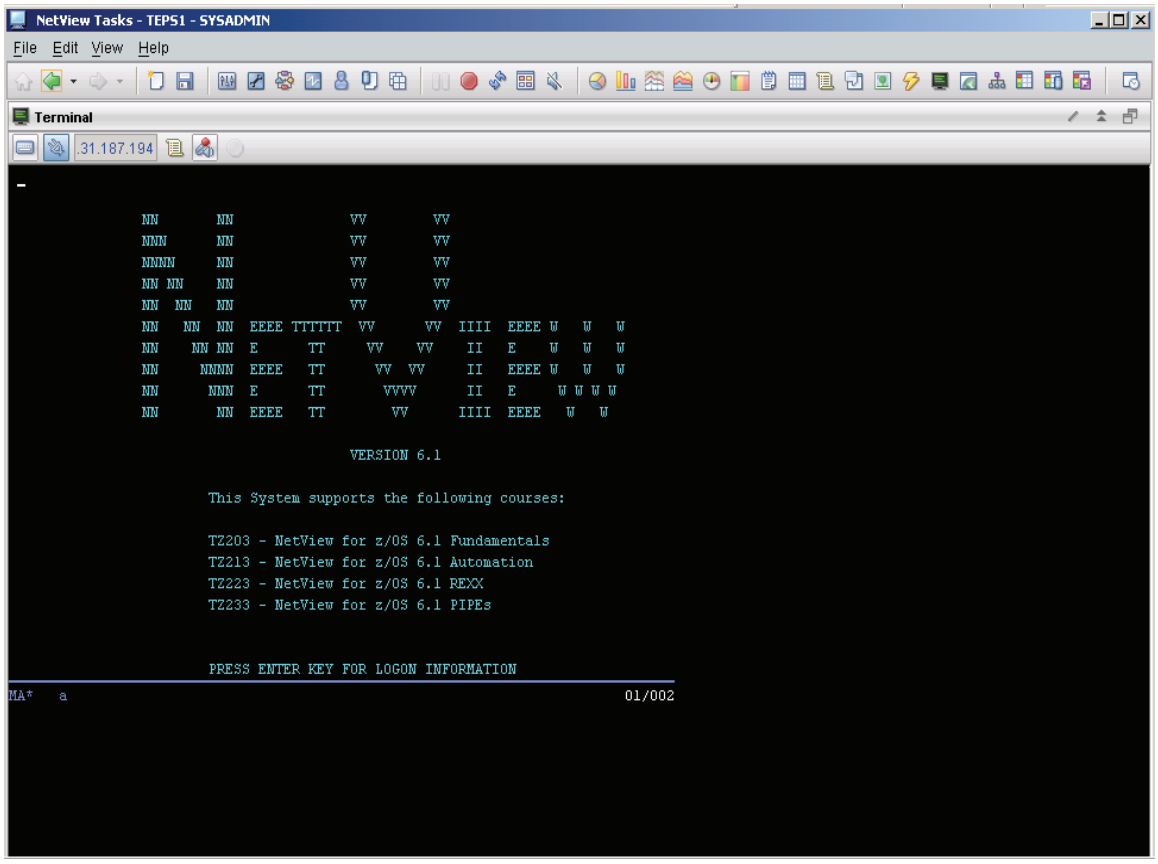


___ 2. At the toolbar, click the terminal icon. The mouse icon changes to the terminal icon. Move your mouse back to the **Storage >= Critical Storage Threshold** view, and click the mouse button within the view.

___ 3. In the Terminal Emulator Configuration window that opens, type the IP address that your instructor provided for your 3270 Personal Communications address.



___ 4. In the **Terminal Type** list, click **IBM 3270 (32 x 80)**, and click **OK**.



It might be necessary to widen the screen height to see the entire 3270 screen.

___ 5. Using the 3270 workstation view, log on to NetView and issue the BROWSE NETLOGA command.

Note: The workspace you have modified is your own private copy. If you want to let others access it, you must enter Workspace Administration Mode. This is though not covered in this course.

