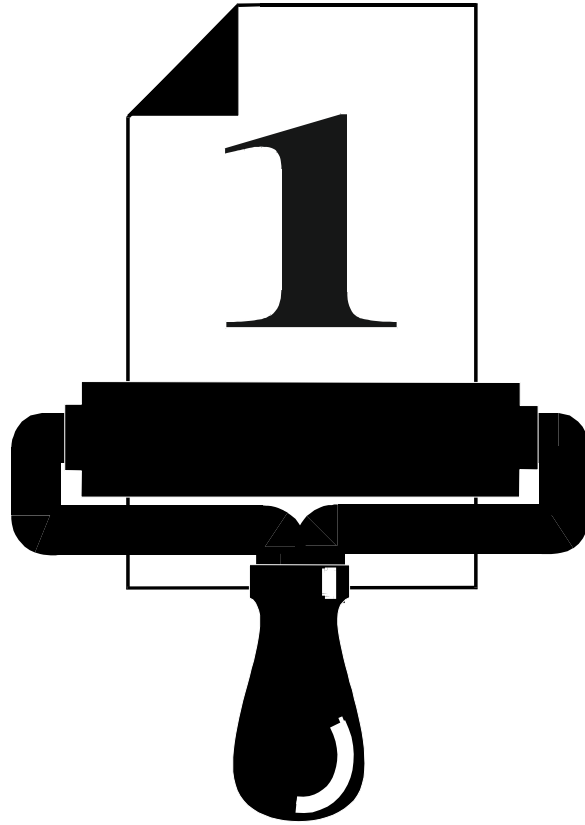


# **OnePrint™**

## ***Installation Reference Guide***



***THE NEXT GENERATION IBM HOST PRINTING SOLUTION***

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*OnePrint Manual for Ver. 2.4*  
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# ***Chapter 1 : Getting Started***

## ***Overview***

This installation reference guide provides the user with safe and easy installation and troubleshooting procedures. This guide is used as a supplement to the Operators Guide (Administration Level).

This guide details step-by-step installation procedures for OnePrint (for more detailed explanations the user is directed to the Operator's Guide). After installation is completed the user is able to configure the OnePrint from any network attached PC using the OnePrint Configuration Utility Program.

This manual is divided as follows:

**Chapter 1:** provides users with a short description of the procedures necessary for installing the OnePrint software.

**Chapter 2:** provides users with step-by-step installation procedures.

**Chapter 3:** provides users with the OnePrint Unit configuration (Hardware and Software Integration).

**Chapter 4:** provides users with troubleshooting procedures.

**Chapter 5:** provides users with known OnePrint error messages.

**Chapter 6:** provides users with Host Connectivity Error Handling.

**Chapter 7:** provides users with Network Interface Card List supported by OnePrint.

**Chapter 8:** provides users with hardware requirements.

## ***Installation Description***

This paragraph describes the scope and order for performing OnePrint Installation. For detailed installation procedures refer to Chapter 2.

- Set up the Host Connection for OnePrint via Host Gateway
- Configure Host LU ports to LAN printing services
- Install OnePrint unit hardware configuration
- Install and run OnePrint configuration program
- Perform OnePrint Console Operation

## Host Connection Options

OnePrint host connections are available for SNA or TCP/IP.

Four types of SNA host connection options available for OnePrint are:

- Direct Token Ring
  - SDLC Remote Connection
  - Channel Attached Connection
  - PC - based SNA Gateway (i.e. IBM Communication Manager/2, Microsoft SNA Server, Novell NetWare for SAA).
- TCP/IP host connection is available for either Mainframe or AS/400 with TCP/IP stack installed. The following table describes requirements running IPDS over TCP/IP by Mainframe or AS/400.

<b>Mainframe:</b>	<ul style="list-style-type: none"><li>• <b>PSF/MVS Ver. 2 Re. 2 with APAROW 15599.</b></li><li>• <b>MVS Scheduler - APAROW 12236 support: IPADDR PORTNO</b></li><li>• <b>TCP/IP Ver. 3 Rel 1 or higher, configured on MVS.</b></li></ul>
<b>AS/400</b>	<ul style="list-style-type: none"><li>• <b>OS400 V3R1M0</b></li><li>• <b>Latest Cumulative PTF (SF 24138 or newer).</b></li><li>• <b>PSF/400</b></li><li>• <b>TCP/IP Software (stack) must be loaded</b></li></ul>

Fully detailed installation description for **Mainframe** running MVS and supports TCP/IP host connection is found in the IBM publication:  
Print Service Facility/MVS Update Guide.

Fully detailed installation description for **AS/400** that supports TCP/IP host connection is shown in Appendix D.

## ***Configure Host LU Ports to LAN Printing Services***

The following are LAN printing services available to the OnePrint user for configuring OnePrint Host LU ports to their appropriate printing service.

- Novell Printing Services
- LPD/LPR Printing Services
- SMB over TCP/IP Printing Services
- PPD/PPR over TCP/IP Printing Services

## ***OnePrint Unit - Hardware and Software Integration***

The following are required to perform hardware and OnePrint software integration to PC-based OnePrint unit.

- NIC configuration
- OnePrint Software installation to hard disk

## ***OnePrint Configuration Program (OPC)***

Run OnePrint configuration utility program from network attached PC.

## ***OnePrint Console Operation***

The OnePrint Console is used by Supervisors (or authorized user) to perform changes in configuration and/or maintenance tasks.

# Chapter 2 : Installation Procedure

## Requirements

OnePrint installation involves configuring the following:

- Host Computer (VTAM / NCP Parameters)
- Host Gateway from the Host Computer to the OnePrint DSPU unit
- OnePrint Unit (hardware and software integration)
- DOS-based PC(s) to run the OnePrint Configuration Utility Program
- File/Print Server(s)

Refer to the OnePrint Installation Worksheets in Appendix A, for a survey of the information needed to set up these devices.

## Important Notes - Read Before Installing

- The installation procedure takes approximately 45 minutes. Carefully follow all instructions as they appear on screen.
- Configuration should **only** include those fields specified within this chapter. Set fields **exactly** as specified. The software program **does not** allow you to return to a previous menu/screen. In the event of an error or unexpected problem exit and repeat installation procedure.
- Verify that hardware devices (hard disk, CD-ROM, etc.) are supported by OnePrint (Refer to Appendix C). If hardware devices are not (currently) supported by OnePrint, ensure that appropriate device driver(s) diskette(s) have been installed during the installation procedure by replacing OnePrint System Diskette #2 with the manufacturer device driver(s) diskette(s).
- Installation is performed in the following order:
  - Install the OnePrint System (System diskettes 1 & 2)
  - Install the OnePrint CD software
  - Install the OnePrint System (System diskette 3)
  - Install the OnePrint Application (Application diskettes 1 -6)
  - Install the (already configured) OPC (OPC diskette 0)
- Now you are ready for successful installation.  
Good Luck!

# Installation Procedures

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## Note

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If using TCP/IP host connection to **AS/400 or Mainframe** with **TCP/IP** stack, refer to **Appendix D and E** for more details.

---

## SNA Host Connection Procedure

### 1. VTAM Definition:

Perform VTAM definitions for OnePrint Host connection used at the user's site.

- 1.1. Direct Token Ring Connection via FEP (37X5). See Figure 3 in the Operator's Guide for a sample of VTAM listing.
- 1.2. SDLC Remote Link to the LAN. Refer to Figure 4 in the Operator's Guide for a sample of VTAM/NCP listing.
- 1.3. 3174 channel attached connection. Refer to Figure 6 in the Operator's Guide for a sample of VTAM listing for a 3174 channel.
- 1.4. LU pooling under (PC based) SNA gateway (i.e. IBM Communication Manager/2, NetWare for SAA, or Microsoft SNA Server).

### 2. Host Gateway Configuration

Configure the Host gateway to support OnePrint as DSPU (PU type 2.0) with the specified number of LU ports.

- 2.1. Refer to OnePrint and Host Gateway Parameters Table in Chapter 2 of the Operator's guide.
- 2.2. If 3174 is used as a host gateway, fill in the 3174 customization questionnaire with the parameters as shown in Chapter 2 of the Operator's guide.

### 3. **OnePrint Unit - Hardware and Software Integration**

Configure the NIC (Network Interface Card) according to the manufacturers instructions as detailed in Chapter 7.

3.1. Verify that the OnePrint package includes the following:

- 9 diskettes that include:
  - System diskettes #1, #2, #3
  - Application diskettes - #1-6
  - Remote Manager(OPC) diskette
  - CD ROM
  - Identity plug.

Refer to Chapter 8 for Hardware details.

3.2. Insert **System disk #1** into the drive required and boot the unit.

3.3. Select the keyboard type, default is US (ASCII) English. Selecting any other language (as default) enables you to use a local keyboard and (optionally) to receive UnixWare messages in your local language.

3.4. The **System Licensing Menu** will appear. **Type Serial Number and Activation Key** exactly as they appear on the colored sticker on the opening page of the "Installation Reference Guide", (*please note that they are case sensitive*). Make sure to type these codes exactly as they appear in the document. Press <F10> to apply.

3.5. The **Choices Menu** will appear. Select the **Continue Installation** option.

3.6. Perform this step if your hardware devices are supported by OnePrint. Insert **System disk #2** into the drive required. Select the option: "**Install Host Bus Adapter (HBA) Drivers**".

3.7. Perform this step if your hardware devices are not currently supported by OnePrint. Install the driver diskette(s) supplied by the manufacturer (instead of System disk #2). Select: "**Install Other HBA Drivers**". Appendix C lists hardware devices supported by OnePrint. When using a PC with hardware devices that are (hard disk, CD, etc.) currently not supported by OnePrint replace the OnePrint System Diskette #2 with the manufacturer device driver(s) diskette(s) during the installation procedure

3.8. Select the **Continue Installation** option, (no more 'HBA' diskettes should be installed) on the DCU (Device Configuration Utility) screen.

3.9. The following menu will appear: "**Select Installation Method**".

3.10. Insert the CD into the CD-ROM drive.

3.11. Select **install from CD ROM**.

**Important!** If CD-ROM does not appear on selection verify if CD-ROM is installed correctly and is supported by the system. If the CD-ROM is detected but the system can not find a CD-ROM or valid data, verify that CD-ROM is installed with driver compatibility. If this problem still occurs terminate installation.

3.11.1. Select **Yes** for installation from CD-ROM.

- 3.12. Select Perform Destructive Installation option.
- 3.13. Select from **Destructive Installation** menu the option: *“Use the ENTIRE DISK for UnixWare 2.1 (Erase All Partitions)”*
- 3.14. Insert system node name: *CONSOLE [Optional]* . Supervisor can select any System Node name as long as two identical system node names are not used in the same network. Press Enter.
- 3.15. Set date and time manually in each field. Pressing **F2** while the Time Zone field is highlighted, will display the available zones. Select the appropriate zone. Press **F10** to apply.
- 3.16. Select from the **Install Menu, View or Change Package Selection.**
- 3.17. Use spacebar to set entire Package Selection Enable the following fields:
  - 3.17.1. Base System
  - 3.17.2. Language Supplement
  - 3.17.3. Enh Application Compatibility
  - 3.17.4. Printer Support
  - 3.17.5. Network Support Utilities
  - 3.17.6. Network Interface Card Support
  - 3.17.7. NetWare Networking
  - 3.17.8. NetWare UNIX client
  - 3.17.9. Internet Utilities ( TCP/IP)
  - 3.17.10. Distributed File System Utilities
  - 3.17.11. Remote Procedure Call Utilities
  - 3.17.12. Network File System Utilities
  - 3.17.13. Graphic Utilities
  - 3.17.14. Desktop Manager
    - 3.17.14.1. Press <Page Down> for the following fields
  - 3.17.15. Advanced Commands
  - 3.17.16. BSD Compatibility
    - Press Enter to apply.
- 3.18. Select **View or Change Disk Configuration** from the **‘Install Menu’**.
- 3.19. Select **File Systems** menu from the **‘Disk Configuration Menu’**.
- 3.20. Set the following parameters:
  - 3.20.1. **Root File System** - minimum **240**. Press enter to apply.
  - 3.20.2. **Swap Slice** - *minimum 740 -maximum 1000*. Press enter to apply.

***Important:*** At the bottom of the screen two fields appear: “Available size (MB)” and “Currently Used (MB)”. Ensure that **currently used** value (set in steps 3.20.1 and 3.20.2) is less than or equal to the **available size**. OnePrint requires a minimum of 1 GB (1000 MB) hard disk for optimal performance. If your hard disk exceeds 1.6 GB, define root file system and swap slice for a combined results of 1,600.

- 3.20.3. **Temporary File System (/tmp)** set to *off* (**F2** and **Enter** to select)
- 3.20.4. **Temporary File System (var/tmp)** set to *off* (**F2** and **Enter** to select)
- 3.20.5. Select **F10** to apply and **Esc** to return to the ‘**Installation Menu**’.
- 3.21. Select “**Accept All Setting and Install Now**” option (from the ‘**Install Menu**’). “**Wait Messages**” will appear for the duration (~15 minutes) that the Operating system is being installed.
  - 3.21.1. Remove the CD-ROM and the diskette from the drives and press **Enter**. The system will automatically shut-down and restart/reboot.
- 3.22. The **Network Interface Card Support Utility - Summary Screen** will appear. Select *Update Network Configuration and Exit this Utility*.
- 3.23. The **Network Interface Card Support Utility - Confirmation Screen** will appear. Select *Yes*.
- 3.24. The following menu will appear: “**Inet Setup Value from System Files**” including ‘**Node Name: CONSOLE**’ field. Press <**F10**> to apply. When using more than a single OnePrint Unit on the same network, ensure to select a different System Node name for each unit.

**Note:** System will halt if identical System Node Name is defined more than once in the same network. If this occurs reinstall following installation procedures.
- 3.25. The “**Language Supplement Installation**” menu appears. Verify that the language/country selection is correct and additional support for all other countries is available. Activate the ‘**Apply**’ field
- 3.26. Set the type of the attached mouse to *Serial Mouse (or PS/2 mouse)*.

**Note:** *Using a PS/2 mouse forces dedicated use of IRQ 12.*
- 3.27. Insert mouse parameters (only for Serial Mouse):
  - Serial port: **tty01 (COM2)**
  - Mouse type: **Microsoft** (default)
  - Number of mouse button: **2** (default). Activate the ‘**Apply**’ field. (For PS/2 Mouse you will be asked for the number of mouse buttons.)
- 3.28. Perform the “**Mouse Test**” procedure, follow the instructions on screen.
- 3.29. Insert *CONSOLE* (or any other name selected) as owner name. Insert *CONSOLE* (or any other name selected) as owner’s login ID (owners user name is irrelevant). Activate the ‘**Apply**’ field.
- 3.30. Press **Enter** for ALL password requirements.

- 3.31. **'System Coming Up'** messages appear on the screen (for viewing only).
- 3.32. The UnixWare Graphic login screen appears for accessing the system. Insert login name: **CONSOLE**, and activate. **<login>** field by pressing enter twice.
- 3.33. The **'Welcome'** screen appears, select **Delete Welcome**.
- 3.34. Select the **Applications** icon followed by **Terminal** icon using the mouse. The \$ prompt is displayed on the upper left hand portion of the screen.
- 3.35. Type **su** and press **Enter**.  
(In the following commands the sign  $\cup$  indicates a space).
  - 3.35.1. Type **Enter** for password requirement. # sign is displayed on the upper left hand portion of the screen.
  - 3.35.2. Type **cd /etc/rc2.d** and press **Enter**. (Ensure that you leave a space after **cd**, it is important to enter this code exactly as shown).
  - 3.35.3. Insert **System # 3** diskette.
  - 3.35.4. Type: **cpio  $\cup$  -ivBud  $\cup$  < /dev/fd0** and press **Enter**.  
**Note:** If using 3 1/2" FDD as second Floppy disk, type **fd1** instead of **fd0**.
  - 3.35.5. Remove diskette and CD from drives, type: **init  $\cup$  6** and press **Enter**. The OnePrint unit will reboot.
- 3.36. Insert CD into CD-ROM drive.
- 3.37. Select **go** (default) and press **Enter**.
- 3.38. Proceed with installation of **Application ('Distribution')** diskettes.
  - 3.38.1. Type source drive name (**A or B**) and press **Enter**.
  - 3.38.2. Insert **Application ('Distribution')** diskettes 1-6 and follow the instructions as they appear on the screen.
  - 3.38.3. After copying the 6 Application diskettes, select **'q'** to quit.
- 3.39. Configure OPC on another PC, or use an already configured OPC diskette, as detailed in steps 4 -12 (below).
4. Run the OPC program on another remote PC.
5. Login to the OPC program using the login name: **Supervisor** and password: **Storm**. Under **Setup** submenu select **Remote** and **Connect** to display the already known connections to OnePrint units.
6. Type **<F9>** to view any active OnePrint Units in the network, and press Enter for the desired OnePrint unit. If no OnePrint unit is identified open **New OnePrint** configuration file (**Setup, File, New**).
7. Enter the **Adapters** submenu. Define the Token Ring Address for the NIC used for the Host connection via the network.
8. Enter **Interface** submenu in order to configure the following:  
*Note: If not using Novell, ensure that the Autodiscovery parameter is disabled. If Autodiscovery is enabled (when Novell is not available) the automatic search mechanism for OnePrint units on network will be considerably slowed down.*

- 8.1. **Inet** Parameters  
Available when using TCP/IP connection. Configure the **IP Address** for each Network Interface Card used.
- 8.2. **Service** Parameters  
Define routing system, either dynamic or default.
9. Enter the **Printing - Servers and Printers** submenus.
  - 9.1. **Servers** Parameters  
Define: **Server Name**,  
**User Name** (when running NetWare or SMB)  
**IPX Net address** and **IPX Node Address** of the server when using Novell NetWare.  
Define: **IP Address** when using IP network.
10. **Printer** Table  
Define printer emulation for each printer port (control language).  
Define the print queue name
11. Enter the **Host** submenu (For SNA over LLC Host Connection Protocol).
  - 11.1. Define **Host Link** parameters:  
Gateway address  
XID (for direct host connection)
  - 11.2. Define **Port** definition:  
Address each LU to the destination print queue.
  - 11.3. Under **Load Profile** menu:  
Define the printer emulation
12. For TCP/IP host connection configure each OnePrint port to support TCP/IP as input host.
13. Save Configuration into a file and store it on the Remote Manager (OPC) diskette.
14. Follow the instructions on the OnePrint console to insert the OPC diskette (already configured) into the drive.
  - 14.1. With the OPC diskette inserted into the disk drive type:  
**<drive name>:<opc file name>.opc.**
  - 14.2. Install the Identity Plug on serial port -COM1. Use the OnePrint console menu to logically reboot the unit. **Do not press reset button!!**
  - 14.3. A graphic Login screen appears. Enter Login ID: **CONSOLE**, <Enter> for password and activate Login field.
  - 14.4. After rebooting the unit perform Integrity Check procedure in order to verify successful installation.

## Chapter 3 : OnePrint Unit Configuration

This chapter details procedures for the OnePrint hardware installation as part of the installation procedure described in Chapter 2, Installation procedures (OnePrint Unit - Hardware and Software Integration). The OnePrint system runs on a dedicated PC attached to the LAN reachable by the Host. OnePrint requires a PC with the following recommended configuration:

- Pentium based PC (75 MHz or higher).
- IDE or SCSI hard disk drive.
- ISA or PCI bus. Verify that the NIC used is supported by OnePrint (Chapter 7).
- 32 MB RAM + cache memory (recommended).
- Network Interface card (Token Ring or Ethernet) for Host and LAN connection.
- Serial Port (DB-25 recommended) -COM1.
- UPS - Uninterrupted Power Supply (recommended).
- CD ROM with SCSI or IDE ATAPI controller interface.



