297-2251-201

DMS-100 Family

TOPS IWS

Network Configuration Guide

IWS 17.0 and up

November 2002

NORTEL NETWORKS™

DMS-100 Family

TOPS IWS

Network Configuration Guide

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1.0 Introduction

This document provides procedures for configuring the BayStack 150-series Ethernet hubs and for datafilling IWS positions. It covers three subjects:

- How to configure the Ethernet hub (Section 2.0 on page 11)
- How to enable common keystroke commands (Section 3.0 on page 25)
- How to datafill the TOPS IWS position (Section 4.0 on page 41)

It is necessary to read only the sections that apply to the process being followed.

1.1 Configuring the Ethernet hub

Section 2.0 provides procedures for configuring the BayStack 150-series Ethernet hub when used in a TOPS IWS Ethernet local area network (LAN) configured with the Nortel Networks Directory One database.

If a non-Nortel Networks directory database is used, any information about its integration into the LAN must be sourced by the customer. It is expected that the person using this document has access to the appropriate Site Networking Packages (SNP), which contain essential hub configuration information, such as hub IP address, subnet mask address, and default gateway address.

If the service center is not configured for Directory One, no hub configuration is required.

If your only requirement is the configuration of the BayStack hub, you need only Section 2.0; Section 3.0 and Section 4.0 are not required for hub configuration.

1.2 Datafilling the IWS position

For datafilling a TOPS IWS position, only Sections 3.0 and 4.0 are needed. Section 3.0 provides information on enabling the keystroke commands required in Section 4.0. Section 4.0 provides the actual procedures for datafilling an IWS position.

A more detailed description of the procedures and files mentioned in this document can be found in *TOPS IWS Base Platform User's Guide,* 297-2251-010, *TOPS IWS RAMP and Provisioning User's Guide*, 297-2251-015, and in the Bay Networks publication, *Installation and Reference for the BayStack 150-series Ethernet Hubs.*

2.0 Ethernet hub configuration

The Ethernet LAN interconnects IWS operator positions to allow data to be passed among the positions, the DMS-200 ETMS, and the optional Directory One database. If the service center is configured with the optional Directory One database, the Ethernet hub must be configured with the appropriate network parameters. Figure 1 shows a typical Directory One Ethernet LAN configuration.

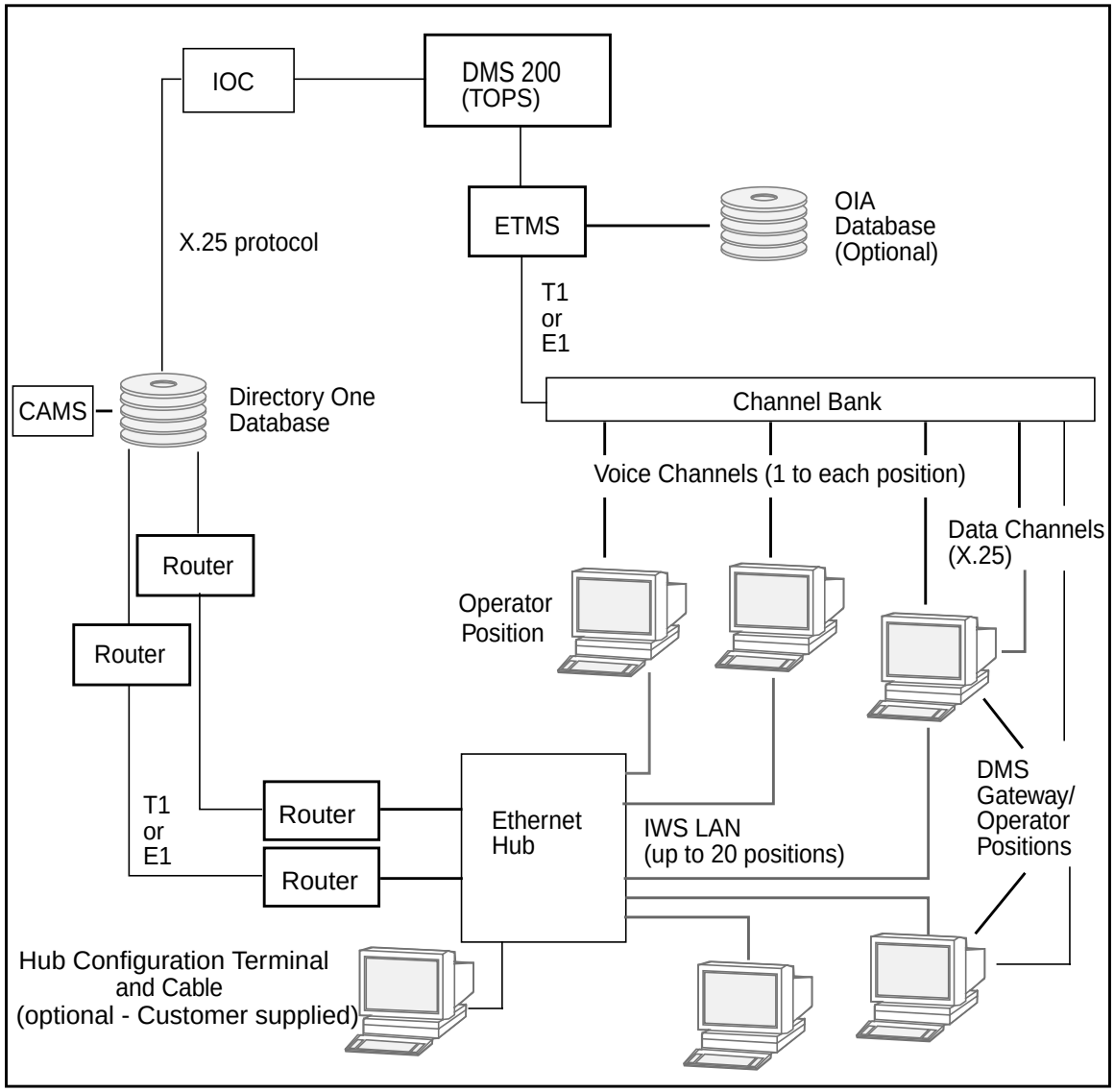


Figure 1. Directory One Ethernet LAN configuration

Each Ethernet LAN is limited to a maximum of 20 IWS operator positions. The LANs are 10 Base-T compatible.

2.1 Ethernet LAN hardware

Each Ethernet LAN consists of the following components:

- Ethernet hub
- Hub configuration terminal (customer supplied)
- 24-inch open frame
- Ethernet plenum rated cables
- Ethernet patch cable (customer supplied)
- Ethernet coupler

Figure 2 shows the relationship of the LAN components to each other.

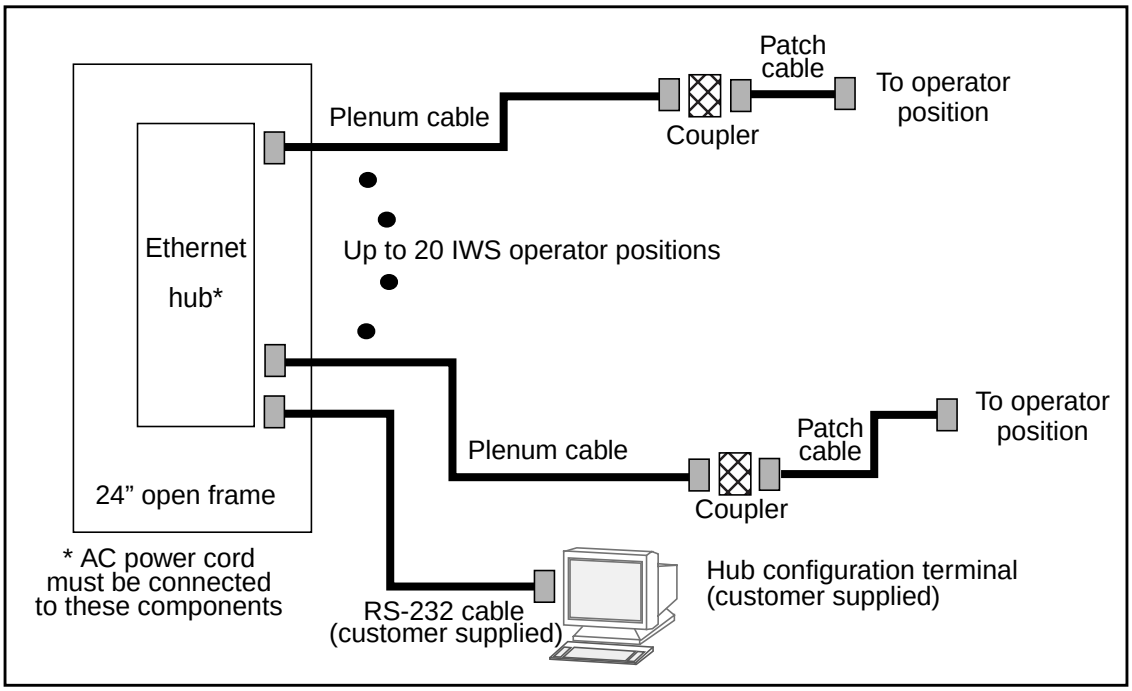


Figure 2. Components of the LAN

2.2 Ethernet hub

The Ethernet hub specified for the NTNX51DA is the BayStack 150 (NTAR25BF) 24-port hub. For specific details not covered in this section, reference the Bay Networks publication, *Installation and Reference for the BayStack 150-series Ethernet Hubs*.

Note: The BayStack 150 should not be operated with any Ethernet cables attached that are not properly terminated to an IWS position or ASN router. The cables are considered properly terminated even if attached equipment is powered down.

2.2.1 BayStack 150 description

The BayStack 150 hub has the following dimensions:

Height:	1.73 inches	(44 mm)
Width:	17.2 inches	(437 mm)
Depth:	8.46 inches	(215 mm)
Weight:	6.2 pounds	(3.0 kg)

The BayStack 150 hub is equipped with

- 24 10 Base-T Ethernet RJ-45 MDI-X ports
- 1 MDI/MDI-X switchable uplink port
- 1 recessed AUI connector
- 1 RS-232 communications port
- 1 LED display
- 1 network management module

2.2.2 LED display

The LED display indicates the link, activity, and partitioning status of each port on the hub. Table 1 provides a detailed explanation of the LEDs.

Table 1. BayStack 150 LED display details

LED label	Color	Activity	Meaning
Master	Green	On	The hub is serving as an active managed hub in the stack.
Con	Green	On	The communications port is being used for the console interface or out-of-band network management. The mode of the console port is set using the console interface or an SNMP-based network management system.
AUI	Green	Blinking	A transceiver is attached to the AUI port on the rear panel of the hub, and data packets are being received through the AUI port.
	Yellow	On	The AUI port is partitioned.
Runt	Amber	On	The hub is receiving a packet that is too short. Ethernet packets must be at least 64 bytes long. Runts are often a normal side effect of collisions.

Table 1. BayStack 150 LED display details (Continued)

LED label	Color	Activity	Meaning
F/A	Amber	On	Data packets have been corrupted during transmission. A frame check sequence (FCS) error occurs when a data packet fails an internal consistency check. An alignment error occurs when the bits in a packet do not add up to a whole number of bytes.
L/C	Amber	On	A collision is detected that happened after the 512th bit of a frame. Late collisions may be caused by overly long delays in the Ethernet network, either because a cable is too long or there are too many repeaters or hubs on a network.
Other	Amber	On	One of the following Ethernet errors is occurring: TooLongErrors ShortEvents VeryLongEvents Datarate Mismatch errors IPG errors Jabbers Fragments SFD errors
Isolate	Amber	On	The hub has been manually segmented from the rest of the network. Usually, the hubs are connected together into a single Ethernet collision domain through the Cascade connectors on the back. Segmenting a hub places the hub in its own collision domain while allowing it to be managed with the rest of the stack.
In	Green	On	Another hub is connected to the In cascade port on the back of the hub.
Out	Green	On	Another hub is connected to the Out cascade port on the back of the hub.
Collision / 1, 5, 10, ≥20	Amber	On	Collision rate is measured in units of tens of collisions per second.
Hub ID			The Unit ID of the hub is displayed. In a hub stack, each hub unit should have a unique ID. The hub is capable of setting the hub ID automatically, freeing you from having to do so. Using the Network Management Module (NMM), you can turn on Group ID flashing, which will make the hub ID indicator flash off and on. This ID flashing may be useful for identifying a specific hub or a hub stack within a large bank of hubs.

Table 1. BayStack 150 LED display details (Continued)

LED label	Color	Activity	Meaning
Utilization %	Green	Blinking	The amount of data traffic is measured. When the data traffic exceeds 40%, the last LED blinks amber.
Link/Rx	Green	On	The port is connected to a port on an Ethernet device that is powered on, and the connection between the ports is valid.
		Off	The port is connected to a port on an Ethernet device that is powered off. The connection between the port on the hub and the port on the connected device is not valid.
		Blinking	The connected port is receiving data packets. Each data packet will be transmitted through all other connected ports on the hub (or all ports in the hub stack).
Disable	Yellow	On	The port has been manually partitioned.
Autopartition	Yellow	Blinking	The port has been automatically partitioned.

2.2.3 Ethernet ports

Twenty-four RJ-45, 10 Base-T Ethernet ports are accessible from the front of the BayStack 150 hub. Port 1 is a special function port, and it is not used.

Figure 3 shows the BayStack 150 hub Ethernet port specifications and RJ-45 connector pinouts.

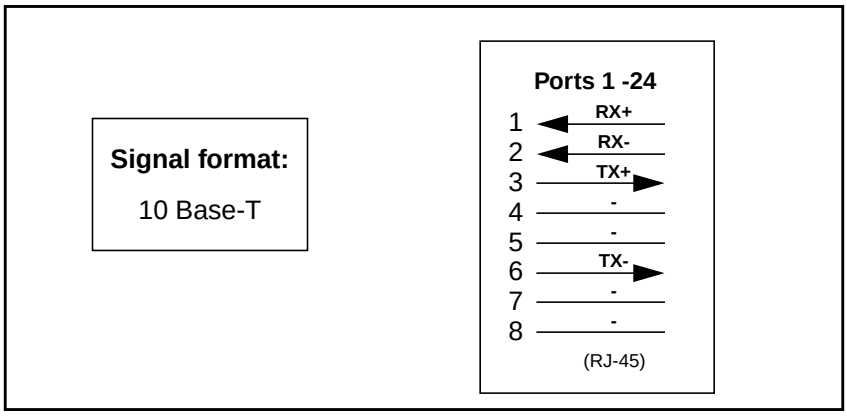


Figure 3. BayStack 150 hub Ethernet port specifications and RJ-45 connector pinout

2.2.4 MDI/MDI-X switch

The MDI/MDI-X switch controls the pinout of port 1 on the BayStack 150 hub. Since the port is unused, no further information is provided. For specific details, reference the Bay Networks publication, *Installation and Reference for the BayStack 150-series Ethernet Hubs*.

2.2.4.1 Interconnect method

The BayStack Hub may be interconnected to another BayStack hub using port 1 in combination with the MDI / MDI-X switch.

The MDI / MDI-X switch allows you to connect the RJ-45 connector ports of the hub directly to another 10 BASE-T hub, through the port 1 10BASE-T connector. The switch should be set to MDI (uplink) on the hub. A standard straight-through UTP cable is customarily used for connection to any MDI-X port.