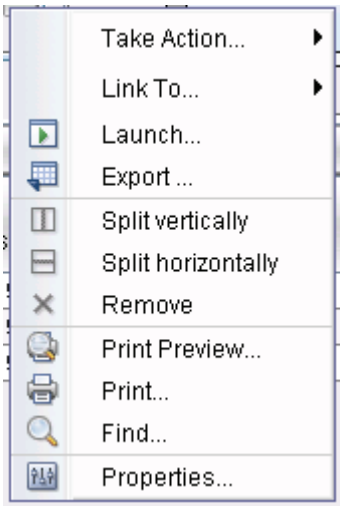
Exercise 2-7: Queries

Accessing queries

Build a workspace based on queries that are associated with the included views. You might not modify or use queries when you do not work with Tivoli Enterprise Portal as an administrator. Certain data is available for a specific view, such as the example that follows: Perform the following steps:

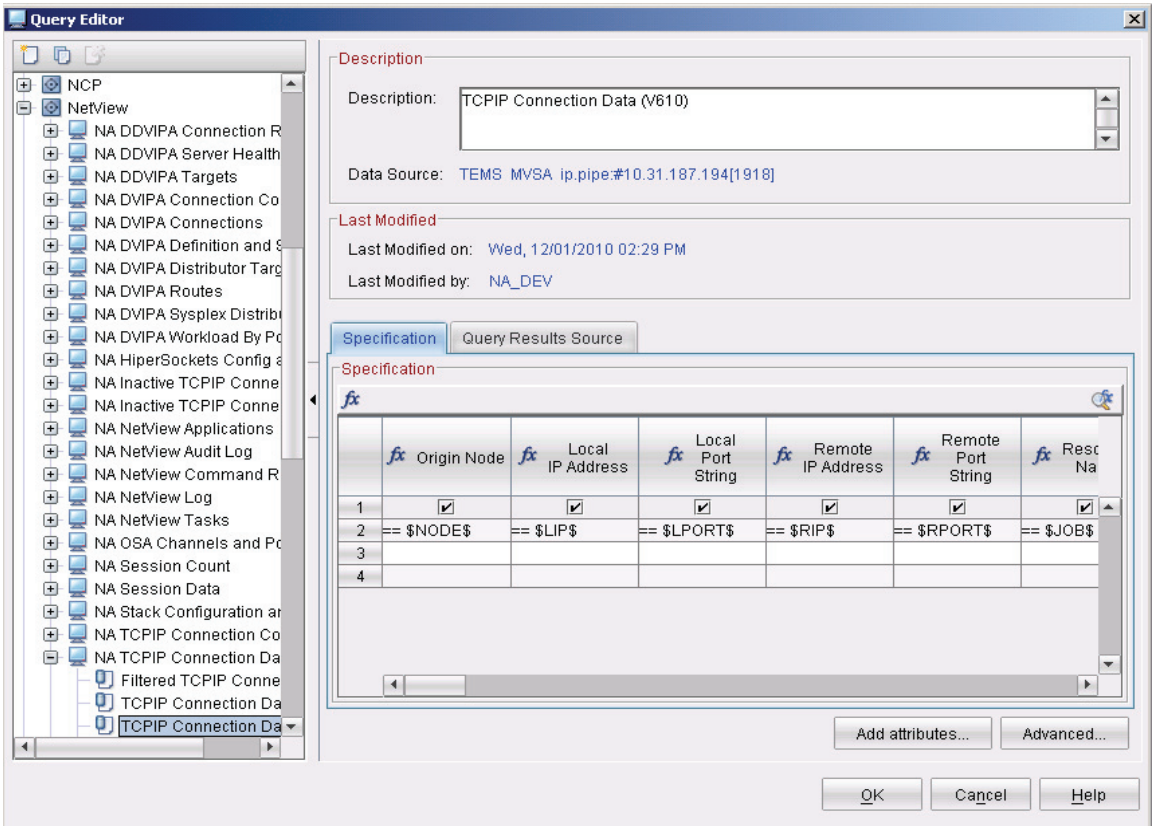
___ 1. Access the **TCPIP Connection Data** workspace.

___ 2. From within the **TCPIP Connection Data Summary** view, access the right-click menu.



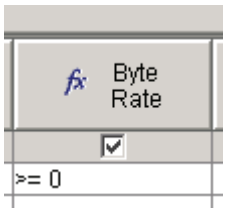
___ 3. Click **Properties** to open the **View Properties Editor**. The first tab in properties displays the query that is associated with the view. In this case, the formula shows the query that is to be sent to the agent.