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## *Network Interface Card (NIC) Configuration*

OnePrint supports various types of NIC, both for Token Ring and Ethernet infrastructures. Currently, OnePrint uses ISA or PCI bus type. Updated NIC list is shown in Chapter 7.

As part of the hardware installation, each NIC must be configured with specific IRQ, base I/O port address and Base memory address (optional). Each NIC must be configured twice:

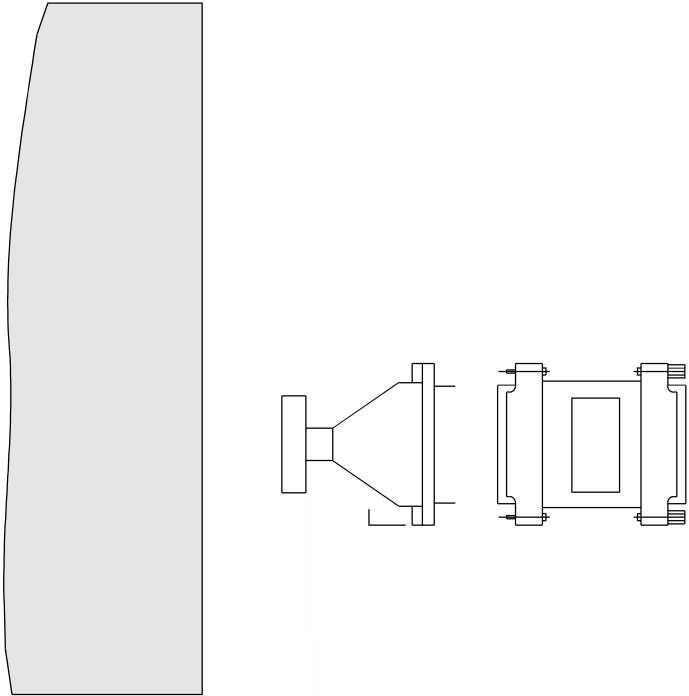
- based on the NIC Manufacturer's instructions
- in the OnePrint configuration utility program

Verify that there will be no simultaneous use of the same IRQ by more than a single adapter in the OnePrint unit. This should avoid collisions in using the same IRQ by two different cards in the OnePrint unit.

For further details regarding the NIC lists supported by OnePrint, operate the OnePrint configuration utility program, consult with your local distributor, or ask your distributor for updates on BBS.

# OnePrint Identity Plug Installation

Figure 1 Illustration showing the attachment of the OnePrint identity plug (using a DB-25 to DB-9 adapter). Requirements- PC with serial port (DB-25) on COM1. Plug s



## ***Chapter 4 :Troubleshooting***

This chapter aids the user in detecting problems that may occur during the installation, setup and operation of the OnePrint program and the OPC.

To quickly identify problems and solutions, this chapter is divided into the following user-friendly subparagraphs :

1. Error Handling Procedures
2. OnePrint Configuration Program (OPC)
3. OnePrint Unit
4. Host Connectivity
5. Host Setup
6. Miscellaneous Errors

Error message listings and corrective actions are found in Chapter 5.

We strongly recommend that you perform an OPC backup for maintenance purposes.

# 1. Error Handling Procedure

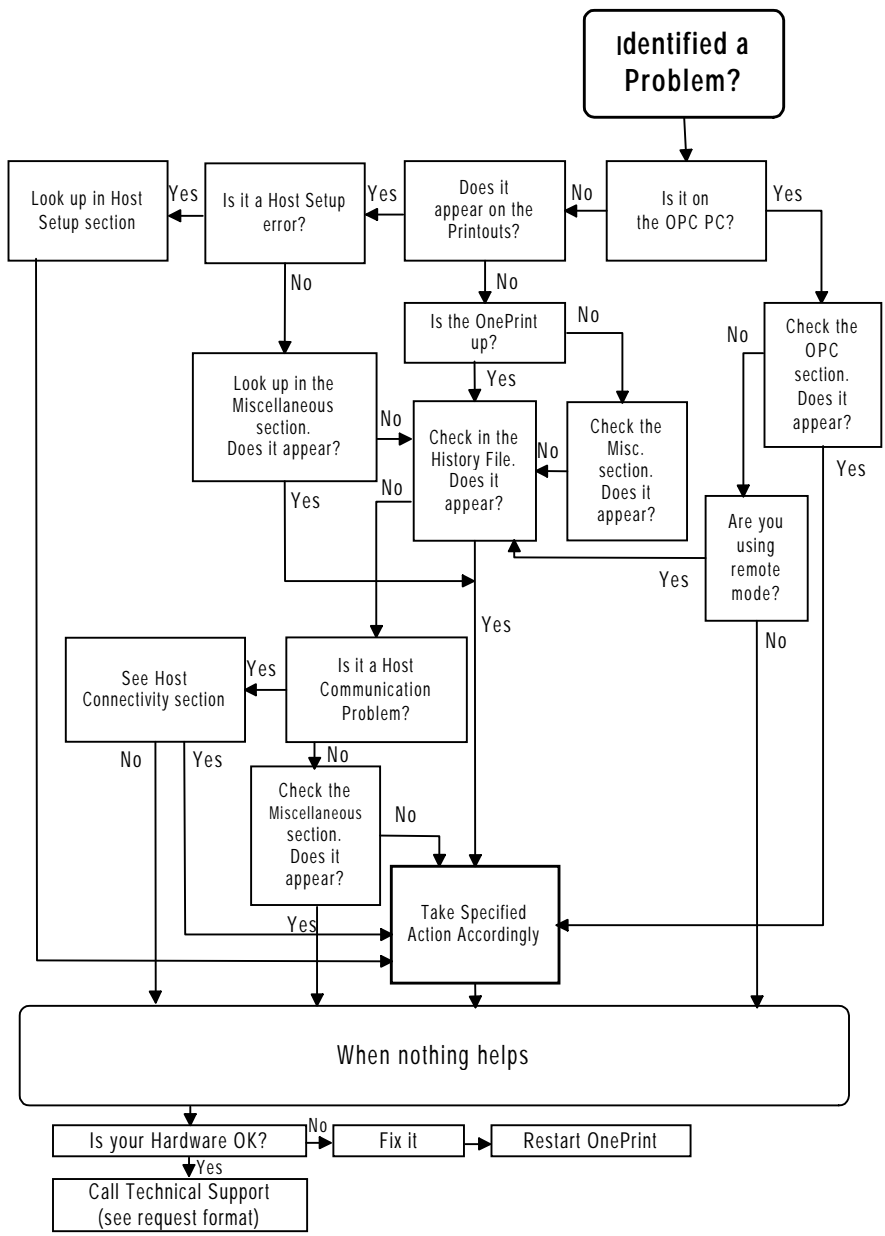
Most failures or irregular performance can be corrected on-site by the operator. When a problem arises, it is important to classify the possible causes. Refer to the flow chart and troubleshooting topics.

Hardware failures can cause system failure. If a hardware problem occurs, run a PC diagnostic test. Ensure that all components (board, disk, RAM, adapter, serial port) successfully pass all tests.

In the event of a failure fill in the following support request form.

## **Support Request Form**

<b>User Name:</b>	<b>Phone:</b>	<b>Fax:</b>
<b>Unit S/N:</b>		<b>Unit Model:</b>
<b>History File:</b> <i>(electronic media)</i>		
<b>OnePrint S/W Configuration</b> <i>(on paper)</i>		
<b>Host System:</b> <ul style="list-style-type: none"><li>• Operating System (e.g., MVS)</li><li>• Gateway Type (e.g., IBM 3174)</li><li>• Host Connection Topologies (e.g., Backbone, Router)</li></ul>		
<b>Application Used:</b> (e.g., PSF) <ul style="list-style-type: none"><li>• <b>Printout:</b> (provide good baseline reference printout and same printout as printed via the OnePrint)</li></ul>		



## 2. OnePrint Configuration Program

This chapter deals with troubleshooting the OnePrint Configuration Program (OPC). When running the OPC program some errors may occur. Relevant messages will be displayed for the user's convenience. The errors are categorized into fatal and non-fatal errors. Specific actions relating to each error are described in this chapter. Chapter 5 contains error messages generated by the OPC program.



### Note

---

The OPC is a DOS-based program that can be run under Windows® 3.1 if allocated sufficient memory. This usually requires writing a Windows “PIF” file, (refer to the Windows manual). The “PIF” file must supply a minimum of 500KB lower(DOS) memory and 100KB of XMS memory for the OPC to run properly. Run the OPC program from the File manager under Windows®.

---



### Note

---

The OPC program only supports EGA affecting the quality of the display. This degradation has no effect on the program itself. . If using a non-standard graphics adapter, install the basic VGA driver that is supplied with Windows®.

---

## Error Specifications

### System Errors

Types of System Errors that can appear when operating OnePrint remote management are:

- OnePrint System Error (#)
- OnePrint General System Error
- History File Management Error (#)

Perform recovery for all the above as follows:

- Press 'OK' and repeat the previous operation
- If the error appear again, reset the computer with the OPC program. In case of a OnePrint error reset the OnePrint unit.

Call technical support and provide them with the message ID (#) and all other relevant information.

## Operating Errors

- There are three basic kinds of operating errors that can occur in the OPC program:  
**Non-Fatal Errors, Fatal Errors, System Errors**

### Non-Fatal Errors

Non-fatal errors are dealt with by the OPC program error handler in a manner similar to DOS error handling. The user has up to four choices for error handling : **Retry, Ignore, Cancel, Abort.**



---

After selecting “Abort” all unsaved data will be lost!

---

**Caution**

Error	Possible Reason	Repair Action
-------	-----------------	---------------

### Fatal Errors

Fatal errors are defined as errors that can not be fixed by the OPC and cause termination of the OnePrint program. These types of errors are mainly caused by hardware failure. A listing of OPC fatal error messages are shown in Chapter 5.



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After a fatal error, all unsaved data will be lost!

---

**Caution**

Error	Possible Reason	Repair Action
-------	-----------------	---------------

### Informative Messages

Informative messages are sent to aid the user in the performance of maintenance procedures.

Message	Explanation
---------	-------------

### 3. OnePrint Unit

This chapter deals with troubleshooting the OnePrint Unit program. Chapter 5 contains error messages generated by the OnePrint Program including error descriptions and required actions.

#### Hardware Errors

Ensure that the hardware requirements are compatible with OnePrint hardware specifications as defined in Chapter 3. Following is a sample of Software Installation Errors.

<b>ERROR MESSAGE &amp; DESCRIPTION</b>	<b>OnePrint &amp; Operator Actions</b>
DISTRIBUTION diskette(s) labeled [labelname] has corrupted files	Try to reinstall the diskette(s). If not successful order new diskette(s).







#### History Logfile

One of the most important tools in resolving problems with the operation of the OnePrint is its *History Logfile*. The OnePrint History Logfile is designed to trap all relevant system messages, based on a system of *notify levels*. The variance in these notify levels differentiates the content of the History Logfile being output. This is the basis for detailed problem diagnosis and resolution.

The History Logfile displays traces on various levels. Generally, trace is activated on all defined ports which affects the overall performance of OnePrint. To perform trace without compromising OnePrint performance, select the specific port requested according to trace types listed below:

- Fault:** History file consists of only fault listings.
- Warning:** History file consists of only Warning messages.
- Trace:** History file consists of trace. Trace is performed on all ports unless specific port is defined.
- TS\_Trace:** Trace file consists of detailed trace.
- Detail Trace:** Enables tracing one or a combination of the following: **Emulation, Protocol, or Transport**
- Dump:** Enables dump of one or a combination of the following: **Emulation, Protocol, or Transport**

The icons in the table below indicate the categories as they appear in Chapter 5 of this manual.

<b>Category</b>	<b>Icon</b>	<b>Description</b>
<b>Critical Failures</b>		Critical Failures in the OnePrint Unit that prevent OnePrint from running.
<b>Critical Fault of OnePrint Services</b>		OnePrint detects a problem that may hinder operation at a later stage.
<b>External or Configuration Faults</b>		External or Configuration Failures.
<b>Critical Warning</b>		Denotes a critical warning message
<b>Obvious Message</b>		Minimal Traces. Technical Support Traces. Vendor Traces - to be used only by the OnePrint Support group.
<b>Trouble - shooting</b>		Appears only under TS_Trace option

## Following is an example of a History Logfile:

```
05/01/96 15:59:41 =====
05/01/96 15:59:41 [UM01] Unit is up
05/01/96 15:59:45 [UM05] Product version 'Ver 2.1'
05/01/96 16:01:40 [UM10] Product model 'MTN I96 '; S/N 'destlab'
05/01/96 16:01:41 [UM20] Configuration File Analyzing in progress
05/01/96 16:01:52 [UM21] File format is compatible
05/01/96 16:02:56 [M063] SNA protocol stack is OK!
05/01/96 16:02:57 [M063] HOST connection initialization is OK!
05/01/96 16:02:57 [M064] IPX channel for SNMP management: is ready
05/01/96 16:02:57 [M064] UDP/IP channel for SNMP management: is ready
05/01/96 16:02:57 [M038] Port 2.: LU-SNA Started, pid=[747]
05/01/96 16:02:57 [M038] Port 1.: LU-SNA Started, pid=[746]
05/01/96 16:02:58 [M038] Port 4.: LU-SNA Started, pid=[752]
05/01/96 16:02:58 [M137] Port 1.Server LANSERVER service 139 - resolved address:
86.0.0.206.0.139
05/01/96 16:02:58 [M137] Port 2.Server os2inter service 515 - resolved address:
89.0.0.226.2.3
05/01/96 16:02:58 [M038] Port 3.: LU-SNA Started, pid=[748]
05/01/96 16:02:58 [M038] Port 5.: LU-SNA Started, pid=[753]
05/01/96 16:02:58 [M137] Port 5.Server jetdirect2 service 515 - resolved address:
89.0.0.224.2.3
05/01/96 16:02:58 [M137] Port 5.Server jetdirect2 service SNMP - resolved address:
89.0.0.224.0.161
05/01/96 16:02:58 [M137] Port 4.Server one_print_2 service 1105 - resolved address:
00001978.000000000001.0451
05/01/96 16:02:59 [M038] Port 7.: LU-SNA Started, pid=[755]
05/01/96 16:02:59 [M137] Port 7.Server IDATA service 5001 - resolved address:
89.0.0.232.19.137
05/01/96 16:02:59 [M038] Port 6.: LU-SNA Started, pid=[754]
05/01/96 16:02:59 [M137] Port 6.Server asi401 service 1105 - resolved address:
00000401.000000000001.0451
05/01/96 16:03:00 [M038] Port 96.: LU-SNA Started, pid=[758]
05/01/96 16:03:00 [M137] Port 96.Server os2inter service 515 - resolved address:
89.0.0.226.2.3
05/01/96 16:03:02 [M038] Port 3.: LU - Ready for session
05/01/96 16:03:02 [M038] Port 4.: LU - Ready for session
05/01/96 16:03:02 [M038] Port 6.: LU - Ready for session
05/01/96 16:03:02 [M038] Port 1.: LU - Ready for session
05/01/96 16:03:02 -WARNING!- [M082] Host communication status : 505
05/01/96 16:03:04 [M038] Port 5.: LU - Ready for session
05/01/96 16:03:07 -WARNING!- [M082] Host communication status : 510
05/01/96 16:03:08 [M038] Port 2.: LU - Ready for session
05/01/96 16:03:10 [M038] Port 96.: LU - Ready for session
05/01/96 16:03:25 [M038] Port 1.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:25 [M038] Port 2.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:26 [M038] Port 3.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:26 [M038] Port 4.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:26 [M038] Port 5.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:26 [M038] Port 6.: Ready for printing.BIND type is - IPDS
05/01/96 16:03:26 [M038] Port 96.: Ready for printing.BIND type is - Non-IPDS
```

The entries in the History Logfile are in the following format.

[DATE][TIME][MESSAGE CATEGORY][IDENTIFIER][MESSAGE]

The History Logfile is written to the disk in a cyclic manner. The file contains all the messages generated during the most recent operation.

At usual user reporting levels, the History Logfile will not have a significant impact on OnePrint performance. However, due to the History Logfile intensively monitoring OnePrint internals, increasing the depth of monitoring will increasingly disturb the OnePrint, i.e., the Vendor Trace Notify Level will show some noticeable impact on performance

### *Data Flow Log File*

One of the most important tools in resolving problems with the operation of the OnePrint is its *Data Flow Logfile*. The OnePrint Data Flow Logfile is designed to trap all relevant data flow. This is used for problem recreation by R&D. To perform trace without compromising OnePrint performance, select the specific port requested.

## *4. Host Connectivity*

The Host Connectivity Error Handling Procedure is mapped in three flow charts (refer to Chapter 6). Refer to the flow charts when a 'OnePrint Host Configuration Error' or 'Host Connectivity Problem' message appears, or in case of suspected Host Connectivity problems.

## *5. Host Setup*

A Host Setup message (format shown below) will be printed when a error occurs. The full list of Host Setup Error Messages appears in Chapter 5. These errors indicate initial host setup error.

Error Messages	Description	Action
----------------	-------------	--------

## *6. Miscellaneous Errors*

This chapter describes errors or irregular performance noticed by the user, problems that do not show up in any other procedure described before (e.g., do not show up in the history file).

ERROR	SUGGESTED ACTION
-------	------------------

## ***Chapter 5 : OnePrint Error Messages***

### ***OnePrint's History Logfile and Printed Output***

Contains error messages as output from the OnePrint History Logfile. Some OnePrint error messages are output with conditional modifiers that relate to specific error conditions. These errors are indicated with an “[Err]” notation and are listed in numerical order immediately following the OnePrint error messages.

### ***OnePrint's Host Setup Procedure***

Describes possible errors that may occur during the OnePrint Host Setup Procedure. Errors can be printed out for easy viewing on the printer.

### ***Miscellaneous Errors***

Miscellaneous errors or irregular performance noticed by the user that do not appear in any other procedure described before (e.g., do not show up in the history file).

### ***OnePrint Configuration Program (OPC)***

Errors may occur when running the OPC program. Relevant messages will be displayed for the user's convenience.

# Operating Errors

There are a number of operating errors that can occur with the OPC program.

## **Non-fatal errors**

These are handled by the OPC program error handler in a manner similar to DOS error handling. The user is presented with four choices: Abort, Retry, Ignore and Cancel.