2.2.5 RS-232 communication port

Figure 4 shows the BayStack 150 Hub RS-232 communication port specifications and cable pinout to the customer-supplied terminal.

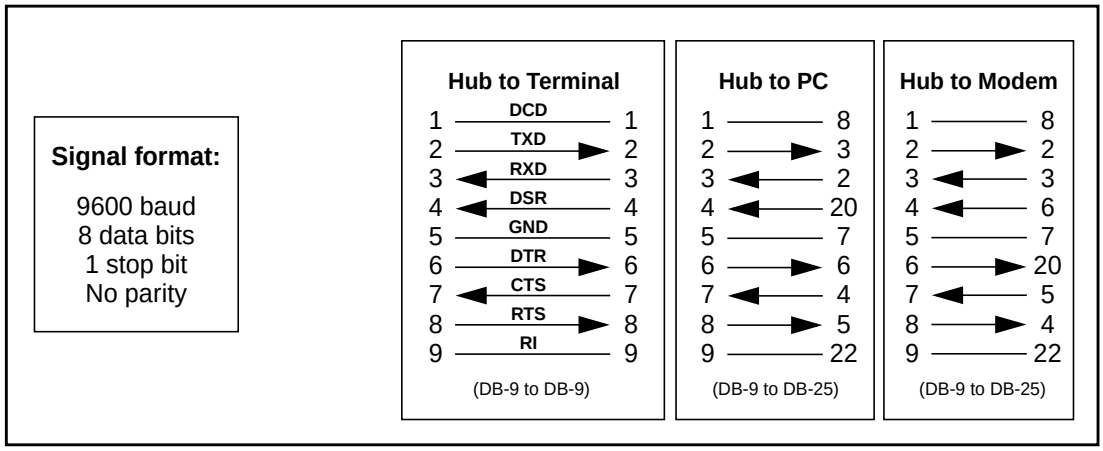


Figure 4. RS-232 communication port specifications and cable pinout

2.2.6 AUI port

The BayStack 150 AUI port is not used. For specific details, refer to the Bay Networks Publication *Installation and Reference for the BayStack 150-series Ethernet Hubs*.

2.2.7 Cascade ports

The BayStack 150 cascade in and out ports are not used. For specific details, refer to the Bay Networks Publication *Installation and Reference for the BayStack 150-series Ethernet Hubs*.

2.3 Configuring the BayStack 150

This section provides information and procedures for setting up and configuring the BayStack 150-series Ethernet hub.

You must be able to fill in Table 2 before executing these instructions. Consult the appropriate SNP for information about the hub IP address, subnet mask address, and default gateway address.

Table 2. IP address list

Hub IP address	
Subnet mask	
Default gateway	

Note: The hub IP address must be unique to the specific hub being configured.

2.3.1 Set up a hub configuration terminal

A customer-supplied VT-100 type terminal, a PC, or a workstation emulating a VT-100 terminal may be attached to the BayStack 150 hub for making changes to the hub configuration. The connection can be either local or remote through a modem. For complete details of hub management capabilities through this port, see the Bay Networks publication *Installation and Reference for the BayStack 150-series Ethernet Hubs*. Figure 6 on page 19 shows the cable pinouts for the interconnect cable.

One method that could be used is to set up an unused IWS position (or any other Windows 95 based computer) to emulate a VT-100 terminal. Use the following procedure to set up the VT-100 terminal emulation.

From the Windows 95 desktop

1. Press **Ctrl+Esc** to open the Start menu.
2. Use the up and down arrow keys to select Run, and press **Enter**.
3. In the Run dialog box type `hypertrm.exe`, and press **Enter** to start the HyperTerminal application.

   The Connection Description dialog box appears.
4. Tab to the Cancel button, and press **Enter.**

   The Connection Description dialog box disappears.
5. Press **Alt**+**F** to open the File menu.
6. In the File menu, use the up and down arrow keys to select Properties. Press **Enter**.

   The New Connection Properties dialog box appears.
7. Use the **Tab** key to select the Connect Using pull-down menu.
8. Use the right and left arrow keys to select the port on the terminal to be used for the hub configuration; for example, COM1.
9. After selecting the port, tab to the Configure button. Press **Enter**.
10. Verify that the following parameters are correctly set:
    - Bits per second: 9600
    - Data bits: 8
    - Parity: None
    - Stop bits: 1
    - Flow control: None

    If these parameters are correct, proceed to step 16. If changes to the settings are required, proceed with the following steps.
11. To set the Bits per second (baud rate), tab to the Bits per second pull-down menu and use the left or right arrow keys to select the setting `9600`.
12. To set the Data bits parameter, tab to the Data bits pull-down menu and use the left or right arrow keys to select `8`.
13. To set the Parity parameter, tab to the Parity pull-down menu and use the left or right arrow keys to select `None`.
14. To set the Stop bits parameter, tab to the Stop bits pull-down menu and use the left or right arrow keys to select `1`.

15 To set the Flow control parameter, tab to the Flow control pull-down menu and use the left or right arrow keys to select None.

16 Tab to the OK button, and press **Enter**.

17 Use the **Tab** key to select the Phone Number tab of the New Connection Properties dialog box. Then press the right arrow key followed by the **Enter** key to select the Settings tab.

18 Use the **Tab** key to select the Emulation pull-down menu.

19 Using the left and right arrow keys, select the VT100 option.

20 Tab to the OK button, and press **Enter**.

This completes the setup of the VT100 terminal emulator. Proceed to Section 2.3.1.1 for information on connecting the terminal to the Ethernet hub.

2.3.1.1 Connect a terminal or PC to the hub

The next task is to connect the terminal to the Ethernet hub, as shown in Figure 5.

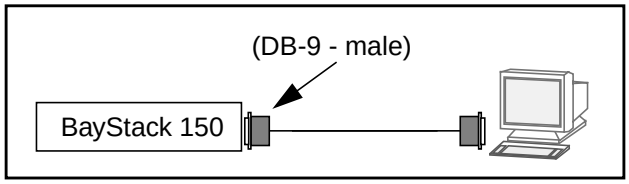


Figure 5. Terminal connection to the BayStack 150 hub

Use the following procedure to make the connection.

1 Study Figure 6, which shows the pin assignments for the interconnect cable between the terminal or PC and the Ethernet hub.

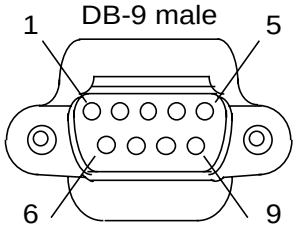
Pin assignment	Pin number and signal	
	1 DCD (input) 2 TXD (input) 3 RXD (input) 4 DSR (input) 5 GND	6 DTR (output) 7 CTS (input) 8 RTS (output) 9 RI (input)

Figure 6. Communication port pin and signal information

2 Connect the DB-9 plug end of the appropriate straight-through cable to the communications port on the rear panel of the hub. Refer to the cable pin-out shown in Figure 6.

3 Connect the remote end of the cable into the appropriate port on the terminal or PC.

2.3.2 Connect power to the hub

Use the following procedure to connect power to the hub.

1. Connect the power cable that comes with the hub to the power connector on the back of the hub.
2. Turn on power to the hub by plugging the power cable into an outlet.

   When you turn on power to the hub, the boot process begins.

   After a valid connection has been established between the hub and the console, diagnostic messages are displayed on the screen, as shown in Figure 7.

```
      Bay Stack 150 NMM POWER-ON SELF DIAGNOSTIC
-------------------------------------------------
PROM Checksum Test                              PASSED
      PROM Checksum Test                        PASSED
DRAM (01024 KByte)                              PASSED
LED Display Test                                PASSED
E2PROM Integration Checksum                     PASSED
29F040 512 Kbytes Flash Memory Installed        PASSED
Network Monitor DRAM Test                       PASSED
DL-P2517B NIC Test                              PASSED
Expansion Module Test                           PASSED

Stack 150 SYSTEM CONFIG AND RUN TIME IMAGE DOWNLOAD
-------------------------------------------------------

-> DUPLICATED IP CHECKING: (Hit CTRL-C to stop system boot/load
      IP Address: 0.0.0.0
      Subnet Mask: 0.0.0.0

Req Send   ARP Reply    ARP Retry    Time (Sec)
--------   ---------    ---------    ----------
```

Figure 7. Power-on self-diagnostic display

2.3.3 Edit IP settings

Use the following procedure to edit the IP settings.

1. While the message `DUPLICATED IP CHECKING:(Hit CTRL-C to stop system boot/load)` is displayed, press **CTRL+C** to display the boot Main Menu (see Figure 8).

```
Boot Main Menu                          BayStack150 Ethernet NMM
Unit: 1

                    MAC Address         Segment
Network Interface : 000081B638E2        1


Boot Protocol     IP                    Boot Mode        local
Management ProtocolIP                   Image Load Mode  local
Image Save Mode   noAvail               Config Load Mode local


*** ERROR: Menu choice was invalid ***

m - Toggle boot mode                |  c - System configuration menu
i - Toggle image load mode          |  b - Boot file configuration menu
f - Toggle config file load mode    |  j - IP configuration menu
k - Reset EEPROM to factory defaults |  e - Load and execute boot file
z - Reset management module         |  w - Write boot config to EEPROM
[Esc] - Refresh boot main menu      |

Enter command: _
```

Figure 8. BayStack 150 Boot Main Menu display

2 From the Boot Main Menu, press **j** to display the IP Configuration Menu (see Figure 9).

```
IP Configuration Menu                  Baystack150 Ethernet NMM
Unit: 1

         IP Address             Subnet Mask
NI 1:    128.5.3.12             255.255.255.0

Default Gateway: 128.5.13.11




i - Set IP address
s - Set subnet mask
g - Set default gateway
[Esc] - Return to previous Menu

Enter command: _
```

Figure 9. IP Configuration Menu

3 From the IP Configuration Menu, press **i** to set the hub IP address.

4 Enter the IP address you have selected, and press **Enter**.

5 Press **s** to set the subnet mask.

6 Enter the subnet mask number for your network, and press **Enter**.

7 Press **g** to set the default gateway.

8 Enter the IP address for your default gateway, and press **Enter**.

9 Press **Esc** to return to the Boot Main Menu.

2.3.4 Edit boot configuration settings

Use the following procedure to edit the boot configuration settings.

From the Boot Main Menu

1 Press **m** to toggle the boot mode to EEPROM.

2 Press **m** to toggle the boot mode to local.

3 Press **f** to toggle the config load mode to local.

4 Press **i** to toggle the image load mode to local.

5 Press **w** to save all parameter values to EEPROM.

The hub uses these new values during its next boot load cycle.

6 Press **z**, then select **y,** and press **Enter** to reboot the hub.

Your configuration of the BayStack hub is now complete.

3.0 Keystroke commands (Alt+Tab, Ctrl+Esc, and Ctrl+Alt+Delete)

The following section contains information on enabling keystroke commands that are used in the IWS environment. Figure 10 shows the keyboard layout for a standard IWS keyboard used in a non-IWS (Windows or DOS) environment.

Note: You can also enable the use of a customer-supplied mouse. The use of a customer-supplied mouse can be enabled to facilitate the movement between IWS and MS Windows applications. The user may also be required to load the appropriate mouse drivers for the specific mouse to be used. Refer to the mouse manufacturer's documentation for specific information on required drivers.

Windows provides three useful key combinations:

- **Alt**+**Tab** - cycles through running applications
- **Ctrl**+**Esc** - opens the Windows XP Professional Start menu
- **Ctrl**+**Alt**+**Delete** - opens the Close Program window

By default, IWS base software disables **Alt**+**Tab** and **Ctrl**+**Esc**, but not **Ctrl**+**Alt**+**Delete**. After the IWS base application has started, however, these commands can be enabled or disabled.

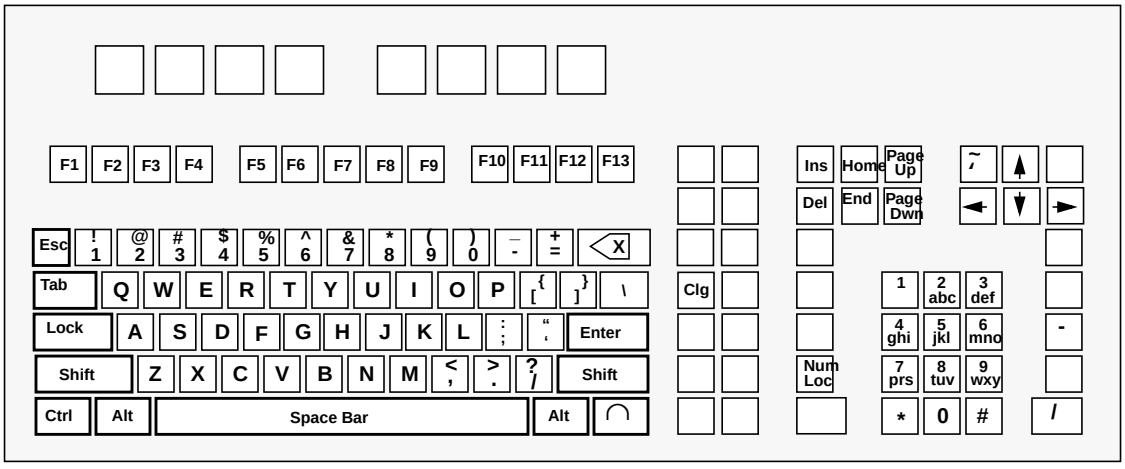


Figure 10. Windows or DOS environment IWS keyboard layout

Note: When used in the Windows or DOS environment, the **Clg** key on the IWS keyboard can also act as the **Delete** key.

3.1 Enabling Alt+Tab

From the IWS logon screen, the **Alt**+**Tab** key command can be enabled on an IWS position by setting a variable called alttab to 1. Use the following procedure to temporarily enable the **Alt**+**Tab** key command.