___ 4. Click **Click here to assign a query.** This opens the Query editor.



The Byte Rate heading has a value of **>= 1024**. When the byte rate is greater than or equal to 1024, that table entry is displayed.

___ 5. To limit the output that displays, modify this byte rate selection query to a higher number, such as **>= 4096**. If none are selected, change it to another number until the table shows more rows.



Click **OK** to save the query selection. From the Properties window, you can test by clicking **Test**. Click **Apply**. You should see fewer lines of data that match this selection criteria.

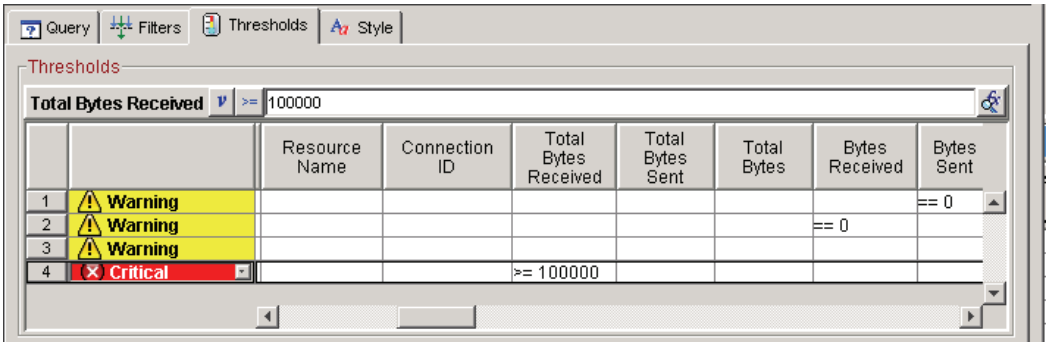
___ 6. If you do not see the **Byte Rate** column in the display, it may be getting filtered. Click the **Filter** tab, scroll to the right, and ensure **Byte Rate** is selected. Click **Test**. Click **Apply** to keep the filter criteria.

Using thresholds

You can use a threshold. Some of the tables that were shown in the previous workspaces have color-coded fields. Those colors result from thresholds that have been set for a view.

___ 7. Click the **TCPIP Connection Data** workspace. In the **TCPIP Connection Data Summary** view, right-click from within the table and select **Properties**.

___ 8. Click the **Threshold** tab. On the line displaying **Critical**, scroll to the right and change the **Total bytes received** to greater than or equal to 100000.



___ 9. Click the **Test** button and look for anything that changes to a red color. If nothing is red in the top table, lower the number and try again until you see red in the table. Click **Apply** and click **OK** to exit. In the table, those entries that match this threshold setting have red Total Bytes Received cells.

