**digital** ™

# DECrepeater 90TS Release Notes
# Firmware Version V2.0
# September 1995

These release notes contain firmware and software requirements, and list known conditions and restrictions that apply to the operation of the DECrepeater ™ 90TS module.

Additional release notes can be found online. See the section of this document that is titled Accessing Online Information for information about retrieving online release notes.

## Contents

## Firmware Requirements

Digital Equipment Corporation requires that you use DEChub 900 MultiSwitch firmware version V4.0, or higher, to manage the DECrepeater 90TS V2.0 in a DEChub 900 when installed in a DEChub 900 MultiSwitch.

If you are using the DECrepeater 90TS as a stack manager, Digital Equipment Corporation requires that you use firmware version V2.0, or higher.

## Software Requirements

If you are using HUBwatch to manage the DECrepeater 90TS V2.0, Digital Equipment Corporation requires that you install HUBwatch software version V4.1, or higher.

## Known Conditions and Restrictions

The following is a list of DECrepeater 90TS module conditions and restrictions:

- The Maintenance Operations Protocol (MOP) V4 loopback function is not supported. The MOP V3 loopback function (Ethernet Configuration Testing Protocol in the Ethernet V2 specification) is supported.

- The IP stack is supported in-band only over the Ethernet datalink layer, but is not supported over IEEE 802.3.

- If you are managing a DECrepeater 90TS module over OBM in a standalone configuration and are using HUBwatch to manage the DECrepeater 90TS module, clicking the Reset button on the Repeater Summary screen will not bring up the module. Recover by using the Console menu to reset to factory settings.

- When managing DECrepeater 90TS modules in a DEChub 90, a DEChub 90 16-slot (double hub), or a Digital MultiStack System with a DECrepeater 90TS agent, managed devices will occasionally disappear in one HUBwatch poll and reappear in another. A refresh of the HUBwatch display will restore the full view of the hub or stack.

  When managing DECrepeater 90TS modules in a DEChub 90, DEChub 90 16-slot (double hub), or Digital MultiStack System using the out-of-band management port, the problem is more pronounced. When using a DECrepeater 90TS module as a DEChub 90, DEChub 90 16-slot (double hub) or Digital MultiStack System manager, use the in-band IP address rather than the out-of-band IP address. The out-of-band management port can still be used in a standalone configuration.

- If the agent's hub mastership is currently enabled and you toggle the hub mastership enable to off and then to on, perform a Reset to Current Settings to regain full SNMP management of the hub or stack.

2

- In a DEChub 90 and a Digital MultiStack System, you must configure the management agent correctly to perform management functions. If you configure an agent to manage a DEChub 90 and place the agent in a Digital MultiStack System, no management will be attempted. Use the console to change the hub mastership backplane configuration to Digital MultiStack System and perform a Reset to Current Settings. The agent will begin managing the stack.

- A DECagent 90 is required as the Digital MultiStack System or DEChub 90 manager, if the following modules are used in the configuration: DECbridge 90, DECbridge 90FL, DECserver 90TL, DECserver 90L, DECserver 90L+.

- The DECbrouter 90T1, DECbrouter 90T2, and DECbrouter 90T2A modules must be in slots 1 through 9 when being managed by a DECrepeater 90TS in a Digital MultiStack System.

- While in HUBwatch, if you press the Factory button in the Repeater Summary screen for any proxied repeater, the nonvolatile RAM data will be cleared out; but the device will not be reset. To initialize the repeater, press the Reset button on the Repeater Summary screen.

- DECrepeater 90TS modules that are managed through a DECrepeater 90TS or DECrepeater 90FS agent will not perform security or port statistics functions. To use security and port statistics on a nonagent DECrepeater 90TS module, manage the device directly through its own in-band or out-of-band IP address.

- The AUI port on the Digital MultiStack System rear cover is not operational for a DECrepeater 90TS.