- Abort**            After the “ABORT” prompt, the OPC program terminates abruptly and returns the user to the DOS prompt. Unsaved data is lost.
- Retry:**            The “RETRY” prompt signifies that some condition is preventing the OPC from carrying out a specific operation, (i.e. saving or deleting a file). The condition needs to be corrected or the instructions need to be altered, before continuing, (i.e. saving a file to a different disk drive).
- Ignore:**           The “IGNORE” prompt occurs when an action of the OPC cannot be carried as expected, however the program attempts “skip over” this to its next operation
- Cancel:**           The “CANCEL” prompt aborts the current action, and returns the OPC to its previous condition



### **Caution**

---

**After the “Abort” prompt, all unsaved data will be lost!**

---

## System Errors

### Non-Fatal Errors

<b>Error</b>	<b>Possible Reason</b>	<b>Repair Action</b>
<b>Encode error. Check network Data integrity check failed</b>	Something went wrong while sending or receiving data to or from the OnePrint unit.	Repeat the operation and if the error appears again check the network .
<b>Communication error</b>	OnePrint does not respond. 1.OnePrint unit is overloaded and can not handle your request in a time. 2.Network overloaded or the unit is too far away. 3. Unit is down. 4.Invalid password or user access.	1 & 2. Repeat the previous operation. and if the error still appears increase timeout and/or number of retries in 'Remote-Option' menu. 3.Check the unit.
<b>Item non-existent in the file version  Item non-existent in the remote version</b>	You are working with a non-compatible version of a OnePrint unit or a file. The item you requested does not exist there.	No action. You can go on working but note that you cannot access all items.
<b>The port is not offline</b>	The port you are working with was put 'Online' by an other manager. You cannot set it up now.	Set it offline from any manager you can access by pressing 'Offline' in 'Host-Port Definition' menu.
<b>Port is not defined</b>	The port you are trying to perform the operation on is not defined yet.	Define the port by pressing 'Execute' in the "Host-Port definition" menu.
<b>Port is initialized or not defined</b>	The port you are trying to 'Initialize' is not defined yet or already initialized.	Define the port or do not try to initialize it again.

<b>Error</b>	<b>Possible Reason</b>	<b>Repair Action</b>
<b>Stack overflow</b>	Host list file error.	Delete host list files ([name].lst).
<b>Create File Error</b> <b>Rename File Error</b> <b>Delete File Error</b>	Trying to write to a write-protected diskette or permission denied to write to current directory.	Check write protection and/or permission.
<b>Write File Error</b>	Possibly your disk is full.	Free some disk space to save configuration file.
<b>Failed to Create Backup File</b>  <b>Delete File Error</b>	Trying to write to a write-protected diskette or permission denied to write.  Some files were previously deleted.	Select 'Ignore' Note: After selecting 'Ignore' you will have no backup file.  If you want a backup file you need to correct the problem and try again.
<b>Invalid Drive Specification</b>	The drive name specified at the 'Directory' submenu does not exist on your computer.	Select 'Cancel' (this selection cancels the whole 'Change Directory' procedure) or select 'Retry' and give the existing drive name.
<b>Another Version, Convert?</b>	The file you are trying to open is another version.	Select 'Cancel' (this selection cancels the whole 'Open File' procedure) or select 'OK' and the program will automatically update the file to the current version.

## Fatal Errors

<b>Error</b>	<b>Possible Reason</b>	<b>Repair Action</b>
<b>Not Enough Memory Extended Memory Error</b>	High memory driver HIMEM.SYS is not loaded. Too many resident programs in conventional memory. Other programs already allocated extended memory.	Install HIMEM.SYS in your AUTOEXEC.BAT file and restart your computer. Unload some programs from conventional memory Check which programs are allocated in extended memory, and unload some. The OPC program needs 100K free in extended memory.
<b>Memory Allocation Error</b>	Too many resident programs in conventional memory.	Unload some programs from conventional memory.
<b>Open File Error Read File Error</b>	Something is wrong with your file or media. A file was deleted during opening.	Check file or media (e.g., with Norton Disk Doctor). Check the existence of a file.
<b>Item Non-Existent in the File Version</b>		Restart your computer, if the message appears again call technical support.
<b>DOS Critical Error</b>	A critical DOS error occurred.	Restart your computer and try to identify the DOS problem.



### Caution

---

**After a fatal error, all unsaved data will be lost!**

---

## Messages

Message	Explanation
<b>Host list is empty</b>	If during 'Autodiscovery' operation no OnePrint units were discovered this message will appear.
<b>The OPC and OnePrint versions mismatch! Therefore parameters could only be looked at (Read Only).</b>	If the OnePrint unit and the OPC programs are different versions, the user can only look at the different version parameters. The user cannot perform any button operations, look at history file or change any of the parameters.

### **Good Advice:**

Mentioned earlier in this manual, backing up your data is the simplest and one of best procedures for easing downtime. Once all initial parameters are set and the OnePrint is working properly, keep the OPC-generated configuration file diskette in a secure place as a backup.

### **OnePrint Error Messages Syntax**

Following is the syntax of the OnePrint error messages that appear in the History Logfile:

[DATE][TIME][MESSAGE CATEGORY][IDENTIFIER][MESSAGE]  
[DATE][TIME] must be set correctly on the dedicated PC, before the OnePrint installation.  
[MESSAGE CATEGORY] relates to one of the icons shown below.  
[IDENTIFIER] helps to find the message explanation in this manual

## **Conventions:**

Throughout the OnePrint Error Message listing, “X” denotes the relevant port number.

### **Icon Conventions - OnePrint Error Messages**

These icons represent the four basic types (and severity) of OnePrint error messages



Denotes a *critical fault/fatal error* message



Denotes a *critical fault* for one of the OnePrint services



Denotes a *configuration and external fault*



Denotes a *critical warning* message











Denotes an *obvious message*






Denotes tracing message(s) for troubleshooting by technical support administrator

[A001]		<b>&lt;program&gt;.Attached to shared memory fail</b> Description: Internal error	Product: Port Fails Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
[A002]		<b>&lt;program&gt;internal exec failed err&lt;num&gt;</b> Description: Internal error	Product: Port Fails Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
[E001]		<b>Event Handler MIB error: actID for event &lt;num&gt;, actindex [act] (pid=&lt;num&gt;)</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E002]		<b>Not supported action [a] for event [ev] actIndex [act] (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E003]		<b>Port [x] Missing general NotifyLevel (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E004]		<b>Language Table is not initialized (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E005]		<b>Missing MsgID [m] for event [ev] (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E006]		<b>Missing DumpID [m] for event [ev] (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E007]		<b>Parameter [n] of message [m] event [ev] does not match (pid=[p])</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
[E008]		<b>Error in MIB language variable. English is default.</b> Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.

<b>[E010]</b>		<b>File '[name]' opening failure (lang [I] - retval [rc] - errno [err])</b>  Description: Internal error	Product error displayed incorrectly. <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
<b>[E011]</b>		<b>Error EvCT cleaning</b>  Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
<b>[E012]</b>		<b>Error in [n] EvCT entry setting [...]</b>  Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
<b>[E013]</b>		<b>Port [X] . Missing port NotifyLevel (pid = [p])</b>  Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
<b>[E014]</b>		<b>Port [X] . Missing port NotifyLevel (pid = [p])</b>  Description: Internal error	Product error displayed incorrectly. Report to technical support except if occurs during unit shutdown.
<b>[E015]</b>		<b>Missing replay file name (pid = [p])</b>  Description: Internal error	No Replay File produced. <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
<b>[E016]</b>		<b>Replay file full. New portion discarded</b> Description: Replay file full	Following replay messages lost. Display replay option, if creating replay is not desired. Clean old replay to create new replay. For enlarged replay file, increase replay size.
<b>[E017]</b>		<b>Replay file wrap-around. Old portion discarded</b>  Description: Replay file full	Oldest replay messages lost. Display replay option, if creating replay is not desired. Clean old replay to create new replay. For enlarged replay file, increase replay size.

**[M001]**



<b>[M005]</b>		<b>Port [X]. Not enough memory for the process.</b>	Product: Port starts automatic recovery process
		Description: Internal Error	Operator action if automatic recovery does not help: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
<b>[M006]</b>		<b>Port [X. ]Instead MIB value to ... was assigned default ...</b>	Product: Assigns default value and continues to Operate
		Description: A default value was assigned rather than an illegal value.	Operator Action: If default value is not acceptable — check and repair the configuration file.
<b>[M007]</b>		<b>Port [X]. Cannot open driver/file [Drv/File] error &lt;Err&gt;.</b>	Product Fails Operator Action: <ul style="list-style-type: none"> <li>• Reset</li> <li>• Call Technical Support</li> </ul>
		Description: Internal error	

= [EC]LPD (Peer-2-Peer) onlyDescription

---

[M008]  Port [X].Idle TCP ti  
[TO]

*LPD (Peer-2*  
Description  
TCP idl  
Prod

[M008]  Port [X].Idle TCP ti  
[TO]

**[M009]**  
(Contd)



**Port [x] [ST] returns [Err]  
Starting <num> retries  
([Sec] secs each)**  
<Err> = **-1022** The server  
stopped receiving data sent by  
the port, but TCP connection  
is still alive

**[ST] "Send To Server Name"  
LPD, LPD (Peer-2-Peer)**

"Attempt receive LPD  
acknowledge from  
[ServerName]"

Possible causes: server,  
service or communication  
fault

"Overflow during Data  
sending to [ServerName]"

Possible causes: low server or  
communication throughput

"LPD 'Receive Data File'  
Subcommand [ServerName]"

Cause: spooler of the server  
is full ( Err = -118)

**LPD (Peer-2-Peer) only**

[ServerName] Intervention  
required

[ServerName] off-line

[ServerName] out of paper

[ServerName] paper jam





[ServerName] out of toner

[ServerName] output bin full


Cause: printer is not ready due  
to one of the above reasons

Product: Begins retrying [ST]  
after failure


Operator Action:  
Try to remove the cause of the  
failure.

[M010]		<b>UNIT PROBLEM [ST] error &lt;Err&gt;</b> Description: Internal error <b>[ST]</b> "update MIB before bind" "make_transport to [Server Name]" "send to [Server Name]" "receive from [Server Name]" "pg_alloc driver can't open" "pg_alloc driver can't share" "pg_alloc driver can't destroy" "pg_alloc driver can't detach" "create job on Queue [Print Queue Name]" "Write to job [Job Description]" "close job on Queue [Print Queue Name]"	Product: Port Fails Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Call Technical Support</li> </ul>
[M011]		<b>Port [X]. Transport to [Server Name] is OK!</b> Description: Transport connection with the server is established.	Informative Message
[M011]		<b>Port [X]. Disconnect from [Server Name] is OK!</b> Description: Transport connection with the server is destroyed.	Informative Message
[M012]		<b>Port [x]Queue [QN] of [FS] has no print server</b>  Description: Queue [QN] on the file server [FS] has no currently attached print server, or the queue was halted for printing services.	Product Action: If a special print server is defined in the port profile, the print jobs will not be queued at all. If the print Informative Message server is defined as 'ANY' in the port profile, print jobs from this port will be queued but will not be printed until printing services of the queue are established. Operator Action: Check the printing services state of the queue.


---

**[M013]**  **Port [x] [PQ] of [FS] will not be available. Error 360.** Product continues operation while port [x] is not available.  
Description: The port is not available. [PQ]= Print queue  
[FS]= File server


---

**[M014]**  **Port [X]. Job [JD] is Opened On [FS]: Queue [PQ] # [JN] file [JF]** Informative Message  
Description: A print job is starting, and a job is opened. [JD]=Job description  
[JN]= Job number  
[JF]= Job file  
[PQ]= Print queue  
[FS]= File server

---

**[M015]**  **Port [X]. Job [JD] is Closed On [FS] : Queue [PQ] # [JN] file [JF]** Informative Message  
Description: The processed print job is finished and closed in the queue, ready for printing. [JD]=Job description  
[JN]= Job number  
[JF]= Job file  
[PQ]= Print queue  
[FS]= File server

---

**[M016]** 

[M019]



**Port [X]. NETWORK Problem [ST] error <Err>**

Description: Network action fatal fault  
ST

**NetWare**

"Access denied to [Server Name]"

**Causes:**

<Err> = -278

<Err> = -305 The server does not work properly

<Err> = -302 Login prohibited due to account restrictions

<Err> = -303 Login prohibited due to credit restrictions

<Err> = -322 Product station address is restricted on the server

<Err> = -320 Time of the Product port's user is restricted on the server

<Err> = -324 Account of Product port's user was disabled by the server administrator

<Err> = -326 Password for Product port's user is expired.

"Hardware error in check of queue: [Print Queue Name]"

**Cause:** Hardware error of the server.

"Create job on Queue [Print Queue Name]"

**Cause:** Missing [Print Queue Name] definitions on the server.

"Close job on Queue [Print Queue Name]"

**Causes:** Hardware error of the server;

Not enough room on the spool area of the server (May be disk or volume restrictions).

**LPD, LPD (Peer-2-Peer), SMB, Encapsulated IPDS**

"make\_transport to [Server Name]"

**Causes:** <Err> = -1020 TCP connection request rejected by server;

<Err> = -1050 TCP connection request was not acknowledged during reasonable time period by the server; "rcv\_transport\_data from [Server Name]"

**Cause:** No expected data received from the server during reasonable waiting time.

Product: Port starts automatic recovery process

Operator Action:

- Check state of the file server and/or the network

---

[M020]



**Port [X]. CONFIGURATION MISMATCH: [ST] error <Err>**

Product: Port starts automatic recovery process

Description: The ports assigned to network configuration do not match actual values.

Operator Action:

- Check Product configuration and file server definitions - restart port

**ST  
NetWare**

"Bad password [Server Name]"

**Cause:** Missing user name and/or password.

"Configuration error on queue: [Print Queue Name]"

**Cause:** Missing queue name or user has no write privileges on the queue.

"Create job on Queue [Print Queue Name]"

**Cause:** Missing queue name or user has no write privileges on the queue.

"Close job on Queue [Print Queue Name]"

**Cause:** Missing queue name or user has no write privileges on the queue.

"Write to job [Job Description]"

**Cause:** User has no write privileges on the queue.

**LPD, LPD (Peer-2-Peer), SMB, Encapsulated IPDS**

"make\_transport to [Server Name]"

**Causes:** Mismatch of Server Name or IP Address; Missing Printing system; The server currently does not support the requested service.

---

**[M021]**



**Port [X]. TEMPORARY PROBLEM: [ST] error <Err>**

Description: Temporary network fault after retries.  
ST

NetWare

"Can't add jobs to queue: [Print Queue Name]"

"Temporary error in service of queue: [Print Queue Name]"

"Create job on Queue [Print Queue Name]"

"Close job on Queue [Print Queue Name]"

Causes: The queue has no entry available;

Not enough room on the spool area of the server (May be disk or volume restrictions);

The queue is halted;

The queue is not allowed to serve print jobs;

LPD, LPD (Peer-2-Peer), SMB, Encapsulated IPDS

"send to [Server Name]"

Cause: <Err> = -1022 The server stopped receiving data sent by the port, but TCP connection is still alive.

"[Printer Name] printer queue is full"

Cause: Not enough resources on [Printer Name] spooler.

Product: Port starts automatic recovery process

Operator Action:

Cancel the cause of your fault, try to restart port.

---

**[M022]**



**Port [X]. JOB Problem [TS] error <Err>**

Description: Port cannot continue adding to the job because of some problem with the print job file.

Product: Port starts automatic recovery process

Operator Action: If automatic recovery does not help restart port.

[M023]



**Port [X]. BIND PROBLEM  
[ST] error <Err>**

Description: Port has problems trying to [ST] to/from the File Server.

**ST**

**NetWare**

"Bind problem in check of queue: [Print Queue Name]"

"Create job on Queue [Print Queue Name]"

"Close job on Queue [Print Queue Name]"

**Cause:** Connection with the server was destroyed during the operation.

**LPD, LPD (Peer-2-Peer),  
SMB, IPDS Encapsulated**

"make\_transport to [Server Name]"

**Cause:** Unexpected event occurred during TCP connection establishing.

"receive from [Server Name]"

"send to [Server Name]"

**Cause:** TCP connection was destroyed during data transmission by unknown reason.

Product: Port starts automatic recovery process

Operator Action:

- 1) Check the state of the server.
- 2) Check that all physical and logical connections to the LAN are OK. Use a PC to check that login, attach and print via Product's entities on servers are accessible.
- 3) Restart ports.

[M024]



**Port [X]. Broadcast message from server [FS]: <num>**

**Description:** Received broadcast message from NetWare

FS — File Server

M — Message

Product: Writes the received broadcast message into the History Logfile

If M = "Can't be obtained because connection was lost", check connection and login state of the file server and port.







[M026]


















**Port X. ... started**









Description: Port session is starting.









Informative Message









[M027]		<b>Port [X]. MIB data ... is changed or is not valid anymore</b>	<p>Product: Continues to operate, but with possible port failure</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Check connection with file server of the port</li> <li>• Restart the port if needed</li> <li>• Only for Version 1.9X</li> </ul>
[M028]		<b>PORT [X].PROCESS PROBLEM: [ST]error [Err]</b>	<p>Informative Message</p> <p>Product action: Try to restart service/port</p> <p>Operator action</p> <ul style="list-style-type: none"> <li>• restart port / Product</li> <li>• call technical support</li> </ul>
[M029]		<p><b>Stack [nc]. Token Ring parameters are: ...</b></p> <p>Description: Token Ring parameter report</p> <p>nc: NETWARE/TR SNA/TR</p>	Informative Message
[M030]		<b>Building streams for stack SNA/TR started</b>	Informative Message
[M031]		<p><b>Error executing download command for stack NETWARE/TR, error&lt;err&gt;</b></p> <p>Description: Error executing stack download command.</p>	<p>Product: Stops working Only for version 1.9X.</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M032]		<p><b>Command ... (args: ...) for Building Stack NETWARE/TR started</b></p> <p>Description: Stack building command started.</p>	<p>Informative Message Only for version 1.9X.</p>










[M033]		<b>Can't perform &lt;a&gt; for stack (driver) &lt;drv&gt;, error &lt;err&gt;</b> Description: Internal error	Port fails <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
[M034]		<b>Port [x] . [...]= [...]</b> Description: Internal value	Continue work <ul style="list-style-type: none"> <li>• Check value is correct</li> </ul>
[M035]		<b>Unknown command ... for Building Stack NETWARE/TR</b> Description: internal error	Product: Stops working Only for version 1.9X.  Operator Action: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Reload Product from the diskettes</li> <li>• Call Technical Support</li> </ul>
[M036]		<b>Port [X]. Bad Argument: [...]</b> = ... Description: Internal error	Product: Restarts and begins automatic recovery process  Operator Action: <ul style="list-style-type: none"> <li>• Try to restart the Port and/or Product</li> <li>• Call Technical Support</li> </ul>
[M037]		<b>Port X. Can't get qid, key [k], error [err]</b> Description: Internal error	Port fails <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact technical support</li> </ul>
[M038]		<b>Port [X]. Can't open Job in network - automatic retry</b> Description: The port could not open a Job in Novell.	Informative Message  Operator Action: <ul style="list-style-type: none"> <li>• Check sense code in earlier messages and act accordingly (Consult Novell's manual)</li> </ul>
[M038]		<b>Port [X]. Internal error: Failure in MIB-PC-Set ... ,Fatal error - Exiting</b> Description: Internal error	Product: Port Fails <ul style="list-style-type: none"> <li>• Reset</li> <li>• Call Technical Support</li> </ul>
[M038]		<b>Port [X]. Internal error: Failure in MIB-PC-Get ... ,Fatal Error - Exiting</b> Description: Internal error	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Restart Unit</li> </ul>







[M038]	 <b>Port [X]. Fail in Wait Awakening , Fatal Error - Exiting</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Reset</li> <li>• Call Technical Support</li> </ul>
[M038]	 <b>Port [X]. Internal Error: Printer is Zero - Exiting</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Check, repair, reload configuration file</li> <li>• Restart the Product</li> </ul>
[M038]	 <b>Port [X]. Internal Error: LUPID Is Zero - Exiting</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Check, repair, reload configuration file</li> <li>• Restart the Product</li> </ul>
[M038]	 <b>Port [X]. Internal Error: Invalid Switch - Program Error</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Restart Port</li> </ul>
[M038]	 <b>Port [X]. Logic Error - Reached Open Without Being Bound: Shutting down</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Restart LU</li> <li>• Reset Product</li> </ul>
[M038]	 <b>Port [X]. LU Aborted By Signal [type - ...]</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Restart Port</li> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M038]	 <b>Port [X]. Sending Message to Queue Fail, Error ...</b>	Product: Port Fails  Operator Action: <ul style="list-style-type: none"> <li>• Restart Port</li> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M038]	<b>Port [X]. Rcvd Msg From Unknown Source; Msg Discarded</b>	Operator Action: None
	Description: Internal error	

[M038]		<b>Port [X]. Unable to Recover - LU Will Now Exit</b>	Product: LU process is Shutting down
		Description: LAN problem has caused automatic recovery process that is unable to overcome the problem.	
[M038]		<b>System Error: System Error Number Out Of Range ... OR System Function Error [Function Name] [Description]</b>	Product: Specified Port Fails  Operator Action: • Restart the port and start with the same logmode as the OPC
		Description: Internal error	
[M038]		<b>Port [X]. HOST Config: [c]</b>	Informative Message
		[c] - Configuration parameters for Product to Host communication.	
[M038]		<b>Port [X]. LU Entering Off-Line</b>	Product: port going off-line No data processing until online.
		Description: Port is in off-line mode.	
[M038]		<b>Port [X]. LU Exit - Function Hex Codes: ...</b>	Product: Port Shutting down  Operator Action: • Restart LU • Reboot Product • Call Technical Support
		Description: Port fails. Internal codes	
[M038]		<b>Port [X]. LU Exiting Off-Line</b>	Product: Going Online Again
		Description: Port is going On-Line	
[M038]		<b>Port [X]. LU: NOT CONFIGURED</b>	Informative Message
		Description: No configuration information for this port.	
[M038]		<b>Port [X]. LU - Ready For Session</b>	Informative Message
		Description: LU process is initialized and waiting for host Bind command.	