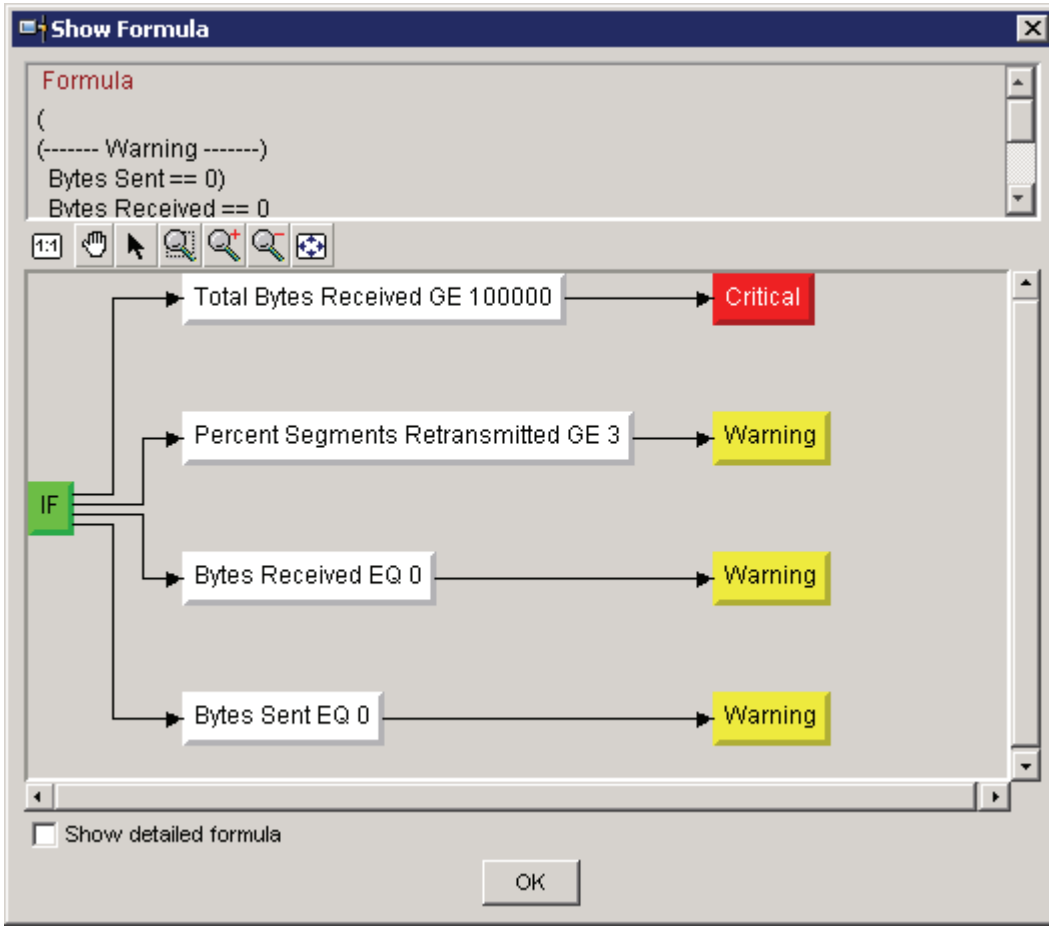
___ 10. You can see the Threshold selections as a formula. Perform the following steps:

___ a. Enter the **Properties** again for the **TCPIP Connection Data Summary** view.

___ b. Click the **Threshold** tab.

___ c. Click the icon to view the threshold conditions in a more readable format. (The icon is under the **Thresholds** toward the right side.)

Note: Some of the threshold rules might be complex.



With what you have learned, try changing thresholds on your own.

___ 11. In the **DVIPA Connections**, change the threshold indicator for Total Bytes Received to greater than or equal to 4096 as a critical threshold.

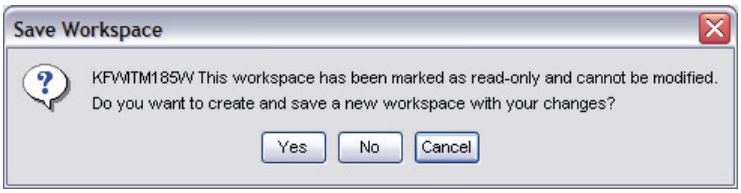
Exercise 2-8: Other Tivoli Enterprise Portal-related functions (optional)

In this exercise, you learn about making minor modifications to workspaces, and about data collection.

Saving workspaces

When you make changes to a workspace, you need to save them to keep the changes. You save a workspace by clicking the **Save** button or pressing Ctrl+S on the keyboard.

Click a workspace and click the **Save** button. A confirmation window opens.



You can save your own copy and prevent original workspaces from being replaced. Workspaces depend on the user ID. Therefore, modifications apply to only your user ID. Only an administrator who creates a workspace as another user and publishes it to others can see the same workspace.

Accessing workspaces as web addresses

Note: This feature is available only when using the browser mode to access the Tivoli Enterprise Portal client.

When using browser mode, each workspace is accessible with a specific web address. You can create entries in your Favorites that provide easy navigation to workspaces of interest to you. Perform the following steps:

___ 1. Open the **DVIPA Distributor Targets** workspace. Save it to your favorites by clicking **Favorites** > **Add to Favorites**.

___ 2. Type a name that is meaningful to you, and add it to a folder where you can locate it again.

___ 3. Access a different workspace.

___ 4. Click the newly created entry in your **Favorites**. This action returns you to the **DVIPA Distributor Targets** workspace.

___ 5. This feature also works when you are not logged on to a client and selecting it with a browser. You receive a prompt for an ID and password before the workspace displays. To test, log off from the client and click a saved workspace from your Internet Explorer Favorites.

