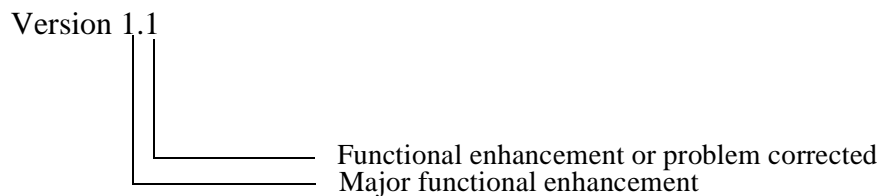




DIGITAL VNswitch 900 Series Modules
Version 1.6
Release Notes
June 1997

As warranted, DIGITAL changes the firmware of this device to make functional enhancements or to correct reported problems. These release notes identify enhancements and changes to the firmware that impact end-user operations. They also contain firmware and software requirements, and list updates in this release as well as known conditions and restrictions that apply to the operation of the DIGITAL VNswitch 900 XX module.

The following example describes the firmware version number:



Contents

Hardware and Firmware Support 2
VNswitch 900XX operation in the DEChub 900 MultiSwitch 2
Port Numbering in the VNswitch 900XX Module 2
VNswitch Firmware Conditions and Restrictions 3
VNswitch MIB Support 4
Documentation Errata 7
Document: VNswitch 900XX Installation and Configuration 7
Document: VNswitch 900 Series Switch Management 7
Document: 100 Mb/s Fast Ethernet Modular Media Interface Cards Installation 8
Accessing On-line Information 9
Network Product Business Web Site 9
Using Electronic Mail 10

Hardware and Firmware Support

The Version 1.6 release of the VNswitch firmware supports the following product:

- DVNXX (VNswitch 900XX)

VNswitch 900XX operation in the DEChub 900 MultiSwitch

VNswitch 900XX operation in the DEChub 900 MultiSwitch requires:

- DEChub 900 MultiSwitch firmware V5.1
- clearVISN V1.1a

Port Numbering in the VNswitch 900XX Module

The VNswitch 900 family uses two different numbering schemes to reference "ports" and "interfaces" on the module.

The "Interface number" is used to configure and monitor the module's network interfaces (Ethernet, FDDI, Fast Ethernet, VNbus and ATM). Interface numbers start at "0" (the VNBus interface number is 0). The numbers on the module's front bezel correspond to the interface number.

The "Bridge Port" number is used to configure and monitor bridging features such as bridge protocol filters, bridge address filters and VLANs. Many displays will include both the "Bridge Port" number as well as the "Interface" number. Bridge Port numbers are +1 higher than interface numbers and start at "1" (the VNBus).

It is important to keep this relationship between "Interface Number" and "Bridge Port" number in mind when using the command line interface. As a help, the following table provide the association for the VNswitch 900XX module supported in this release.

	Bezel	Interface #	Bridge Port #
VNswitch 900XX			
VNbus	0	0	1
4 Fast Ethernet	1 - 4	1 - 4	2 - 5

VNswitch Firmware Conditions and Restrictions

The following are the known conditions and restrictions for this release of the VNswitch firmware.

- The "No Frame Interval" functionality is not supported in this firmware release.
- When configuring the module for Out-of-Band management, you must configure both an in-band IP address and an out-of-band IP address for the module.
- When the module is in a DEChub 900 MultiSwitch, the OBM address mask is settable in the OBM configuration menu. However, the mask is not saved in the module's configuration nor is the mask used or required for the OBM configuration.
- The OBM baud rate cannot be set to 4800 when the VNswitch is in the Hub. However, 4800 is a valid speed when the module is in a docking station.
- If you take the IP address of any module that is serving as the IP Services module for the DEChub 900 MultiSwitch and reassign it to the VNswitch, you must remove (power cycle) the other module (from which the IP address was taken) before the VNswitch can assume the new address and operate as an IP Services module.
- When clearing SNMP configuration (using Clear all or Clear SNMP commands) you must restart the module for the clear to take affect.
- Before the VNswitch can configure itself on the VNbus, either enable the VNbus-AutoConnect feature of the DEChub MultiSwitch 900, or use the clearVISN LAN-Hopping configuration. If you enable the VNbus-AutoConnect feature, you cannot use the clearVISN LAN-Hopping features for VNswitches in the HUB.
- This firmware release does not support networks that have the same MAC address appearing in different VSDs on the same VNswitch. Examples of this are networks that have DECnet routers with the same MAC address on each interface and that MAC address appears on separate VSDs on the same VNswitch in that network. Some vendor's workstations with dual network interfaces also use the same MAC address on both interfaces. Duplicate MAC addresses are supported in different VSDs only if no VNswitch in the network exists that has ports in both of these VSDs. Further information on this topic is available on Digital's Network Product Business Web Site.
- The VNswitch 900XX does not support the clearVISN MultiChassis Manager LAN Interconnect feature.

