D-Link

DES-3226 Switch Management Module

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RECYCLABLE

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DES-3226 Management

User's Guide

About this Guide

This User's Guide tells you how to use the D-View5.1 network management system to manage your DES-3226 Series intelligent Fast Ethernet switch, including how to install the management module for the switch, and how to use the module to control and monitor the switch. Additional information on installing your switch and configuring it for management can be found in the DES-3226 *User's Guide*.

2

About this Guide



DES-3226 Series Intelligent Ethernet Switch

This guide discusses how to manage the DES-3226 Series switch using the D-View5.1 network management system. The DES-3226 Series combines conventional Ethernet, Fast Ethernet, Gigabit Ethernet, and switching technologies into one package. This device features twenty-four 10/100 NWay switching ports, and supports an optional ultra high-speed 1000BASE-SX Gigabit Ethernet rear module.

Additional information about configuring the DES-3226 Ethernet switch may be found in the Ethernet switch's hardware *User's Guide*.

Network Management

As networks grow larger, network management becomes more and more of a necessity. A large network requires a considerable amount of work to keep it running smoothly, including time and effort spent on user support, troubleshooting, network planning, and performance monitoring. The intent of a network management system (NMS) is to make it possible to monitor a widely spread-out network (possibly spanning many different sites) from a centralized location.

Network management works by placing a small degree of "intelligence" in the network elements (routers, switches, hubs, hosts, etc.) to be managed. This intelligence takes the form of an *agent* that is capable of collecting statistics and status information, as well as performing control operations that affect the operation of the network. The agent responds to commands and requests for information from the centralized network management system, allowing the health and performance of the network to be monitored and adjusted.

Introduction

A network protocol known as the Simple Network Management Protocol (SNMP) is generally used to communicate between network management stations and the devices they manage. SNMP was originally developed for controlling the devices that made up the infrastructure of the Internet, and has become the primary standard for network management. SNMP commonly runs "on top of" the TCP/IP Internet Protocol, though other transmission methods are possible.

Because a network management station can be used to manage a wide range of devices, network management software is generally divided into two different parts: a base *platform* consisting of software common to the management of all devices; and a set of *modules*, each of which can communicate with a narrow range of devices by way of their SNMP-based agents. If a new device type is added to the network, then a new module (compatible with the particular platform being used) needs to be added to facilitate its management.

This manual describes the module used on the D-View5.1 platform for controlling DES-3226 intelligent Gigabit Ethernet switches.

Introduction

Installing the Management Module

This section describes the requirements and procedures for installing the DES-3226 Series management module on your network management system.

Requirements

We recommend that your system meet the following requirements to be able to use the DES-3226 Series switch management module:

D-View

- An IBM PC AT or compatible computer with a 486DX2-66 or faster processor
- Microsoft Windows 95, 98, NT 4.0, 2000 or XP
- D-View SNMP Network Management Program, version 5.1
- ◆ 16 megabytes (32M preferred) of main memory (RAM)
- At least 10 megabytes of free hard disk space
- A Windows-compatible mouse or other pointing device
- An Ethernet network card with appropriate drivers
- ♦ A CD-ROM drive

Before installing the module, you need to have D-View5.1 installed on your system. Take note of the directory path where you installed it because you will need to enter the same path name when you install management modules.

Installing the Management Module

You will need to make sure that your switch is properly set up before you can use the management module:

- Ensure that the switch is either connected to the same network as the network management station, or that it is connected using the SLIP protocol using the RS-232C console port.
- Ensure that the switch's TCP/IP settings are set properly. If the switch is on the same local network, the network portion of the switch's IP address needs to be the same as that of the network management station. If they are on separate LANs, the TCP/IP gateway (router) field of both the switch and the router need to be set properly so that information can be routed properly between the switch and the management station.

For more information about these and other items, consult the DES-3226 hardware *User's Guide*.

Installing the Module Software

Take the following steps to install the module on your network management system:

D-View

- **1.** Exit D-View if you are running it.
- **2.** Insert the DES-3226 disk into your system's CD-ROM drive.
- 3. Under Windows 98, choose Run... from the Start menu on the taskbar. When the dialog box appears, type the pathname of the setup.exe program (D:\Setup).

Installing the Management Module

4. The installation program will start. You will see the following **Setup** prompt.



5. When the Welcome to the DES-3226 Setup program window opens, click Next.



Installing the Management Module

6. When the User Information screen appears enter the relevant information and then click Next.

	Type your r company yo	name below. You must also type the name of the ou work for.
	N <u>a</u> me:	Shine May Hung
	<u>C</u> ompany:	Dlink
20		
InstallShield		< <u>B</u> ack <u>N</u> ext > Cancel



Installing the Management Module

7. To install DES-3226 in the directory C:\...\D-Link\D-View\Modules\DES3226 click Next or click Browse to find an alternate location.

	Setup will install DES-3226 in the following directory.
	To install to this directory, click Next.
	To install to a different directory, click Browse and select another directory.
	You can choose not to install DES-3226 by clicking Cancel to exi Setup.
Ż	Destination Directory C:\\D-Link\D-View\Modules\DES3226 Browse
InstallShield	(Back Nants Consel

Installing the Management Module

8. Select folder name and click Next to continue the module installation.

Select Program Folder		×
	Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.	
	DES3228	
	Existing Folders:	
	Accessories Administrative Tools CoreIDRAW 10 D-Link Lotus Applications Microsoft Office Tools	
000 4	Trend OfficeScan WinNT	1
InstallShield		-
	< <u>B</u> ack <u>N</u> ext> Cancel	1



Installing the Management Module

9. The current settings for copying files is listed. If you are satisfied with the settings click **Next**. If not click **Back** to change settings.

Start Copying Files		×
	Setup has enough information to start copying the program fi If you want to review or change any settings, click Back. If y are satisfied with the settings, click Next to begin copying file Current Settings:	es. Iou s.
	Setup Type: Complete Target Folder C:\Program Files\D-Link\D-View\Modules\DES3226 User Information Name: Shine May Hung Company: Dlink	*
InstallShield	✓ Back Next > Cancel	

Installing the Management Module

10. When your computer is finished, the **Setup Complete** window appears. Click **Finish**.

Setup Complete	
	Setup has finished installing the application on your computer. You may launch the application by selecting the icons installed.
InstallShield	Click Finish to complete Setup.

The D-View network management system will now be ready to manage DES-3226 Series switches once a switch icon is added to the network map (see the next section for instructions).

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Installing the Management Module

DES-3226 Management

Adding your DES-3226 Switch to the Map

Before you can manage individual DES-3226 Series Ethernet switches, you need to add them to your network map.

D-View

You can do this either by:

- Using D-View's Auto Discover capability to add all new SNMPmanageable devices to the map.
- Using the manual Discover Devices capability.

DES-3226 Management

To use the second method the following screen will appear when you click on **Discover** under the **System** drop-down menu. Enter the appropriate IP settings and Discover the device of choice.

To IP Address 10 16	5 79 126	Discover Schema		0
SNMP Read public TimeOut 1000	msec	Search	C Select Device	Stop Save & E
No.	IP Address		System Description	

DES-3226 Management

The DES-3226 switch icon should now be displayed on your network map as shown below:

🚯 D-View 5.1 - [ListViewForm-D-Link]					_ 🗆 🗙
🚯 System <u>V</u> iew <u>E</u> dit MIBs <u>T</u> oo	ols <u>A</u> ccount <u>V</u>	<u>V</u> indow <u>H</u> elp				_ 8 ×
🚜 🎢 💾 쓪 🛼 🚺 Tool	User Define					
	OTT	(in)				
		, <i>t</i>				
🖃 🥰 Root 📃 🔺	DG-104	DGS- 	DG-104	DHS- 3210	DG-104	DES- 3226
Ethernet						
E Seperal	10.1.1.105	10.1.1.155	10.1.40.88	10.11.22.202	10.12.13.88	10.132.26.10
E Cisco						
🕀 🚥 📴 D-Link	DGS- 3308	DES- 3226	DES- 3226	DES - 3326	DES- 63.00	DGS- 3308
	10151.00	10 10 70 100	10.10.70.00	10.10.70.00	10.10.70.00	10.17.11.0
+ Microsoft	10.15.1.33	10.16.79.126	10.16.79.26	10.16.79.36	10.15.79.53	10.17.11.3
F	CAMP .	1 DEC	DES	C NIM D	DEC.	- 0
		3226	3326		8300	
🗄 🖏 Interactive	10 17 11 76	10 17 11 77	10 17 11 82	10 17 11 86	10 17 11 88	10 20 6 22(
som		10.111.11	10.11.11.02	10.11.11.00	10.11.11.00	-
Messages Turned						
<u> </u>						

The Module Display

Double-clicking on the icon in the network map causes the module display to open. The module display is used to monitor and perform network management functions on the selected device. The module display for the DES-3226 appears as follows:

DES-3226 Management

onfiguration MIB II	Bridge YLAN	RMON Advanced Configur	artion Help	
DES-3226	- 1 ³	5 7 9 11 13	15 17 19 21 23-	Ethernet Switch
D-LINK		in Anal		
Diagnostics RS-23				9 0
Console	2 4	8 10 12 14	16 18 20 22 24	

- Menu Buttons The Configuration, MIBII, Bridge, VLAN, RMON, Advanced Configuration, and Help buttons display their respective pull-down menus. The items listed in these menus are described later on in this manual.
- **Ports** Each of the ports on the switch are depicted on the panel. You can select individual ports to perform operations on them. Clicking on the gray area immediately surrounding the ports will deselect the port and select the switch as a whole.
- **Port Status Indicators** There are corresponding port status indicators for each of the ports on the switch. Each port indicator can be interpreted as follows:
 - ♦ **Link** Lights green when a port is connected to a powered-on Ethernet device.
 - ♦ Act Lights blink off briefly when information is transmitted or received on a port.
 - ♦ 100M Lights when a 100 Mbps connection is made on a port.
- Switch Status Indicators There are two switch status indicators. Each switch indicator can be interpreted as follows:
 - ♦ **Power** Lights green when device is powered on.
 - ♦ **Console** Lights when the console management program is in use.