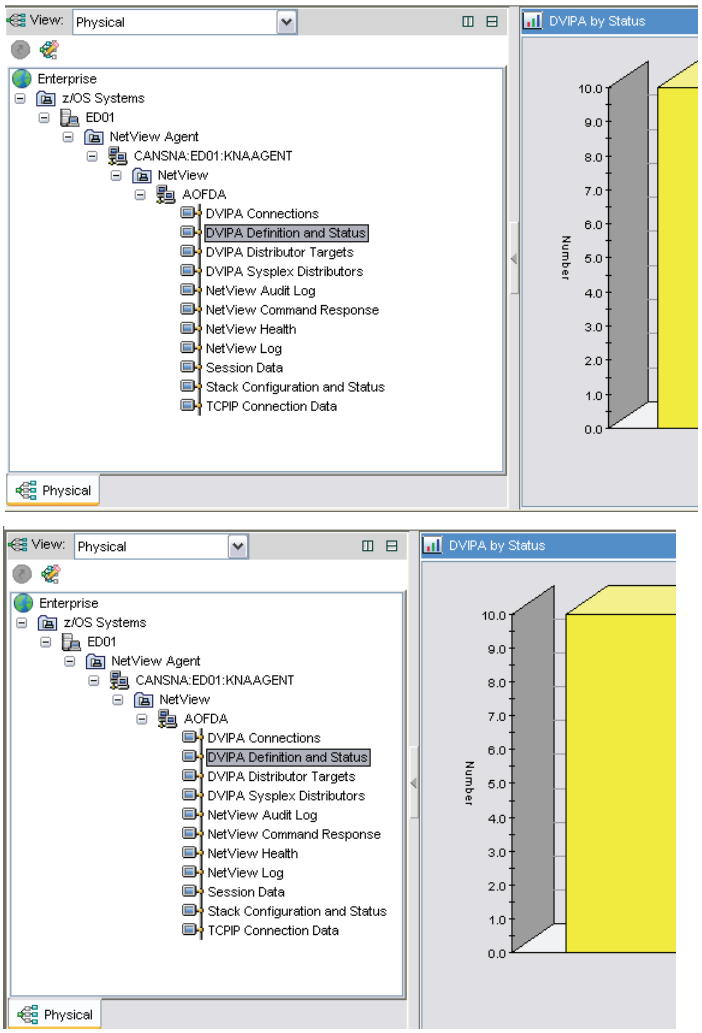
Modifying view panes

Not all aspects of modifying views are covered in this unit. However, there are some modifications that users can do.

Resizing views

One of most common scenarios that you encounter is a different screen resolution on your desktop. Although most workspaces have been created with an industry standard screen size in mind, it might be beneficial for you to adjust the view sizes. This also applies if you do not want to view Tivoli Enterprise Portal in full-screen mode, or if you use the browser mode.

Hover your mouse pointer on the border of a view and drag it in a direction that the arrow points. In the following example, the bar that separates the Navigator from the view to the right has been dragged to the left. This action reduces the size of the Navigator.



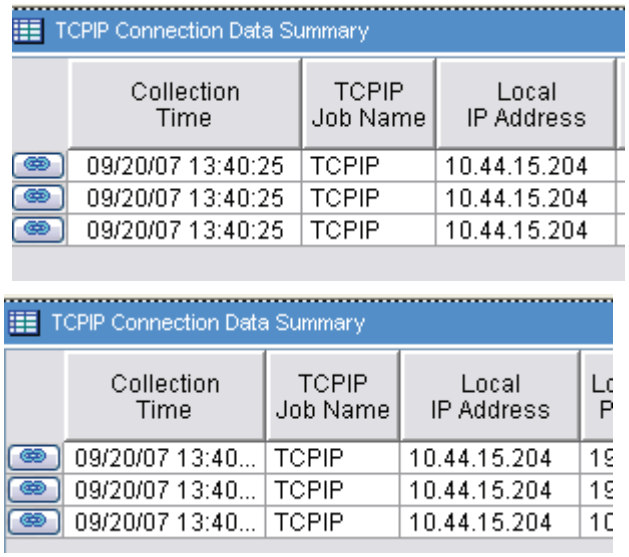
After you adjust view sizes, you must save your workspace to keep your changes. Press the **Save** button.

Modifying table views

When working with table views, you can modify the column width, sort order, and sequence of columns.