1. **If the IWS logo window has focus, shut down the IWS base application as follows:**
   a. Press Ctrl+Alt+Delete and select the Task Manager.
   b. Select the Applications Tab if it is not already selected.
   c. Use the down arrow key to highlight MPX BASE Application or Remote Access Maintenance Position.
   d. Use the Tab key to highlight the End Task button and then press the Enter key to end the application. (Close both the IWS base and RAMP applications if both are running.)
2. **Press Ctrl+Esc to open the Start menu.**
3. **Go to Settings, and select Control Panel.**

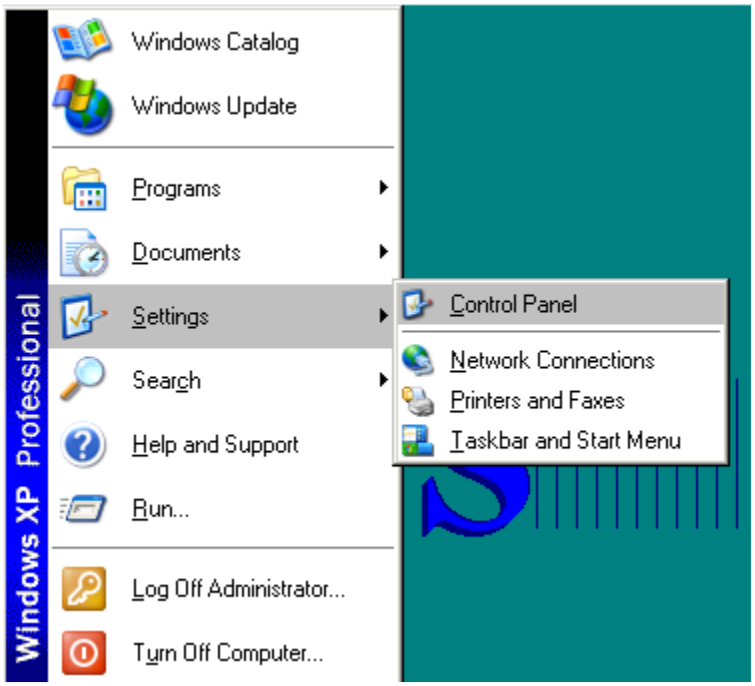


FIGURE 11. Control Panel location

4. **Double click on the System Icon to open the System Properties screen.**

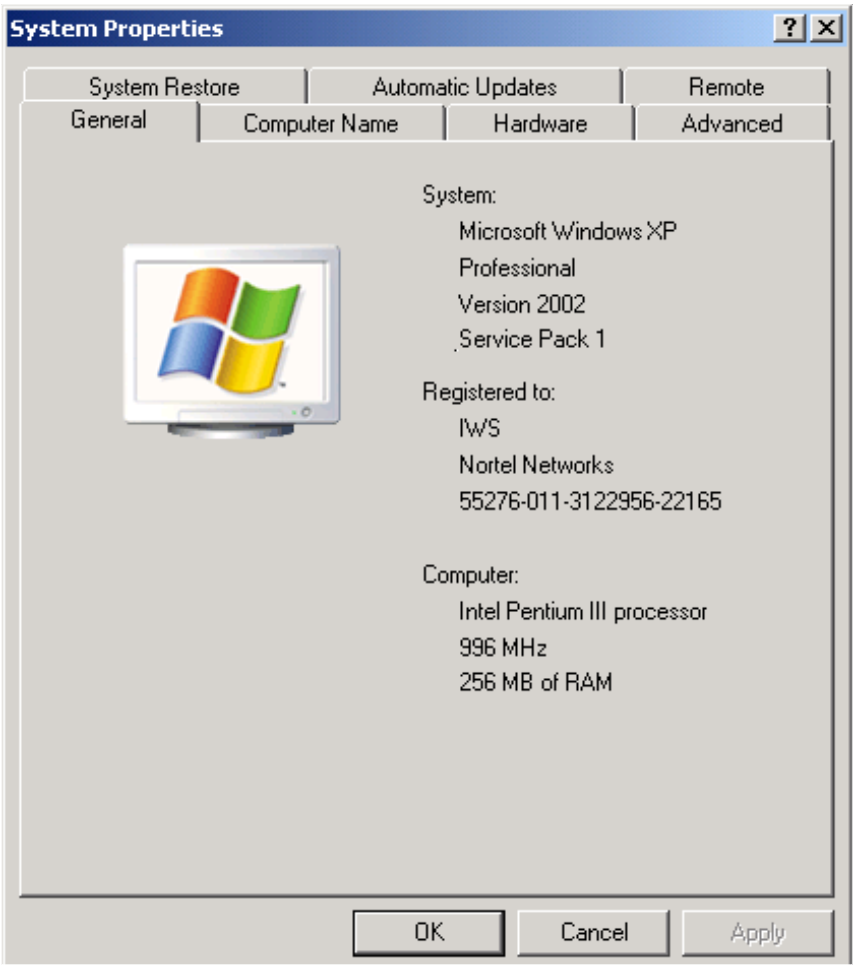


FIGURE 12. System Properties screen

5. **Go to the Advanced tab of Systems Properties**

6. Click on Environmental variables button at bottom of the screen

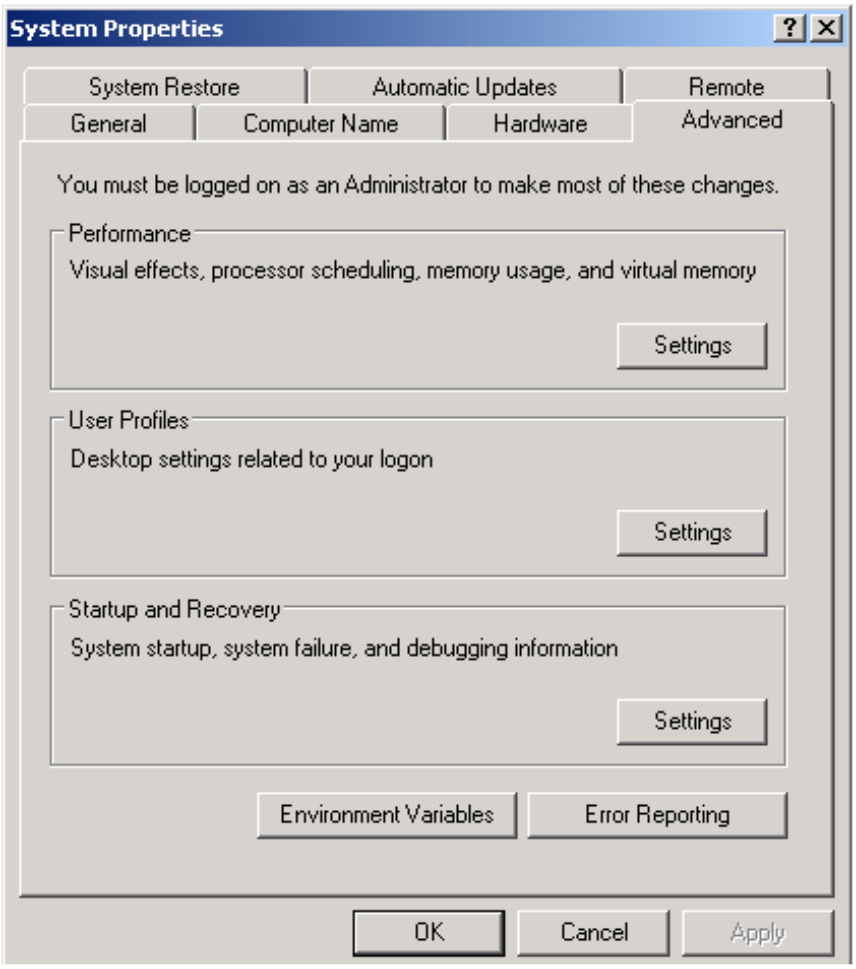


FIGURE 13. System Properties Advanced tab

7. Display the Environmental variables screen.

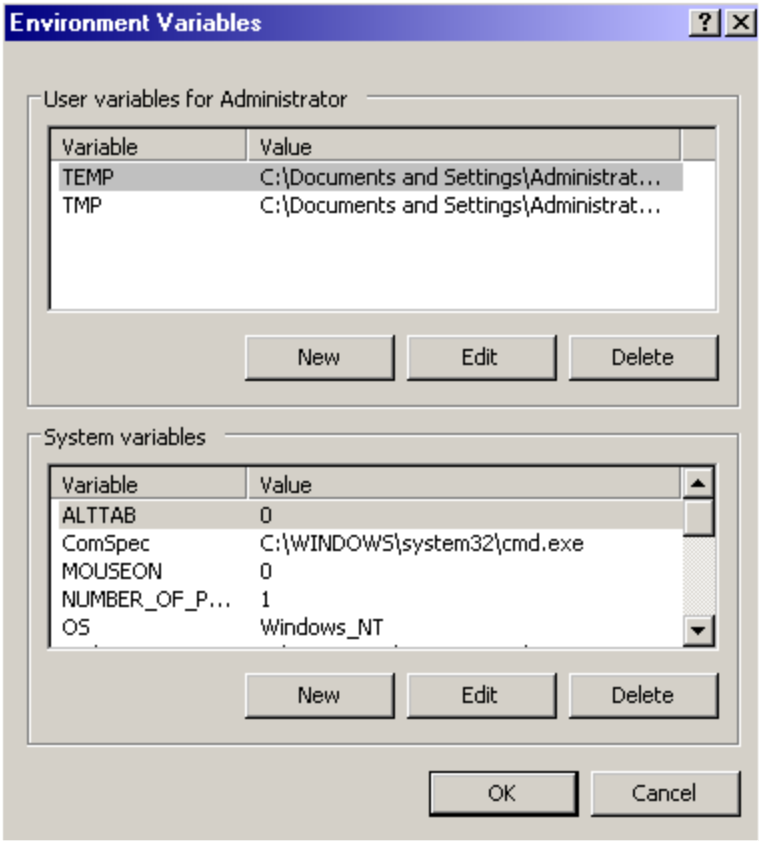


FIGURE 14. Environmental variables screen

8. Change the ALTTAB variable in the Environmental variables screen.

a. Click on ALTTAB in the System variables box

b. Click on the Edit button for the System variables.

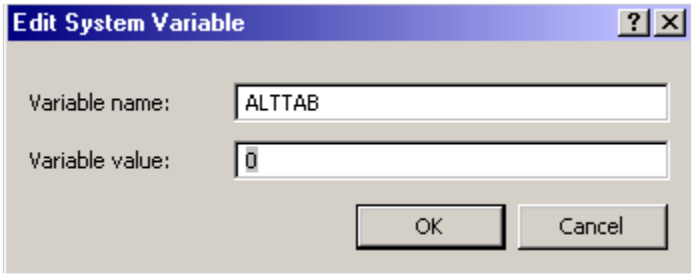


FIGURE 15. Edit Systems Variable screen

c. Change the Variable value to 1. Note: The default is 0, which represents off. A value of 1 represents on.

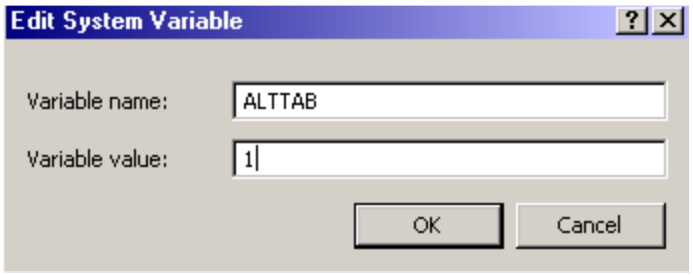


FIGURE 16. Changing the system variable

d. Click OK.

e. Verify that the ALTTAB variable is set to 1 in the Environmental variables screen.

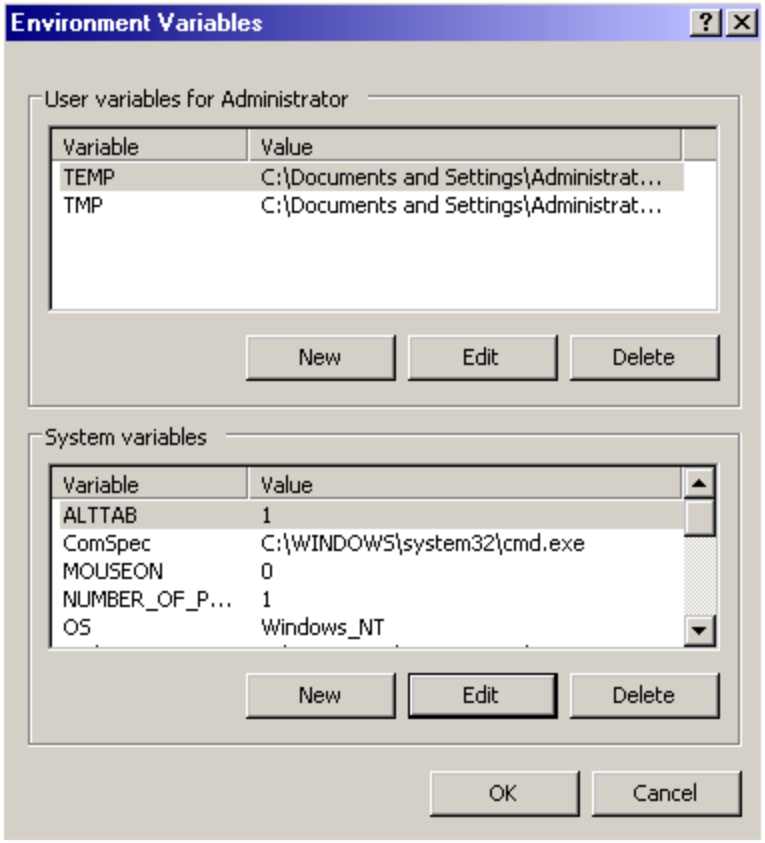


FIGURE 17. Verify variable changed

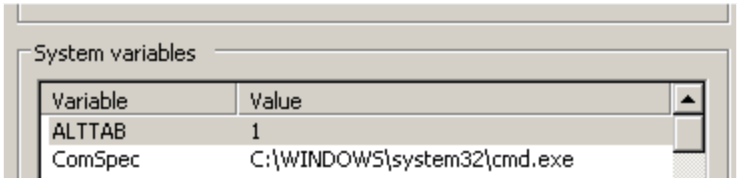


FIGURE 18. ALTTAB variable changed

f. Click OK to return to the System properties screen.

g. Click OK to return to the Control panel.

8. The Alt+Tab command is now permanently enabled for use at the IWS logo window.

Press Alt+Tab as needed to switch between the IWS logo window and other running applications (more than one application must be running). (If the IWS position is restarted again, Alt+Tab remains enabled at the IWS logo window.)

Later, once Alt+Tab is no longer needed, it can be disabled again. Just use the same steps, but this time, change the ALTTAB environmental variable back to 0.

3.2 Control of Alt+Tab and Ctrl+Esc from RAMP

The RAMP can be used to enable both **Alt**+**Tab** and **Ctrl**+**Esc** commands temporarily on designated IWS positions. Use the following procedure to temporarily enable both commands.

1. **If an IWS logo window has focus at the RAMP and Alt+TAb is NOT enabled on the position, shut down the IWS base application as follows:**
   a. Press Ctrl+Alt+Delete and select the Task Manager.
   b. Select the Applications Tab if it is not already selected.
   c. Use the down arrow key to highlight MPX BASE Application or Remote Access Maintenance Position.
   d. Use the Tab key to highlight the End Task button and then press the Enter key to end the application. (Close both the IWS base and RAMP applications if both are running.)
2. **Press Alt+Tab if needed to get a Remote Access Maintenance Position window.**

   If the RAMP window does not have focus, press Alt+Esc to give it focus. It may also be necessary to enable the RAMP's ping setting from the Options menu.
3. **Press Alt+T to open the Tools menu.**
4. **Press key P to open a Position Profile window.**

   Use the arrow keys to highlight and target an IWS position from the ones listed in the Available Positions box as shown in Figure 19. Note that if this is a RAMP and general operator position, and that step 1 was not used to shut down the MPX BASE Application, then the target position can be this RAMP itself as shown in Figure 20.