## MIB and RFC Information

The DECrepeater 90TS module supports the following MIBs and RFCs:

- MIB II, RFC 1213

- Ethernet-like interface type MIB, RFC 1398

- IETF repeater MIB, RFC 1516

- DEChub 900 repeater MIB extensions version V2.0

- DEChub 900 common MIB version V2.0

- DEChub 900 chassis MIB version V2.0 (when the DECrepeater 90TS is the managing agent)

## Accessing Online Information

This section describes how to access this product's online release notes, public MIBs, Digital's private MIBs, firmware images, and requests for comments (RFCs). This information is available from Digital's Internet ftp access server at ftp.digital.com (16.1.0.2).

| To Access... | Use... |
|---|---|
| MIBs, release notes, firmware update files, and HUBloader | Anonymous ftp |
| MIBs and release notes | ftpmail |
| RFCs | Electronic mail |

## Using Anonymous ftp

You can access any of Digital's DEChub MIBs, firmware update files, and release notes over the Internet by using your ftp software.

When you use ftp, you must use the following parameters:

- connect to `ftp.digital.com`

- for a user name, enter `anonymous`

- for a password, enter your Internet mail address; for example:

    `name@system.company.com`

- change directory to:

    `/pub/DEC/hub900/<directory_name>`

(See Table 1 for a list of directory names.)

**Table 1   Directory Names Available**

| Name | Contents[1] |
|---|---|
| mibs | DEChub MIBs |
| firmware | DEChub firmware images |
| firmware/hubloader | HUBloader |
| release | DEChub product release notes |

[1] Digital suggests reading the README file in each directory to understand the contents of that directory.

You can also access these directories from the World Wide Web using a browser. The Universal Resource Locator (URL) is as follows:

`file://ftp.digital.com/pub/DEC/hub900/`

The following example shows how to copy a README file. User input in the example is shown in **bold** text.

 **NOTE:**    User input is case sensitive; you must type it as shown.

```
% ftp ftp.digital.com
Connected to ftp.digital.com
```

```
220 FTP.DIGITAL.COM FTP Service Process

Name: anonymous

331 ANONYMOUS user ok, send real ident as password.

Password: milano@netman.stateu.edu

230 User ANONYMOUS logged in at Tue 10-May-1994 10:24-EST, job 54.

ftp> cd /pub/DEC/hub900/<directory_name>  (See Table 1 for directory names.)

331 Default name accepted. Send password to connect to it.

ftp> ascii  (See note below.)

220 Type A ok.

ftp> get README

200 Port 19.54 at host nnn.nn.nn.nn accepted.

150 ASCII retrieve of /pub/DEC/hub900/mibs/README started.

226 Transfer completed. 40239 (8) bytes transferred.

40239 bytes received in 23.65 seconds (5.8 Kbytes/s)

ftp> quit

%
```

**NOTE:** To transfer binary files, such as firmware updates, replace the `ascii` command shown in this example with `binary` or `image`.

## Using ftpmail

Digital offers Internet ftpmail access to private MIB and release note information, in ASCII text form, at ftp.digital.com, with up-to-date documents stored in:

`/pub/DEC/hub900/<directory_name>`

(See Table 1 for a list of directory names.)

To use ftpmail, follow these instructions:

1.  Send a mail message to `ftpmail@ftp.digital.com`.

2.  Ignore the subject line.

3.  Include the word `connect` in the first line of the body.

4.  Include `get` commands for each document required, for example:

    `get /pub/DEC/hub900/<directory_name>/README`
    (See Table 1 for a list of directory names.)

5.  `quit`

Requests are acknowledged, then queued and processed every 30 minutes. Because of the number of requests, it may take a day or two before you receive a reply.

**NOTE:** For more timely access, consider using anonymous ftp. (Refer to the section titled Using Anonymous ftp.)

## 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.

The following are example `SUBJECT` lines to obtain `DDN NIC` documents:

```
HELP

RFC 822

RFC INDEX

RFC 1119.PS

FYI 1

IETF 1IETF-DESCRIPTION.TXT

INTERNET-DRAFTS 1ID-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
```

Requests are processed automatically once a day. Large files are broken down into separate messages.