Selecting Ports

Many of the switch management functions can be applied to the switch itself, or to a particular port. You can select an individual port by clicking on the port

DES-3226 Management

itself. You can select the switch itself by clicking in the gray area surrounding the ports, so that none of the ports are selected.

Menu Buttons

The menu buttons on the module - **Configuration**, **MIBII**, **Bridge**, **VLAN**, **RMON**, **Advanced Configuration**, and **Help** – are used to access all the configuration settings, polling parameters and viewing tables used in management. The section below addresses the function and use of each item in the menu button's drop-down menus.

Configuration Menu Button

The **Configuration** menu contains options that allow you to get information about current settings, configure switch parameters, and setup the switch for monitoring.

Configuration →Basic →Basic Information

You may access this window by choosing **Basic** under the **Configuration** button and then by selecting **Basic Info**. It gives a list of the MIBs that are supported by the device, the version and type of the MIB. It indicates whether the console is currently in use.

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				11
Index	Descr	Version	Туре	Sample
1	RFC1213-MIB	2	standard	
2	RFC1215-MIB	2	standard	
3	RFC1493-MIB	2	standard	
4	RFC1757-MIB	2	standard	Hefresh
5	RFC2233-MIB	2	standard	
6	RFC2358-MIB	2	standard	
7	RFC2674-MIB	2	standard	
8	RFC2737-MIB	2	standard	
9	DLINK-AGENT-MIB	1	p prietary	
10	DLINK-L2MGMT-MIB	1	proprietary	
11	DHS3226-MIB	1	proprietary	

Configuration →Basic →Basic Configure

A basic configuration entry contains information about downloading or uploading the boot file, log file and config file.

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File Index	File Dscr	File Address	File Transfer Type	File	
1	boot file	10.43.10.1	network-load	£\prc	2
2	log file	10.43.10.1	network-load	(NUL	3
3	config image file	10.43.10.1	network-load	(NUL	Sample
					Refresh
▲ Software F	ile Address			▶	
Software F	ile Name	1			
Load Type	e upload	1	¥		
	Status				

Configuration →Basic →IP Configure

Use this screen to manually set the IP Address, Subnet Mask and Default Gateway of the device.

DES-3226 Management

aet IP From	Manu	ıal	_		Befrech
P Address	10	16	79	126	116116311
iubnet Mask	255	0	0	0	Set
efault Gateway	0	0	0	0	

Configuration →Basic →Trap Receiver

This screen gives a list of trap managers to which SNMP traps will be sent.

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DES-3226 Management

	ITEI TUDICI IUI	16.79.126	
IP Address	Community String	Status	0 Sample
			Refresh Add/Modify
P Address Community Stri			

Configuration →Basic →Port Trunk

The DES-3226 can support up to 6 trunk groups, each of which combines multiple ports into a single, logical, high-bandwidth data pipe.

To view or edit the Port Trunking Table, choose **Port Trunk** from the **Configuration** menu:

DES-3226 Management

🔊 Port	: Trunk T	able :10.16.7	9.126		
Index	Name	Master Port	Port List	Trunk State	
1	(NULL)	0	00000000	Disabled	6
2	(NULL)	0	00000000	Disabled	b
3	(NULL)	0	00000000	Disabled	Sample
4	(NULL)	0	00000000	Disabled	
5	(NULL)	0	00000000	Disabled	
6	(NULL)	0	00000000	Disabled	Refresh
Name Maste	er Port			Trunk Status	Set
		9 11 13 15		23 	
2 4	6 8	10 12 14 16	18 20 22	24	
iet:Ok!.	Request:	Port Trunk Tab	le.Received	at 04:43:46 PM.	/

Configuration →Basic →Port Mirror

A list of information provides an easy way to monitor traffic on any port. The user can bring a fancy network monitor attaching to any target mirror port and set the port to be monitored as the source mirror port. The user can set the source port, target port, and mirror direction.

DES-3226 Management

Port Mirror	Table:10.16.79.126	
Source Port	port 1	Refresh
Target Port	port 2	Get
Mirror Directio	n Ingress & Egress 💌	
Mirroring 9	itatus	

Configuration →Basic →IGMP Control Table

The **IGMP Control Table** option allows you to set up the switch for handling multicast transmissions. You may access this window by choosing **Basic** under **Configuration** and then by selecting **IGMP Control Table**.

Internet Group Management Protocol (IGMP) allows multicasting on your network. When IP Multicast Filtering is enabled, the switch can intelligently forward (rather that broadcast) IGMP queries and reports sent between devices connected to the switch and an IGMP-enabled device hosting IGMP on your network.

The table controls the VLAN's IGMP function. Its scale depends on current VLAN state.

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Vid	Query Interval	Query Max Re	sponse Time	Robustness	Timer	Querier V	
1	125	10		2	260	v0Queriei	1 Sample
							Sample
							Refresh
							Add
							-
•						•	
VL4 Mai	AN ID Response Time enier Version VOC	(1-25) 10 Juerier 💌	Query In Robustr	nterval ness Variable(1	-255)		

Configuration →Basic →IGMP Query Information

IGMP Host-Query packets are transmitted on this interface. The information is displayed in the table below.

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🛐 IG	MP Query In	formation Table :	10.16 <mark>_ 🗆 ×</mark>
Vid	Query Count	Tx Query Count	procession and the second
t taratartartartartartartartartartartartar	0	0	1 Sample
			Refresh

Configuration →IF-MIB →General Table

The following table gives a brief description of the IF MIB:

IF-MIB (RFC 2233)

1. The ifGeneralInformationGroup. This group contains those objects applicable to all types of network interfaces,

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including bit-oriented interfaces.

- 2. The ifPacketGroup. This group contains those objects applicable to packet-oriented network interfaces.
- 3. The ifFixedLengthGroup. This group contains the objects applicable not only to character-oriented interfaces, such as RS-232, but also to those subnetwork technologies, such as cell-relay/ATM, which transmit data in fixed length transmission units. As well as the octet counters, there are also a few other counters (e.g., the error counters) which are useful for this type of interface, but are currently defined as being packet-oriented. To accommodate this, the definitions of these counters are generalized to apply to characteroriented interfaces and fixed-length-transmission interfaces. It should be noted that the octet counters in the if Table aggregate octet counts for unicast and non-unicast packets into single counter direction а octet per (received/transmitted). Thus, with the above definition of fixed-length-transmission interfaces, where such interfaces which support non-unicast packets, separate counts of unicast and multicast/broadcast transmissions can only be maintained in a media-specific MIB module.

The General Table tells when the IfTable was last changed and when the If Stack was last changed.

ifGeneral Table : 10	.16.79.126	×
IF Table Last Change	0:00:10:24	Befresh
IF Stack Last Change	0:00:10:24	
et:DISNMP : Ok! Reques	Receive at 11:20:41 AM.	

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Configuration →IF-MIB →IfX Table

The **IfX Table** gives a list of interface entries. The number of entries is given by the value of the **IfNumber**. This table contains additional objects for the interface table.

IfName is the textual name of the interface. The value of this object should be the name of the interface as assigned by the local device and should be suitable for use in commands entered at the device's console. This might be a text name or a simple port number depending on the interface naming syntax of the device.

IfInMulticastPkts is the number of packets, delivered by this sub-layer to a higher (sub-) layer, which were addressed to a multicast address at this sub-layer.

IfInBroadcastPkts is the number of packets delivered by this sub-layer to a higher (sub-) layer, which were addressed to a broadcast address at this sub-layer.

IfOutMulticastPkts is the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including ones that were discarded or not sent.

IfOutBroadcastPkts is the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent.

IfHCInUcastPkts is the number of packets, delivered by this sub-layer to a higher (sub-) layer, which were not addressed to a multicast or broadcast address at this sub-layer. This object is a 64-bit version of **ifINUcastPkts**.

IfHCInMulticastPkts is the number of packets, delivered by this sub-layer to a higher (sub-) layer, which were addressed to a multicast address at this sub-layer. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of **ifInMulticastPkts**.

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IfHCInBroadcastPkts is the number of packets, delivered by this sub-layer to a higher (sub-) layer, which were addressed to a broadcast address at this sub-layer. This object is a 64-bit version of **ifInBroadcastPkts**.

IfHCOutOctets is the total number of octets transmitted out of the interface, including framing characters. This object is a 64-bit version of **ifOutOctets**.

IfHCOutUcastPkts is the total number of packets that higher-level protocols requested be transmitted, and which were not addressed to a multicast or broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of **ifOutUcastPkts**.

IfHCOutMulticastPkts is the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a multicast address at this sub-layer, including those that were discarded or not sent. For a MAC layer protocol, this includes both Group and Functional addresses. This object is a 64-bit version of **ifOutMulticastPkts**.

IfHCOutBroadcastPkts is the total number of packets that higher-level protocols requested be transmitted, and which were addressed to a broadcast address at this sub-layer, including those that were discarded or not sent. This object is a 64-bit version of **ifOutBroadcastPkts**.

IfLinkUpDownTrap Enable indicates whether linkup/linkDown traps should be generated for this interface. By default, this object should have the value enabled (1) or interfaces which do not operate on 'top' of any other interface (as defined in the **ifStackTable**), and disabled(2) otherwise.

IfHighSpeed is an estimate of the interface's current bandwidth in units of 1,000,000 bits per second.

IfPromiscuous Mode is an object that has a value of false(2) if this interface only accepts packets/frames that are addressed to this station. This object has a value true(1) when the station accepts all packets/frames transmitted on the media.

IfConnectorPresent is an object that has the value 'true(1)' if the interface sublayer has a physical connector and the value 'false(2)' otherwise.

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IfAlias is an 'alias' name for the interface as specified by a network manager, and provides a non-volatile 'handle' for the interface.

IfCounterDiscontinuityTime. The value of **sysUpTime** on the most recent occasion at which any one or more of this interface's counters suffered a discontinuity. The relevant counters are the specific instances associated with this interface of any Counter32 or Counter64 object contained in the **ifTable** or **ifXTable**.