[M038]		<b>Port [X]. LU Execution Terminated</b>	Informative Message
Description: LU process is actually down.			
[M038]		<b>Port [X]. Ready for Printing. BIND Type is [IPDS/Non-IPDS].</b>	Informative Message
Description: Port has received IPDS BIND command from the host and is waiting for a job.			
[M038]		<b>Port [X]. This version Does Not Support IPDS!</b>	Informative Message
Description: Informative Message			
[M038]		<b>Port [X]. [Process Name]: Going Up</b>	Informative Message
Description: Process is going up			
[M038]		<b>Port [X]. Automatic Recovery - WRITE to Network Successful</b>	Informative Message
Description: Automatic recovery has succeeded to write to the network.			
[M038]		<b>Port [X]. Automatic Recovery - Job Open Successful</b>	Informative Message
Description: Automatic recovery has succeeded to Open Job to the network.			
[M038]		<b>Port [X]. Automatic Recovery - Network BINDING Successful</b>	Informative Message
Description: Automatic recovery succeeded in Network binding.			
[M038]		<b>Port [X]. Can't WRITE to Network - Automatic Retry</b>	Informative Message
Description: The port was not able to write to the network.			

<b>[M038]</b>		<b>Port [X]. Can't Get QID, Key ..., Error ...</b>	Product: Port Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Activate the Port</li> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
<b>[M038]</b>		<b>Port [X]. Configuration Error: Printer Does Not Match Emulation</b>	Action: <ul style="list-style-type: none"> <li>• Output will be in HP LaserJet III data stream format</li> </ul>
		Description: Emulation type is either 3812 or 4028 and the target printer differs from a laser printer.	
<b>[M038]</b>		<b>Port [X]. in Job Close Failure - Error Code: &lt;x&gt;</b>	Product lost this job.
		Description: The Port was not able to close a file on the network.	Operator Action: <ul style="list-style-type: none"> <li>• Resend the job</li> <li>• Check for LAN problems</li> </ul>
<b>[M038]</b>		<b>Port [X]. Internal Error: Failure Entering Off-Line - Off-Line Operation Ignored</b>	Operator Action: None
		Description: Internal Error	
<b>[M041]</b>		<b>Port [X]. Sending message to q [n] fail, error [err].</b>	Port Fails <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact Technical Support</li> </ul>
		Description: Internal error	
<b>[M041]</b>		<b>Port [X]. Receiving message to q [n] fail, error [err].</b>	Port Fails <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Contact Technical Support</li> </ul>
		Description: Internal error	
<b>[M042]</b>		<b>Port [X]. [Process Name] Terminated. Signal (Exit Code) ...</b>	Informative Message Operator Action: <ol style="list-style-type: none"> <li>1) If process terminated abnormally during shutdown — ignore it.</li> <li>2) If process terminated abnormally while operating, try to restart Port(X=1-32) and/or the Product (X&gt;32).</li> <li>3) If message consistently reappears — contact Technical Support.</li> </ol>
		Description: If exit code=0, process terminated properly, otherwise process terminated abnormally.	
<b>[M045]</b>		<b>Port [X]. [RN] For ... ([C]) Failed, Error &lt;err&gt;</b>	Product: Port Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Activate Port</li> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>

[M047]		<b>Port [X]. Can't Get SDLC Rev Buffer</b>	Product: Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M049]		<b>Port [X]. Session With [Server] Is Lost. SNA Server received signal [s]</b>	Product: Process Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M050]		<b>Port [X]. Bad Message Type Of [t] Received From SNA</b>	Product: Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M051]		<b>Port [X]. Unbind Session Called By</b>	Informative Message
		Description: Unbind session called by ID	
[M052]		<b>Port [X]. SDLCQ Shutdown Entry ..., id ...</b>	Product: Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>If not in shutdown, restart Product.</li> </ul>
[M055]		<b>SCP JOURNAL: ...</b>	Product: Fails
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Restart Product</li> <li>• Call Technical Support</li> </ul>
[M063]		<b>HOST Connection Initialization Is OK!</b>	Informative Message
		Description: Action is performed OK (no Port)	
[M063]		<b>SNA Protocol Stack is OK!</b>	Informative Message
		Description: action performed OK (no Port). The building of SNA stacks layers has succeeded.	
[M063]		<b>NetWare Protocol Stack is OK</b>	Informative Message Only for version 1.9X
		Description: Protocol stack for NetWare communications was built correctly and checked.	

<b>[M064]</b>		<b>Product NW/IPX Net Address:</b> ... Description: Physical IPX Net number of Product. Note — This is NOT the configured internal IPX net address.	Informative Message Only for version 1.9X
<b>[M064]</b>		<b>[T] Channel for SNMP Management: is Ready</b>  Description: Product is ready for remote management from specific channel. [T] is either IPX or UDP/IP	Informative Message Specific channel [T] is either IPX or UDP/IP.
<b>[M064]</b>		<b>[T]Channel for SNMP Management: is Closed</b>  Description: Product end remote management for specific channel [T] is either IPX or UDP/IP.	Informative Message
<b>[M064]</b>		<b>Unit Manager:...</b>  Description: Problem is setting configuration for strategic parameters	Ignore some configuration settings. <ul style="list-style-type: none"> <li>• Rewrite configuration file without problem setting</li> </ul>
<b>[M064]</b>		<b>Unit Manager(Configuration Check):...</b>  Description: Problem is setting configuration for strategic parameters.	Ignore some configuration settings. <ul style="list-style-type: none"> <li>• Rewrite configuration file without problem setting</li> </ul>
<b>[M064]</b>		<b>Unit Manager: Invalid Argument</b>  Description: Internal error	Informative message <ul style="list-style-type: none"> <li>• Reset product</li> <li>• Contact technical support</li> </ul>

[M067]



**Unit Manager Receive Message Failure ( Error <err>)**

Description: Product manager failed to receive message.

Product: Shutting down

Operator Action:

- Reset Product
- Call Technical Support

[M068]



**Unit Manager Send Message Failure (Error <err>)**

Description: Product manager failed to send message

Product: Shutting down

Operator Action:

- Reset Product
- Call Technical Support

[M069]

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[M075]



**Unit Manager: Signal not sent to [a] because [p] is not alive**

Description: The [a] operation will be ignored  
[a] - Off-line

The [a] Operation Will Not Be Serviced.

Operator Action:

Send Off - line only if the port is up.

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[M076]



**OP Manager Received Continuation Signal**

Description: Warm up will continue after another process ends its initialization.

Product: Continued Warm Up

[M077]



**Product removed** • Product s/  
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Local Support






Operating system message:...

[M103]		<p><b>Port [X]. SMB: Session Request Failed &lt;Error&gt;, &lt;Error2&gt; With Myname=[Name1] Destname=[Name2]"</b>  Severity: Service critical.  Description: Session request to server [Name2] from Product [Name1] failed.  Product Action: Try to repeat this request or restart Port.  Error 2 is explained in next message.</p>	<p>Operator Action: Test server [Name2] and its definitions in [Name1].  Error1 is only for tech. Support--  Call tech. support.</p>
[M104]		<p><b>Port [X]. SMB: Not Listening [ST] Name</b>  Description: This message is a continuation of M103  &lt;Error2&gt; = 0x80 - ST= "on called" ([Name2]);  &lt;Error2&gt; = 0x81- ST= "for calling" ([Name1]).</p>	Informative message
[M105]		<p><b>Port [X]. SMB: Called name [ST] not present .</b>  Description: This message s a continuation of M103:  [Error2] = 0x80 - ST= "on called" ([Name2]);  [Error2] = 0x81- ST= "for calling" ([Name1]).</p>	Informative message
[M106]		<p><b>Port [X]. SMB: Unspecified Error &lt;Error2&gt;</b>  Description: This message is a continuation of M103: [Error2] = 0x8f.</p>	Informative message
[M107]		<p><b>Port [X]. SMB: Protocol Negotiation Failed- [ST]</b>  Description: Product is incompatible with SMB server.</p>	<p>Product Action: LU exit  Operator Action:  • Call Technical Support</p>
[M108]		<p><b>Port [X]. SMB: Session Setup Failed- [ST]</b>  Description: Product failed to login to SMB server.</p>	<p>Product Action: Restart Port  Operator Action: Test SMB server and its definition in Product.  • Call Technical Support</p>

[M110]		<b>Port [X]. Printer [Name]([Type]) Isn't Available (Error - &lt;Error&gt;)</b>	Product Action: Restart Port
		Description: Printer is not available Name - server and printer names. Type - Type of the server.	Operator Action: Test the server [Name] and its definition in Product.  Restart Port.
[M111]		<b>Port [X]. Printer [Name]([Type]) Is Accessible; Max_Xmit=[len]</b>	Product action: Continue to work
		Description: Printer is Available. Name - server and printer names. Type - Type of server. len - Negotiated with the server Max Packet length.	
[M112]		<b>[M112] Port [X]. [Type]: There Is Not Enough Memory; New Max_Xmit=[len]</b>	Product Action: Continue to work
		Description: Not enough memory available for supporting packet length negotiation. Type - Type of the server. len - Max Packet length, which Product can support.	
[M113]		<b>Port [X]. SMB: Disconnection With Printer [Name] - [Result]: [ST]</b>	Product Action: If [Result] = 'OK', Product continues to work, or restart Port
		Description: Product disconnected from printer  Name - server and printer names. Result - "ok" or "failed", failed for unsuccessful disconnection operation. ST - error explanation, if failed.	Operator Action: If [Result]= 'failed', restarts port.

<b>[M114]</b>		<b>Port [X]. SMB: Open job For [JobD](Copy [Num]) - Failed: [ST]</b>	Product Action: Restart Port
Description: Job open failure			
JobD - job description Num - Copy number ST - error explanation			
<b>[M115]</b>		<b>Port [X]. SMB: Close for [Num] Copy(Base Name-[JobD]) On [Name] - Fail: [ST]</b>	Product Action: Restart Port
Description: Job select failure Name - server and printer names JobD - job description Num - Copy number ST - error explanation			
<b>[M116]</b>		<b>Port [X]. SMB: Write For [Num] Copy(Base Name-[JobD]) On Printer [Name] - Failed: [ST]</b>	Product Action: Restart Port
Description: Job write failure Name - server and printer names. JobD - job description Num - Copy number ST - error explanation			
<b>[M119]</b>		<b>Port [X]. SMB: Received Invalid Packet; Length = [Len]</b>	Product Action: Restart Port
Description: Received packet lengths from SMB server is invalid.			
Len - wrong length of received packet.			
<b>[M123]</b>		<b>Port [X]. Local Printer [num] Is Busy</b>	Product Action: Retry for some time, and after that try restart Port Operator
Description: Printer not available Num - Printer name			

[M124]		<b>Port [X]. Open Job On Local Printer [Na] - [ST]; Error- &lt;err&gt;</b>	Product Action: Restart Port
		Description: Job open failure [n] - printer name err-Operating System I/O	
		error code.	
[M125]		<b>Port [X]. Lock Local Printer [Name] - Failed: &lt;Error&gt; .</b>	Product Action: Restart Port
		Description: Operation failure Name - Printer name. Error -Operating System I/O erno code.	
[M126]		<b>Port [X]. Control Serial Printer [Name] - Failed: &lt;Error&gt;</b>	Product Action: Restart Port
		Description: Operation failure	
		Name - Printer name. Error -Operating System I/O erno code.	
[M127]		<b>Port [X]. Write to Local Printer [Name] - Failed: &lt;Error&gt;</b>	Product Action: Restart Port
		Description: Operation failure	
		Name - Printer name. Error - Operating System I/O erno code .	
[M128]		<b>Port [X]. Unlock Local Printer [Name] - Failed: &lt;Error&gt;</b>	Product Action: Restart Port
		Description: Operation failure Name - Printer name. Error - Operating SystemI/O erno code.	
[M129]		<b>Port [X]. Close Job On Local Printer [Name] - [ST]; Error- &lt;Error&gt;</b>	Product Action: Product is still up and running
		Description: Job closed	If error is not 0 printing can be lost.

[M130]		<b>OS rebuild required. This will take a few minutes.</b> Description: Job closed	Product Action: Product is still up and running  If error is not 0 printing can be lost.
[M131]		<b>OS rebuilt successfully</b> Description: A strategic configuration parameter was changed	Informative message
[M132]		<b>OS failed to rebuild. Change card parameters and rerun. Error=&lt;num&gt;.</b>  Description: A strategic configuration parameter was changed and can not be integrated.	Product shut down Operator Actions: <ul style="list-style-type: none"> <li>• Check card parameters in OPC</li> <li>• Check card parameters in monitor</li> <li>• Change bad parameters accordingly</li> <li>• Reset product</li> <li>• Call technical support</li> </ul>
[M133]		<b>Unit Manager: Conf MAJOR change detected but reboot limit exceeded</b>  Description: A strategic configuration parameter was changed and can not be integrated.	Product shut down Operator Actions: <ul style="list-style-type: none"> <li>• Reset product</li> <li>• Call technical support</li> </ul>
[M137]		<b>Port [X] Server [SN] Service [SR] - Resolved Port. Address: [RA]</b>  Description: Product resolved the IP or IPX address([RA]) of the Server [SN] and service [SR]. Note: If message doesn't appear after starting port Product can't find the requested server. Try to find out the server accessibility using the "Check Servers" option of the Console Monitor either in "NETWARE Communication" or in "INET Communication".	Informative Message

[M138]



**Port [X].File [FN] Of The Job [JD] Is Sent To [PR] Server [SN]**

Informative Message

***LPD, LPD (Peer-2-Peer) only***

Description : Port successfully sent the job [JD], usually one page, to printer/print queue [PR] of the server [SN].

Note: If using LPD server spooling, file [FN] was spooled in the spool directory.

[M139]



**Port [X].No Acknowledge Received To [ST],Queue [PR],Server [SN]**

Product: Port starts automatic recovery process

***LPD, LPD (Peer-2-Peer) only***

Description : No mandatory LPD protocol acknowledge was received from server [SN] (printer [PR]) during reasonable waiting time.

[ST]

"Receive Print Job Command"

"Receive Data File Subcommand"

"[Data File Name]"

"Receive Control File Subcommand"

"[Control File Name]"

Operator Action:

Check the server and/or communication state.

[M146]



**Port [X].Disconnect Acknowledge Not Received From [SN]**

Product: Port aborts the TCP connection

***LPD, LPD (Peer-2-Peer), SMB, Encapsulated IPDS***

Description : Product port tried to disconnect from the server, but no acknowledge received.

Operator Action:

Check the server and/or communication state.

[M147]

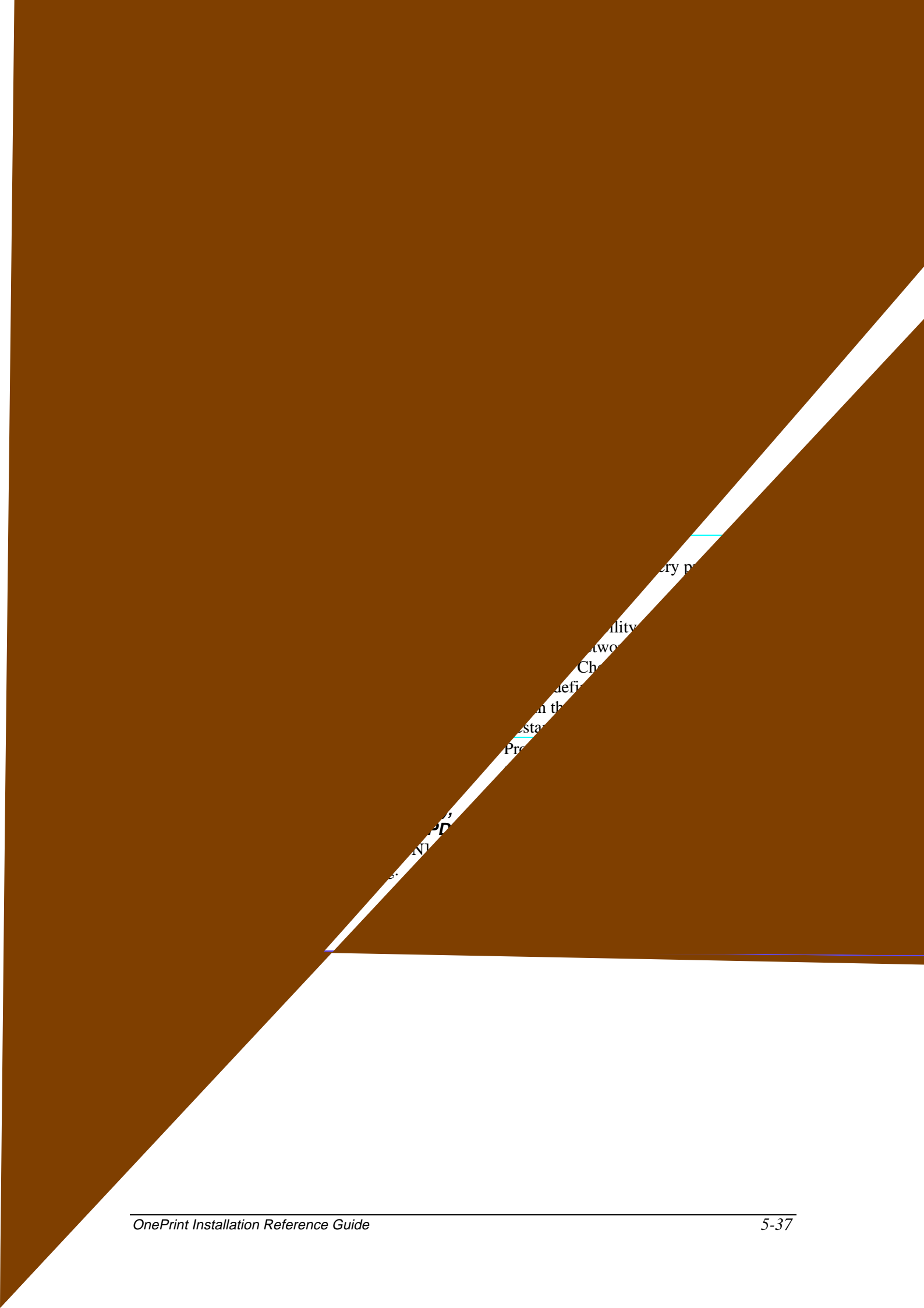







**Port [X] .Connection With Server [SN] Is Established**






Informative Message








***LPD, LPD (Peer-2-Peer ), SMB, Encapsulated IPDS***







Description : TCP connection to the server [SN] is established.