VNswitch MIB Support

The VNswitch supports the following MIBs. If a MIB is defined in more than one RFC, the supported RFC is listed first and the other RFCs are listed on a separate line. The MIB handlers do not support SNMP set requests unless otherwise noted.

MIB	RFC/GROUP
mib-2	iso(1).org(3).dod(6).internet(1).mgmt(2).mib-2(1) rfc-1213 rfc-1158 -> rfc-1213 system(1) (set) interfaces(2) ifAdminStatus(7) (set) at(3) ip(4) ipDefaultTTL(2) (set) icmp(5) tcp(6) udp(7) egp(8) transmission(10) (interface mibs) snmp(11)
ethernet	.mib-2(1).transmission(10).dot3(7) rfc-1643 rfc-1284 -> rfc-1398 -> rfc-1623 -> rfc-1643 dot3StatsTable(2) dot3CollEntry(5) dot3Tests(6) <oid pointers> dot3Errors(7) <oid pointers> dot3ChipSets(8) <oid pointers>
fddi	.mib-2(1).transmission(10).fddi(15).fddimib(73) rfc-1512 rfc-1285 -> rfc-1512 fddimibSMT(1) fddimibMAC(2) fddimibPATH(3) ddimibPORT(4)

MIB	RFC/GROUP
bridge	.mib-2(1).dot1dBridge(17) (multiple spanning tree support) rfc-1493 rfc-1286 -> rfc-1493 & rfc-1525 dot1dBase(1) dot1dStp(2) (set) dot1dSr(3) Not applicable dot1dTp(4) (set) not implemented: dot1dStatic destination address filtering dot1dStaticTable(1) traps
interfaces	.mib-2(1).ifMIB(31).ifMIBObjects(1) rfc-1573 ifStackTable(2)
digital	.private(4).enterprises(1).dec(36).ema(2) mib-extensions-1(18)
elan	elanext(1).efddi(1) (set) elanext(1).ebridge(4) (set) ebrIfSpanTable Not supported ebrTwoPortStatic Not supported ebrTwoProtoFilt Not supported ebrNTP Not supported
hub	dec_elan_vendor_mib_v30.mib decHub900(11).pubCommon(2) pcomHub(2) pcomLed(3) (set) pcomLoad(4) (set)
comet	comet-mib(2) cinterface(1)
vlan	vlan_v1.mib pe2000(33).bridgeGroup(1) (set) bridgeGroupPortTable(4) bridgeGroupNameTable(5) bridgeGroupPeBusTagTable(7) bridgeGroup atomics

MIB	RFC/GROUP
proteon	.private(4).enterprises(1).dec(36).ema(2). mib-extensions-1(18).cometBROUTERS(20).proteon-mib(1) no rfc - proteon mib text fully supported including sets admin(1).oid(1) admin(1).status(2) admin(1).els(3) admin(1).xface(4) admin(1).private(5) (no documentation) nvram(1) reset(2) xface(2) proto(3)
icom	internal(0).intCommon(1) int-common.mib The icom MIB objects are normally only visible to the MAM on the hub backplane serial line icomHlap(1) icomRoot(2) Table not populated icomHub(3) icomStatus(4) icomTrap(5) Not supported icomIps(6) icomEnviron(7) icomPower(8) icomIntProtInstrumentation(9) Not supported icomBp(10) icomBpTotalConfigChanges(1) icomBpIfNumEntries(2) icomBpIfTable(3) icomBpPortDescrTable(4) Missing in walk icomBpIfSubtypeNumEntries(5) icomBpIfSubtypeTable(6) icomBpSignalSetNumEntries(7) icomBpSignalSetTable(8) icomBpConnNumEntries(9) icomBpConnTable(10) icomSlot(11) icomEntity(12) icomRemotePoll(14) Not supported icomLigo(15) icomLast Not supported

Documentation Errata

Document: VNswitch 900XX Installation and Configuration

Appendix C of the *VNswitch 900XX Installation and Configuration* manual reflects the current LED states. This document is included with the V1.6 kit and is also available on the DIGITAL Network Product Business Web Site.