1 Port 1 2387 72058 0 0 2 Port 2 0 0 0 0 0 3 Port 2 0 0 0 0 0 3 Port 2 0 0 0 0 0 4 Port 2 0 0 0 0 0 5 Port 3 0 0 0 0 0 6 Port 6 0 0 0 0 0 7 Port 7 0 0 0 0 0 8 Port 8 0 0 0 0 0 9 Port 9 0 0 0 0 0 10 Port 10 0 0 0 0 0 11 Port 11 0 0 0 0 0 0 0 12 Port 12 0 0 0 0 0 0 0 0 0 13 Port 14 0	ifIndex	ifName	ifInMulticastPkts	ifInBroadcastPkts	ifOutMulticastPkts	ifOutBroa
2 Port 2 0 0 0 0 3 Port 3 0 0 0 0 4 Port 3 0 0 0 0 5 Port 5 0 0 0 0 6 Port 6 0 0 0 0 7 Port 7 0 0 0 0 8 Port 8 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 11 Port 12 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 18 0 0 0 0	1	Port 1	2387	72058	0	0
3 Port 3 0 0 0 0 4 Port 3 0 0 0 0 5 Port 5 0 0 0 0 6 Port 6 0 0 0 0 7 Port 6 0 0 0 0 8 Port 7 0 0 0 0 9 Port 9 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 18 0 0 0 0 17 Port 19 0 0 0 0	2	Port 2	0	0	0	0
4 Port 4 0 0 0 0 5 Port 5 0 0 0 0 6 Port 5 0 0 0 0 7 Port 6 0 0 0 0 7 Port 7 0 0 0 0 8 Port 8 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 15 0 0 0 0 15 Port 15 0 0 0 0 16 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 19 0 0 0 0	3	Port 3	0	0	0	0
5 Port 5 0 0 0 0 6 Port 6 0 0 0 0 7 Port 7 0 0 0 0 8 Port 8 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 12 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 15 0 0 0 0 15 Port 15 0 0 0 0 16 Port 17 0 0 0 0 17 Port 17 0 0 0 0 18 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 </td <td>4</td> <td>Port 4</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td>	4	Port 4	0	0	0	0
6 Port 6 0 0 0 0 7 Port 7 0 0 0 0 8 Port 8 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 17 0 0 0 0 18 Port 18 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	5	Port 5	0	0	0	0
7 Port 7 0 0 0 0 8 Port 8 0 0 0 0 9 Port 8 0 0 0 0 9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 15 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0	6	Port 6	0	0	0	0
8 Port 8 0 11 Port 10 0 0 0 0 0 0 11 Port 11 0	7	Port 7	0	0	0	0
9 Port 9 0 0 0 0 10 Port 10 0 0 0 0 11 Port 10 0 0 0 0 11 Port 10 0 0 0 0 11 Port 10 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 15 0 0 0 0 15 Port 15 0 0 0 0 16 Port 15 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	8	Port 8	0	0	0	0
10 Port 10 0 0 0 0 11 Port 11 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 15 0 0 0 0 17 Port 17 0 0 0 0 18 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	9	Port 9	0	0	0	0
11 Port 11 0 0 0 0 12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 13 0 0 0 0 14 Port 13 0 0 0 0 15 Port 15 0 0 0 0 16 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	10	Port 10	0	0	0	0
12 Port 12 0 0 0 0 13 Port 13 0 0 0 0 14 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	11	Port 11	0	0	0	0
13 Port 13 0 0 0 0 14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 16 0 0 0 0 17 Port 16 0 0 0 0 18 Port 17 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 4	12	Port 12	0	0	0	0
14 Port 14 0 0 0 0 15 Port 15 0 0 0 0 16 Port 15 0 0 0 0 17 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 4	13	Port 13	0	0	0	0
15 Port 15 0 0 0 0 16 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 4 Image: Constraint of the second	14	Port 14	0	0	0	0
16 Port 16 0 0 0 0 17 Port 17 0 0 0 0 18 Port 18 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	15	Port 15	0	0	0	0
17 Port 17 0 0 0 0 0 18 Port 18 0 0 0 0 0 19 Port 19 0 0 0 0 0 20 Port 20 0 0 0 0 0 21 Port 21 0 0 0 0 0 22 Port 22 0 0 0 0 0	16	Port 16	0	0	0	0
18 Port 18 0 0 0 0 19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	17	Port 17	0	0	0	0 -
19 Port 19 0 0 0 0 20 Port 20 0 0 0 0 21 Port 21 0 0 0 0 0 22 Port 22 0 0 0 0 0 0 ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	18	Port 18	0	0	0	0
20 Port 20 0 0 0 0 0 21 Port 21 0 0 0 0 0 22 Port 22 0 0 0 0 0 0 ◀	19	Port 19	0	0	0	0
21 Port 21 0 0 0 0 22 Port 22 0 0 0 0	20	Port 20	0	0	0	0
22 Port 22 0 0 0 0	21	Port 21	0	0	0	0
	22	Port 22	n,	n	n	0
	•					
	Linkuj	p/LinkDov	wn Trap	-	Allas	
LinkUp/LinkDown Trap Alias						
LinkUp/LinkDown Trap Alias	F Pr	omiscuous	Mode			

Configuration →IF-MIB →IfStack Table

The **IfStack Table** contains information on the relationships between the multiple sub-layers of network interfaces. In particular, it contains information

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on which sub-layers run 'on top of' which other sub-layers, where each sub-layer corresponds to a conceptual row in the ifTable.

ifStackHigherLayer	ifStackLowerLayer	ifStackStatus		
0	196609	active		
1	0	active		
2	0	active		
3	0	active		-
4	0	active		Refresh
5	0	active		Annonitementement
6	0	active		
7	0	active		
8	0	active		
9	0	active		
10	0	active		
11	0	active		
12	0	active		
13	0	active		
14	0	active		
15	0	active		
16	0	active		
17	0	active		
18	0	active		
19	0	active		
20	0	active		
21	0	active	•	

Configuration →Entity →Physical Table

The following table gives information about the Entity MIB:

Entity MIB (RFC 2737)	
 Logical Entity A managed system contains one or more logical entities, each represented by at most one instantiation of each of a particular set of MIB objects. A set of management functions is associated with each logical entity. Examples of logical entities include routers, bridges, print-servers, etc. 	
	-

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- Physical Entity A "physical entity" or "physical component" represents an identifiable physical resource within a managed system. Zero or more logical entities may utilize a physical resource at any given time. It is an implementation-specific manner as to which physical components are represented by an agent in the EntPhysicalTable. Typically, physical resources (e.g., communications ports, back planes, sensors, daughter-cards, power supplies, the overall chassis) which can be managed via Functions associated with one or more logical entities are included in the MIB. - Containment Tree Each physical component may be modeled as 'contained' within another physical component. A "containment-tree" is the conceptual sequence of entPhysicalIndex values which uniquely specifies the exact physical location of a physical component within the managed system. It is generated by 'following and recording' each 'entPhysicalContainedIn' instance 'up the tree towards the root', until a value of zero indicating no further containment is found.

The Entity Physical Table can be accessed by choosing Entity under Configuration and then Physical Table. This table contains one row per physical entity. There is always at least one row for an 'overall' physical entity.

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entPhysicalIndex	entPhysicalDescr	entPhysicalVendorType	
1	D-LINK DES-3226 device	1.3.6.1.4.1.171.10.36.1.3.1	07
2	D-LINK Base Module[DES-3226]	1.3.6.1.4.1.171.10.36.1.4.1	21
3	D-LINK Slot 1	1.3.6.1.4.1.171.10.36.1.6.1	Sample
4	D-LINK UTP-10/100M Nway port 1	1.3.6.1.4.1.171.10.36.1.5.1	
5	D-LINK UTP-10/100M Nway port 2	1.3.6.1.4.1.171.10.36.1.5.1	
6	D-LINK UTP-10/100M Nway port 3	1.3.6.1.4.1.171.10.36.1.5.1	[
7	D-LINK UTP-10/100M Nway port 4	1.3.6.1.4.1.171.10.36.1.5.1	Refresh
8	D-LINK UTP-10/100M Nway port 5	1.3.6.1.4.1.171.10.36.1.5.1	
9	D-LINK UTP-10/100M Nway port 6	1.3.6.1.4.1.171.10.36.1.5.1	C .
10	D-LINK UTP-10/100M Nway port 7	1.3.6.1.4.1.171.10.36.1.5.1	Set
11	D-LINK UTP-10/100M Nway port 8	1.3.6.1.4.1.171.10.36.1.5.1	
12	D-LINK UTP-10/100M Nway port 9	1.3.6.1.4.1.171.10.36.1.5.1	
13	D-LINK UTP-10/100M Nway port 10	1.3.6.1.4.1.171.10.36.1.5.1	
14	D-LINK UTP-10/100M Nway port 11	1.3.6.1.4.1.171.10.36.1.5.1	
15	D-LINK UTP-10/100M Nway port 12	1.3.6.1.4.1.171.10.36.1.5.1	
16	D-LINK UTP-10/100M Nway port 13	1.3.6.1.4.1.171.10.36.1.5.1	
17	D-LINK UTP-10/100M Nway port 14	1.3.6.1.4.1.171.10.36.1.5.1	
19	D LINK HTD 10/100M Number out 15	1 2 6 1 4 1 171 10 26 1 6 1	
•			
Serial Number	Alias	Asset ID	

Configuration →Entity →Logical Table

The Entity Logical Table can be accessed by choosing Entity under the Configuration menu tab and then by choosing Logical Table. This table contains one row per logical entity. For agents which implement more than one naming scope, at least one entry must exist.

DES-3226 Management
entLogicalIndex	entLogicalDescr	entLogicalType	entLogicalCommunity	
1	D-LINK Bridge Ver.4.00.081	1.3.6.1.2.1.17	(NULL)	1 Sample Refres
(F	

Configuration →Entity →Mapping

The **Entity Mapping** table contains zero or more rows of logical entity to physical equipment associations. For each logical entity known by this agent, there are zero or more mappings to the physical resources which are used to realize that logical entity.