[M164]		<p><b>Port [X].[SN] Application Not Responding!</b></p> <p><b>LPD, LPD (Peer-2-Peer), SMB, Encapsulated IPDS</b></p> <p>Description: Server [SN] does respond on ping; but Product does not receive any response from service.</p>	<p>Product: Starts automatic retries and recovery process</p> <p>Operator Action: Check accessibility of the service on the server [SN]. Check server type definition of OPC configuration.</p>
[M164]		<p><b>Port [X].Supplemental Information About [PR] [SN]: [Text]</b></p> <p>Description: [Text] is the server dependent supplemental information about both server [SN] and Printer/print queue [PQ].</p> <p>LPD (Peer-2-Peer) [Text] is system description of JetDirect card.</p> <p>Not receiving this information indicates possible problems with JetDirect server and/or communication.</p> <p>Other Printing Systems: Supplemental information is not supported at this stage.</p>	Informative message
[M165]		<p><b>Unit Manager failed to fork itself, return &lt;num&gt;</b></p> <p>Description: Internal error.</p>	<p>Product shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Call technical support</li> </ul>
[M166]		<p><b>Unit Manager : Configuration MAJOR change detected . Reboot performed</b></p> <p>Description: A strategic configuration parameter was changed.</p>	Informative message
[M167]		<p><b>Unit Manager: Update &lt;part&gt; system files failed (error &lt;num&gt;)</b></p> <p>Description: A strategic configuration parameter was changed and can not be integrated.</p>	<p>Product shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Check card parameters in OPC</li> <li>• Check card parameters in monitor</li> <li>• Change bad parameters accordingly</li> <li>• Reset product</li> <li>• Call technical support</li> </ul>

[M169]		<b>Port X. Supplemental information about...</b> Description: Supplemental information	Informative message
[M171]		<b>Port [X].Printer [PR] [SN] [LS]-Line,Panel: '[PText]',Status - [Stext]</b>  <b>LPD (Peer-2-Peer) only</b> Description: [LS] is line status (on/off/?). [PText] is the text from the printer panel. [SText] is the status of server [SN] printer [PR]. At troubleshooting level this message indicates a proper work of printer and server. At Warning level it indicates printing process problems due to printer/server state and holds needed information.	Product: Starts automatic recovery process  Operator Action: Remove cause of the Printer problem.
[M172]		<b>Remote SNMP Agent normally terminated</b>  Description:SNMP operate shutdown.	Informative message
[M173]		<b>Remote SNMP Agent problem (Signal &lt;num&gt;). Automatic reset</b>  Description: SNMP operation is non-functional.	Automatic recovery Operator Action: <ul style="list-style-type: none"> <li>• If problem occurs too many times, report to technical support</li> </ul>
[M175]		<b>Port X.:...Job is spooled on [S] queue or printed</b>  Description: Regular job processing message.	Informative message

[UM01]		<b>Unit is Up</b> Description: Product session first message	Informative Message
[UM02]		Description: Internal error	Product: shuts down  Operator Action: • Reset Product • Call Technical Support
[UM03]		<b>LU Fonts Loading Failure (Error &lt;Num&gt;)</b> Description: Internal Error	Product: Shuts down  Operator Action: • Reset Product • Call Technical Support
[UM04]		<b>Bad Formatted Version, rc&lt;num&gt; ,errno &lt;num&gt;</b> Description: Version information not available	Product: Shuts down  Operator Action: • Reset Product • Reload the Product diskettes and run the Integrity Check • Ensure that Product is loaded from good working diskettes • Call Technical Support
[UM05]		<b>ProductVersion &lt;string&gt;</b> Description: Product software Version identification	Informative Message  Operator Action: • If the version displayed differs from the version desired use correct version. •
[UM06]		<b>Bad Formatted Plug Description, rc&lt;num&gt;, errno &lt;num&gt;</b> Description: Internal error	Product: Shuts down  Operator Action: • Reset Product • Reload the Product diskettes and run the Integrity Check • Ensure that Product is loaded from good working diskettes • Call Technical Support
[UM07]		<b>Bad Formatted Identity Plug; rc=... errno=...</b> Description: Product Identity Plug faulty or damaged.	Product: Shutting down  Operator Action: • Reset Product • Ensure that the Identity Plug is not faulty

[UM07]		<b>Missing or Destroyed Identity Plug; rc&lt;num&gt; errno &lt;num&gt;...</b>	<p>Product: Shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Ensure that identity plug is connected to proper port</li> <li>• Ensure that proper port is defined in the PC's setup</li> <li>• Verify that COM port is okay using a DOS-based utility</li> </ul> <p>Repair if needed</p> <ul style="list-style-type: none"> <li>• Ensure that identity plug is not faulty</li> <li>• Replace plug if necessary</li> </ul>
[UM08]		<b>Bad Formatted Identity Plug Description, rc&lt;num&gt;, errno &lt;num&gt;</b>	<p>Product: Shuts down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Ensure that identity plug is not faulty</li> <li>• Replace plug if necessary</li> </ul>
[UM10]		<b>Product Model&lt;model&gt; ; S/N&lt;string&gt;</b>	<p>Informative Message</p> <p>Operator Action:</p> <p>Replace plug if model differs from acquired model</p>
[UM11]		<b>EV load EvCT return ...</b> Description: Internal error	<p>Product: Shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>
[UM12]		<b>Vendor File Opening Failure, Errno&lt;num&gt;</b> Description: Internal error	<p>Product: Shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>
[UM13]		<b>Invalid Call to &lt;func&gt; &lt;num&gt;</b> Description: Internal error	<p>Product: Shut down</p> <p>Operator Action:</p> <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>

<b>[UM14]</b>		<b>Missing or Badly Formatted Configuration File</b>	Product: Shut down
		Description: Configuration file not loaded or corrupted.	Operator Action: <ul style="list-style-type: none"> <li>• Check that the product configuration file matches version in use</li> <li>• Reload configuration file (without errors in loading) and reboot</li> <li>• Rebuild configuration file and reboot</li> <li>• Build a new configuration file with default values and reboot---If reboot is okay modify default file in you site's configuration by setting parameters sequentially until problem is detected and fixed</li> <li>• Reload product diskettes and run integrity check</li> <li>• Call technical support</li> </ul>
<b>[UM15]</b>		<b>Conflicting OID in Configuration File</b>	Product: Shuts down
		Description: Configuration file corrupted	Operator Action: <ul style="list-style-type: none"> <li>• Ensure that the product configuration file matches version in use</li> <li>• Reload configuration file (without errors in loading) and reboot</li> <li>• Rebuild configuration file and reboot</li> <li>• Build a new configuration file with default values and reboot. If reboot is okay modify default file in you site's configuration by setting parameters sequentially until problem is detected and fixed</li> <li>• Reload product diskettes and run integrity check</li> <li>• Call technical support</li> </ul>
<b>[UM16]</b>		<b>Unit Manager Received Signal &lt;num&gt;</b>	Product: Shuts down
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Call Technical Support</li> </ul>
<b>[UM17]</b>		<b>Shutdown In Process</b>	Product: Shuts down
		Description: Product begins a shutdown process. All links are disconnected.	

<b>[UM18]</b>		<b>Shut down process complete</b>	Informative Message
		Description: Last message for product session after shutdown is completed.	
<b>[UM19]</b>		<b>Unit Manager Fails To Abort. Process&lt;num&gt;</b>	Product: Shut down
		Description: Internal Error	
<b>[UM20]</b>		<b>Configuration File</b>	Informative Message
		Description: Product reads the configuration file.	
<b>[UM21]</b>		<b>File Format Compatible</b>	Informative Message
		Description: Confirmation of configuration file in correct format.	
<b>[UM22]</b>		<b>Missing Reference OS version (&lt;func&gt; error &lt;num&gt;)</b>	Product: Shuts Down
		Description: Internal Error	Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>
<b>[UM23]</b>		<b>Missing running OS version, (&lt;num&gt;)</b>	Product: Shuts Down
		Description: Internal Error	Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>
<b>[UM24]</b>		<b>Incompatible running OS version</b>	Product: Shuts Down
		Description: Internal error	Operator Action: <ul style="list-style-type: none"> <li>• Reset Product</li> <li>• Reload product diskettes and run integrity check</li> <li>• Ensure that software is fully loaded</li> <li>• Call technical support</li> </ul>

[UM25]



**Missing software version**  
, (<func> error <num>)

Product: Shuts Down

Description: Internal error

Operator Action:

- Reset Product
- Reload product diskettes and run integrity check
- Ensure that software is fully loaded
- Call technical support

The following table lists OnePrint Message Errors ([Err] codes):

<b>OnePrint Message Errors</b>	
-1	OTHER ERROR
104	NETWORK TEMPORARY ERROR
113	NOT ENOUGH MEMORY
182	DIRECTORY FULL
201	CAN NOT SEND REQUEST
202	NO REPLY FROM FILE SERVER
202	MISSING GET LENGTH
204	MISSING GET DATA LENGTH
205	MISSING PUT LENGTH
206	PUT ERROR
207	GET ERROR
208	BAD DRV HANDLE
209	BAD PUT PARMS
210	BAD GET PARMS
211	QUEUE FULL
212	NOT CONNECT ACK
213	BIND PROBLEM IN QUEUE CHECK
214	NOT SERVICE REPLY
215	QUEUE SERVICING
216	SERVER CANNOT SERVICE QUEUE
217	QUEUE NOT ACTIVE
220	CONNECTION WITH SERVER WAS LOST
221	QUEUE HALTED
225	SERVER IS DOWN
226	BAD CONNECTION IN REQUEST
227	SERVER HAS NO CONNECTION AVAILABLE
228	NCP DRIVER BAD STATE
254	SERVER IN USE
264	INVALID FILE HANDLE
277	SERVER HAS NO CONNECTION AVAILABLE
278	SERVER OUT OF MEMORY
282	DIRECTORY FULL
291	LOCK ERROR
302	NO ACCOUNT BALANCE
303	NO CREDIT
305	INTRUDER DETECTION LOCK
307	QUEUE ERROR
308	NO QUEUE

<b>OnePrint Message Errors</b>	
309	NO QUEUE SERVER
310	NO QUEUE RIGHTS
311	QUEUE FULL
312	NO QUEUE JOB
313	NO JOB RIGHTS
315	QUEUE SERVICING
317	QUEUE NOT ACTIVE
318	NO CONNECTION
319	STATION NOT SERVER
320	UNAUTHORIZED LOGIN TIME
321	QUEUE HALTED
322	UNAUTHORIZED LOGIN STATION
323	MAX QUEUE SERVERS
324	ACCOUNT DISABLED
325	BAD PASSWORD
326	PASSWORD HAS EXPIRED
330	NO SUCH MEMBER
331	BAD STATION NUMBER
331	NOT GROUP PROPERTY
332	NO SUCH SET
335	ILLEGAL NAME
336	WILD CARD NOT ALLOWED
355	NO SUCH PROPERTY
360	NO SUCH OBJECT
367	DIRECTORY LOCKED
374	SUPERVISOR HAS DISABLED LOGIN
385	HARD FAILURE
389	IO BOUND ERROR
401	UNLOCK ERROR
402	FAILURE
403	BIND PROBLEM CLOSE/OPEN JOB ON QUEUE
628	NO CONFIG DATA
740	EMULITHOP
801	PG STATE BROKEN
805	CANNOT OPEN STREAM
806	CANNOT LINK STREAM
807	CANNOT PUSH STREAM
809	CANNOT CONFIGURE STREAM
1000	TRANSPORT EVENT
1001	MISSING RETURNED ADDRESS TRANSPORT EVENT
1002	NOT SUPPORTED MODE TRANSPORT EVENT
1003	UNDETECTED PROVIDER FAULT TRANSPORT EVENT
1004	STRUCTURE NOT ALLOWED TRANSPORT EVENT
1005	UNDETECTED SYSTEM FAULT TRANSPORT EVENT
1006	BAD DATA TRANSPORT EVENT
1007	CANNOT ALLOCATE ADDRESS TRANSPORT EVENT
1008	NO PERMISSION TRANSPORT EVENT

<b>OnePrint Message Errors</b>	
1009	ADDRESS BUSY TRANSPORT EVENT
1010	BAD REQUESTED ADDRESS TRANSPORT EVENT
1011	CONNECTION NOT ESTABLISHED TRANSPORT EVENT
1012	CONNECTED ADDRESS NOT RECEIVED TRANSPORT EVENT
1013	PROTOCOL OPTIONS NOT RECEIVED TRANSPORT EVENT
1014	EXPEDITED DATA NOT SUPPORTED TRANSPORT EVENT
1015	DISCONNECT FAILED TRANSPORT EVENT
1016	RECEIVE NOT COMPLETE TRANSPORT EVENT
1017	BAD PROTOCOL OPTIONS TRANSPORT EVENT
1018	BAD CONNECT DATA TRANSPORT EVENT
1019	OUT OF STATE TRANSPORT EVENT
1020	CONNECT RELEASE RECEIVED TRANSPORT EVENT
1021	DISCONNECT RECEIVED TRANSPORT EVENT
1022	TOO MANY DATA TRANSPORT EVENT
1023	CONNECTION DESTROYED TRANSPORT EVENT
1024	SERVICE TYPE NOT SUPPORTED TRANSPORT EVENT
1025	FREE FAILED TRANSPORT EVENT
1026	NO DISCONNECT ACKNOWLEDGE TRANSPORT EVENT
1027	DISCONNECT DATA NOT SENT TRANSPORT EVENT
1028	BAD SEQUENCE TRANSPORT EVENT
1029	BAD FHANDLE TRANSPORT EVENT
1030	DATA OBTAINED TRANSPORT EVENT
1031	Hostname was not resolvable
1032	Service was unknown
1033	Couldn't resolve symbol
1034	File couldn't be opened
1035	File is not accessible
1036	Unknown object to be freed
1037	Unknown option passed to netdir options
1038	Option failed in netdir options
1039	Other System error
1040	No memory for error variable
1041	No library in netconfig list was found
1042	An xti call failed; check get t errno
1043	Incorrect state to attempt t bind
1050	TIME EXPIRED TRANSPORT EVENT

## OnePrint Host Setup Error Messages

These are *Host Setup* messages output by the printer(s) when an error occurs in the OnePrint Host Setup. They provide differentiation between those errors resulting from a mistake in the initial Host Setup, or those generated from reconfiguration commands passed from the Host to OnePrint.

<b>Error Messages</b>	<b>Description</b>	<b>Action</b>
[MNE] Illegal Mnemonic	[MNE] is an illegal mnemonic.	See the user manual for the correct mnemonic.
Too Many Values	Too many parameters were given for this command.	See the manual for the correct command syntax.
Not Enough Values	Not enough parameters were provided for this command.	See the manual for the correct command syntax.
Base Not Supported	The base used in the command is not supported.	See the manual for the correct command syntax.
Number Beyond Integer	The value is beyond the supported range.	Use a value smaller than 64K.
Illegal Value	The value used in this command is not supported.	See user manual for supported values.
Illegal Sequence	The sequence used in this command is not supported.	See user manual for supported sequences.
Too Many Remote Indices	Syntax error in using remote access. Probably from an overuse of indices.	See user manual for the syntax usage of this command.

<b>Error Messages</b>	<b>Description</b>	<b>Action</b>
Illegal Remote Index	Index used is out of range.	Index is limited to the accessed table size. Some table sizes are derived from the model number. Recheck the index used.
Unprivileged Error For Remote Command	User trying to access a protected parameter without the correct privileges.	Enter into supervisor mode (via SUMODE) before trying to access protected fields.
Unprivileged Password Error	Illegal password used when trying to enter supervisor mode	Retry using the correct password
Set To MIB Error	Syntax error in command or an internal error.	<ol style="list-style-type: none"> <li>1) A usage of redundant or missing index in command. See user manual for the correct usage.</li> <li>2) Retry another access.</li> <li>3) Call technical support.</li> </ol>
Trailer Not Sent	Host Setup Trailer is missing in the print job.	<ol style="list-style-type: none"> <li>1) Check if the trailer in the application exists or matches the configured trailer in Port.</li> <li>2) A job could have ended in the middle of the Host Setup session. Check your End-of Job Method parameter.</li> </ol>
Exclusivity Over MIB Failed	Internal error	<ol style="list-style-type: none"> <li>1) Reset unit.</li> <li>2) Call technical support.</li> </ol>
Set LU To Offline Failed	Internal error	<ol style="list-style-type: none"> <li>1) Reset unit.</li> <li>2) Call technical support.</li> </ol>

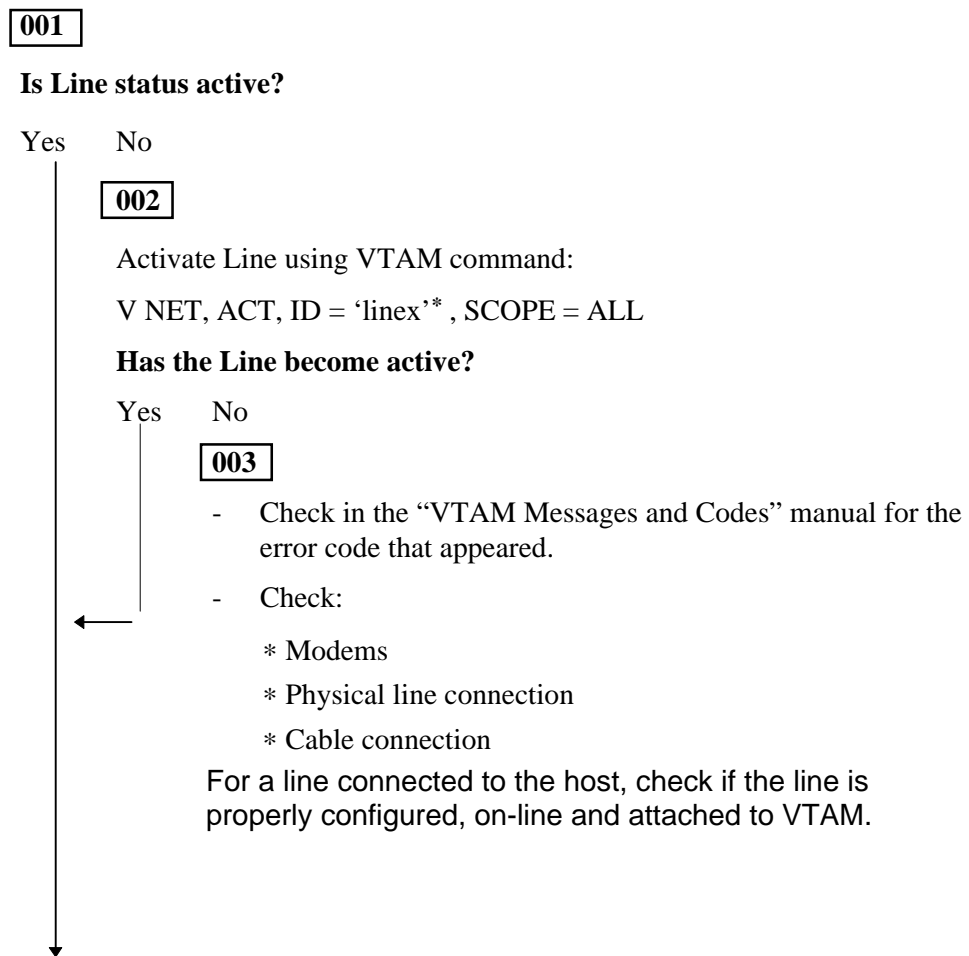
## Miscellaneous Errors

<b>ERROR</b>	<b>SUGGESTED ACTION</b>
Unreadable OnePrint Console	The display controller does not match. Check with your distributor for a list of supported screen controllers.
OnePrint does not power on.	A hardware component in your platform is most likely not functioning. Run a standard diagnostic test to locate the faulty component and replace.
Print output is a mix of more than one job or one print job runs into another.	More than one port is printing to the same printer and OnePrint can't differentiate between the end of one print job and the beginning of the next print job. Check the "Job End Method" parameter in the manual for a detailed explanation.
A single print job is divided into several print jobs while queued in the print server	As long as the entire job gets printed, this situation is minor. It can usually be avoided by changing the "End Job Method" parameter in the OPC.
Printout doesn't look good.	Check the LAN printer submenu. Possibly the printer type and/or the printer language has been chosen incorrectly.
Slow performance.	Performance will improve as the unit is fine-tuned to the site's specific configuration.
The number of activated ports reported by the console are less than the number defined.	Possibly your OnePrint model is different (supporting fewer ports) than expected. Check the OnePrint History Logfile for the OnePrint model/version message.
Two different jobs print on two sides of the same paper when printing in duplex.	OnePrint assumed that the two jobs are really one. See the "End Job" parameter, for more precise control of OnePrint in differentiating the end of one job and the start of the next one.
The configuration of the unit seems to change by "itself".	An unprivileged user has changed the configuration via the "Host Setup" mechanism. Make sure a password is assigned to avoid this occurrence in the future.
Part of the page is cut-off.	Check for predefined wide left and/or top margins. Check if the printable area of the printer fits the actual paper size that the application expects to print on.