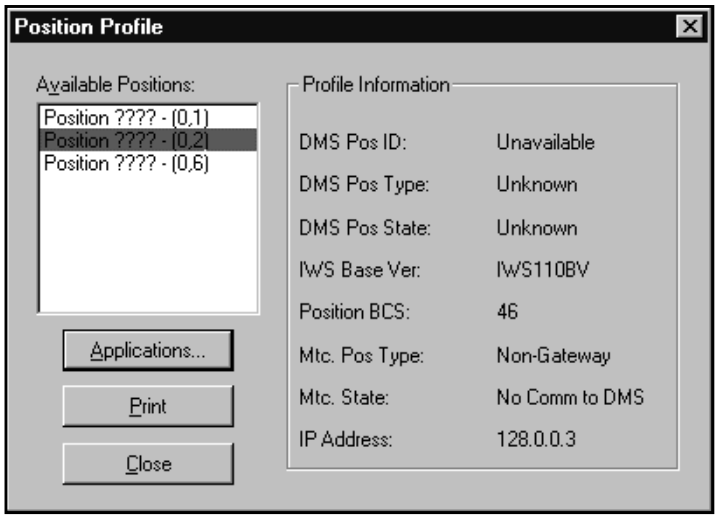


FIGURE 19. Profile of an IWS Position

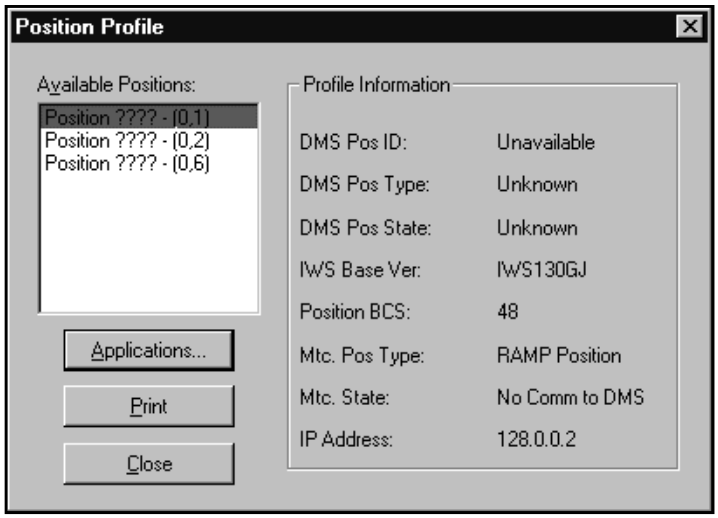


FIGURE 20. Profile of RAMP

5. Press Alt+A to open an Applications Profile window.

a. Use the down arrow key to highlight the name IWS BASE in the Available Applications box. An example window in shown in Figure 21.

b. Press Alt+N and then arrow keys to highlight the name Start Menu Enabled in the Parameter Name box. This parameter can only be modified when its Attribute is set to R/W.

With the parameter Start Menu Enabled set to False as shown in Figure 21, the Ctrl+Esc command at the target position cannot be used to open the Windows Start menu from the IWS logo window. And Alt+Tab cannot be used at the target position to cycle from the IWS logo window to another currently running application.

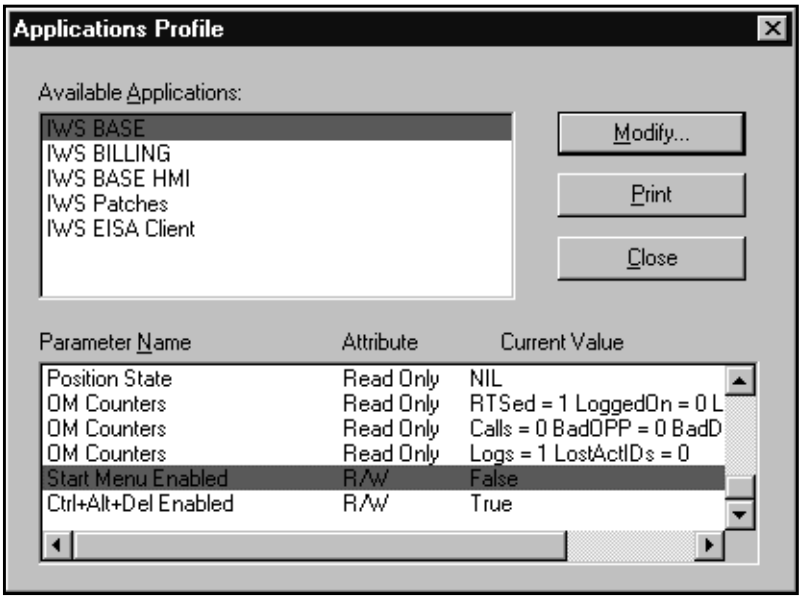


FIGURE 21. Applications Profile Window

6. Press Alt+M to choose the Modify button and open an Application Parameter Modification window.

a. Type **true** at the Value command line as shown in Figure 22.

b. Press Alt+S to change the setting of the Start Menu Enabled variable to true as shown in Figure 23.

Commands Ctrl+Esc and Alt+Tab key are now temporarily enabled at the target position. Alt+Tab can be used to tab from the IWS logo window to another running application. And Ctrl+Esc can be used to open the Windows XP Professional Start menu. If the target position is restarted, Ctrl+Esc and Alt+Tab are again disabled at the target position.

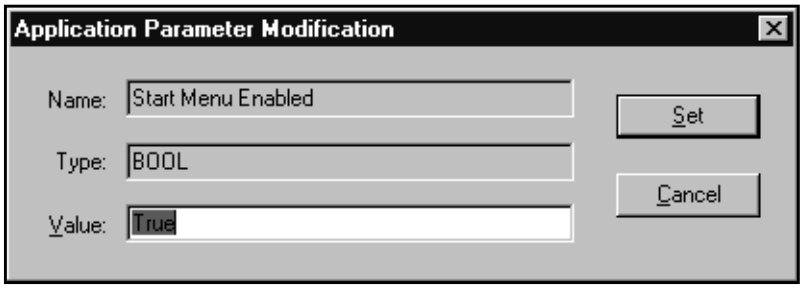


FIGURE 22. Setting Start Menu Enabled to True

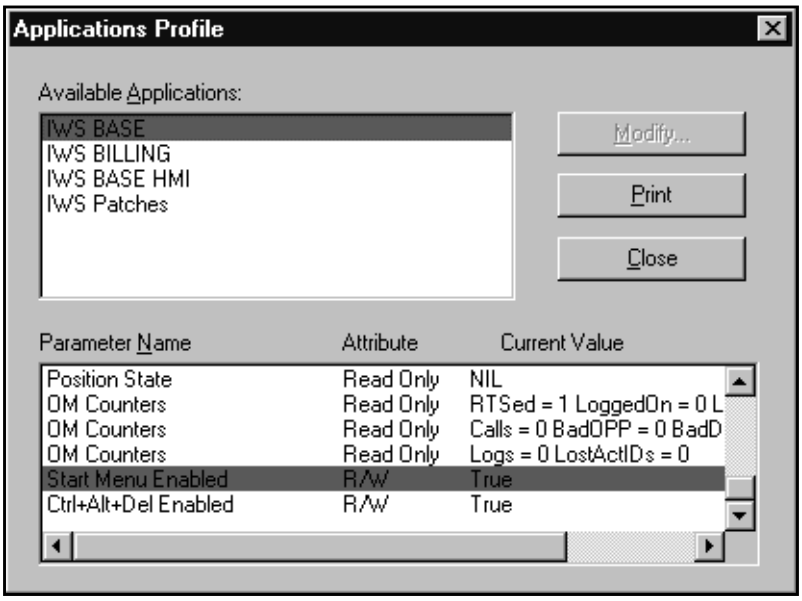


FIGURE 23. Start Menu Enabled Set to True

7. Use the Tab key and Enter keys to close the modification windows at the RAMP.

3.3 Control of Ctrl+Alt+Delete from RAMP

The Windows Ctrl+Alt+Del command is used to obtain a list of currently running applications and it is also used to restart (soft reboot) the PC. By default, this command is not disabled by IWS software so that it can used by maintenance personnel. Once an IWS position is set up to process telephone calls, the Ctrl+Alt+Del command can be disabled. The RAMP can be used to disable (or enable) this command for the IWS base application at an IWS position as follows:

1. **If an IWS logo window has focus at the RAMP and Alt+Tab is NOT enabled on the position, shut down the IWS base application as follows:**

   a. a.Press Ctrl+Alt+Delete and select the Task Manager.

   b. Select the Applications Tab if it is not already selected.

   c. Use the down arrow key to highlight MPX BASE Application or Remote Access Maintenance Position.

   d. Use the Tab key to highlight the End Task button and then press the Enter key to end the application. (Close both the IWS base and RAMP applications if both are running.)

2. **Press Alt+Tab if needed to get a Remote Access Maintenance Position window.**

   If the RAMP window does not have focus, press Alt+Esc to give it focus. It may also be necessary to enable the RAMP's ping setting from the Options menu.

3. **Press Alt+T to open the Tools menu.**

4. **Press key P to open a Position Profile window.**

   Use the arrow keys to highlight and target an IWS position from the ones listed in the Available Positions box as shown in Figure 24. Note that if this is a RAMP and general operator position, and that step 1 was not used to shut down the MPX BASE Application, then the target position can be this RAMP itself as shown in Figure 25.

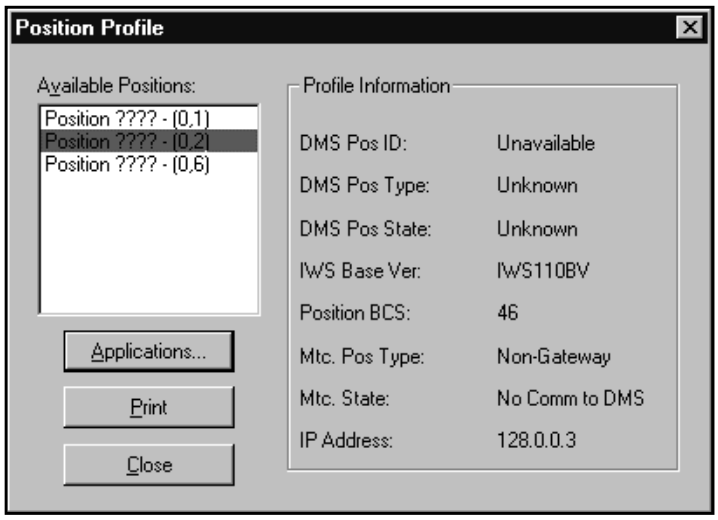


FIGURE 24. Profile of an IWS Position

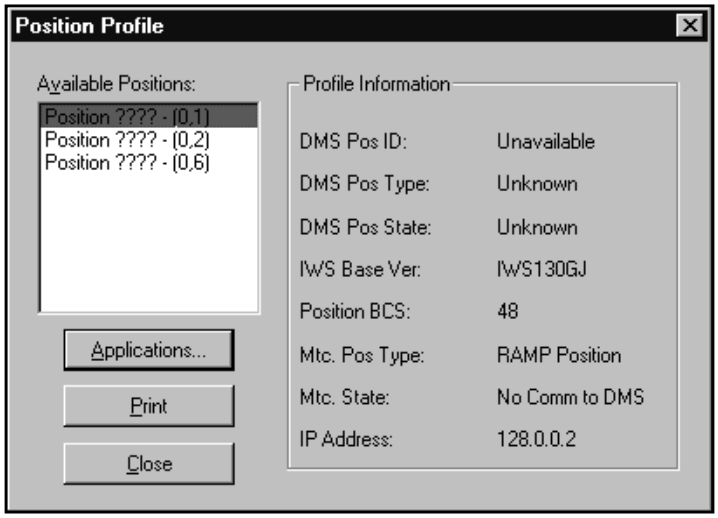


FIGURE 25. Profile of RAMP

5. Press Alt+A to open an Applications Profile window.

a. Use the down arrow key to highlight the name IWS BASE in the Available Applications box. An example window in shown in Figure 26.

b. Press Alt+N and then use arrow keys to highlight the name Ctrl+Alt+Del Enabled in the Parameter Name box. This parameter can only be modified when its Attribute is set to R/W.

With Ctrl+Alt+Esc Enabled set to true as shown in Figure 26, the Ctrl+Alt+Del command at the target position can be used to open a Close

Program window from the IWS logo window. This parameter needs to be set to false to disable it.

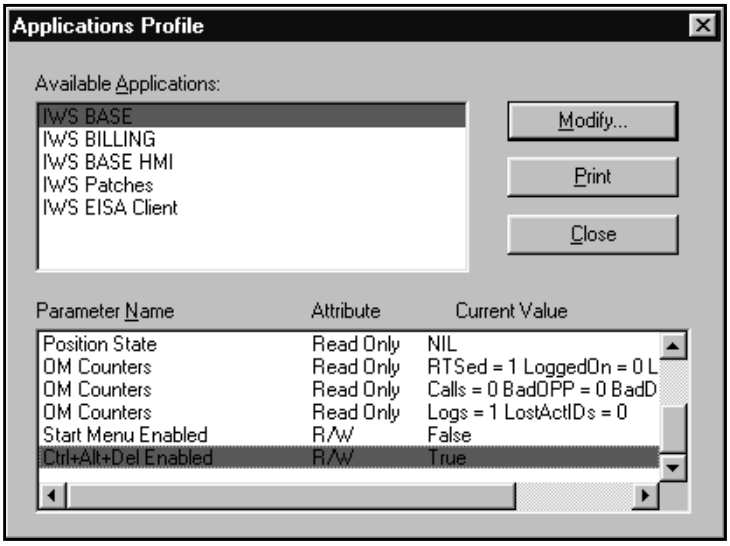


FIGURE 26. Ctrl+Alt+Esc Enabled

6. Press Alt+M to choose the Modify button and open an Application Parameter Modification window.

a. Type **False** at the Value command line.

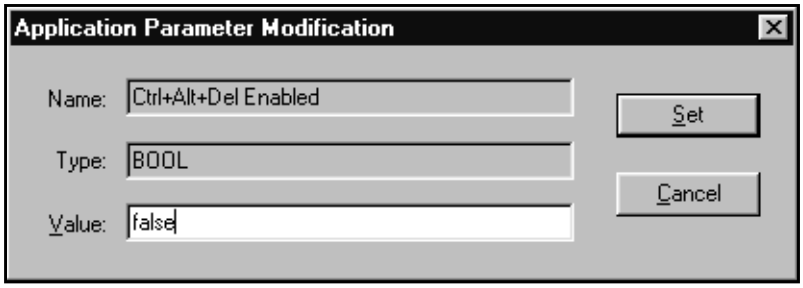


FIGURE 27. Setting Ctrl+Alt+Esc Enabled to False

b. Press Alt+S to set Ctrl+Alt+Del Enabled to false.

With Ctrl+Alt+Del Enabled set to false as shown in Figure 28, the Ctrl+Alt+Del **cannot** be used at the target position from an IWS logo window. Even if the PC's power switch is used to shut down and restart the PC, the Ctrl+Alt+Del command cannot be used at an IWS logo window.

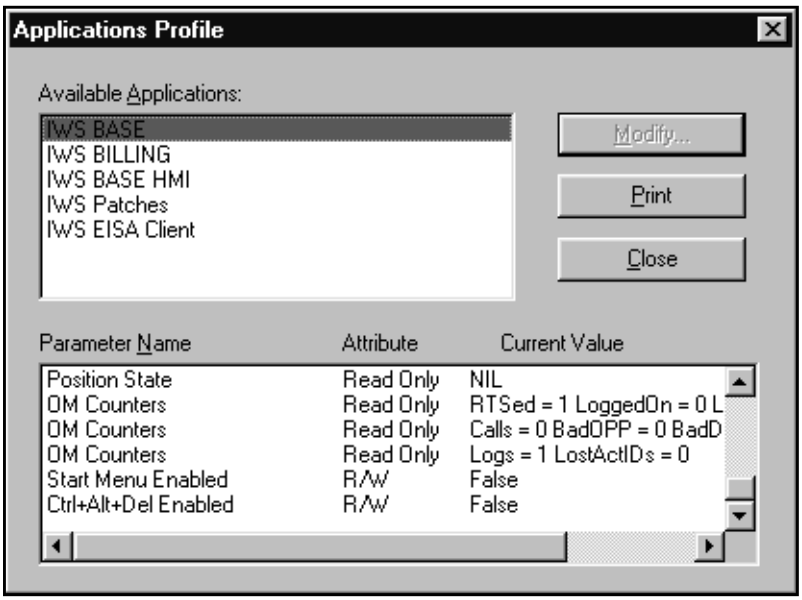


FIGURE 28. Ctrl+Alt+Del is Disabled

7. Use the Tab key and Enter keys to Close the Profile windows.

To again enable Ctrl+Alt+Del, repeat this procedure but set the Ctrl+Alt+Del parameter to true instead of false.