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.PMappingTable	AliasMappingTable Phy	sicalContainsTable	
entLogicalIndex	entLPPhysicalIndex	1	1
	1	Sample	
		Befrei	•h
			511
	· · · · · · · · · · · · · · · · · · ·		

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Configuration →dot 3 Statistics

dot3StatsIndex	dot3StatsAlignmentErrors	dot3StatsFCSErrors	dot3StatsSingleCol A	
1	0	0	0	0.4
2	0	0	0	24
3	0	0	0	Samp
4	0	0	0	
5	0	0	0	
6	0	0	0	·····
7	0	0	0	Ref
8	0	0	0	-
9	0	0	0	
10	0	0	0	
11	0	0	0	
12	0	0	0	
13	0	0	0	
14	0	0	0	
15	0	0	0	
16	0	0	0	
17	0	0	0	
18	0	0	0	
19	0	0	0	
20	0	0	0	
21	n .	n	0	

Configuration → Save Changes

To save the changes made to the settings above choose **Save Changes** under the **Configuration** button. A screen asking you, "Are you sure?" will pop up. Click **OK** to put changes into effect or click **Cancel**.



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Configuration →Reset

To reset the device click on **Reset** under the **Configuration**. You will be prompted, "Are you sure?" Click **OK** to reset the device. Otherwise click **Cancel**.

Resetting Device	2	×
Are yo	u sure?	
OK	Cancel	

MIBII Menu Button

MIB II pop-up menus are accessed as drop-down menus and can be viewed alone. You can also have multiple windows opened simultaneously.

MIB II →Information

Use the MIB II Information window to view and write basic device SNMP information.

Enter the following:

- System Contact,
- System Name
- System Location

Type in the new text and click on Set to make these change effective.

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System Description	D-Link DES-3226 Ethernet Switch	
System OID	1.3.6.1.4.1.171.10.36.1.11	Refresh
System Up Time	1 day 3:44:44.75	Set
System Contact		
System Name		
System Location		
System Service	3	

The remaining menus under MIB II are the following read-only table and counter windows (examples pictured below):

- IF Table
- IF Counters
- IP Counters
- IP Routing
- IP Address Table
- ICMP Counters
- UDP Counters
- SNMP Counters

Read-only menus can be refreshed, reset and paused; you may adjust the poll interval for the counters. Examples are provided below.

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MIB II → IF Table

Index	Descr	Туре	Mtu	Speed	PhysAddress	AdminStatus	Ope -
	RMON Unit 1 Port 1	62	1500	100000000	008010275616	up	up
2	RMON Unit 1 Port 2	62	1500	100000000	008010275616	up	up
3	RMON Unit 1 Port 3	62	1500	0	008010275616	up	dow
1	RMON Unit 1 Port 4	62	1500	0	008010275616	up	dow
i	RMON Unit 1 Port 5	62	1500	0	008010275616	up	dow
;	RMON Unit 1 Port 6	62	1500	0	008010275616	up	dow
7	RMON Unit 1 Port 7	62	1500	0	008010275616	up	dow
3	RMON Unit 1 Port 8	62	1500	0	008010275616	up	dow
)	RMON Unit 1 Port 9	62	1500	0	008010275616	up	dow
10	RMON Unit 1 Port 10	62	1500	0	008010275616	up	dow
11	RMON Unit 1 Port 11	62	1500	0	008010275616	up	dow
12	RMON Unit 1 Port 12	62	1500	0	008010275616	up	dow
13	RMON Unit 1 Port 13	62	1500	0	008010275616	up	dow
14	RMON Unit 1 Port 14	62	1500	0	008010275616	up	dow
15	RMON Unit 1 Port 15	62	1500	0	008010275616	up	dow
16	RMON Unit 1 Port 16	62	1500	0	008010275616	up	dow
17	RMON Unit 1 Port 17	62	1500	0	008010275616	up	dow
18	RMON Unit 1 Port 18	62	1500	0	008010275616	up	dow
19	RMON Unit 1 Port 19	62	1500	0	008010275616	up	dow
20	RMON Unit 1 Port 20	62	1500	0	008010275616	up	dow
21	RMON Unit 1 Port 21	62	1500	0	008010275616	up	dow
22	RMON Unit 1 Port 22	62	1500	0	008010275616	up	dow
23	RMON Unit 1 Port 23	62	1500	0	008010275616	up	dow
24	RMON Unit 1 Port 24	62	1500	0	008010275616	up	dow

DES-3226 Management

MIB II → IF Counters

Index	Descript	ion					· · · ·
1	BMONI	Init 1					System Time
2	BMON I	Joit 1					3:50:31 PM
3	BMON I	Joit 1					-
4	BMON I	Init 1					Refresh
5	RMON L	Jnit 1					Louise
6	BMON L	Jnit 1					
7	RMON L	Jnit 1					
8	RMONI	Init 1				<u> </u>	
Inde	× 1		Description F	RMON Unit 1 Port	1		
Name		Value	Delta	Rate	Peak	Peak Occure	Poll Interva
InOctet	s	1038178974	9450	9450	13220	3:50:28 PM	1 👻
InUcast	Pkts	1940989	20	20	20	3:50:28 PM	
InNUca	stPkts	7242315	60	60	104	3:50:28 PM	
InDisca	rds	41565	0	0	0	3:50:27 PM	Reset
InErrors		0	0	0	0	3:50:27 PM	
InUnkn	ownPro	0	0	0	0	3:50:27 PM	Start
OutOcte	ets	177097260	2223	2223	2287	3:50:28 PM	-
OutUca	stPkts	1561165	17	17	18	3:50:28 PM	Pause
OutNU	astPkts	398	0	0	0	3:50:27 PM	
OutDisc	ards	0	0	0	0	3:50:27 PM	
OutErro	15	0	0	0	0	3:50:27 PM	

DES-3226 Management

MIB II → IP Counters

Name	Value	Delta	Rate	Peak	Peak Occured at	Custom Tim
pInReceives	2492547	25	25	27	3:52:44 PM	System Tim
pInHdrErrors	463	0	0	0	3:52:43 PM	13.32.40 PM
pInAddrErrors	0	0	0	0	3:52:43 PM	
pForwDatagrams	0	0	0	0	3:52:43 PM	1 -
pInUnknownProtols	0	0	0	0	3:52:43 PM	Dell Internet
pInDiscards	208302	0	0	0	3:52:43 PM	Poll Interva
pInDelivers	2283782	25	25	27	3:52:44 PM	
pOutRequests	1558483	16	16	17	3:52:44 PM	Devet
pOutDiscards	0	0	0	0	3:52:43 PM	Heset
pOutNoRoutes	27	0	0	0	3:52:43 PM	
						Start
						Pause
						-
			-			

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MIB II → IP Routing

ipRouteDest	ipRoutelfIndex	ipRouteMetric1	ipRouteMetric2	ipRouteMetric3	ipF	
10.0.0.0	196609	1	-1	-1	-1	
						Refresh
					•	

DES-3226 Management

MIB II → IP Address Table

ipAdEntAddr	ipAdEntIfIndex	ipAdEntNetMask	ipAdEntBcastAddr	ipAdEntReasmM	
10.16.79.126	196609	255.0.0.0	1	65535	
					_
					Refresh
•				•	



MIB II → ICMP Counters

Name	Value	Delta	Rate	Peak	Peak Occured at	
icmpInMsgs	8116	0	0	1	4:18:14 PM	System I me
icmpInErrors	0	0	0	0	4:18:14 PM	4:18:18 PM
icmpInDestUnreachs	0	0	0	0	4:18:14 PM	
icmpInTimeExcdsms	0	0	0	0	4:18:14 PM	
icmpInParmProbs	0	0	0	0	4:18:14 PM	
icmpInSrcQuenchs	0	0	0	0	4:18:14 PM	Poll Interval
icmpInRedirects	0	0	0	0	4:18:14 PM	
icmpInEchos	8116	0	0	1	4:18:14 PM	
icmpInE choReps	0	0	0	0	4:18:14 PM	Reset
icmpInTimestamps	0	0	0	0	4:18:14 PM	
icmpInTimestampR	0	0	0	0	4:18:14 PM	Start
icmpInAddrMasks	0	0	0	0	4:18:14 PM	
icmpInAddrMaskR	0	0	0	0	4:18:14 PM	Davina
icmpOutMsgs	8143	0	0	1	4:18:14 PM	Pause
icmpOutErrors	0	0	0	0	4:18:14 PM	
icmpOutDestUnrea	27	0	0	0	4:18:14 PM	
icmpOutTimeExcds	0	0	0	0	4:18:14 PM	
icmpOutParmProbs	0	0	0	0	4:18:14 PM	
icmpOutSrcQuenchs	0	0	0	0	4:18:14 PM	
icmpOutRedirects	0	0	0	0	4:18:14 PM	
icmpOutEchos	0	0	0	0	4:18:14 PM	
icmpOutEchoReps	8116	0	0	1	4:18:14 PM	
icmpOutTimestamps	0	0	0	0	4:18:14 PM	
icmpOutTimestamp	0	0	0	0	4:18:14 PM	
icmpOutAddrMasks	0	0	0	0	4:18:14 PM	
icmpOutAddrMask	0	0	0	0	4:18:14 PM	

DES-3226 Management

MIB II → UDP Counters

Name	Value	Delta	Rate	Peak	Peak Occure	System Time
udpInDatagrams	96	1	1	1	3:00:05 PM	3:00:06 PM
udpNoPorts	287	0	0	2	3:00:05 PM	100000000000000000000000000000000000000
udpInErrors	0	0	0	0	3:00:04 PM	1 -
udpOutDatagra	86	1	1	1	3:00:05 PM	Dell Jahanual
						Foil Interval
						Reset
						Start
						Pause