# Chapter 6 : Host Connectivity Error Handling

## SDLC Remote Connection

### Map 1



---

\* Replace all lower case letters with installation VTAM name.

(...Continued)

**001**

**003**

If you have identified the problem, return to step 002, if not, call the appropriate technical support person in your organization.

**004**

**Is the 3174 PU status active?**

Yes    No

**005**

**Is the 3174 PU status NEVAC or INOP?**

Yes    No

**006**

- Check if 3174 is powered on.
- Check if the 3174 display status is other than 505/532. If yes, it is an error situation. Check the "3174 Status Codes" manual for clarification of this code.
- Check if the 3174 VTAM/NCP definitions match the 3174 customization definition.

See next page..

(.Continued)

**004** **005** **006**

VTAM/NCP Definitions	3174 Customization Questions
XID = Yes/No	510 = 1/Yes 0/No
MAX Data = 521/256	370 = 0/256 1/521
NRZI - Yes/No	313 = 0/NRZ 1/NRZI
ADDR = xx	104 = Controller Address
Duplex = Full/Half Address (xxx) Full Half	318, 340 - Also dependent on modem capabilities

- Check in VTAM/NCP, definition for PU type 2.
- Correct the problem and return to step 005.

**007**

Activate 3174 PU using VTAM command:

V NET, ACT, ID = '3174 pu\*', SCOPE = ALL

**Is the 3174 PU active now?**

Yes    No

**008**

Check the "VTAM Messages and Codes" manual for the reason. If you have identified the problem, correct and return to step 004. If not return to step 006.

\* Replace all lower case letter with installation VTAM name.

(..Continued)

**004**



**009**

**Is the OnePrint PU status active?**

Yes      No



**010**

**Is the OnePrint PU status NEVAC or INOP?**

Yes      No



**011**

- Check if the OnePrint status is Up.
- Check if the OnePrint VTAM/NCP definitions match the 3174 customization definitions and the OPC definitions.

See next page..

009 010 011

<b>OnePrint VTAM Definitions</b>	<b>3174 Customization Question</b>	<b>OPC Definitions</b>
<b>OnePrint Address Addr = xx</b>	<b>In range of Question 104-105</b>	–
–	<b>Question 900 GW MAC and SAP</b>	<b>Host link definition: GW ADDRESS, GW SAP =</b>
–	<b>Question 940/941 OnePrint MAC + SAP</b>	<b>Token Ring address + Local SAP</b>
<b>MAX DATA</b>	<b>Question 941 OnePrint F-Field</b>	<b>Host Link parameters: I frame size</b>
<b>MAX OUT</b>	<b>Question 941 OnePrint W Field</b>	<b>Host link parameters: receive window size</b>
<b>XID</b>	–	–

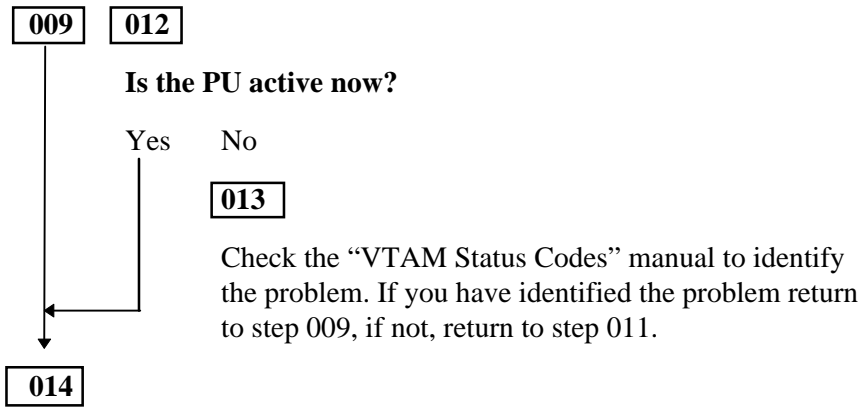
- Verify that 3174 customization Question 150 = 10 (config support C) or Question 150 = 1 (config support B). This parameter identifies the 3174 as a gateway controller.
- After correcting the problem return to step 009.

012

Activate the OnePrint PU using VTAM command: V NET, ACT, ID = 'oneprint pu\*', SCOPE=ALL

\* Replace all lower case letters with installation VTAM name.

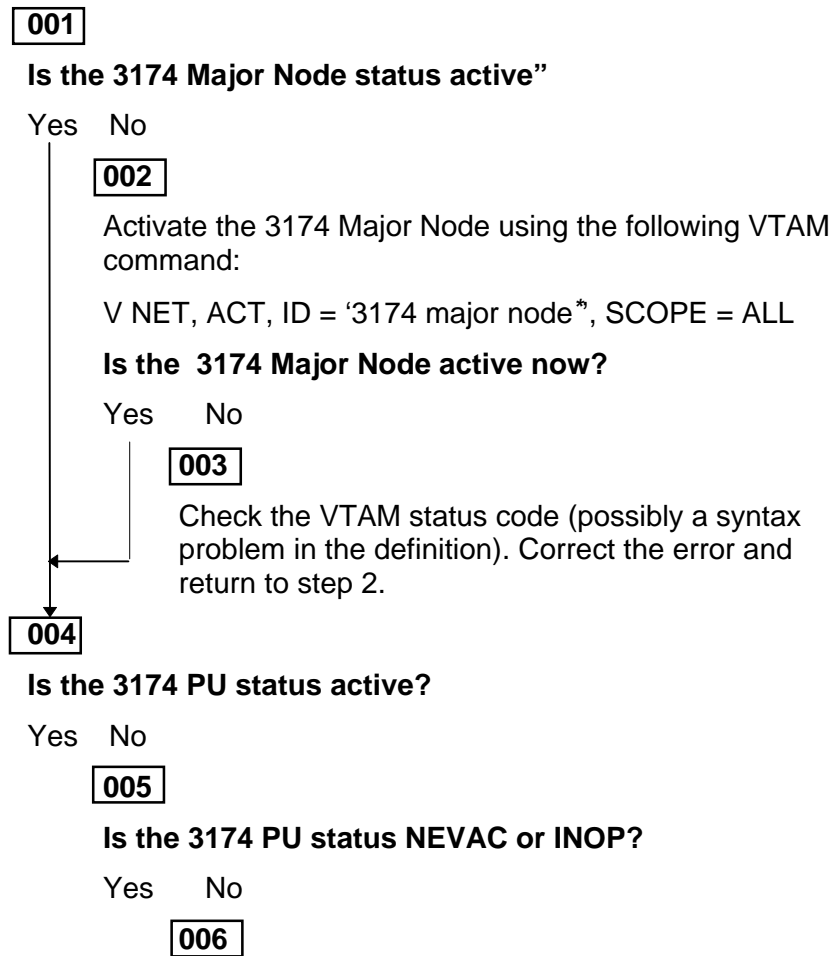
(..Continued)



Go to Map 2, step 14.

# Channel Attached Connection

## MAP 2



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\* Replace all lower case letters with installation VTAM name.

(...Continued)

**004** **005** **006**

- Check if the 3174 is powered on and online
- Check if the 3174 status code is other than 505/532. If yes, check in the "3174 Status Codes" manual for an explanation of the current status.
- Check if the 3174 PU definitions match the 3174 customization questions.

<b>VTAM Definitions</b>	<b>3174 Customization Questions</b>
<b>XID = Yes/No</b>	<b>510 =1/Yes 0/No</b>
<b>CU Addr = xx</b>	<b>104 = Controller Address</b>

- Check if VTAM MAXBFRU is large enough, calculate using the following formula:  
**MAXBFRU x IOBFRU ≥ MAX RU Size**
- Check if PU type = 2 in the VTAM definition.

Correct the problem and return to step 4

**004** **007**

**004**

**007**

Activate the 3174 PU using the following VTAM command:

V NET, ID = '3174 pu\*', ACT,  
SCOPE = ALL

V NET, ID = '3174 pu\*', ACT,  
SCOPE = ALL

**Is the PU active now?**

Yes      No

**008**

- Check the "VTAM Status Codes" manual to identify the reason. If you have identified the problem return to Step 004. If not, return to step 006.

**009**

**Is the OnePrint PU status active?**

Yes                      No

**010**

**Is the OnePrint PU status NEVAC or INOP?**

Yes      No

**011**

---

\* Replace all lower case letters with installation VTAM name.

(..Continued)→ **009** → **010** → **011** →

- Check if the OnePrint status is Up.
  - Check if the OnePrint VTAM definitions match the 3174 customization question and OPC definition.

<b>VTAM Definitions</b>	<b>3174 Customization Question</b>	<b>OPC Definitions</b>
<b>OnePrint CU Address</b>	<b>In range of Question 104-105</b>	-
-	<b>Question 941 for the OnePrint F Field</b> <b>I frame size</b>	<b>Host Link parameters:</b> <b>Ma x. frame size</b>
-	<b>Question 900</b> <b>GW MAC + SAP</b>	<b>Host Link definition GW address GW SAP</b>
-	<b>Question 940/941</b> <b>OnePrint MAC + SAP</b>	<b>Token Ring Address, Local SAP</b>

- Check if in the 3174 customization  
Question 150 =10 (config support C) or  
Question 150 = 1 (config support B).

This parameter identifies the 3174 as a gateway controller.  
Correct the problem and return to Step 009.

**012**

See next page...

**009** **012**

Activate the OnePrint PU using the following VTAM command:

V NET, ACT, ID = 'OnePrint pu\*',  
SCOPE = ALL

**Is the PU active now?**

Yes No

**013**

Check in the "VTAM Status Codes" manual to identify the reason. If you have identified the problem return to Step 009. If not, return to Step 011.

**014**

**Have the OnePrint LUs become active?**

Yes No

**015**

Activate the LUs using the following VTAM command:

V NET, ACT, ID = 'OnePrint PU'.  
SCOPE = ALL

**Are the OnePrint LUs active now?**

Yes No

**016**

- Check in the "VTAM Messages and Codes" manual to identify the reason.

---

\* Replace all lower case letters with installation VTAM name.

**014**



**016**

- Check the VTAM LU definitions for the appropriate DLOGMODE for the LU type.

Correct the problem and return to Step 010.

**017**

Send a printout to the LU.

Has any printed page come out of the LAN-attached printer?

**Did the output come out on paper?**

Yes No



**018**

**Did the output appear on the Novell server?**

Yes No



**019**

- Check for VTAM sense code on the LU. If such a code was detected, check the "VTAM Messages and Codes" manual to detect the reason.

Correct the problem and return to Step 017.

**020**

- Check the connection definition between the printer and the Novell server.

Correct and return to Step 017.

**021**

**021**

**Did the printed output appear correctly as required?**

Yes No

**022**

- Check the OPC printer profile and customize the definition.

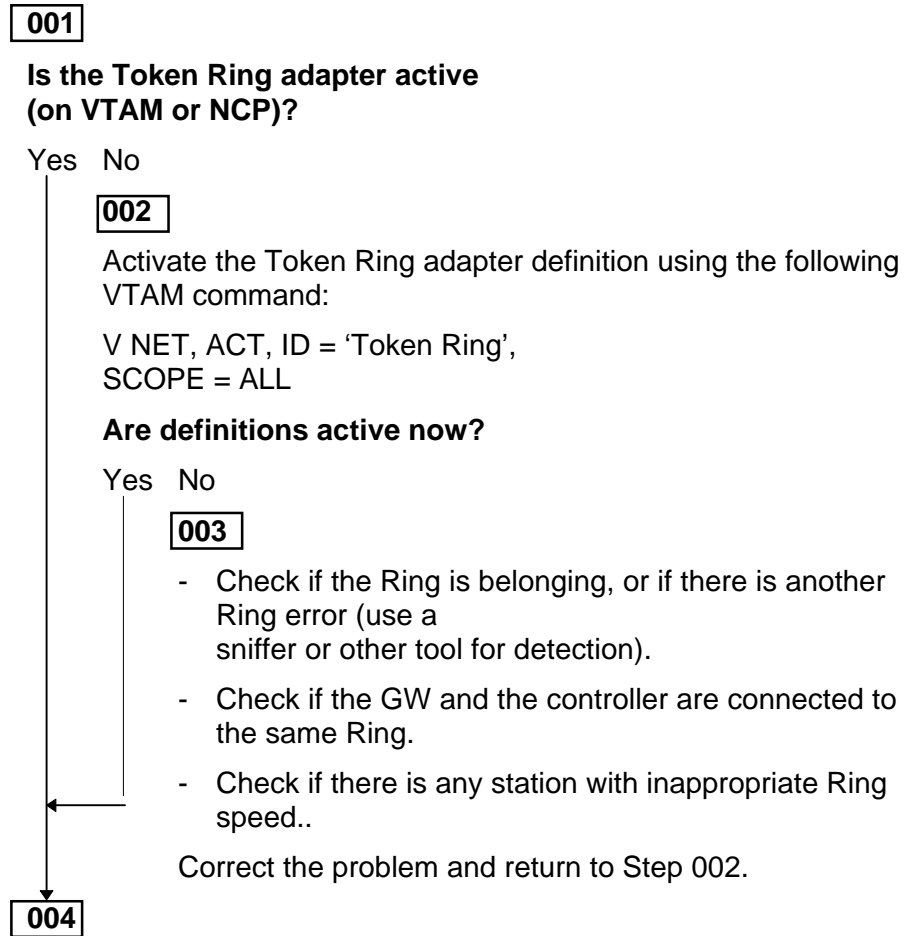
Correct the problem and return to Step 017.

**023**

**Happy End!**

# Direct Token Ring Connection Configuration

## Map 3



**004**

**Is the OnePrint Switched Major Node active?**

Yes No

**005**

Activate the OnePrint Switched Major Node using the following VTAM command:

V NET, ACT, ID = 'Major Node', SCOPE = ALL

Is the OnePrint Switched Major Node active now?

Yes No

**006**

- Check the "VTAM Messages and Codes" manual to detect the problem.

The problem could be caused by a syntax problem in the Switch Major Node definition.

Correct the problem and return to 002.

**007**

**Is the OnePrint PU status active?**

Yes No

**008**

**Is the OnePrint PU status NEVAC or INOP?**

Yes No

**009**

...See next page

**007** **008** **009**

- Check if VTAM definitions match OPC host definition.

<b>VTAM Definitions</b>	<b>OnePrint-OPC Definition</b>
<b>IDBLK, IDNUM</b>	<b>XID (Include IDBLK, IDNUM)</b>
<b>MAXDATA</b>	<b>I-Frame size</b>
<b>MAXOUT</b>	<b>Receive window size</b>

Correct the problem and return to Step 004.

**010**

Activate the OnePrint PU using the following VTAM command:

V NET, ACT, ID = 'OnePrint PU', SCOPE = ALL

**Is the OnePrint PU active now?**

Yes No

**011**

Check the "VTAM Messages and Codes" manual to identify the reason. If reason was identified return to Step 004. If not, return to Step 006

**012**

## **Chapter 7 :Network Interface Card List**

This chapter contains detailed information referring to each ISA adapter for Token Ring or Ethernet that is tested and approved by OnePrint.



**Note**

---

Manual configuration is not required when using PCI adapters with PC's that support "Plug and Play" (PnP).

PnP will automatically define adapter set up.

If using ISA adapters with PCI (PnP) adapter, set the specific ISA adapters Interrupt (IRQ) parameters (via the PC-BIOS setup).

---

## Detailed Card List Spec Supported by OnePrint

<b><u>Card Type:</u></b>	<b>IBM Auto 16/4 ISA</b>
Valid IRQ for OnePrint:	<b>9 Only.</b> (Verify that IRQ 9 is available only for OnePrint unit)
Valid DMA:	N/A
Valid I/O Range:	A20 - A23, A24 - A27
Valid Memory Range:	N/A
Cards Tested and Approved:	<ul style="list-style-type: none"><li>• IBM_16/4_Token_Ring</li><li>• 3COM_TokenLink III_3C619B</li><li>• 3COM_TokenLink III_3C619C</li></ul>

### ***OnePrint Compatibility With IBM Auto 16/4 ISA or 3COM Token Link III.***

The new device drivers shipped with the Auto 16/4 ISA Adapter work with the hardware to correctly configure it. It is recommended that you use the new device drivers. If you choose to run the auto 16/4 ISA Adapter with previous device drivers, use LANAIID to configure the following parameters:

- Disable Autosense
- Manually set the ring speed with LANAIID to the speed of your token-ring network.
- Set the parameters to the values used by your applications.

For most cases the following values will work:

```
Int = 2
RAM SIZE = 16 K
Primary
RAM = D8000
ROM = CC000
Secondary
RAM = D4000
ROM = DC000
```

For compatibility with previous device drivers, you must use Interrupt 2. Do not use IRQ 10 or 11.

The Auto 16/4 ISA Adapter can be used with an existing NetWare shell configuration by copying the driver to the hard disk, and changing the driver callout to the new driver.