4.0 TOPS IWS position datafill

This section describes methods and procedures for datafilling a TOPS IWS position.

4.1 TOPS IWS provisioning tool

To edit datafill for specific site or position conditions, or to add other IWS-compliant applications, use the Programs menu (Figure 29) of the Windows Start menu to access TOPS IWS base tools (Figure 30). For more information on using the IWS provisioning tool, refer to *TOPS IWS RAMP and Provisioning User's Guide*, 297-2251-015.

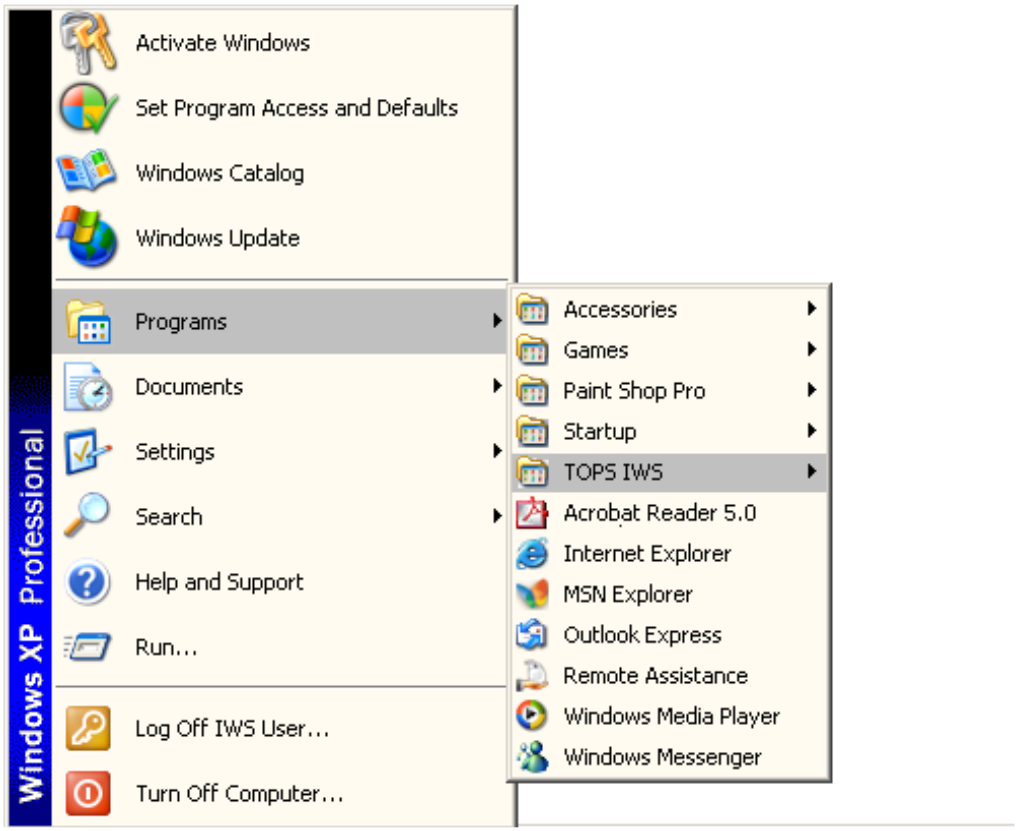


Figure 29. TOPS IWS menu box

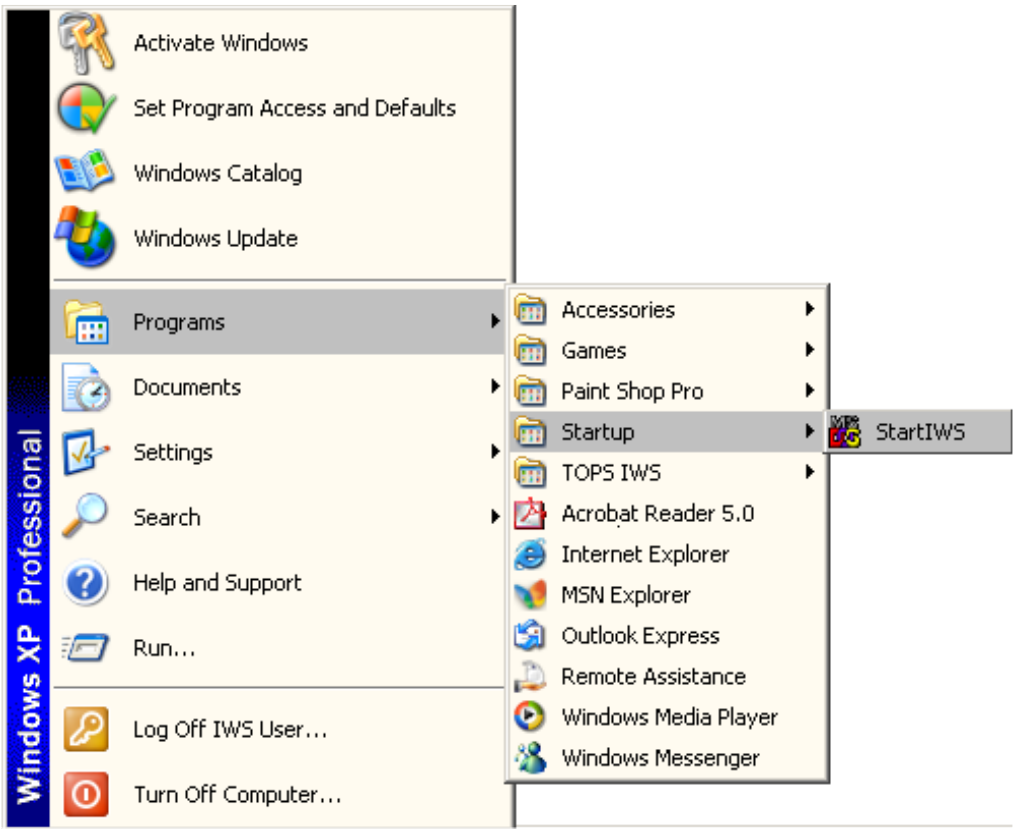


Figure 30. Startiws pull-down menu

4.2 Datafill information

This section contains information concerning the datafill of IWS software release 10.0, 11.0, and 12.0. See Section 4.2.1 on page 44 for information concerning IWS release 13.0 datafill.

The operation of the TOPS IWS position is dependent upon having proper initialization files and datafill tables or files in the correct directories on each position. These are not DMS tables or files, and therefore normal DMS controls do not apply. Many of the IWS tables do, however, correspond directly to specific DMS tables. In these cases, the data in the IWS table must match the data in the corresponding DMS table.

Certain datafill files may be overwritten during an IWS software update. **The user must manually make any custom or site-specific changes to the overwritten files**. Upgrade information about all IWS base and application files is created and placed in directory C:\MPXBASE\TMP. This directory contains the following information:

- NEWTBL.TXT: contains a list of datafill files that are new for this release. These files did not exist in directory C:\MPXBASE\DATAFILL before the upgrade. The original file content with its custom data is saved in directory C:\MPXBASE\TMP to a file in the format <filename.iws>. If this is an initial install, this file will contains a list of all .TBL, .LNG, and .KBD files that were installed.
- CHGTBL.TXT: contains a list of datafill files that were overwritten because of differences between the original files and the upgraded files. The original file content with its custom data is saved in directory C:\MPXBASE\TMP to a file in the format <filename.iws>. The user must manually make any custom or site-specific changes to the overwritten files.
- OBSTBL.TXT: contains a list of datafill files that were obsoleted and removed. The original file content with its custom data is saved in directory C:\MPXBASE\TMP to a file in the format <filename.iws>.

In addition to overwritten datafill files, all files in directory C:\WINDOWS that have an .IWS extension are the previous versions of files that were modified during the installation or upgrade process. For example, MPXINI is the old version of MPXINI.INIthat resided on the IWS position prior to installation. These files might contain data that you want to retrieve and put back in the new versions of the files.

To see what files were affected in this manner, enter the command `dir *.iws` in the C:\WINDOWS directory, and press **Enter**.

Recommendation: After installing an IWS update, check the directories C:\ and C:\WINDOWS for any files with an .IWS extension. Also check the CHGTBL.TXT, NEWTBL.TXT and OBSTBL.TXT files in the C:\MPXBASE\TMP directory for any new, modified, or obsoleted datafill files. Any custom changes regarding position or site-specific information needed in the new corresponding files will require manual modifications. The changes can be made using the IWS provisioning tool or any Windows text editor (such as Wordpad or Notepad). The provisioning tool is the preferred method of editing datafill files because it provides error checking. For more information on using the IWS provisioning tool, refer to *TOPS IWS RAMP and Provisioning User's Guide*, 297-2251-015.

Table 3 lists datafill files that are new, changed, or removed as a result of an upgrade to IWS 17.0. The datafill files that are added, changed, or removed depend both on the previously installed IWS load (IWS 9.0, 10.0, or 11.0) and on which of the IWS application disks (NTOA or NTDA, or both) are applied as part of the upgrade to IWS 12.0.

Table 3. Files changed by upgrade to IWS 17.0

Update IWS 9.0 to 12.0	Update IWS10.0 to 12.0	Update IWS 11.0 to 12.0
Files changed	**Files changed**	**Files changed**

* = Deleted file # = New file

Table 3. Files changed by upgrade to IWS 17.0

Update IWS 9.0 to 12.0	Update IWS10.0 to 12.0	Update IWS 11.0 to 12.0
CASEAPP.LNG	CASEAPP.LNG	CASEAPP.LNG
CASESFKY.LNG	CASESFKY.LNG	CASESFKY.LNG
MPXINI.INI	POSMSA.LNG	POSMSA.LNG
MPXPARM.INI	XCLLORIG.TBL	XCLLORIG.TBL
NTOAINI.INI	MPXINI.INI	
OACALLD.LNG *	MPXPARM.INI	
OACINFO.LNG *	SCRSINI.INI *	
OIACIW.LNG	XFNCTS.TBL	
PCCCINFO.LNG	XKEYMAC.TBL #	
POSMSA.LNG	XTGDSPL.TBL	
SCRPTINI.INI		
SCRSINI.INI *		
XCLLORIG.TBL		
XFNCTS.TBL		
XKEYMAC.TBL #		
XOAOPRSK.TBL*		
XTGDSPL.TBL		

* = Deleted file # = New file

4.2.1 IWS release 13.0 datafill information

This sections is for upgrades from IWS 10.0, IWS 11.0, or IWS 12.0 to IWS release 13.0 only. IWS releases prior to IWS 10.0 must first be upgraded to either IWS 10.0, 11.0, or 12.0 and properly datafilled before being upgraded to release 13.0. The procedures for updating TOPS IWS software can be found in the *TOPS IWS Base Platform User's Guide*, 297-2251-010.

For a new IWS position pre-loaded with IWS 13.0, this section does not apply. Refer to Section 4.3, "Inserting IWS datafill information," on page 51 for the procedure for installing required datafill.

Under the old software upgrade method, when the preserve datafill option was selected, only user modified .LNG and .TBL files were preserved. All .INI files associated with a particular application upgrade were automatically renamed from .INI to .IWS in the C:\WINDOWS directory. In their place, the new default .INI template files were automatically installed. This happened regardless of whether any changes had been made to the .INI file in the new release. Any custom changes made to the original .INI file regarding position or site-specific information would then have to be manually inserted into the new .INI file.

As of IWS release 13.0, this process has changed. If a working IWS position is being upgraded from IWS release 11.0 or 12.0, and the preserve datafill option is selected, all

affected .INI files are handled as before. However, the new install process now scans the new .INI file, looking at all the sections and entries. Then the respective .IWS file is examined for matching sections and entries. If a match is found, the value is extracted from the .IWS file and placed in, or added to, the new .INI file. If no matching values are found, the IWS default value is used in the .INI file. The end result of this new process is that any custom changes that are still relevant to the new .INI file regarding position or site-specific information are automatically transferred into the new .INI file.

Note: An exception to this process is when an IWS default *value* has become obsolete or the default *value* has changed. In this case, the old value from the .IWS file is not transferred to the new .INI file.

The benefits of this new process are many. First, it ensures that the user has the latest version of the .INI file. Also, since the process scans the .IWS files only for entries that are found in the new .INI files, obsolete entry values are not carried forward. Finally, this process ensures that any new values or entries that are added in the file will be set to its default value. The user still has the option of modifying the new IWS file using the IWS provisioning tool or any Windows text editor (such as Wordpad or Notepad). The provisioning tool is the preferred method of editing datafill files because it provides error checking. For more information on using the IWS provisioning tool, refer to *TOPS IWS RAMP and Provisioning User's Guide,* 297-2251-015.

Table 4 lists datafill files that are new, changed, or removed as a result of an upgrade to IWS 13.0. The datafill files that are added, changed, or removed depend both on the previously installed IWS load (IWS 10.0, 11.0, or 12.0) and on which of the IWS application disks (NTOA or NTDA, or both) are applied as part of the upgrade to IWS 13.0.

Table 4. Files changed by upgrade to IWS 13.0

Update IWS 10.0 to 13.0	Update IWS 11.0 to 13.0	Update IWS 12.0 to 13.0
Files changed	**Files changed**	**Files changed**
CASEAPP.LNG	CASEAPP.LNG	None
CASESFKY.LNG	CASESFKY.LNG	
MPXINI.INI	POSMSA.LNG	
MPXPARM.INI	XCLLORIG.TBL	
POSMSA.LNG		
XCLLORIG.TBL		
XFNCTS.TBL		
XKEYMAC.TBL		
XTGDSPL.TBL		

4.2.2 Datafill – Determining user-modified files

A datafill disk should be created that contains all user-modified files. Any IWS file that contains site- or position-specific information should be backed up on the datafill disk. Files with site- or position-specific information include, but are not limited to, MPXINI.INI, MPXNET.INI and HOSTS located in the C:WINDOWS directory. Other commonly modified IWS files include table files (.TBL) and language files (.LNG), which are located in the C:\MPXBASE\DATAFILL directory. The customer should provide a complete listing of all user-modified files and tables to include on the datafill disk.

If a complete listing of user-modified files is not available, a check of all IWS datafill files is recommended. To do this, compare the template files located in the C:\MPXBASE\TOOLS\TEMPLATE directory to their corresponding files located in the C:\WINDOWS and C:\MPXBASE\DATAFILL directories. For example, the template file MPXINI.TPL corresponds to the file MPXINI.INI located in C:\WINDOWS.