MIB II → SNMP Counters

Name	Value	Delta	Rate	Peak	Peak Occured	T
snmpInPkts	184	2	2	2	3:02:46 PM	System Time
snmpOutPkts	145	2	2	2	3:02:46 PM	3:U2:47 PM
snmpInBadVersio	38	0	0	0	3:02:45 PM	
snmpInBadComm	0	0	0	0	3:02:45 PM	a -
snmpInBadComm	0	0	0	0	3:02:45 PM	le 🖂
snmpInASNPars	0	0	0	0	3:02:45 PM	Poll Interva
snmpInTooBigs	0	0	0	0	3:02:45 PM	
snmpInNoSuchN	0	0	0	0	3:02:45 PM	
snmpInBadValues	0	0	0	0	3:02:45 PM	Reset
snmpInReadOnlys	0	0	0	0	3:02:45 PM	
snmpInGenErrs	0	0	0	0	3:02:45 PM	Start
snmpInTotalReg	380	28	28	28	3:02:46 PM	Jidit
snmpInTotalSetV	0	0	0	0	3:02:45 PM	Davas
snmpInGetRegu	67	2	2	2	3:02:46 PM	Pause
snmpInGetNexts	79	0	0	0	3:02:45 PM	
snmpInSetReque	0	0	0	0	3:02:45 PM	
snmpInGetRespo	0	0	0	0	3:02:45 PM	
snmpInTraps	0	0	0	0	3:02:45 PM	
snmpOutTooBigs	0	0	0	0	3:02:45 PM	
snmpOutNoSuch	0	0	0	0	3:02:45 PM	
snmpOutBadValu	0	0	0	0	3:02:45 PM	
snmpOutGenErrs	0	0	0	0	3:02:45 PM	
snmpOutGetReg	0	0	0	0	3:02:45 PM	
snmpOutGetNexts	0	0	0	0	3:02:45 PM	
snmpOutSetReg	0	0	0	0	3:02:45 PM	
snmpOutGetRes	145	2	2	2	3:02:46 PM	
snmpOutTraps	0	0	0	0	3:02:45 PM	
sninpournaps				0	3.02.43 PM	

Bridge Menu Button

Bridge →802.1d →Information

First some Bridge 802.1D (RFC 1493) MIB Group Definitions:

Bridge 802.1D (RFC 1493) MIB Groups

The dot1dBase Group

This mandatory group contains the objects, which are applicable to all types of bridges.

The dot1dStp Group

DES-3226 Management

This group contains the objects that denote the bridge's state with
respect to the Spanning Tree Protocol. If a node does not implemented
the Spanning Tree Protocol, this group will not be
implemented.
The dot1dSr Group
This group contains the objects that describe the entity's state with
respect to source route bridging. If source routing is not supported this
group will not be implemented. This group is applicable to source route
only, and SRT bridges. This group will be described in a separate
document applicable only to source route bridging.
The dot1dTp Group
This group contains objects that describe the entity's state with respect
to transparent bridging. If transparent bridging is not supported this
group will not be implemented. This group is applicable to transparent
only and SRT bridges.
The dot1dStatic Group
This group contains objects that describe the entity's state with respect
to destination-address filtering. If destination-address filtering is not
supported this group will not be implemented. This group is applicable
to any type of bridge which performs destination-address filtering.
Relationship to Other MIBs
As described above, some IEEE 802.1d management objects have not
been included in this MIB because they overlap with objects in other
MIBs applicable to a bridge implementing this MIB. In particular, it is
assumed that a bridge implementing this MIB will also implement (at
least) the 'system' group and the 'interfaces' group defined in MIB-II.
Relationship to the 'system' group
In MIB-II, the 'system' group is defined as being mandatory for all
systems such that each managed entity contains one instance of each.

Bridge aging time can be adjusted in the Information window; otherwise Bridge 802.1 windows are read-only

ridge Address	008010275616	
lumber of Ports	24	Refresh
ridge Type	transparent-only	Set
earned Entry Discard	0	
AC Address Aging Tim	e 300	

Bridge →802.1d →Port Table

Port	IfIndex	Circuit	DelayExceededDiscards	MtuExceededDiscards	A
1	1	0.0	0	0	
2	2	0.0	0	0	
3	3	0.0	0	0	
4	4	0.0	0	0	
5	5	0.0	0	0	Refresh
6	6	0.0	0	0	
7	7	0.0	0	0	
8	8	0.0	0	0	
9	9	0.0	0	0	
10	10	0.0	0	0	
11	11	0.0	0	0	
12	12	0.0	0	0	
13	13	0.0	0	0	
14	14	0.0	0	0	
15	15	0.0	0	0	
16	16	0.0	0	0	
17	17	0.0	0	0	
18	18	0.0	0	0	
19	19	0.0	0	0	
20	20	0.0	0	0	
21	21	0.0	0	0	
22	22	0.0	0	0	

DES-3226 Management

Bridge → Spanning Tree → Information

Use the STP Information window for global changes to the selected device. User configurable global STP settings include **Priority**, **Maximum Aging Time**, **Hello Time** and **Forward Delay**.

Protocol	ieee8021d	
Priority (0-65535)	32768	Refresh
Time Since Topology Change	2 days, 2:02:53.00	Set
Number of Topology Changes	0	
Designated Root	8000008010275616	
Root Cost	0	
Root Port	0	
Maximum Aging Time	2000	
HelloTime	200	
Hold Time	100	
Forward Delay	1500	
Maximum Aging Time(600-4000)	2000	
Hello Time(100-1000)	200	
Forward Delay(400-3000)	1500	

Bridge → Spanning Tree → Port Table

The STP Port Table allows you to configure STP port settings. Select the port you wish to configure and type in the desired Priority and Path Cost for the port. The Status pull-down menu is used to enable or disable the STP settings for the port.

DES-3226 Management

Port	IfIndex	Circuit	DelayExceededDiscards	MtuExceededDiscards	•
1	1	0.0	0	0	
2	2	0.0	0	0	
3	3	0.0	0	0	
4	4	0.0	0	0	
5	5	0.0	0	0	Refresh
6	6	0.0	0	0	
7	7	0.0	0	0	
8	8	0.0	0	0	
9	9	0.0	0	0	
10	10	0.0	0	0	
11	11	0.0	0	0	
12	12	0.0	0	0	
13	13	0.0	0	0	
14	14	0.0	0	0	
15	15	0.0	0	0	
16	16	0.0	0	0	
17	17	0.0	0	0	
18	18	0.0	0	0	
19	19	0.0	0	0	
20	20	0.0	0	0	
21	21	0.0	0	0	and the second sec
22	22	0.0	n	n	

Bridge →Transparent Bridge →Port Counters

Counter tables and traffic graphs can be paused or reset as desired. The user can change the Poll Interval and Count, graphs may use a three dimensional line by checking the 3D Line box.

DES-3226 Management

dot1dTpPort	dot1dTpPortM	faxInfo				C 1. T
1	1506					System Time
2	1506					1:33:46 PM
3	1506					
4	1506					Refresh
5	1506					
6	1506				•	
Port Number Port Counter T	1 able Port Tra	Ma:	< Info 1506			Poll Interv
Name	Value	Delta	Rate	Peak	Peak Occ	Count
Input Frames	13370815	29	29	0	1:33:40 PM	10 -
Output Fram	2750328	16	16	0	1:33:40 PM	
Discard Fra	41565	0	0	0	1:33:40 PM	🗖 3D Lin
						Reset
						Start
						Pause
				-	_	

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VLAN Menu Button

Use the 802.1P side menus to view and set 802.1P port priority as well as **GMRP** and **GARP** settings. The read-only **Port Capability Form** is accessed as a side menu.



DES-3226 Management

This group contains the objects for configuring and reporting status of
priority-based queuing mechanisms in a bridge. This includes per-port
user priority treatment, mapping of user priority in frames into internal
traffic classes and outbound user priority and access priority.

1pGarp Group

This group contains the objects for configuring and reporting on operation of the Generic Attribute Registration Protocol (GARP).

1pGmrp Group

This group contains the objects for configuring and reporting on operation of the GARP Multicast Registration Protocol (GMRP).

Dot1qBase Group

This mandatory group contains the objects, which are applicable to all bridges implementing IEEE 802.1Q virtual LANs.

The dot1qTp Group

This group contains objects that control the operation and report the status of transparent bridging. This includes management of the dynamic Filtering Databases for both unicast and multicast forwarding. This group will be implemented by all bridges that perform destination-address filtering.

The dot1qStatic Group

This group contains objects that control static configuration information for transparent bridging. This includes management of the static entries in the Filtering Databases for both unicast and multicast forwarding.

The dot1qVlan Group

This group contains objects that control configuration and report status of the Virtual LANs known to a bridge. This includes management of the statically configured VLANs as well as reporting VLANs discovered by other means e.g. GVRP. It also controls configuration and reports status of per-port objects relating to VLANs and reports traffic statistics. It also provides for management of the VLAN Learning Constraints.

VLAN→802.1P→Basic Configure

Set the Traffic Class State (true, false) and GMRP Status.

DES-3226 Management

🚯 802.1P Basic Conf	igure : 10.16.	79.126	-O×
Device Capabilities Traffic Classes State	4B true	•	Refresh
GMRP Status	disabled	-	Set
Get:DISNMP : Ok! Requ	iest:.Receive al	t 05:26:19 PM.	

VLAN→802.1P→Priority Information

Choose the appropriate tab to view information listed by port number. Select the port number and type in the appropriate priority values; click Set to effect the change.

1	User Priorities To Traf Default User Priorities	fic Class of Each Port	Port Outbound Access Priorities	24
				Samples
PortNumber	DefaultUserPriority	PortNumTrafficClasses		1
	0	4		Defeat
2	0	4		nellesh
3	0	4		
	0	4		Set
5	0	4		18
3	0	4		
7	0	4		
3	0	4		
3	0	4		
0	0	4		
1	0	4		
2	0	4		
3	0	4		1
4	0	4		
5	0	4		
6	0	4		
7	0	4		
8	0	4		
Port Number	Priority (0-7)	Supported Traffic Cla	sses Num[1-8]	

DES-3226 Management

Path: VLAN→ 802.1P → Priority Information Form						
Default User Priorities of	Table Information	PortNumber, DefaultUserPriority, PortNumTrafficClasses				
Each Port	Set	SupportedTrafficClassesNum, DefaultUserPriority				
Regenerated	Table Information	PortNumber, UserPriority, RegeneratedUserPriority				
Priorities	Set	UserPriority				
User Priority To Traffic	Table Information	PortNumber, TrafficClassPriority, MappedTrafficClass				
Class	Set	MappedTrafficClass				
Port Outbound Access Priority	Table Information	PortNumber, RegenerateUserPriority				

VLAN→802.1P→GMRP

The GMRP Form allows you to enable GMRP for a selected port. To enable GMRP for a given port, highlight to select, choose Enable from the pull-down menu and click Set.