Resizing columns

Access a workspace that contains a table, for example, the **TCPIP Connection Data.** Hover your mouse pointer on the border between two column headings. Click and drag your mouse to resize your table row. In the following example, the **Collection Time** column has narrowed.



Sorting columns

By pressing any column heading, the sort order switches among not sorted, ascending sort order, and descending sort order. From the **TCPIP Connection Data** view, click the **Remote IP Address** column heading several times and view the changes.

The first example shows sorted order, the second ascending, and the third descending.

TCPIP Connection Data Summary

Collection Time	TCPIP Job Name	Local IP Address	Local Port	Remote IP Address	Remote Port
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	10.44.15.204	1076
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	9.27.132.48	1323
09/20/07 13:40:25	TCPIP	10.44.15.204	1076	10.44.15.204	1918

TCPIP Connection Data Summary

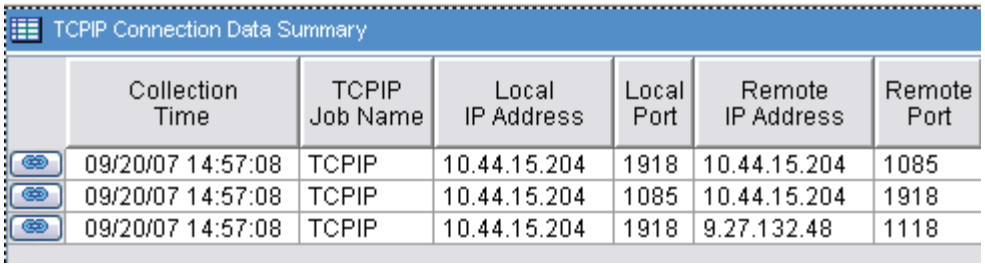
Collection Time	TCPIP Job Name	Local IP Address	Local Port	▲ Remote IP Address	Remote Port
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	10.44.15.204	1076
09/20/07 13:40:25	TCPIP	10.44.15.204	1076	10.44.15.204	1918
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	9.27.132.48	1323

TCPIP Connection Data Summary

Collection Time	TCPIP Job Name	Local IP Address	Local Port	▼ Remote IP Address	Remote Port
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	9.27.132.48	1323
09/20/07 13:40:25	TCPIP	10.44.15.204	1918	10.44.15.204	1076
09/20/07 13:40:25	TCPIP	10.44.15.204	1076	10.44.15.204	1918

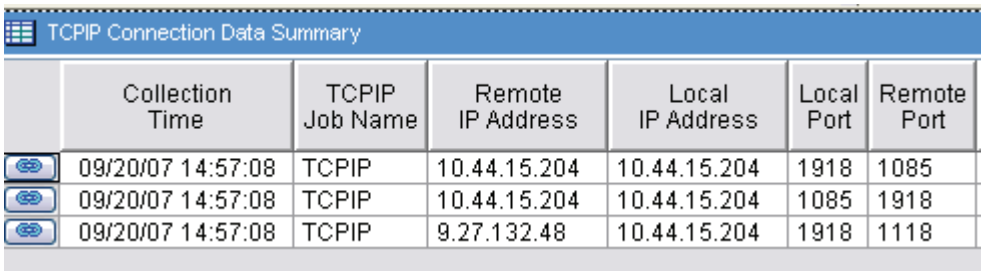
Changing column sequence

In the same workspace view, click the column heading labeled **Remote IP Address** and hold down the left mouse button. Drag that column to the front of the **Local IP Address** column and release the button.



TCPIP Connection Data Summary

	Collection Time	TCPIP Job Name	Local IP Address	Local Port	Remote IP Address	Remote Port
	09/20/07 14:57:08	TCPIP	10.44.15.204	1918	10.44.15.204	1085
	09/20/07 14:57:08	TCPIP	10.44.15.204	1085	10.44.15.204	1918
	09/20/07 14:57:08	TCPIP	10.44.15.204	1918	9.27.132.48	1118



TCPIP Connection Data Summary

	Collection Time	TCPIP Job Name	Remote IP Address	Local IP Address	Local Port	Remote Port
	09/20/07 14:57:08	TCPIP	10.44.15.204	10.44.15.204	1918	1085
	09/20/07 14:57:08	TCPIP	10.44.15.204	10.44.15.204	1085	1918
	09/20/07 14:57:08	TCPIP	9.27.132.48	10.44.15.204	1918	1118

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