The .TPL files are the default template files provided by Nortel Networks. By comparing the datafill file to the corresponding .TPL file, you should be able to determine whether that file has been modified by the customer. If a file does not correspond exactly to its template (.TPL) file, the file has been modified by the customer and should therefore be included on the datafill disk.

To compare the .INI, .KBD, .LNG, .SCR, or .TBL files to their template files, do the following:

Note: The following steps use keyboard commands such as **Ctrl**+**Esc** that are, by default, disabled in the IWS software. See Section 3.0 on page 25 for information concerning

enabling required keyboard commands. However, a customer-supplied mouse may be used in place of the keyboard commands, if installed and connected.

From the Windows desktop

1 Press **Ctrl**+**Esc** to open the Start menu.

2 From the Start menu, press **P** and then the right arrow key to access Programs.

3 Use the arrow keys to move to the MS-DOS Prompt, and press **Enter**.

4 At the C:\WINDOWS prompt, type `dir *.ini/on>ini.txt`, and press **Enter**.

This lists all the .INI files in the C:\WINDOWS directory, sorted in alphabetical order by name, and redirects the output to the file INI.TXT in the C:\WINDOWS directory. The file name INI.TXT is used here as an example. Any file or naming convention can be used.

5 At the `C:\WINDOWS` prompt, type `cd\mpxbase\datafill`, and press **Enter**.

6 At the `C:\MPXBASE\DATAFILL` prompt, type `dir *.*/on>datafill.txt`, and press **Enter**.

This lists all the files in the C:\MPXBASE\DATAFILL directory, sorted in alphabetical order (by name), and redirects the output to the file DATAFILL.TXT which will be located in the C:\MPXBASE\DATAFILL directory. The file name DATAFILL.TXT is used here as an example. Any file or naming convention can be used.

7 At the `C:\MPXBASE\DATAFILL` prompt, type `cd\mpxbase\tools\template`, and press **Enter**.

8 At the `C:\MPXBASE\TOOLS\TEMPLATE` prompt, type `dir *.*/on>template.txt` and press **Enter**.

This lists all the files in the C:\MPXBASE\TOOLS\TEMPLATE directory, sorted in alphabetical order (by name), and redirects the output to the file TEMPLATE.TXT which will be located in the C:\MPXBASE\TOOLS\TEMPLATE directory. The file name TEMPLATE.TXT is used here as an example. Any file or naming convention can be used.

9 At the `C:\MPXBASE\TOOLS\TEMPLATE` prompt, type `exit`, and press **Enter.**

This returns you to Windows.

10 Press **Ctrl**+**Esc** to open the Start menu.

11 From the Start menu, press **P** and then the right arrow key to access Programs.

12 Use the arrow keys to move to Windows Explorer, and press **Enter**.

This takes you to the Exploring dialog box.

13 If the contents of the C drive are displayed, proceed to step 14. If the contents of the C drive are not displayed, follow these steps:

a Tab to the Folders pop-up dialog box.

b Press the right or down arrow key to expand the pop-up menu.

c Use the arrow keys to select the C drive, and press **Enter**.

14 Press the **Tab** key to go to the Contents of the IWS (C:) dialog box.

15 Use the arrow keys to select the Mpxbase folder.

16 Press **Enter** to expand the Mpxbase folder.

17 Use the arrow keys to select the Datafill folder.

18 Press **Enter** to expand the Datafill folder.

19 Use the arrow key to scroll down to the text file created in step 6, in this case *datafill.txt*.

20 Press **Enter** to open the datafill.txt file.

21 Press **Alt**+**Tab** to go back to the Exploring dialog box.

22 Press the **Tab** key to return to the All Folders section of the Exploring dialog box.

23 Use arrow keys to select the Mpxbase\Tools folder.

24 Press the right arrow key to expand the Tools folder.

25 Use the arrow keys to select the Template folder.

26 Press the **Tab** key to move to the Contents of Template section of the Exploring dialog box.

27 Use the arrow key to scroll down to the text file created in step 8, in this case *template.txt*.

28 Press **Enter** to open the template.txt file.

29 Press **Alt**+**Tab** to go back to the Exploring dialog box.

30 Press the **Tab** key to return to the All Folders section of the Exploring dialog box.

31 Use the arrow keys to select the Windows folder.

32 Press the **Tab** key to move to the Contents of the Windows section of the Exploring dialog box.

33 Use the arrow keys to scroll down to the text file created in step 4, in this case *ini.txt*.

34 Press **Enter** to open the ini.txt file.

35 Arrange the three windows with the open text files so they can all fit on the screen at the same time. Follow these steps:

   a Press **Alt**+**Tab** to select one of the windows with a text file.

   b To change the size of the window, press **Alt**+**Spacebar**+**S** and use the arrow keys.

   c To position the windows on the screen, press **Alt**+**Spacebar**+**M** and use the arrow keys.

   d Use the **Alt**+**Tab** key combination to switch between the open files while sizing and positioning the windows.

36 Using Table 5, “IWS template file (.TPL) cross-reference“ on page 49, compare the size, date, and time stamp of the various template files with those of the corresponding files in either the C:\MPXBASE\DATAFILL or C:\WINDOWS directories. Note any file that does not match exactly for inclusion on the datafill disk.

Notes:

- Prior to IWS 11.0, the HOSTS file was located in directory C:\PATHWAY. As of IWS release 11.0, the HOSTS file is located in directory C:\WINDOWS.
- The use of an FT router to access a DAS is not supported in IWS release 11.0 or later. If you are upgrading NTDA to IWS version 11.0 or later but keeping the datafill from an earlier IWS release, the FT router option must be removed from the nonregistering applications in the MPXINI.INI file. Failure to remove this will result in an error at the startup of the IWS position.

- If you are upgrading to IWS 11.0 or later but keeping the datafill from an earlier release of XKBOARD.TBL, be aware that three scan codes have been changed. Scan codes 91, 92, and 93 have been changed to scan codes 119, 120, and 121, respectively. If the old scan codes were assigned, use the KeyBind utility to restore functionality to these keys. For information on using the KeyBind utility, refer to *TOPS IWS RAMP and Provisioning User's Guide*, 297-2251-015.

Table 5. IWS template file (.TPL) cross-reference

C:\MPXBASE\		C:\WINDOWS		C:\MPXBASE\		C:\WINDOWS
TOOLS\TEMPLATE	DATAFILL			TOOLS\TEMPLATE	DATAFILL	
AACTWSFK.TPL	AACTWSFK.LNG			PDCALLD.TPL	PDCALLD.LNG	
APPLMENU.TPL	APPLMENU.LNG			POSMSA.TPL	POSMSA.LNG	
ASSGNACT.TPL	ASSGNACT.LNG			POSPRFLG.TPL	POSPRFLG.LNG	
BHMIMSA.TPL	BHMIMSA.LNG			POSPRFSK.TPL	POSPRFSK.LNG	
BKCALLBD.TPL	BKCALLBD.LNG			SASFK.TPL	SASFK.LNG	
BKCALLSK.TPL	BKCALLSK.LNG			SCRPTIN.TPL		SCRPTIN.INI
CASEAPP.TPL	CASEAPP.LNG			SCRPTLNG.TPL	SCRPTLNG.LNG	
CASESFSK.TPL	CASESFSK.LNG			SCRPTSCR.TPL	SCRPTSCR.SCR	
CLNTTCPI.TPL		CLNTTCPI.INI		SVCSMENU.TPL	SVCSMENU.LNG	
DATABASE.TPL	DATABASE.LNG			TRBLMENU.TPL	TRBLMENU.LNG	
ESTWNDW.TPL	ESTWNDW.LNG			UMP.TPL		UMP.INI
FNCMENU.TPL	FNCMENU.LNG			XALTRTE.TPL	XALTRTE.TBL	
ICQUSFK.TPL	ICQUSFK.LNG			XAPPL.TPL	XAPPL.TPL	
ICSFK.TPL	ICSFK.LNG			XCASTS.TPL	XCASTS.TBL	
IDLMSA.TPL	IDLMSA.LNG			XCDFA.TPL	XCDFA.TBL	
LGNSFK.TPL	LGNSFK.LNG			XCLLORIG.TPL	XCLLORIG.TBL	
LOGON.TPL	LOGON.LNG			XCORGXSC.TPL	XCORGXSC.TBL	
LOGOTEXT.TPL	LOGOTEXT.LNG			XCOTHSD.TPL	XCOTHSD.TBL	
MPXINI.TPL		MPXINI.INI		XCT4Q.TPL	XCT4Q.TBL	
MPXNET.TPL		MPXNET.INI		XCT4QXSC.TPL	XCT4QXSC.TBL	
MPXPARM.TPL		MPXPARM.INI		XCTRYDIR.TPL	XCTRYDIR.TBL	
MPXTOP.TPL		MPXTOP.INI		XDARBLG.TPL	XDARBLG.TBL	
NTDA.TPL	NTDA.KBD			XDBCLASS.TPL	XDBCLASS.TBL	
NTDACORG.TPL	NTDACORG.TBL			XDBCOMP.TPL	XDBCOMP.TBL	
NTDACT4Q.TPL	NTDACT4Q.TBL			XDBERROR.TPL	XDBERROR.TBL	
NTDAINI.TPL		NTDAINI.INI		XDBSRVC.TPL	XDBSRVC.TBL	
NTDAMISC.TPL	NTDAMISC.LNG			XDBVRSTN.TPL	XDBVRSTN.TBL	
NTDAMSA.TPL	NTDAMSA.LNG			XFNCTS.TPL	XFNCTS.TBL	
NTDASPID.TPL	NTDASPID.TBL			XINFBRSN.TPL	XINFBRSN.TBL	
NTOAINI.TPL		NTOAINI.INI		XINFBSVC.TPL	XINFBSVC.TBL	
OASAICW.TPL	OASAICW.LNG			XKBOARD.TPL	XKBOARD.TBL	
OGTMENU.TPL	OGTMENU.LNG			XKEYMAC.TPL	XKEYMAC.TBL	
OIACIW.TPL	OIACIW.LNG			XLANG.TPL	XLANG.TBL	
OIAMSA.TPL	OIAMSA.LNG			XOGTMENU.TPL	XOGTMENU.TBL	
OPADMSFK.TPL	OPADMSFK.LNG			XOLNSEQP.TPL	XOLNSEQP.TBL	
OPPRFLNG.TPL	OPPRFLNG.LNG			XOLNSRST.TPL	XOLNSRST.TBL	
OPPRFSFK.TPL	OPPRFSFK.LNG			XPCCSK.TPL	XPCCSK.TBL	

Table 5. IWS template file (.TPL) cross-reference (Continued)

C:\MPXBASE\		C:\WINDOWS		C:\MPXBASE\		C:\WINDOWS
TOOLS\TEMPLATE	DATAFILL			TOOLS\TEMPLATE	DATAFILL	
OPRSTATS.TPL	OPRSTATS.LNG			XPCCTRIG.TPL	XPCCTRIG.TBL	
OPRSTSFK.TPL	OPRSTSFK.LNG			XRBLG.TPL	XRBLG.TBL	
PANOACT.TPL	PANOACT.LNG			XRCXSC.TPL	XRCXSC.TBL	
PASSWORD.TPL	PASSWORD.LNG			XSERVS.TPL	XSERVS.TBL	
PASSWSFK.TPL	PASSWSFK.LNG			XSPIDXSC.TPL	XSPIDXSC.TBL	
PCCCINFO.TPL	PCCCINFO.LNG			XTGDSPL.TPL	XTGDSPL.TBL	
PCCDBSK.TPL	PCCDBSK.LNG			XTROUBLE.TPL	XTROUBLE.TBL	

4.2.3 Create datafill disk

If an up-to-date datafill disk exists, proceed to Section 4.2.4 on page 51. To create a datafill disk when one does not exist, follow these steps:

At the PC

1 Place a formatted 1.44MB floppy disk in the A drive.

2 Create directories on the backup disk.

a At the C:\> prompt type **md a:\windows** and then press the Enter key to create directory path A:\WINDOWS on the backup disk.

b At the C:\> prompt type **md a\:mpxbase\datafill** and then press the Enter key to create directory path A:\MPXBASE\DATAFILL on the backup disk.

3 To copy files to the datafill disk do the following from the C:\ prompt:

a Type **Copy C:\windows\system32\drivers\hosts\etc\hosts a:\windows**.

b Each TOPS IWS position type (general, gateway and RAMP) has a uniquely configured variation of the MPXINI.INI file. Therefore there should be three variations of this file on the datafill disk. Since three files with the same name cannot exist in a common directory on the datafill disk, use the following (or similar) naming method to maintain these files:

- For a general position type

  Copy C:\windows\mpxini.ini a:\windows\mpxini.gen

  and then press the Enter key.

- For a gateway position type

  Copy C:\windows\mpxini.ini a:\windows\mpxini.gty

  and then press the Enter key.

- For a RAMP position type

  Copy C:\windows\mpxini.ini a:\windows\mpxini.rmp

  and then press the Enter key.

c Type
Copy C:\windows\mpxnet.ini a:\windows
and then press the Enter key.

d Copy any user-modified datafill files to the datafill disk by typing **Copy C:\mpxbase\datafill\<filename.ext> a:\mpxbase\datafill** and then press the Enter key.

- Repeat this step until all user-modified datafill files are copied to the disk.

e Copy any other customer-modified IWS files to the appropriate locations on the datafill diskette. Store the datafill disk (or set of disks if more than one disks is required) in a safe location for future reference.

Store the datafill disk in a safe location for future reference. This datafill disk will be used to complete the IWS software installation or upgrade later in this procedure. See Section 4.3, "Inserting IWS datafill information," on page 51.

4.2.4 Back up the datafill disk

Before you install or update to a new release of IWS software, create a copy of the existing datafill disk. This copy will serve as the starting point for the new datafill disk for the updated IWS software. The original datafill disk must be an accurate record of the files that were customized with site- or position-specific information. If you are unsure of the accuracy of the existing datafill disk, make a complete check of all IWS datafill files before performing the IWS upgrade. For information on performing a complete check of all IWS datafill files, see Section 4.2.2, "Datafill – Determining user-modified files," on page 46.

Use the following procedure to create a copy of the existing datafill disk.

From the Windows desktop

1 Press **Ctrl**+**Esc** to open the Start menu.

2 From the Start menu, press **P** and then the right arrow key to access Programs.

3 Use the arrow keys to move to Windows Explorer, and press **Enter**.

4 Press the **Tab** key and the arrow keys to select the My Computer icon.

5 Press **Enter** to open the My Computer dialog window.

6 Use the arrow keys to highlight the A drive icon.

7 Press **Alt**+**F** to open the File pull-down menu.

8 Use the arrow keys to move down to the Copy Disk selection, or press **Y**.

9 Press **Enter** to open the Copy Disk window.

10 Insert the datafill disk to be copied into the A drive.

11 Select the Start button and press **Enter**, or press **S** to begin copying the disk.

12 When prompted, remove the disk from the A drive, insert a blank formatted floppy in drive A, select the OK button, and press **Enter**.

13 When the copy process is complete, select the Close button and press **Enter** or **C**.

4.3 Inserting IWS datafill information

This section contains information about inserting datafill for IWS software release 10.0, 11.0, and 12.0 or an upgrade to IWS 13.0 if the preserve datafill option was not selected

during the update process. If the preserve datafill option was selected, see Section 4.2.1, "IWS release 13.0 datafill information," on page 44 for additional information concerning IWS release 13.0 datafill.