54

PortNumber	Status	GMRPFailedRegistrations	GMRPLastPduOrigin	
1	ena	0	00000000000	24
2	ena	0	00000000000	Samples
3	ena	0	00000000000	- angles
4	ena	0	00000000000	
5	ena	0	00000000000	
6	ena	0	00000000000	Betrash
7	ena	0	00000000000	rieliesh
8	ena	0	00000000000	
9	ena	0	00000000000	Set
10	ena	0	00000000000	
11	ena	0	00000000000	
12	ena	0	00000000000	
13	ena	0	00000000000	
14	ena	0	00000000000	
15	ena	0	00000000000	
16	ena	0	00000000000	
17	ena	0	00000000000	
18	ena	0	00000000000	
19	ena	0	00000000000	
20	ena	0	00000000000	
21	ena	0	00000000000	
22	ena	0	00000000000	
23	ena	0	00000000000	
24	ena	0	00000000000	
Port Number		Status	¥	
- Sector and the sector				

Path: VLAN \rightarrow 802.1P \rightarrow GMRP

GMRP Table Information

PortNumber, Status, GmrpFailed, GmrpLastPduOrign

VLAN→802.1P→GARP

GARP settings are expressed in Centi-seconds (hundredths of a second) for each port.

DES-3226 Management

PortNumber	GARPJoinTime	GARPLeaveTime	GARPLeaveAllTime		24
1	20	60	1000		24
2	20	60	1000		Sample
3	20	60	1000		
4	20	60	1000	1	Defeash
5	20	60	1000		Herresh
6	20	60	1000	1	
7	20	60	1000		Set
8	20	60	1000	-	
9	20	60	1000		
10	20	60	1000		
11	20	60	1000		
12	20	60	1000		
13	20	60	1000		
14	20	60	1000		
15	20	60	1000		
16	20	60	1000		
17	20	60	1000		
18	20	60	1000		
19	20	60	1000		
20	20	60	1000		
21	20	60	1000	-	
GARP Join T	ime (0214	7483647)	Centiseconds		
GARP Leave	Time (0214	7483647)	Centiseconds		
GARP Leave	All Time (0214	7483647)	Centiseconds		
GPATH LOGIC	and the former	1100011)]	Contraction		

Path: VL	$AN \rightarrow 802.1P \rightarrow GARP$
GARP Table Information	PortNumber, GarpJoinTime, GarpLeaveTime, GarpLeaveAllTime
Set	GarpJoinTime, GarpLeaveTime, GarpLeaveAllTime

VLAN→802.1P→Port Capability

The Port Capability window (accessed as a side menu from 802.1P submenu) is read-only and lists Port Capabilities Entry Messages listed by port number.

56

PortNumber	dot1dPortCapabilities	_
1	05	24
2	05	Samples
3	05	
4	05	Refresh
5	05	
6	05	
7	05	
8	05	
9	05	
10	05	
11	05	
12	05	
13	05	
14	05	-1
	05	

Path: VLAN \rightarrow 802.1P \rightarrow	Port Capability
---	-----------------

Table Information	PortNumber, dot1dPortCapabilities

VLAN→802.1Q→802.1Q Bridge→Basic Configure

Set GVRP Status. The rest of this screen is read-only.

DES-3226 Management

802.1Q Basic Config	ure : 10.16.79.126	>
VLAN Version Number	1	Refresh
Max VLAN ID	4094	Set
Max Supported VLANs	255	
Current Num Of VLANs	1	
GVRP Status	disabled	비 리 나 편이다.

VLAN→802.1→802.1Q Bridge→Ports Information

Configure VLANs settings for the selected device in the VLAN ports information side menu.

58

PortNumber	PortVLANID	AcceptableFrameTypes	IngressFiltering	GVRPStatus	GVRPF -	
1	1	admitAll	false	enabled	0	24
2	1	admitAll	false	enabled	0	Sample
3	1	admitAll	false	enabled	0	
4	1	admitAll	false	enabled	0	
5	1	admitAll	false	enabled	0	Befresh
6	1	admitAll	false	enabled	0	
7	1	admitAll	false	enabled	0	Cab
8	1	admitAll	false	enabled	0	Set
9	1	admitAll	false	enabled	0	
10	1	admitAll	false	enabled	0	
11	1	admitAll	false	enabled	0	
12	1	admitAll	false	enabled	0	
13	1	admitAll	false	enabled	0	
14	1	admitAll	false	enabled	0 -	
15	1	admitAll	false	enabled	0	
16	1	admitAll	false	enabled	0	
17	1	admitAll	false	enabled	0	
18	1	admitAll	false	enabled	0 -1	
19	1	admitAll	false	enabled	0 -	
Port VLAN I Ingress Filte Get:DISNMP :	D ing false Ok! Request.	GVRP Stat	a Frame Types ∂ us e	admitAll		
Path:	VLAN	I→ 802.1Q Infc	\rightarrow 802	.1Q Br n	idge –	Po
			PortN	lumber,	PortVla	anID,
		Tabla	Acce	ptableF	rameTy	pes,
			Ingro	oo Eiltori	ing Cur	nCtat

VLAN Ports	Table Information	AcceptableFrameTypes, IngressFiltering, GvrpStatus GvrpFailedRegistrations, GvrpLastPduOrigin
n Form	Set	PortVlanID, AcceptableFrameTypes, IngressFiltering, GvrpStatus

VLAN→802.1Q→Forwarding/Filtering

Forwarding and Filtering information is presented in four separate menus. The menus listed here appear as tabs in the Forwarding/Filtering Form.

DES-3226 Management

U	Multicast Form	orwarding varding Inf	Info o		TpG	Forward aroup Des	Unregistered tination Forw	d Info varded	0 Samples
/LAN ID	GroupAddr	ess Eg	ressPorts	GMRPL	earntPorts				Refresh
Engress Po	rts GMRF	Learnt P	orts				5.0		
F 9	□ 2 □ 10	□ 3 □ 11	□ 4 □ 12	F 13	□ 6 □ 14	F 15	1 8		
F 17	□ 18	□ 19	□ 20	□ 21	□ 22	□ 23	□ 24		

Path: VLA	N → 802.1Q Fo	→ Forwarding/Filtering orm
Unicast Forwarding Info	Table Information	Fdb Id, FdbMacAddress, PortNumber, Status
Tp Group Destination	Table Information	VLAN ID, GroupAddres, EgressPorts, GMRPLearntPorts
Forwarded	Configure	EgressPorts, GMRPLearntPorts
Multcast Forwarding	Table information	VLAN ID, AllPorts, StaticPorts, ForbiddenPorts

DES-3226 Management

Info	Configure	AllForwardedPorts, AllStaticPorts, AllForbiddenPorts
Forward	Table Information	VLAN ID, UnregisteredPorts, Unregistered,StaticPorts
Unregistered Info	Configure	UnregisteredPorts, UnregisteredStaticPorts, UnregisteredForbiddenPorts

VLAN→802.1Q→802.1Q VLAN

The Basic VLAN Configuration Form presents in two tables to display VLAN Static and VLAN Current information.

DES-3226 Management

	20.00					1
	VI AN Name	Faress Ports	Forbidden Faress Ports	Lintagged Ports	Te	Sample
1	DEFAULT	FFFFFF00	00000000	FFFFFF00	A	Refres
						Tienes
						Set
						Add
						Delet
4					- 1	0.0101
Next Free	Local VLAN I	ndex 0				
VI AN Infor	mation Earon	o Porto Earbir	dden Porte Untagged Po	eta l		
	L'uner l'Egres	is rons [Poible	doctrions Orkayged Po			
MANID	-		VI AN Name			
VLANID	1		VLAN Name j			
Status		•				
CalDIONING	OH Desire	t Dessin at 1	0.40.40.414		-	
Get:DISNMF	?: Ok! Reques	st.Receive at 1	0:40:49 AM.			
Get:DISNMF	? : Ok! Reques	st.Receive at 1	0:40:49 AM.			
Get:DISNMF	?: Ok! Reques	stReceive at 1	0:40:49 AM.			
Get:DISNMF	e: Ok! Reques Path: V	tt.Receive at 1	0:40:49 AM. → 802.1Q →	€ 802.1		AN
GetDISNMF	P: Okl Reques	st:.Receive at 1	0:40:49 AM. → 802.1Q →	> 802.1(Q VLA	AN Ie,
Get:DISNMF	Path: V	atReceive at 1 /LAN -	0:40:49 AM. → 802.1Q → VLAN Egres	• 802.10	Q VLA	AN 1e,
Get:DISNMF P	Path: V	tt.Receive at 1 /LAN - e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbid	→ 802.10	Q VLA	AN Ie,
GetDISNMF P VLAN Static	Path: V	tt.Receive at 1 /LAN - e mation	0:40:49 AM. → 802.1Q → VLAN Egres Forbic	• 802.10	Q VLA N Nam ess Po	AN Ie, Irts
GetDISNMF P VLAN Static Table	Path: V	tt.Receive at 1 /LAN - e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbio VLAN Doctor	• 802.10	Q VLA N Nam ess Po ion, Eg	AN le, rts gres
GetDISNMF P VLAN Static Table	Path: V Table Infor	tt.Receive at 1 /LAN - e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbio VLAN Ports	• 802.10 I ID, VLA ss Ports, dden Egro I Informat , Forbidde	Q VLA N Nam ess Po ion, Eg en Port	AN ie, irts gres ts,
Get.DISNMF P VLAN Static Table	Path: V Table Infor Set	/LAN - e mation	0:40:49 AM. → 802.1Q → VLAN Egres Forbio VLAN Ports Untag	→ 802.10 I ID, VLA Iss Ports, I Informat Forbidde gged Port	Q VLA N Nam ess Po ion, Eg en Port s	AN ie, i <u>rts</u> gress ts,
GetDISNMF P VLAN Static Table	Path: V Table Infor Set	tt.Receive at 1 /LAN - e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbic VLAN Ports Untag VLAN	• 802.10 I ID, VLA Is Ports, dden Egro I Informat , Forbiddo ged Port I ID, VLA	Q VLA N Nam ess Po ion, Eg en Port s N Nam	AN ne, rts gres ts, ts,
F VLAN Static Table	Path: V Path: V Table Infor Set	tt.Receive at 1 /LAN - e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbia VLAN Ports Untag VLAN Egres	• 802.10 I ID, VLA S Ports, dden Egra I Informat , Forbidde ged Port I ID, VLA S Ports,	Q VLA N Nam ess Po ion, Eg en Port s N Nam	AN ne, rts gres ts, ne,
GetDISNMF P VLAN Static Table VLAN Current	Path: V Path: V Table Infor Set	e rmation	0:40:49 AM. → 802.1Q → VLAN Egres Forbio VLAN Ports Untag VLAN Egres Forbio Forbio	802.10 B B02.10 B B075, D B075, D B075, D B075 D B075, D B075, D B075, D B075, D B075, D B075, D B075,	Q VLA N Nam cion, Eg en Port S N Nam ess Po	AN rts gres ts, re, rts.