<b><u>Card Type:</u></b>	<b>OLICOM TOKEN RING 3118</b>
Valid IRQ:	5,9 (2),10,11,12,15
Valid DMA:	No DMA, 1,3,5,6,7
Valid I/O Range:	A00, A20, A40, A60, A80, AA0, AC0, AE0, B00, B20, B40, B60, B80, BA0, BC0, BE0
Valid Memory Range:	N/A

<b><u>Card Type:</u></b>	<b>OLICOM TOKEN RING 3117</b>
Valid IRQ:	5,9,10,11,12,15
Valid DMA:	5,6,7
Valid I/O Range:	A20 - A23, A24 - A27, A50 - A53, A54 - A57
Valid Memory Range:	N/A
Cards Tested:	Olicom_ISA)16/4_Token_3115

<b><u>Card Type:</u></b>	<b>3COM EtherLink III</b>
Valid IRQ:	5,9,10,11,12,15
Valid DMA:	N/A
Valid I/O Range:	200-20F, 210-21F, 220-22F, 230-23F, 240-24F, 250-25F, 260-26F, 270-27F, 280-28F, 2A0-2AF, 2B0-2BF, 2C0-2CF, 2D0-2DF, 2E0-2EF, 2F0-2FF, 300-30F, 310-31F, 320-32F, 330-33F, 340-34F, 350-35F, 360-36F, 370-37F, 380-38F, 390-39F, 3A0-3AF, 3B0-3BF, 3C0-3CF, 3D0-3DF, 3E0-3EF, 3F0-3FF
Valid Memory Range:	N/A
Cards Tested and Approved:	<ul style="list-style-type: none"> <li>• 3COM_EtherLink_III_3C509B</li> <li>• 3COM_EtherLink_III_3C509B-Combo</li> <li>• 3COM_EtherLink_III_3C509B-TP</li> <li>• 3COM_EtherLink_III_3C509B-TPO</li> </ul>

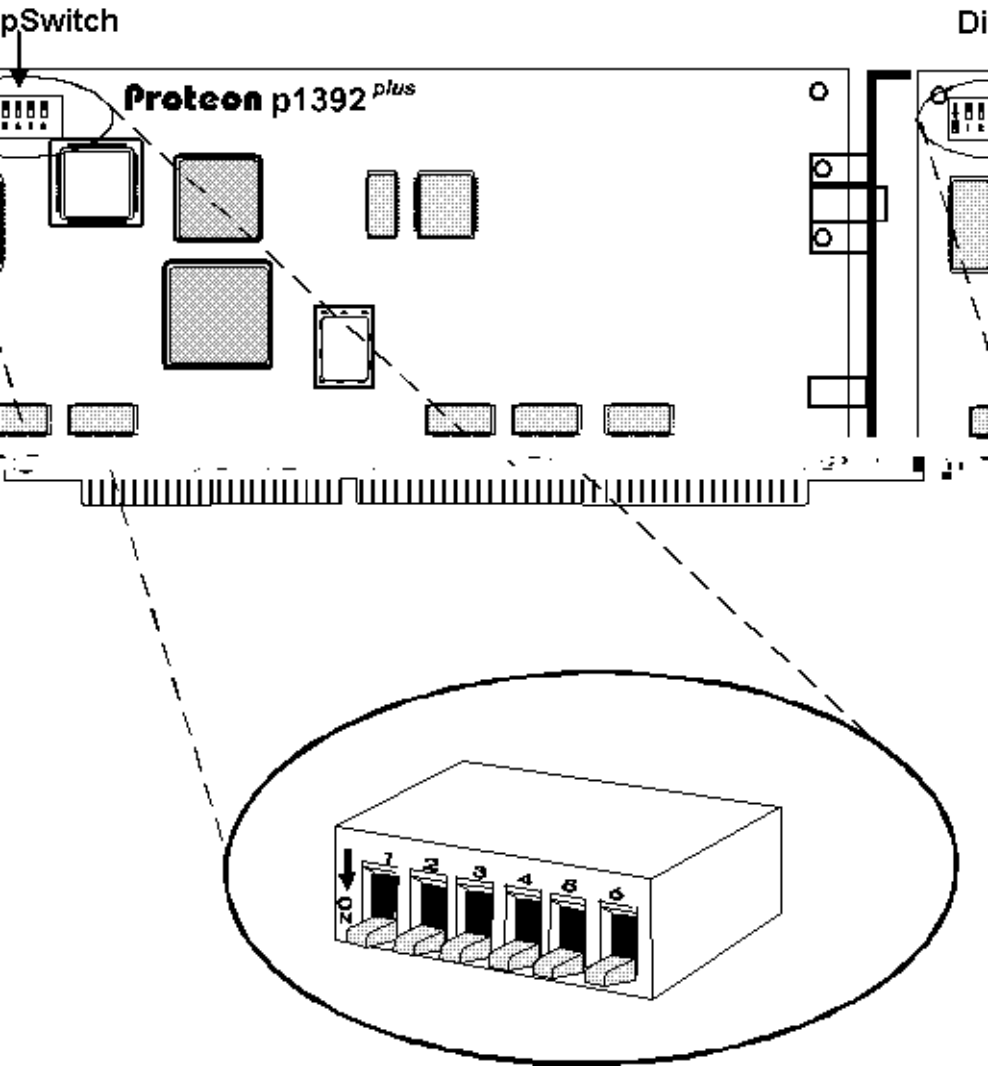
<b><u>Card Type:</u></b>	<b>SMC ETH 8216 FAMILY</b>
Valid IRQ:	5,9,10,11,15
Valid DMA:	N/A
Valid I/O Range:	200-21F, 220-23F, 240-25F, 260-27F, 280-29F, 2A0-2BF, 2C0-2DF, 2E0-2FF, 300-31F, 320-33F, 340-35F, 360-37F, 380-39F
Valid Memory Range:	C0000-C3FFF, C2000-C5FFF, C4000-C7FFF, C6000-C9FFF, C8000-CBFFF, CA000-CDFFF, CC000-CFFFF, CE000-D1FFF, D0000-D3FFF, D2000-D5FFF, D4000-D7FFF, D6000-D9FFF, D8000-DBFFF, DA000-DDFFF, DC000-DFFFF, DE000-E1FFF, E0000-E3FFF, E2000-E5FFF, E4000-E7FFF, E6000-E9FFF, E8000-EBFFF, EA000-EDFFF, EC000-EFFFF
Cards not Tested:	<ul style="list-style-type: none"> <li>• SMC_EtherCard_Elite16_8416C</li> <li>• SMC_EtherCard_Elite16_ULTRA_8216L</li> <li>• SMC_EtherCard_Elite16_ULTRA_8216C</li> </ul>

<b><u>Card Type:</u></b>	<b>Novell ETH 2000+ FAMILY</b>
Valid IRQ:	9,10,11,12,15
Valid DMA:	N/A
Valid I/O Range:	240-25F, 280-29F, 2C0-2DF, 300-31F, 320-33F, 340-35F, 360-37F
Valid Memory Range:	N/A
Cards Tested and Approved:	<ul style="list-style-type: none"> <li>• Netware_Ethernet_NE2000_Plus</li> </ul>

<b><u>Card Type:</u></b>	<b>PROTEON 139X+</b>
Valid IRQ:	5, 9, 10, 11, 12, 15 (1394+)
Valid DMA:	5,6,7
Valid I/O Range:	See following table.
Cards Tested and Approved:	<ul style="list-style-type: none"> <li>• PROTEON 1392</li> <li>• PROTEON 1392Plus</li> <li>• PROTEON 1394Plus</li> </ul>

I/O Base Address	2	3	4	5	6
0A20	ON	ON	ON	ON	ON
0E20	OFF	ON	ON	ON	ON
1A20	ON	OFF	ON	ON	ON
1E20	OFF	OFF	ON	ON	ON
2A20	ON	ON	OFF	ON	ON
2E20	OFF	ON	OFF	ON	ON
3A20	ON	OFF	OFF	ON	ON
3E20	OFF	OFF	OFF	ON	ON
4A20	ON	ON	ON	OFF	ON
4E20	OFF	ON	ON	OFF	ON
5A20	ON	OFF	ON	OFF	ON
5E20	OFF	OFF	ON	OFF	ON
6A20	ON	ON	OFF	OFF	ON
6E20	OFF	ON	OFF	OFF	ON
7A20	ON	OFF	OFF	OFF	ON
7E20	OFF	OFF	OFF	OFF	ON
8A20	ON	ON	ON	ON	OFF
8E20	OFF	ON	ON	ON	OFF
9A20	ON	OFF	ON	ON	OFF
9E20	OFF	OFF	ON	ON	OFF
AA20	ON	ON	OFF	ON	OFF
AE20	OFF	ON	OFF	ON	OFF
BA20	ON	OFF	OFF	ON	OFF
BE20	OFF	OFF	OFF	ON	OFF
CA20	ON	ON	ON	OFF	OFF
CE20	OFF	ON	ON	OFF	OFF
DA20	ON	OFF	ON	OFF	OFF
DE20	OFF	OFF	ON	OFF	OFF
EA20	ON	ON	OFF	OFF	OFF
EE20	OFF	ON	OFF	OFF	OFF
FA20	ON	OFF	OFF	OFF	OFF
FE20	OFF	OFF	OFF	OFF	OFF

# Proteon p1392<sup>plus</sup> Network Interface Card Configuration



## Chapter 8 : Hardware Requirements

The following is a listing of PC products that have been tested and approved by LogNet Systems Ltd.

### Brand Name PC's

IBM APTIVA	Model 931 (75MHz)
IBM PC 330	Pentium 90MHz
IBM PC 350	Pentium 133MHz
Compaq DeskPro 6000	Pentium 166 MHz
Compaq Proliant 1500	
Digital Venturis FX 5133	
HP Vectra	
Apricot PC	

### Compatible PC's Motherboard

Intel Advanced/EV(Endeavor)	(up to Pentium 200 Mhz)
Intel Advanced/AS (Atlantis)	(up to Pentium 200 Mhz)
Intel Advanced/ML	(up to Pentium 200 Mhz)

CD	CD with SCSI or IDE ATAPI Controller
----	--------------------------------------



### Caution!

---

OnePrint software must be fully compatible with PC motherboard. Before installing the OnePrint verify that Intel motherboard is used. Intel chipset in motherboard will not guarantee full compatibility with OnePrint. Failure to comply can result in installation failure.

---



### Note

---

Due to constant advances in PC and CD technology, check with local distributor regarding compatibility of hardware and software drivers to OnePrint.

---

# **Appendix A : Site Installation Worksheet**

## **OnePrint General Site Information**

Gather the information requested in the following worksheets from your IBM Host administrator and LAN administrator.

### **Site:**

Company Name & Dept: \_\_\_\_\_

Location of OnePrint Gateway :

\_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

### **Planning & Installation Personnel:**

IBM Host Administrator \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

LAN Administrator \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

OnePrint Installer \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

### **Vendor Personnel:**

Sales Contact Person \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

## System Information

The system information table displays all the general details.. These values are useful in configuration printouts and in remote management. When managing several OnePrint units on the network, it is important to have this information readily available.

<b>Parameter</b>	<b>Description</b>	<b>Value</b>
Name	Unique Network Name	
Description	Unit Description	
Location	Unit Location	
Contact	Person in Charge of the Unit	

## LAN Adapters

OnePrint supports up to 4 LAN adapters. The first adapter must be used for the host connection. Currently, only a Proteon 1392+ Token Ring adapter can be used for this purpose. The other 3 adapters can be selected from a list of LAN adapters in this chapter.

To properly fill the following table you will need assistance from your PC/LAN administration. Use the following table to record the site's configuration.

Index	Adapter Type	Rate 4/16 Mbps (only T.R.)	Cable connection (STP/UTP)	MAC Address (12 Hex Digits)												DMA (1 Hex Digit)	IRQ	I/O Start (4 Hex Digits)	Memory Start (4 Hex Digits)
1.																			
2.																			
3.																			
4.																			

**Ensure to define Proteon 139X card first when using for Host connection over Token Ring,**

The following section deals with LAN-adapter protocols.

For a Novell network fill out section 2.2.

For a TCP/IP network fill out sections 2.1 and 2.3.

## INET (TCP/IP) Parameters

This table defines the IP parameters for each of OnePrint's LAN adapters.

Index	Host Name	IP Address <sup>1</sup>	Advanced Parameters	
			Subnet Mask <sup>1,2</sup>	Broadcast Address <sup>2</sup>
1.				
2.				
3.				
4.				

## NetWare Parameters

\* Fill in only when the OnePrint PC platform contains at least 2 LAN adapters running IPX.

Fill in a unique internal network number.

IPX Internal Network (8 Hex Digits)							

## LAN Service Parameters

Currently valid only for TCP/IP network.

## Routing Addresses

Fill out the following tables only if your network contains *Static Routing Tables*.

Default Router IP Address <sup>3</sup> (12 Digits)											

<sup>1</sup> The IP address format is xxx.xxx.xxx.xxx

<sup>2</sup> If this field is not filled out, the default values are used.

<sup>3</sup> IP address format: xxx.xxx.xxx.xxx

Fill in up to 10 Static Routing Addresses.

<b>Index</b>	<b>IP Network Address</b>	<b>IP (Local) G/W Address</b>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

## Printing Parameters

Connection of the OnePrint system to the LAN environment requires consistent parameter definitions between the OnePrint gateway and the file servers. Use the following tables to collect these definitions from the LAN system administrator.

### Servers

On NetWare or SMB servers OnePrint requires at least one user account on each file server that it will be using a print queue. On other servers, server identification is sufficient. Use the following table to collect the relevant parameters for the servers.

Index	File Server Name	User Name <sup>1</sup>	User Password	IP Address (12 Digits)												Server Type <sup>2</sup> (Name)	Version of Server	
1.																		
2.																		
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		

*Note: The internal IPX address is dynamically identified by the OnePrint as the default when the Autodiscovery parameter is enabled.*

---

<sup>1</sup> The User Name and Password are those the OnePrint will use when accessing the Print Queue on this server.

<sup>2</sup> Choose one of the following server types:  
 NetWare (Bindery mode), LPD, LPD Peer2Peer for print server, SMB or IPDS encapsulated over TCP/IP (Intermate)

# Printers

OnePrint supports a variety of LAN PC printers. Printouts are formatted according to the type of printer attached to a print queue. List each LAN printer that will be accessible to Host users. The Server Index is the Server print queue that is associated with each printer.

Index	Location & Make	Printer Type <sup>1</sup> Control Language PCL-4, PCL-5, PCL- Level III, Epson, ISO, Postscript	Queue Name	Attachment <sup>2</sup>	Server Index (See Section 3, Server Table)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15..					

---

**<sup>1</sup> Options:**

- PCL4 for HP II (Epson Action Laser 1000, QMS 1725, Okidata OL850).
- PCL5 for HP III and 4 (Epson 1500, Brother HL-10h, Lexmark 4039, Compaq, Genicom 7150, QMS 2025 ).
- PCL Level III for HP DeskJet 5xx.
- Epson for Epson FX 1000 and all other matrix printers that support Epson emulation.
- ISO for Canon-ISO Page Printers.
- Postscript level 1 for Postscript printers.

**<sup>2</sup> Options:** LPT1, LPT2, LAN.

# Profile Configuration

Port's loaded profile contains the system's initial startup configuration. The minimal configuration needed to define the active ports and to select the relevant IBM printer emulation requested for each port.

<b>LU Ports</b>	<b>Description</b>	<b>IBM Host Printer Emulation</b>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		

## IBM SNA Host Communication Parameters

Connection of OnePrint to the upstream Host requires consistent definition of parameters on the Host, OnePrint, and Host Gateway systems. OnePrint can connect to an IBM Host via a 3174 cluster controller, 37x5 front end processor, an integrated Token Ring controller on the Host, or some other gateway that converts SNA to an 802.2 data stream. Use the following table to collect the Host connection parameters.

OnePrint Parameter	Description	VTAM / NCP Description	Format	Value
OnePrint's MAC Address	Token Ring Node Address		6 Bytes (12 hex digits, 0-F)	
Host Gateway's MAC Address	Token Ring Node Address		6 Bytes (12 hex digits, 0-F)	
Receive Window Size <sup>1</sup>	Window Size is the number of I-Frames being sent or received before Acknowledgment	MAXOUT	1 - 7 1 is recommended	
Transmit Window Size <sup>1</sup>	Window Size is the number of I-Frames being sent or received before Acknowledgment		1 - 7 7 is recommended	
OnePrint SAP <sup>2</sup>	Local Service Access Point		1 Byte (2 hex digits, 0-F)	
Gateway SAP <sup>2</sup>	Gateway Service Access Point		1 Byte (2 hex digits, 0-F)	
XID <sup>3</sup>	Identification to VTAM	IDBLK <sup>4</sup>   IDNUM	4 Bytes (8 hex digits, 0-F)	0   1   7
Maximum Frame Size <sup>5</sup>	I-field size in the Token Ring I-frame	MAXDATA	265/521/1033/ 2057/4105	

<sup>1</sup> Never set the Transmit Window Size (MAXOUT) value in the Gateway Node to less than the receive window size value. This causes a delay in receiving an acknowledgment, thereby degrading performance.

<sup>2</sup> SAP - The 802.2 service access point (SAP) in the node token ring adapter used for the link between the OnePrint translator and the Host gateway.

<sup>3</sup> XID - Only used for direct Token Ring connections. Set to **NONE** for SDLC remote connections and 3174 channel attached connections.

<sup>4</sup> 017 is the recommended IDBLK, i.e., the first 3 hex digits.

<sup>5</sup> Frame Size - Must be equal or greater than the transmit frame size configured in the gateway node.

## Port Assignments/Definitions

OnePrint can handle the output of up to 128 Host printers. The LU port of each Host printer is mapped to a specific printer on the LAN. VTAM locations are offset by one when mapped to a port index (e.g., VTAM LOCADDR-2). TCP/IP ports should be defined by assigning the value of 5001 and up.