This chapter describes the process for copying the site- or position-specific information from the datafill disk to the appropriate locations on the IWS position.

Remember that there should be three variations of the MPXINI.INI file on the datafill disk:

- general position = MPXINI.GEN
- gateway position = MPXINI.GTY
- RAMP = MPXINI.RMP

Select the proper version of the file for the position to be datafilled.

Use the following procedure to copy the files from the datafill disk.

1. Insert the datafill disk into drive A.
2. At the `C:\` prompt, type

   `>copy a:\windows\mpx*.ini c:\windows`

   and press **Enter**.
3. At the `C:\` prompt:
   - *For a general position*, type

     `>copy a:\windows\mpxini.gen c:\windows\mpxini.ini`

     and press **Enter**.
   - *For a gateway position*, type

     `>copy a:\windows\mpxini.gty C:\windows\mpxini.ini`

     and press **Enter**.
   - *For a RAMP*, type

     `>copy a:\windows\mpxini.rmp C:\windows\mpxini.ini`

     and press **Enter**.
4. Copy the a:\datafill files. At the `C:\` prompt, type

   `>copy a:\mpxbase\datafill\*.* c:\mpxbase\datafill`

   and press **Enter**.
5. Copy the a:\windows\HOSTS file. At the `C:\` prompt, type

   `>copy a:\windows\hosts c:\windows\system32\drivers\etc`

   and press **Enter**.
6. The preceding files are the ones most commonly modified by the customer. The customer should provide a complete listing of all user-modified files on the datafill disk. Copy any other customer-modified files to the appropriate locations on the IWS position.
7. Reboot the position to put the new settings into effect.

5.0 Appendix: Configuring a preloaded TOPS IWS position

Nortel contracts with various software integrators to pre-load and configure TOPS IWS settings. Nevertheless, some configuration and datafill of site-specific parameters must be specified. This section contains the procedure for setting up TOPS IWS position network parameters.

5.1 Changing the Network Settings of an IWS Position

It may be necessary to change or reset the IP address of an IWS position (because of a LAN setup change for example).

1. If already at the Windows XP Professional desktop, proceed to step 2. If the IWS base or RAMP application is running, follow substeps a through d to close the application.
   a. Press Ctrl+Alt+Delete and select the Task Manager.
   b. Select the Applications Tab if it is not already selected.
   c. Use the down arrow key to highlight MPX BASE Application or Remote Access Maintenance Position.
   d. Use the Tab key to highlight the End Task button and then press the Enter key to end the application. (Close both the IWS base and RAMP applications if both are running.)
2. Press Ctrl+Esc to open the Start menu.
3. Press the S key, and then press the Enter C to open the Control Panel.
4. Use the arrow keys to highlight Network Connections, and then press the Enter key to open the Network Connections box.

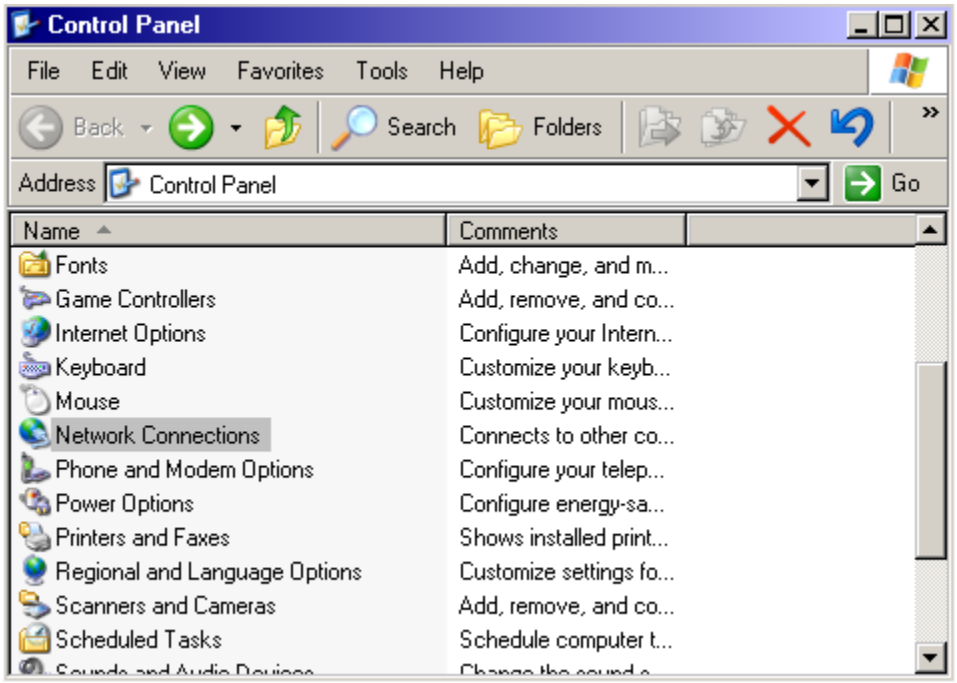


FIGURE 31. Control Panel highlighting Network Connections

5 Use the Tab and arrow keys to open the Local area Connections icon.

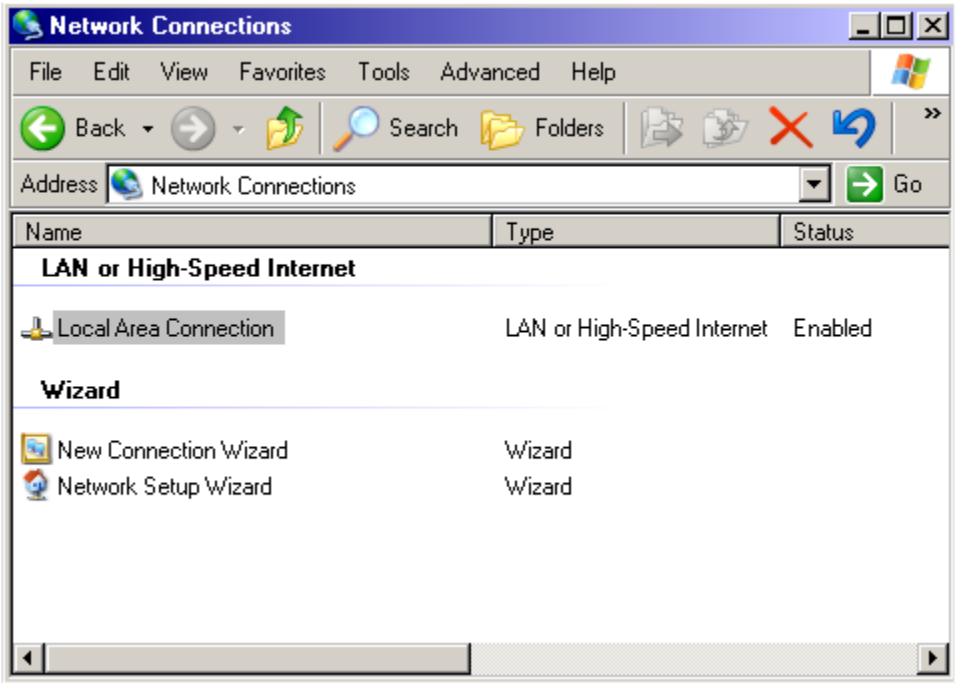


FIGURE 32. Local Area Connection location

6 Press the Enter key to display the Local Area Connection Status box.

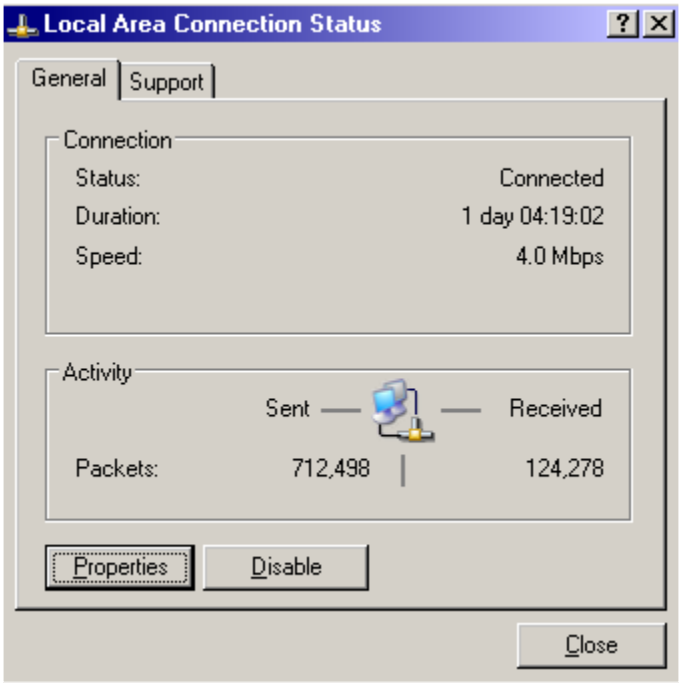


FIGURE 33. Local Area Connection Status box.

7 Tab to the Properties box and press Enter.

8 Select the Internet Protocol (TCP/IP) option.

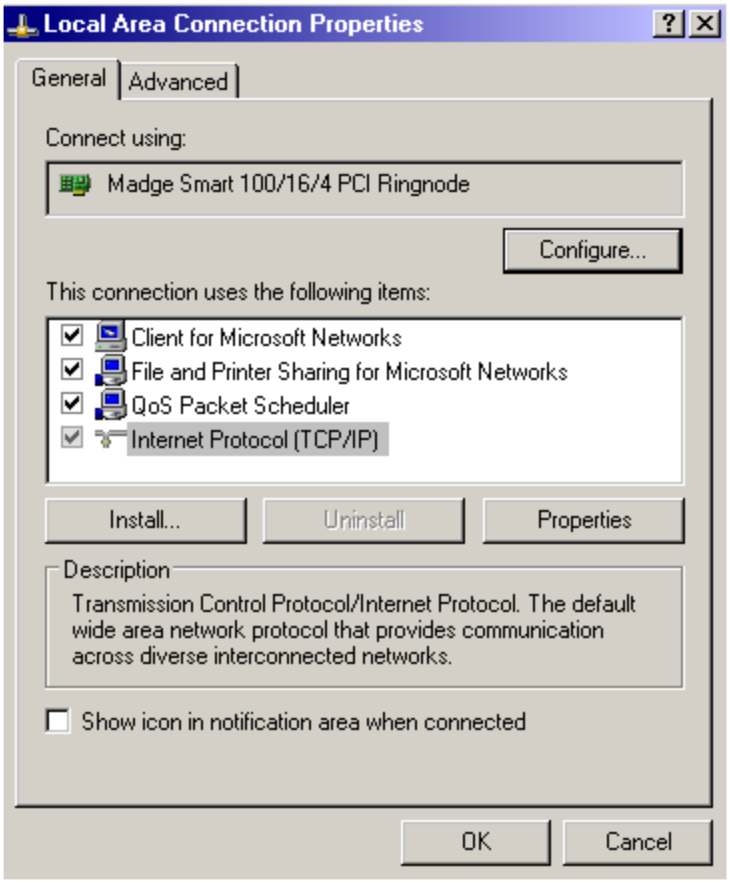


FIGURE 34. Local Area Connection Properties box

9 Press the Properties button to display the Internet Protocol (TCP/IP) Properties window.

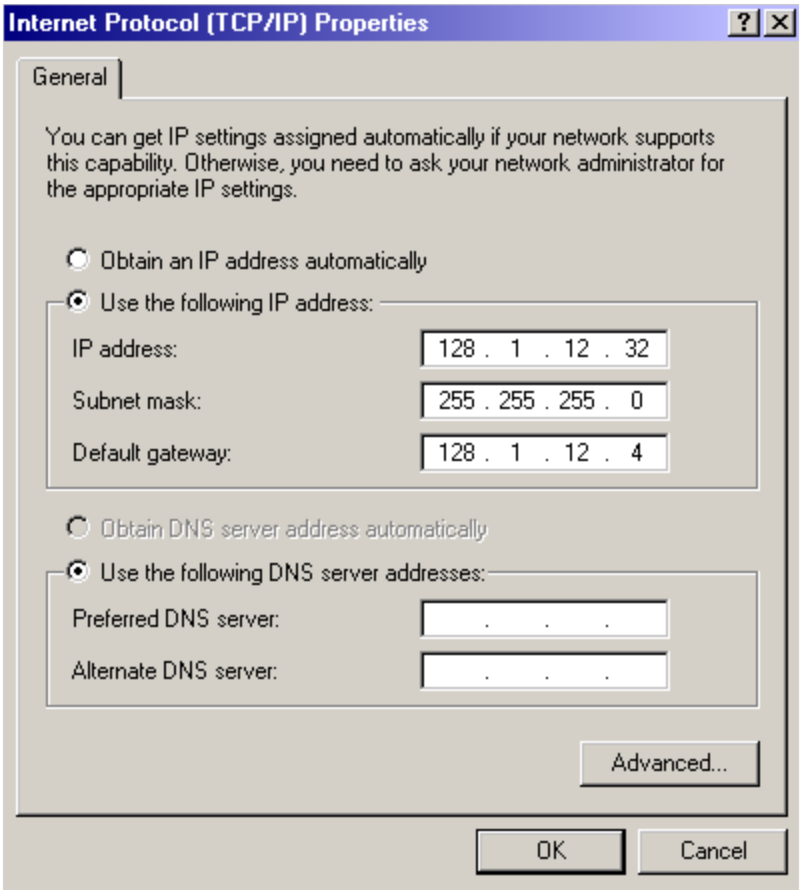


FIGURE 35. Internet Protocol (TCP/IP) Properties window

Type in the IP address of the IWS position using the following format

nnn.nnn.nnn.nnn

where “n” is a segment of the IP address, and “.” separates two segments.

As an example, an IWS position with the IP address 128.1.12.32 must have the computer name 128x1x12x32.

The subnet mask may also need to be updated, and can also be done in this window. To add additional gateways, select the Advanced button and proceed to step 10

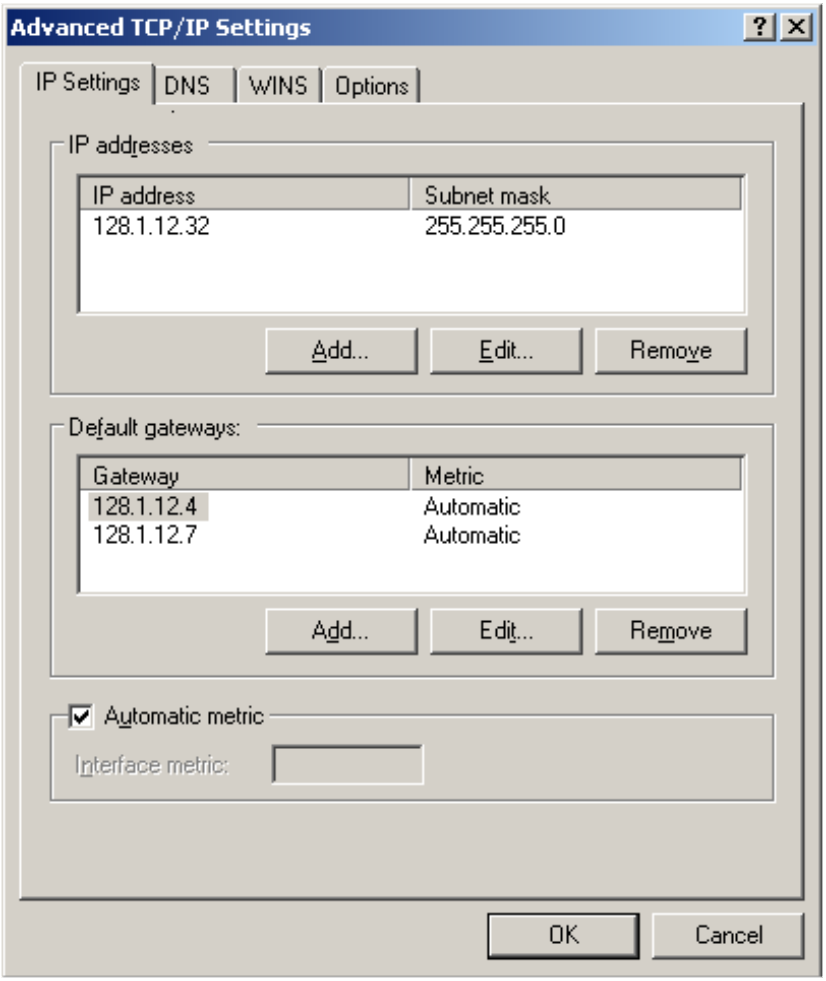


FIGURE 36. Advanced TCP/IP Settings window

10 Routers (called gateways by Windows software) are used to access external databases. These are not the IWS gateway positions that connect to the DMS switch. The routers need to be identified in the Installed gateways list box. If the IPs are listed correctly, go directly to the next step. Otherwise, continue with this step to identify the database routers.