DES-3226 Management

Set Egress Ports, Untagged Ports

VLAN→802.1Q→Unicast/Multicast Static Filtering

	UnicastAddre	ss Rece	eivePort	PortsUnic	astAllowe	dToGoTo	Status	Samples Befresh
VID	Address			Stah	21		v	Set
Allow 1	o Go To Port							
	1 🗖 2	Π3	4	□ 5	□ 6	Γ7	□ 8	
Г	0 = 10	L 11	□ 12	□ 13	□ 14	1 5	□ 16	
	9 1 10			 21	□ 22	Z 23	24	

Path: MIBs → 802.1Q → Unicast/Multicast Static Filter Table				
Unicast Info	Table Information	UnicastAddress, ReceivePort, PortsUnicastAllowedToGoTo, Status		

DES-3226 Management

	Configure	VID, MAC Address, Status, Allow To Go To Ports (select ports)
VLAN	Table information	MAC Address, Receive Port, Egress Port, Forbidden Ports, Status
Table	Configure	VID, MAC Address, Status, Egress Ports, Forbidden Ports (select ports)

RMON Menu Button

RMON → Statistics

View RMON statistics for any port on the selected device by clicking the index (port) number. By default the **Statistics Table** is displayed for index 1. **Port Utilization**, **Error** and **Packet Distribution** are displayed graphically. Check the 3D Line for more readily visible graph lines.

The Etherne for each mo consists of t defined for o These group group.	It statistics group contains statistics measured by the probe nitored Ethernet interface on this device. This group he etherStatsTable. In the future other groups will be other media types including Token Ring and FDDI. os should follow the same model as the Ethernet statistics
The History	/ Control Group
The history data from va historyContr	control group controls the periodic statistical sampling of arious types of networks. This group consists of the olTable.

DES-3226 Management

The alarm group periodically takes statistical samples from variables in the probe and compares them to previously configured thresholds. If the monitored variable crosses a threshold, an event is generated. A hysteresis mechanism is implemented to limit the generation of alarms. This group consists of the alarmTable and requires the implementation of the event group.

The Event Group

The event group controls the generation and notification of events from this device. This group consists of the event Table and the log Table.

Indeu	Data Sa	Data Source				Chabin			
nuex	Data SU	IfIndex 1				Status			System Tim
	Ifindex 2			monitor		Valid			11:08:48 AM
	Inndex.2		monitor		Valid	-			
5	Ifindex.3			monitor		Valid			Refresh
	IfIndex.4		monitor		Valid	-		-	
2	Inndex.5			monitor		Valid	-		Add
	Ifindex.6			monitor		valid			-
	Ifindex.7			monitor		Valid	-		Modify
	Ifindex.a			monitor		Valid			0.44
	Hinday 9		1	monitor		Uslid			Delete
	122.00				2				1
Index	x : 1	Data	Sou	ce : IfIndex.1	Ĩ	Ow	ner : monitor		Interval (sec (13600)
Index Name	×∶]1 ⊧	Data	Sour	ce : IfIndex.1 elta	Rate	Ow	ner: monitor Peak	Peak Occur.	Interval (sec (1-3600)
Index Name DropE	k : 1	Data Value 41565	Sour	rce : flndex.1 elta	Rate	Ow	ner: monitor Peak 0	Peak Occur. 11:08:46 AM	Interval (sec (13600)
Index Name DropE Octets	x : 1 vents	Data Value 41565 2101714694	Sour	ce : [flndex.1 elta 65	Rate 0 8465	Ow	ner : monitor Peak 0 9222	Peak Occur. 11:08:46 AM 11:08:47 AM	Interval (ser (13600) 1 Count(10-12)
Index Name DropE Dctets Pkts	k : 1 vents	Data Value 41565 2101714694 19962257	De 0 84 38	ce : <mark>IfIndex.1</mark> elta 65	Rate 0 8465 38	Ow	Peak 0 9222 52	Peak Occur. 11:08:46 AM 11:08:47 AM 11:08:47 AM	Interval (ser (13600) 1 Count(10-12 10
Index Name DropE Dctets Pkts Broadd	k: 1 vents castPkts	Data Value 41565 2101714694 19962257 9976061	Sour De 0 84 38 17	ce : IfIndex.1 elta 65	Rate 0 8465 38 17	Ow	Peak 0 9222 52 30	Peak Occur. 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM	Interval (sec (1-3600) 1 Count(10-12 10
Index Name DropE Dotets Pkts Broadd	x: 1 vents s castPkts astPkts	Value 41565 2101714694 19962257 9976061 3450869	Sour 0 84 38 17 2	ce : f ndex.1 elta 65	Rate 0 8465 38 17 2	Ow	ner : monitor Peak 0 9222 52 30 2	Peak Occur.	Interval (sec (1-3600) 1 Count(10-12 10 3D Line
Index Name DropE Dotets Pkts Broadd Multica CRCA	x: 1 vents s castPkts astPkts lignErrors	Data 41565 2101714694 19962257 9976061 3450869 0	De 0 84 38 17 2 0	cce : ffIndex.1 elta 65	Rate 0 8465 38 17 2 0	Ow	ner : monitor Peak 0 9222 52 30 2 0	Peak Occur. ▲ 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM	Interval (sec (1-3600) 1 Count(10-1) 10 3D Line
Index Name DropE Dotets Pkts Broado Multica CRCAI Under	x: 1 vents castPkts astPkts lignErrors sizePkts	Data 41565 2101714694 19962257 9976061 3450869 0 0	De 0 84 38 17 2 0 0	ice : IfIndex.1 elta 65	Rate 0 8465 38 17 2 0 0	Ow	ner : monitor Peak 0 9222 52 30 2 0 0	Peak Occur. ▲ 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM	Interval (sec (1-3600) 1 Count(10-1) 10 3D Line Stop
Index Name DropE Dctets Pkts Broadd Multica CRCAI Undersi Dversi	x: 1 vents castPkts astPkts lignErrors sizePkts izePkts	Data 41565 2101714694 19962257 9976061 3450869 0 0 0 0	Sour 0 84 38 17 2 0 0 0	ice : lfIndex.1 elta 65	Rate 0 8465 38 17 2 0 0 0	Ow	ner : monitor Peak 0 9222 52 30 2 0 0 0 0	Peak Occur. 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:48 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM	Interval (sec (13600) 1 Count(10-12 10 3D Lind Stop
Name DropE Dctets Pkts Broado Multica CRCAI Undersi Dversi Fragm	x: 1 vents castPkts astPkts lignErrors sizePkts izePkts ents	Data 41565 2101714694 19962257 9976061 3450969 0 0 0 0 0 0	Sour 0 84 38 17 2 0 0 0 0 0	ce : [f]ndex.1 elta 65	Rate 0 8465 38 17 2 0 0 0 0 0	Ow	ner : monitor Peak 0 9222 52 30 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak Occur. 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM	Interval (sec (13600) 1 T Count(10-12) 10 T 3D Line Stop Start
Index DropE Dotets Pkts Broadd Multica CRCAI Joders Dversi Fragm Jabber	x: 1 vents castPkts astPkts lignErrors sizePkts izePkts ents rs	Data 41565 2101714694 19962257 9976061 3450869 0 0 0 0 0 0 0 0 0	Sour 0 84 38 17 2 0 0 0 0 0 0	ice : ffindex.1 elta 65	Rate 0 8465 38 17 2 0 0 0 0 0 0 0 0	0	Peak 0 9222 52 30 2 0 0 0 0 0 0 0	Peak Occur. ▲ 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM	Interval (sec (13600) 1 • Count(10-12) 10 • 3D Line Stop Start
Index DropE Dctets Pkts Broado Multica DCRCAI Jnder: Dversi Fragm Jabber Collisio	x: 1 vents castPkts astPkts lignErrors sizePkts izePkts rs ons	Data Value 41565 2101714694 19962257 9976061 3450869 0 0 0 0 0 0 0 0 0 0 0 0 0	De 0 84 38 17 2 0 0 0 0 0 0 0 0 0	ice : [ffindex.1 elta 65	Rate 0 8465 38 17 2 0 0 0 0 0 0 0 0 0 0 0 0	Ow	ner : monitor Peak 0 9222 52 30 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Peak Occur. ▲ 11:08:46 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM	Interval (sec (13600) 1 • Count(10-1) 10 • 3D Line Stop Start Reset
Index DropE Dctets Pkts Broado Multica CRCAI Under: Dversi Fragm Jabber Collisio 640 cto	x: 1 vents castPkts astPkts lignErrors sizePkts izePkts rs ons ets	Data 41565 2101714694 19962257 9976061 3450869 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	De 0 84 38 17 2 0 0 0 0 0 0 0 27	ce : flndex.1 elta 65	Rate 0 8465 38 17 2 0 0 0 0 0 0 0 0 0 0 0 27	Ow	Peak 0 9222 52 30 2 0 0 0 0 0 0 0 0 0 0 42	Peak Occur. ▲ 11:08:45 AM 11:08:47 AM 11:08:47 AM 11:08:48 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM	Interval (sec (13600) 1 Count(10-12 10 3D Lind Stop Start Reset
Index Name DropE Octets Pkts Broado Multica CRCAI Unders Oversi Fragm Jabber Collisio 640cto 65to12	x: T vents s castPkts astPkts lignErrors sizePkts zePkts rs rs rs rs ets 270ctets	Data 41565 2101714694 19962257 9976061 3450869 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	De 0 84 38 17 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 10	ce : ffindex.1	Rate 0 8465 38 17 2 0 0 0 0 0 0 0 0 0 27 10	Ow	Peak 0 9222 52 30 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 12	Peak Occur. 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:47 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:46 AM 11:08:47 AM 11:08:47 AM	Interval (sec (13600) 1 • Count(10-12) 10 • 3D Line Stop Start Reset

Use the Add and Modify function to add an index or change a selected index's variables. Clicking the Add or Modify button will bring up the Control Table pop-up menu. The Control Table pop-up screen is used to input index variables. Statistics information displayed may be frozen at any point and resumed using the Start and Stop buttons.