LU Port	Loc. Addr.	TCP/IP Port	Printer ID
1	2	5001	
2.	3	5002	
3.	4	5003	
4.	5	5004	
5.	6	5005	
6.	7	5006	
7.	8	5007	
8.	9	5008	
9.	10	5009	
10.	11	5010	
11.	12	5011	
12.	13	5012	
13.	14	5013	
14.	15	5014	
15.	16	5015	
16.	17	5016	

## ***Appendix B : Printing Services and Transport Protocols Supported by OnePrint***

<b>SERVERS</b>	<b>APPLICATION PROTOCOL</b>	<b>TRANSPORT PROTOCOLS</b>	<b>PRINTING METHOD</b>
<b><i>Servers</i></b>			
Windows 95	SMB	TCP/IP	Spool
Windows NT	SMB	TCP/IP	Spool
Windows For Workgroup	SMB	TCP/IP	Spool
IBM LAN Server	SMB	TCP/IP	Spool
LAN Manager	SMB	TCP/IP	Spool
Novell 3.X	NCP	IPX	Spool (Bindery Mode)
Novell 4.X	NCP	IPX	Spool (Bindery Mode)
UNIX Machines	LPD	TCP/IP	Spool
OS/2 + TCP/IP	LPD	TCP/IP	Spool
<b><i>Print Servers</i></b>			
Printer connected servers	LPD	TCP/IP	Peer-to-peer
JetDirect	LPD, SNMP	TCP/IP, UDP/IP	Peer-to-peer
DOS or Windows operating system running LPD over TCP/IP application	LPD	TCP/IP	Spool
IPDS Servers (Encapsulated IPDS over TCP/IP)	IPDS	TCP/IP	Peer-to-peer

## **Appendix C :Device Drivers Supported by OnePrint Systems Diskettes #1 and #2**

### *Device Drivers Supported by OnePrint System #1 Diskette*

<b>DEVICE DRIVER</b>	<b>VENDOR</b>	<b>MODEL</b>	<b>IRQ</b>	<b>I/O RANGE</b>	<b>MEMORY ADDRESS RANGE</b>	<b>DMA</b>
adsc (SCSI controller)	Adaptec	AHA-1540B, AHA-1540CF, AHA-1542B, AHA-1542CF, AHA-1540C, AHA-1542C, AHA-1640, AHA-1740, AHA-1740A, AHA-1742	11	330-333	dc000-ddfff	5
athd	multiple +	ESDI/IDE hard disk	14	1f0-1ff	0-0	-

### *Device Drivers Supported by OnePrint System #2 Diskette(Host Bus Adapter Drivers)*

<b>DEVICE DRIVER</b>	<b>VENDOR</b>	<b>MODEL</b>	<b>IRQ</b>	<b>I/O RANGE</b>	<b>MEMORY ADDRESS RANGE</b>	<b>DMA</b>
adsa	Adaptec	AIC-7770, AHA-2740, AHA-2742, AHA-2740-T, AHA-2742-T	-	-	-	-
adse	Adaptec	AHA-1740, AHA-1740A, AHA-1742A	-	-	-	-
adss	Adaptec	AHA-1505, AHA-1510, AHA-1512, AHA-1520, AHA-1522, AHA-1520A, AHA-1522-A	-	-	-	-
bls	BusLogic	BT-542B, BT545S, BT-542D, BT-742A, BT-747S, BT-747D,, BT-757S, BT-757D, BT-640A, BT-646S, BT-646D, BT-445S, BT-946C	11	330-333	dc000-ddfff	-
efp2	Olivetti	EFP2 SCSI	-	-	-	-
fdeb	Future Domain	IC-9C50, TMC 850IBM, TMC 850/M/MEX/MER	5	0-0	ca00-cbfff	-

*Device Drivers Supported by OnePrint System #2  
Diskette(Host Bus Adapter Drivers) - Cont'd.*

<b>DEVICE DRIVER</b>	<b>VENDOR</b>	<b>MODEL</b>	<b>IRQ</b>	<b>I/O RANGE</b>	<b>MEMORY ADDRESS RANGE</b>	<b>DMA</b>
fdsb	Future Domain	IBM 16-Bit AT Fast SCSI Adapter, IC-18C30, IC-18C50, IC-36C70, MCS® 600/700, TMC 3260, 1660/1680, 1650/1670, 1610MER/MEX/M	11	140-14f	0-0	-
ida	Compaq	IDA, IDA-2, IDAE, SMART	-	-	-	-
iiop	Tricord	PowerFrame	-	-	-	-
lmsi	Phillips	LMSI non-SCSI CD ROM	5	340-347	0-0	-
msci	IBM	MCIS-1015, MCIS-1018 SCSI Host Adapter	-	-	-	-
mitsumi	Mitsumi	CRMC-LU005S CD ROM	10	360-363	0-0	-
sony	Sony®	SONY non-SCSI CD ROM (cd 31a, cd33a, cd535)	5	320-323	0-0	1
wd7000	Western Digital	wd7000-ASC	-	-	-	-



**Note**

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The *adsc*, *dpt*, *ictha*, *blc* and *fdsb* device drivers support both EISA and ISA controllers. The value listed above are only required for ISA controllers.

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## **Appendix D : OnePrint Port Definition For Encapsulated IPDS over TCP/IP Host Connection**

OnePrint port can be defined in three ways:

- **SNA** - The traditional SNA LU 1 or LU 3 via PU 2.0.
- **TEST** - An internal file which is sent from the OnePrint to the port for test purposes only.
- **TCP/IP** - TCP/IP host connection enables sending IPDS printout from the PSF to a OnePrint port using TCP/IP.

The OnePrint port is compatible with IPDS network printers (IBM 31XX Series) that receive Encapsulated IPDS over TCP/IP protocol.

This feature allows the following applications to send encapsulated IPDS over TCP/IP print jobs to LAN attached printers using the OnePrint:

- IBM OS/2 V2.1 or higher running PSF/2.
- IBM AIX V3.2.4 or higher with PSF/6000 (PSF/AIX) v1.2.0 or higher.
- IBM AS/400 V3R1 or higher with PSF/400 including PTF's (Cumulative package C5227310 or higher).
- IBM MVS version 2.2 with PSF including:  
PTF-APAROW15599 & OW12236.  
TCP/IP for MVS V3R1 or higher should be installed and operating.

The above mentioned hosts - AS400, Mainframe, OS/2 or RS6000 running TCP/IP stacks can send IPDS print jobs to the OnePrint over TCP/IP network.

OnePrint can be connected simultaneously to multiple hosts running TCP/IP stacks. OnePrint functions as a TCP/IP server and the connection is established by each host.

For example:

- AS/400 sends Encapsulated IPDS over TCP/IP to NOVELL server via OnePrint TCP/IP port.
- M/F sends IPDS print job to Windows NT server via OnePrint SNA host connection.
- OnePrint sends internal test file to HP Jet direct.

## CONFIGURATION

- In the “Host” submenu, under “Port Definition”, select the first port and set the “ Type” parameter to the desired input: SNA, TEST or TCP/IP. Repeat action for all ports.
- In the “Interface” submenu, under “Inet”, select the adapter position and set the TCP/IP parameters.
- In the “Interface” submenu, under “Service”, set the gateways parameters if necessary.
- If all ports are set to TCP/IP input, disable the SNA stack as follows: In the “Host” sub menu, under “SNA Host Link”, ensure that the “SNA Link” is disabled (shown as an empty box ).

## IBM AS/400

- Configuration Requirements:  
OS/400 V3R1  
PSF/400  
PTF/FIX SF27170 or higher  
TCP/IP is configured and loaded
- Implement the WRKAFP2 command and complete configuration according to Appendix E.

## IBM AIX

- Configuration Requirements:  
PSF/6000 V1.2.0 or higher
- Create a new IPDS printer definition in the PSF/6000.
- Create a new printer.
- Modify the device description. Set IP address similar to OnePrint IP address. Set each TCP/IP port number sequentially starting from 5000. For example: OnePrint port 3 will be 5003 in the PORT Number parameter.
- For more details refer to “Installing a TCP/IP- attached IPDS printer in the PSF/6000” Print Administration manual.

## IBM MVS

- Configuration Requirements:  
PSF/MVS V2R2 with APAR OW15599  
MVS Scheduler APAR OW12236 to support two new PRINTDEV keywords: *IPADDR* and *PORTNO*  
TCP/IP V1R3 or higher installed and configured on MVS
- Define the MVS communications control unit to MVS.
- Modify the TCP/IP profile on the MVS system, if necessary.
- Ping the printer.
- Define the printer as a writer controlled printer to JES.
- Define the printer as PSF with a PRINTDEV statement including the IP-address and PORT number.
- For more details, refer to IBM publication: **Print Service Facility/MVS**

## IBM OS/2

- Configuration Requirements:  
OS/2 V3.0 or higher  
IBM PSF/2
- Create a new IPDS printer definition in the PSF/2 (240 or 300 dpi resolution).
- Select TCP/IP as attachment type.
- Modify the TCP/IP setting. Set IP address similar to OnePrint IP address. Set each TCP/IP port number sequentially starting from 5000. For example: OnePrint port 3 will be 5003 in the PORT Number parameter.
- Add a queue name and attach to the new printer.
- For more details refer to the “PSF/2 Print Administration Manual”.

# ***Appendix E : OnePrint TCP/IP Connection for AS/400 Setup Guide***

This document describes AS/400 setup and printing procedures necessary for printing AFP/IPDS data to a LAN attached printer emulate using the OnePrint port via a TCP/IP connection.

## ***System requirements***

- OS/400 V3R1 Modification version 0 or higher with PSF/400
- Latest cumulative PTF: PTF/FIX SF27170 version or higher
- PSF/400
- TCP/IP must be configured and loaded

Ensure that the latest cumulative PTF including the command interface WRKAFF2 is used. This document describes WRKAFF2 and the parameters used by the command to provide an interface to QPQXWAFP which is the program to process the command.

The PTF also includes QSYS/QPQXWAFP, that provides an interface to a data area used by PSF/400 to obtain additional configuration information not provided through use of the native CRTDEVPRT command. QPQXWAFP creates a data area in library QGPL with authority of \*LIBCRTAUT.

## *WRKAFP2 Installation*

Ensure that a source physical file named QCLSRC is available before performing the following instructions:

1. WRKMBRPDM QGPL/QCMDSRC
2. Press F6 to create a new member. The name is: WRKAFP2 and the type is: CMD. Give it a meaningful description. Press Enter.
3. The SEU edit screen appears. Press F15 to Browse/Copy member.
4. Select:

Selection: 1 = Member  
Copy all records: N  
Member: QSF24144  
File: QAPZCOVER  
Library: QGPL  
Press Enter. a split screen should appear.

5. At the command line for the screen type: F WRKAFP2: CMD and press Enter. After the character string is located, press F16 twice. A line that begins with "WRKAFP2: CMD" will appear. Type: CC in the control space(line no.) at the beginning of the line.
6. Go to the end of the program. Type B at the command line to go to the end of the member. Type CC in that line.
7. Move the cursor back to the new member you are creating and type an "A" at the first line. Press Enter.
8. Press F12 to end the split screen. F3 to end the edit session and Enter to save the new source.
9. Compile the command. It can be compiled by entering the following command:

```
CRTCMD CMD(QGPL/WRKAFP2)PGM(QSYS/QPQXWAFP)  
SRCFILE(QGPL/QCMDSRC)
```

After the command has been successfully compiled, you are ready to use the WRKAFP2 command. To ensure that the values specified with WRKAFP2 take effect, they must be entered before activating PSF/400. Perform the following.

1. End PSF/400 (ENDWTR), if it is active.
2. Use WRKAFP2 to set the values.
3. Start PSF/400 (STRPRTWTR).

Values specified with WRKAFP2 take effect only after PSF/400 is started (STRPRTWTR).

## **WRKAFP2 Parameters**

For WRKAFP2 the following parameters are available:

### ***DEV D - Printer Device Name.***

This is the name of the data area to be created, modified or migrated by WRKAFP2. The value may be any name permitted for a data area.

### ***PRINT ONLY - Print Data Area Only.***

Use a value of \*YES if you wish to print the contents of a data area previously created by WRKAFP2. Valid values are \*YES and \*NO. When \*YES is specified, all other parameters are ignored. The default value is \*NO.

### ***IPDSPASTHR - IPDS Pass Through***

Specifies if you are using PSF/400's IPDS Pass through function. You may use this function when printing on TCP/IP connection. Valid values are \*YES and \*NO. The default value is \*NO.

### ***TCPIP - TCP/IP***

Specifies if you are attaching to a device which requires PSF/400's TCP/IP support. Valid values are \*YES and \*NO. If you specify \*YES, you will have to specify values for RMTSYS and PORT; see below. The default value is \*NO.

### ***RMTSYS - Remote System.***

Specifies the remote system name of the OnePrint logical printer port. You may use either a host name or an IP address.

### ***PORT - Port.***

Specifies the port number for the device. Valid values range from 5001-5128.

### ***ACTTMR - Activation Timer.***

Specifies the number of seconds PSF/400 will wait for a printer to respond to an activation request. If the printer does not respond within this time, PSF/400 terminates. The value specified depends on what is required in your environment. The value you select is dependent on whether you are sharing the OnePrint logical port with another PSF, or the length of time required for an activation request to reach the printer. Acceptable values are 1-2550 seconds and \*NOMAX (wait forever).

### ***INACTTMR - Inactivity Timer.***

Specifies the length of time PSF/400 will maintain a session with the printer while there are no spooled files with a status of RDY. If the specified time elapses, PSF/400 closes the connection with the printer, which permits another PSF to use the printer. This parameter is used for TCP/IP-connection. Valid values are 1-30 minutes, \*NOMAX (never close the connection), \*SEC15 (15 seconds) and \*SEC30 (30 seconds). The default value is \*NOMAX.

The remaining four parameters have already been made available by setting values in a data area accessed by PSF/400. They are also made available through WRKAFP2.

### ***PSC - Page Size Control.***

Specifies whether PSF/400 sets the page size (forms) in the printer. This parameter only applies to the 4224, 4230, 4234, 4028, 6404, 6408, and 6412 printers. Valid values are \*YES and \*NO. If \*YES is specified, the page size in the spooled file overrides the printer's configuration. The default value is \*NO.

### ***DRF - Disable Resident Fonts.***

Specifies whether PSF/400 does not support the resident fonts on a printer that has resident fonts. If \*YES is specified, PSF/400 will map resident font references to the equivalent host font and then download the host font to the printer. Valid values are \*YES and \*NO. The default value is \*NO.

## **DRR - Disable Resource Retention.**

Specifies if PSF/400 should delete page segments and overlays from the printer after printing a spooled file which references page segments and overlays. Valid values are \*YES and \*NO. The default value is \*NO.

Examples for WRKAFP2

This section gives some examples of how to use WRKAFP2 for different printing requirements. The term printer is used for an OnePrint port configure as a TCP/IP attached printer.

### ***Example 1:***

Configure PSF/400 to attach to a TCP/IP OnePrint printer port #1.

```
WRKAFP2 DEVD(PRT3130) TCPIP(*YES) RMTSYS('9.5.12.102') PORT(5001)
```

### ***Example 2:***

Configure PSF/400 on two or more AS/400s to share a TCP/IP attached printer. The following command must be issued on each AS/400:

```
WRKAFP2 DEVD(PRT3130) TCPIP(*YES) RMTSYS('9.99.12.112')
```

```
PORT(5001) ACTTMR(*NOMAX) INACTTMR(5)
```

The value specified for ACTTMR affects the length of time for which PSF/400 attempts to make a connection with the printer. INACTTMR (5) will be sent by PSF/400 to the OnePrint port automatically if after five minutes OnePrint port is not in RDY status and no spool files are in the output queue.

Although the connection is terminated, PSF/400 will not end. As soon as a spooled file becomes RDY, PSF/400 will re-attempt to make a connection with the OnePrint.

Note that while one AS/400 is printing, one or more AS/400s may be attempting to make a connection. As soon as an AS/400 ends the connection to a printer, another AS/400 can get a connection to the printer.

## *Before Printing Instructions*

This section describes the steps to verify that PSF/400 will be able to connect to the printer.

1. Vary on the line description, `VRYCFG CFGTYPE(*LIN)`, to be used, if it is not already varied on.
2. Vary on the printer device description, `VRYCFG CFGTYPE(*DEV)`, to be used, if it is not already active.
3. Ensure that TCP/IP interface to be used is active.
4. Ensure that OnePrint and relevant ports are ready.
5. Issue the `PING` command to verify that OnePrint port can be contacted from your AS/400. Using the IP address from the above example, you would enter `PING RMTSYS('9.99.12.128')`. If the device cannot be `PINGed`, then you may have a configuration error, a network problem (such as a duplicate IP address) or a hardware error (cable, etc.).
6. After the device has been successfully `PINGed`, you may start PSF/400 using the `STRPRTWTR` command.

## *Data Area Migration Concerns*

You may already be using a data area to control some aspects of AFP printing. WRKAFP2 will automatically migrate that data area to the new one required to configure for the above-mentioned new functions. This is necessary if the existing data area is not of the correct size.

A data area will be migrated if the following conditions exist:

- The data area specified for DEVD in WRKAFP2 exists in library QGPL.
- The first eight bytes of the data area are set to WWPDRHR.

The migration performed by WRKAFP2 involves the following steps:

- Save the value stored within the existing data area.
- Delete the existing data area.
- Create a new data area of the correct size.
- Copy the values from the old data area to the new data area.

Add any new values you have specified to the new data area.

### *Important Notes:*

Keep alive parameter:

If your environment has a need to make certain that OnePrint has not been powered off, you may use the TCP keep alive parameter in CHGTCPA. The value used for this parameter determines how long PSF/400 will wait for a response from OnePrint before terminating.

### *Printer Sharing:*

PSF/400 may share OnePrint port with PSF/2 and PSF/6000. A maximum of 3 PSFs can share OnePrint port when TCP/IP is used.

### *Message File:*

PSF/400 will automatically update message file QSYS/QPQMSGF and alert table QSYS/QPQMSGF with new messages. Messages will be updated with English text and be in upper case. New inquiry messages will require a reply in upper case.

### *Setsockopt:*

For performance purposes, PSF/400 uses the setsockopt socket function to set the size of the TCP send buffer used by PSF to 32768. This value is not configurable.

### *MTU Sizes:*

Best performance is obtained by configuring both AS/400 and the printer for as large an MTU as possible.

If you are using a 4M Token Ring line, configure the MAXFRAME parameter in the line description and the MTU in the corresponding TCP/IP interface for 4060. If you are using a 16M Token Ring line, you may set the MAXFRAME and MTU for 4096.

If data from your AS/400 goes through one or more routers to get to a printer, OS/400 TCP support will use an MTU of 576. An MTU of this size may negatively impact printer performance.

## *Problem Determination*

This section describes some error situations that may occur when you are preparing to use PSF/400's TCP/IP support. This section does not describe all the possible error situations that may occur. When necessary, please refer to the appropriate IBM publications.

### *Cannot PING OnePrint:*

1. The OnePrint is not powered on.
2. You are PINGing the wrong IP address.
3. The OnePrint has the same IP address as another device in your network.

### *AS/400 PING Command Not Work*

1. The AS/400 TCP/IP support has not been started. Issue the STRTCP CL command to start AS/400 TCP/IP support.
2. The TCP/IP interface for your line description has not been started. Use the STRTCPIFC CL command, or work your way through the menu provided by using the CFGTCP CL command, to start the TCP/IP interface for the Token Ring or Ethernet line description you are using.

### *PSF/400 Fails to Start(Message CPF5379 is Logged):*

You did not configure PSF/400 for TCP/IP support. Use the WRKAFF2 command to configure PSF/400 for TCP/IP.

Reference Codes Returned By QPQXWAFP

Listed below are the reference codes that can be returned by QPQXWAFP. An explanation for each code is given.

<b>Reference Code</b>	<b>Description</b>
QPQXWAFP 0001	A blank value for DEVD was given. Use WRKAFP2 again and specify a nonblank value for DEVD.
QPQXWAFP 0002	Specified TCPIP(*YES) but did not give a value for RMTSYS. Use WRKAFP2 again and specify a value for RMTSYS.
QPQXWAFP 0003	Specified TCPIP(*YES) but did not give a value for PORT. Use WRKAFP2 again and specify a value for PORT.
QPQXWAFP 0004	specified PRINTONLY(*YES) but the specified data area could not be found. Use WRKAFP2 again, specifying a data area created by QPQXWAFP.
QPQXWAFP 0005	QPQXWAFP was unable to open a spooled file for output. Review the messages in your job log for additional information.
QPQXWAFP 0006	QPQXWAFP was unable to write to the spooled file it had opened. Review the messages in your job log for additional information.
QPQXWAFP 0007	QPQXWAFP was unable to close the spooled file it was using. Review the messages in your job log for additional information.
QPQXWAFP 0009	Specified PRINTONLY(*YES) but the specified data area could not be interpreted by QPQXWAFP. This means that the data area was not created by QPQXWAFP. Delete the data area, DLTDTAARA, and then use QPQXWAFP to create the data area.
QPQXWAFP 0010	The caller of QPQXWAFP does not have authority to the data area specified for DEVD.
QPQXWAFP 9999	An existing data area was successfully migrated to a new data area.

If a data area is successfully created or changed (but not migrated), a reference code is not issued by QPQXWAFP.