First, identify the two ASN routers that access the external DA and CCDB databases by entering the IP addresses of the LAN-segment connections (not the WAN-segment connections). The addresses shown here are only examples, the actual address you enter will be different. Note that each of the two routers must route to both the DA server and the CCDB server. After the IP addresses for the DA and CCDB routers are entered, then the addresses of any other routers can be entered. A total of five IP addresses can be listed.

Each IP address is entered as follows:

a Tab to the New gateway address box and type in the IP address.

b Press Alt+A. Check that the added IP address is listed in the Installed gateways box.

c Perform these steps as needed up to five times.

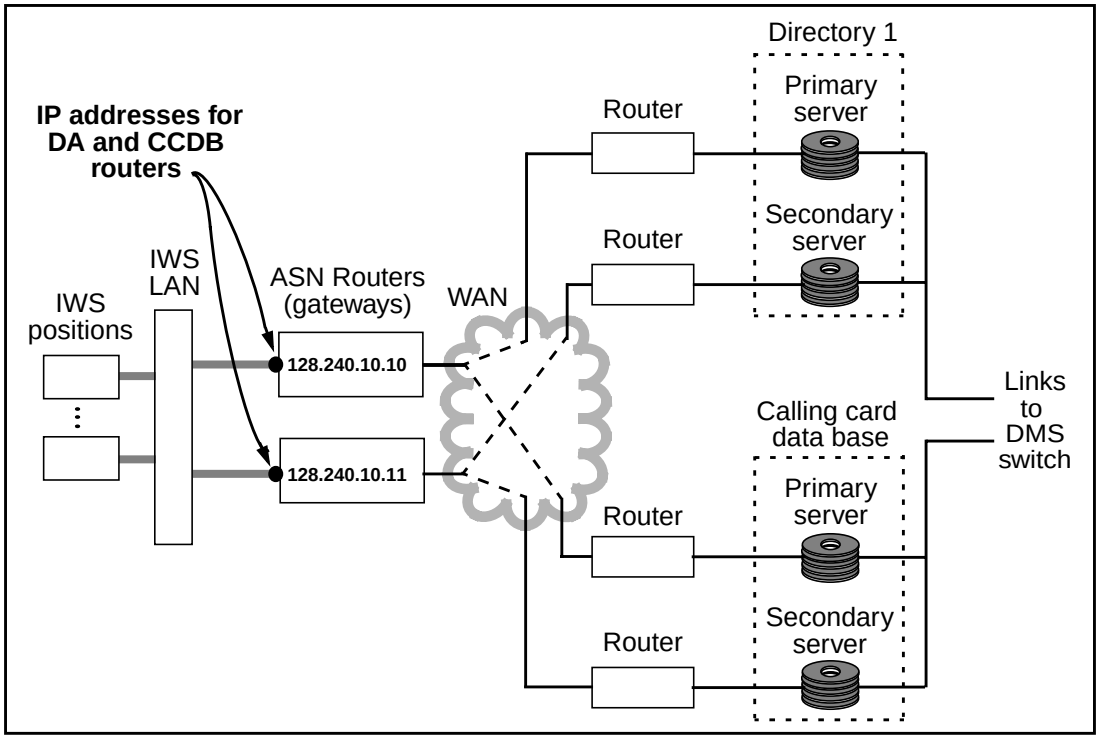


FIGURE 37. IP Addresses for DA and CCDB Routers

11 After changing the IP address, select OK.

12 Return to the Control Panel to access the Systems properties box. This is required to change the computer's name.

13 In the Systems properties box, select the tab for Computer name.

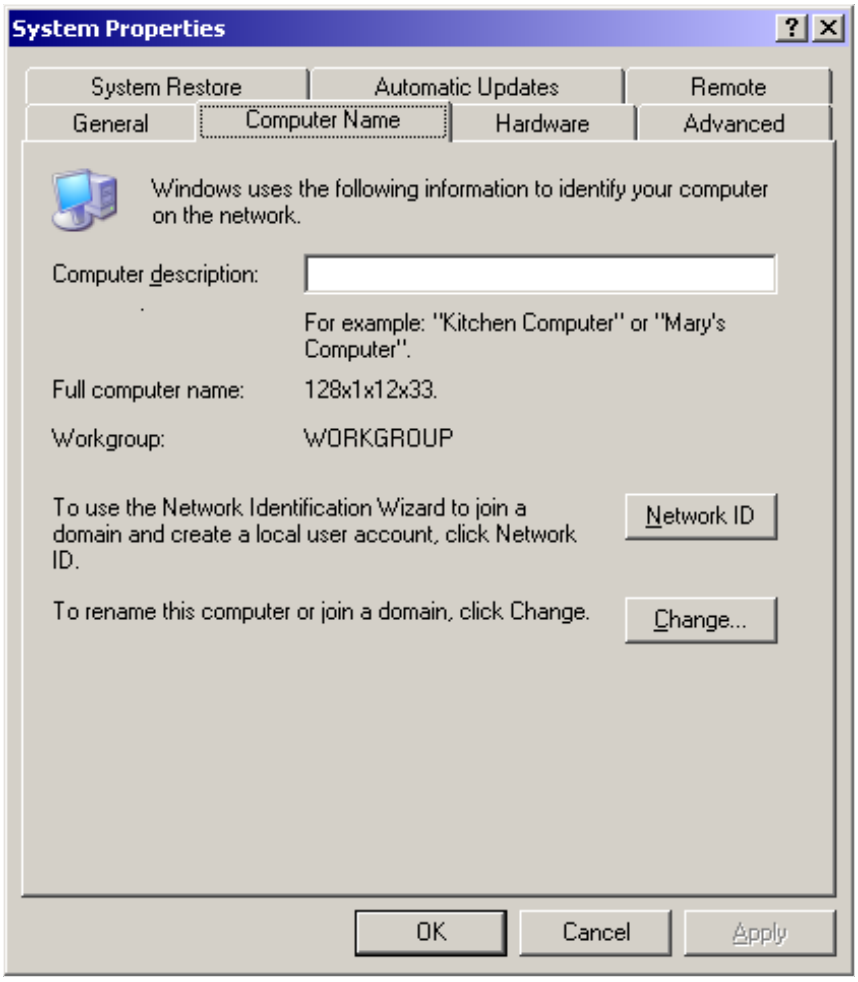


FIGURE 38. Computer Name tab in the System Properties window

14 Select the Change button to display the Computer Name Changes window.

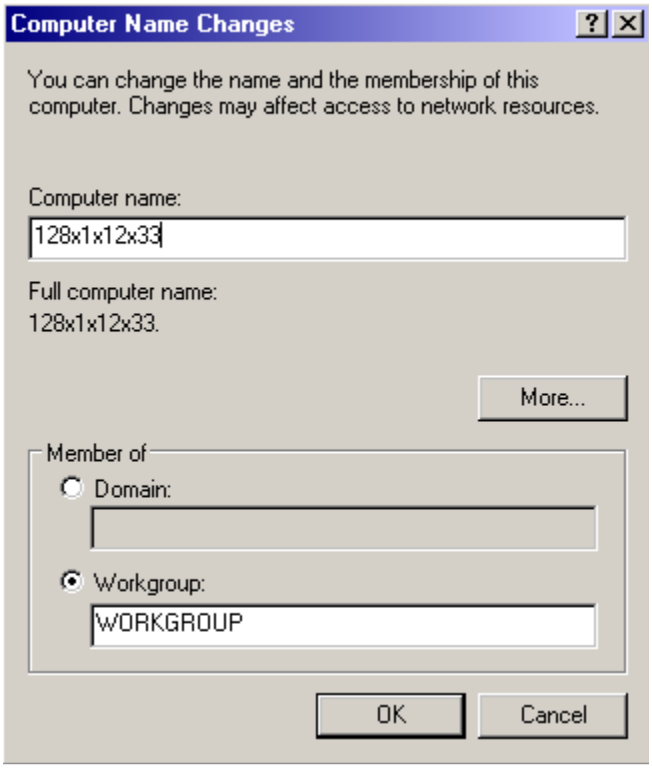


FIGURE 39. Computer Name Changes window

15 Type in new Computer name. It must exactly match the IP address entered in Step 9

16 Select OK.
Note: if the OK button remains grayed out, nothing has been changed. If you replace the IP address with the same number, it will remain grayed out.

17 A message appears alerting the user that the computer must be restarted for the change to take effect. Select OK.

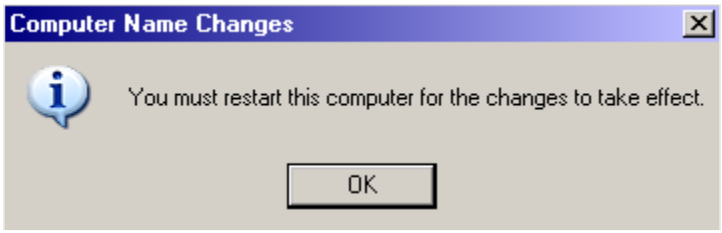


FIGURE 40. Name Change restart alert

18 After clicking ok, the system returns you to the System Properties menu.

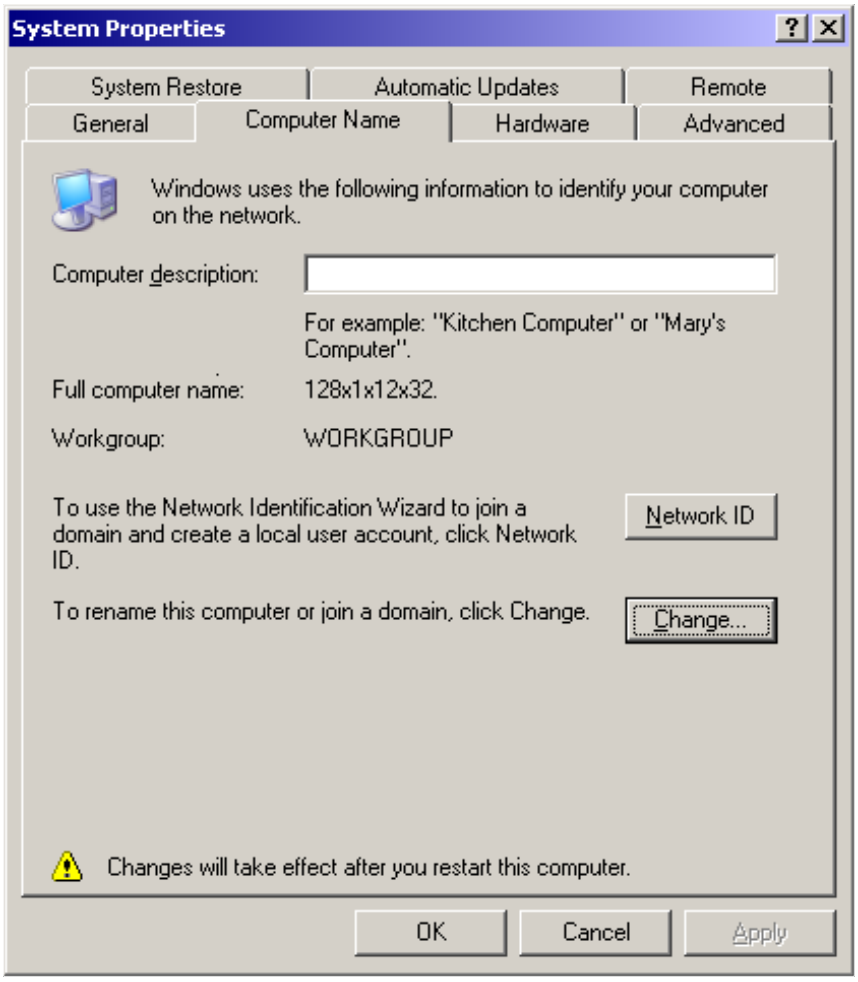


FIGURE 41. System Properties window denoting changes

19 Note the new message at the bottom of the screen:

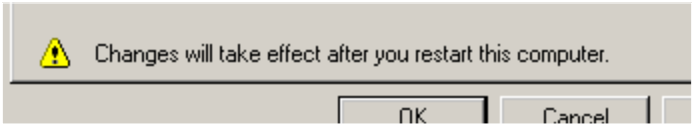


FIGURE 42. Change alert on the System Properties window

20 Select OK.

21 The system will prompt you to restart the computer.

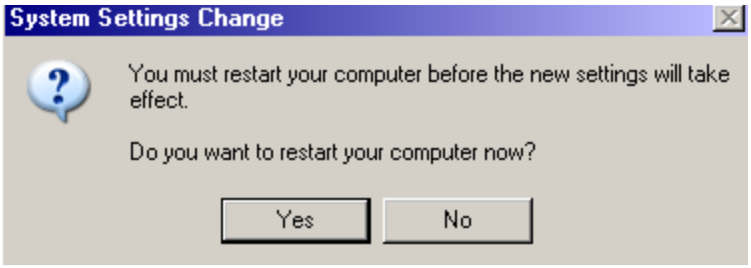


FIGURE 43. Restart prompt

Once you restart the computer, the IP address of the IWS Position will be changed.

22 Proceed to Section 4.0, "TOPS IWS position datafill", on page 41.

6.0 Revisions

6.1 Revisions for release 17.0

Released for IWS 17.0 with the following changes:

- Updated all subheadings in Section 3.0 “Keystroke commands (Alt+Tab, Ctrl+Esc, and Ctrl+Alt+Delete)”
- Updated Section 4.2.3 “Create datafill disk”
- Updated Section 5.1 “Changing the Network Settings of an IWS Position”

6.2 Revisions for release 15.2

- Released for minor formatting changes. No updates to technical content.

6.3 Revisions for release 15.0

- Released for minor formatting changes. No updates to technical content.

6.4 Revisions for release 14.0

- Book revised, edited, and corrected throughout.

6.5 Revisions for release 13.0

- Initial release of this book.

7.0 Index

DMS-100 Family

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