Document: VNswitch 900 Series Switch Management

Please note the following corrections to the *VNswitch 900 Series Switch Management* manual in Chapter 10:

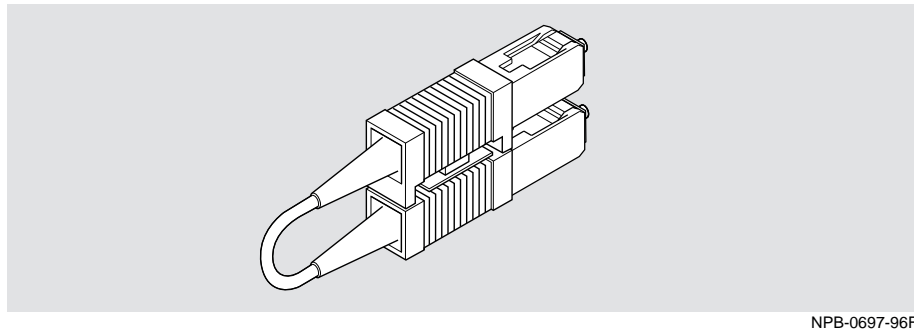
- In "Configuring Installation File Locations," Task 1 specifies the address of the interface through which the firmware upgrade occurs using the "Add address" command. This command is not supported in this release of the firmware. Instead, 'Reload' and 'Load Remote' use the IP-HST address for the upgrade operation.
- In "Displaying Interface Information," the "List Addresses" command described in the Boot-config menu is no longer supported.
- In the section on configuring the module for dumping, the description does not explain how the IP address for the dump interface is specified. Please read the following note and paragraph when configuring the module for dumping.

NOTE: You need to configure the module with an in-band IP address and enable TCP/IP Host Services for dump to work.

The IP address of the LDM port defaults to the in-band IP address already configured for the module. To specify an IP address for the LDM port that is different from the host IP address, use the "add address" command at the boot-config prompt. This command prompts you for the IP address and net mask to assign to the LDM port.

Document: 100 Mb/s Fast Ethernet Modular Media Interface Cards Installation

In Appendix C, the wrong connector is shown in Figure A-2: Multimode Fiber-Optic Loopback Connector. The correct figure follows:



In Appendix C, in the UTP Cable and Connector Information section, the table describing the card's cable and connectors with their order numbers should read:

The following UTP cables and loopback connector are available from DIGITAL:

Cable/Connector Description	Order Number
UTP high-performance data grade building cables (TIA/EIA Category 5)	H8245-C and H8246-C series
UTP Category 5 patch cord (straight)	BN25G-xx ¹
UTP Category 5 patch cord (cross over)	BN24Q-xx
Loopback connector	H4082-AA

¹ The symbol xx represents the cable length. The available cable lengths are described in the *Open DECconnect Applications Guide*.

Accessing On-line Information

Network Product Business Web Site

Further information on this network product or topic is available on DIGITAL's Network Product Business Web Site, as well as its Bulletin Board System. Both systems maintain a common, rich set of up-to-date information on NPB's products, technologies, and programs.

The Web Site can be reached at geographic locations via the following URLs:

Americas Network Product Business Home Page	http://www.networks.digital.com/
Europe Network Product Business Home Page	http://www.networks.europe.digital.com/
Australia Network Product Business Home Page	http://www.digital.com.au/networks/
Digital Equipment Corporation Home Page	http://www.digital.com/

To connect to the Network Product Business Bulletin Board System, you need a PC and a modem. Dial 508-486-5777 (U.S.A.). Set your modem to 8 bits, no parity, 1 stop bit.

Using Electronic Mail

The DDN Network Information Center (NIC) of SRI International provides automated access to NIC documents and information through electronic mail. This is especially useful for users who do not have access to the NIC from a direct Internet link, such as BITNET, CSNET, or UUCP sites.

To use the mail service, follow these instructions:

- 1 Send a mail message to **SERVICE@NIC.DDN.MIL**.
- 2 In the SUBJECT field, request the type of service that you want followed by any needed arguments.

Normally the message body is ignored, but if the SUBJECT field is empty, the first line of the message body is taken as the request. Requests are processed automatically once a day. Large files are broken into separate messages.

The following example shows the SUBJECT lines you use to obtain DDN NIC documents:

```
HELP
RFC 822
RFC INDEX
RFC 1119.PS
FYI 1
IETF 1IETF-DESCRIPTION.TXT
INTERNET-DRAFTS IID-ABSTRACTS.TXT
NETINFO DOMAIN-TEMPLATE.TXT
SEND RFC: RFC-BY-AUTHOR.TXT
SEND IETF/1WG-SUMMARY.TXT
SEND INTERNET-DRAFTS/DRAFT-IETF-NETDATA-NETDATA-00.TXT
HOST DIIS
```