DES-3226 Management

Path: RMON \rightarrow Statistics				
RMON Statistics Table Information	Index, Data source, Owner, Ststus, Name, Value, Delta, Rate, Pea, Peak Occurred At			

RMON →History

View the history table and graphs including Utilization, Error and Packet Distribution. Add or modify and index with the Control Table.

ndex	Data	Source		Buckets	Requested	Buckets Gr	ranted	Interval	Owner	ii.			Time	
	IfInde	×1		50		50		30	monito	r		545	11-31-15 AM	
	IfInde	x.1		50		50		1800	monito	r		111.5	1.10 /4/1	
	IfInde	x.2		50		50		30	monito	t			Add	
	IfInde	x.2		50		50		1800	monito	t				
	IfInde	x.3		50		50	and the second se	30	monito	f			Modify	
5	IfInde	x.3		50		50		1800	monito	r.				
	IfInde	x.4		50		50		30	monito	r	-		Delete	
1	10			50		50		1000	[- 1	Ľ		View	
able	Utiliza	ation Error	Packet D	istribution								F	Refresh	
to dec	. F		ate Cours	and the state	-	0						Inte	val (sec	
Index	<:]]	0) ata Sour	ce : IfIndex	1	Owner : m	nonitor	r [Inte (10-	val (sec -3600)	
Index Fime S	<: 1 Stamp	Drop Events) ata Souri Octets	ce : IfIndex Packets	.1 Broadcast	Owner: m	CRC A	lign Ur	Idersize	Ove	11	Inte (10-	val (sec -3600)	
Index Fime S I days	<: 1 Stamp	Drop Events 0	Octets	Packets	1 Broadcast 4813	Owner : m Multicast 804	CRC AI	lign Ur 0	Idersize	Ove 0	11	Inte (10- 10 Cou	val (sec -3600) •	
index ime s days days	(;] Stamp (; 20: (; 20:	Drop Events 0 0	oata Souro Octets 1037 1048	Packets 11097 11163	1 Broadcast 4813 4830	Owner : m Multicast 804 825	CRC AI	lign Ur 0 0	Idersize	0ve 0 0	11	Inte (10- 10 Cou 30	rval (sec -3600) • nt(10-12	
ime s days days days	<: 1 Stamp 20: 20: 20: 20:	Drop Events 0 0 0	Octets 1037 1048 1047	Packets 11097 11163 11173	1 Broadcast 4813 4830 4824	Owner : n Multicast 804 825 844	CRC AI	lign Ur 0 0	ndersize	0ve 0 0	11	Inte (10- 10 Cou 30	rval (sec -3600) • nt(10-12	
lindex days days days days	(;]] Stamp (, 20: (, 20: (, 20: (, 20: (, 20:	Drop Events 0 0 0 0	Octets 1037 1048 1047 1048	Packets 11097 11163 11173 11230	1 Broadcast 4813 4830 4824 4934	Owner : m Multicast 804 825 844 817	CRC AI	lign Ur 0 0 0	ndersize	0ve 0 0 0	11	Inte (10- [10 Cou [30	rval (sec -3600) • nt(10-12 •	
lindex days days days days days	stamp , 20: , 20: , 20: , 20: , 20: , 20: , 20:	Drop Events 0 0 0 0	Octets 1037 1048 1047 1048 1039	Packets 11097 11163 11173 11230 11095	1 Broadcast 4813 4830 4824 4934 4774	Owner : m Multicast 804 825 844 817 843	CRC AI	lign Ur 0 0 0 0	Idersize	0ve 0 0 0 0	11	Inte (10) [10] Cou [30]	rval (sed -3600) • nt(10-12 • 3D Line	
ime S days days days days days days	(1) Stamp (2) (2) (2) (2) (2) (2) (2) (2)	Drop Events 0 0 0 0 0 0	Octets 1037 1048 1047 1048 1039 1040	Packets 11097 11163 11173 11230 11095 11145	1 Broadcast 4813 4830 4824 4934 4774 4818	Owner : n Multicast 804 825 844 817 843 843	CRC AI	lign Ur 0 0 0 0	ndersize	0ve 0 0 0 0 0	11	Inte (10 Cou 30	rval (sec -3600) Image: sec nt(10-12) Image: sec State Sec St	
lindex days days days days days days days	(;]1 Stamp ; 20: ; 20: ; 20: ; 20: ; 20: ; 20: ; 20: ; 20:	Drop Events 0 0 0 0 0 0 0 0	Octets 1037 1048 1047 1048 1039 1040 1042	Packets 11097 11163 11173 11230 11095 11145 11196	1 Broadcast 4813 4830 4824 4934 4934 4774 4818 4865	Owner : n Multicast 804 825 844 817 843 848 831	CRC AI	lign Ur 0 0 0 0 0 0 0	idersize	0ve 0 0 0 0 0 0 0		Inte (10- Cou 30	rval (sec -3600) Image: second Image: second Ima	
ime S days days days days days days days days	(;]1 Stamp ; 20: ; 20: ; 20: ; 20: ; 20: ; 20: ; 20: ; 20: ; 20:	Drop Events 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1047 1048 1039 1040 1042 1079	Packets 11097 11163 11173 11230 11095 11145 11196 11442	1 Broadcast 4813 4830 4824 4934 4774 4818 4865 5032	Owner : n Multicast 804 825 844 817 843 848 848 831 936	CRC AI 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0	idersize	0 0 0 0 0 0 0 0 0		Inte (10) Cou [30]	rval (sec -3600) Image: second mt(10-12 Image: second Stop	
ime S days days days days days days days days	(* 1 <u>Stamp</u> , 20 , 20	Drop Events 0 0 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1047 1048 1039 1048 1039 1040 1042 1079 1079	Packets 11097 11163 11173 11230 11095 11145 11196 11142 11379	1 Broadcast 4813 4830 4824 4934 4774 4818 4865 5032 4936	Owner : n Multicast 804 825 844 817 843 848 831 936 995	CRC Al 0 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0	idersize	0 0 0 0 0 0 0 0 0 0 0		Inte (10) Cou [30]	rval (sec -3600) It (10-12 It (10-12 It (10-12 It (10-12) It	
ime s days days days days days days days day	(;]1 <u>Stamp</u> , 20 , 20	Drop Events 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1047 1048 1049 1049 1040 1079 1079 1075	Packets 11097 11163 11173 11230 11095 11145 11196 11442 11379 11166	1 Broadcast 4813 4824 4824 4934 4774 4818 4865 5032 4936 4797	Owner: m Multicast 804 825 844 817 843 848 831 936 995 889	CRC AI 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0 0 0	idersize	0ve 0 0 0 0 0 0 0 0 0 0 0 0		Inte (10- [10 [30	start Pasat	
index days days days days days days days days	(;] Stamp , 20: , 20:	C Drop Events 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1048 1047 1048 1039 1040 1042 1079 1075 1106	Packets 11097 11163 11173 11230 11095 11145 11196 11442 11379 11166 11546	1 Broadcast 4813 4824 4934 4934 4934 4818 4865 5032 4936 4797 5052	Owner : m Multicast 804 825 844 817 848 831 936 995 889 1019	CRC AI 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Idersize	0ve 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Inte (10- [10 [30	rval (sec -3600) T nt(10-12 T 3D Line Stop Start Reset	
index days days days days days days days days	(;] Stamp , 20: , 20:	Drop Events 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1048 1048 1047 1048 1047 1040 1040 1040 1042 1079 1075 11065	Packets 11097 11163 11173 11230 11095 11145 11196 11142 11379 11166 11546 1157	1 Broadcast 4813 4830 4824 4934 4774 4818 4865 5032 4936 4797 5052 4805	Owner: n Multicast 804 825 844 817 843 843 843 831 936 935 889 1019 900	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Idersize	0ve 0 0 0 0 0 0 0 0 0 0 0 0 0		Inte (10) [10] [30]	rval (sec -3600) nt(10-12 3D Line Stop Start Reset	
Time S days days days days days days days days	(;]1 Stamp , 20: , 21:	C Drop E vents 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Octets 1037 1048 1048 1049 1049 1040 1049 1079 1079 1075 1106 1055 1255	Packets 11097 11097 11163 11173 11209 11145 11196 11445 11379 11166 11546 11157	1 Broadcast 4813 4830 4824 4934 4774 4818 4865 5032 4936 4797 5052 4805 5672	Owner: m Multicast 804 825 843 843 843 843 843 843 843 843 843 843	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lign Ur 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Idersize	0ve 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Inte (10) [10 [30]	stop Start Reset	

Path: RMON \rightarrow History

DES-3226 Management

RMON History Table Information	Index, Data source, Buckets Requested, Buckets Granted, Interval, Owner, Status, Time Stamp, Drop Events, Octets, Packets, Broadcast, Multicast, CRCAlign, Umndersize, Oversize, Fragments, Jabbers, Collisions, Utilizations
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RMON → Alarm/Event

To add an alarm and define parameters for it click the Add button. The Alarm Table pop-up will accept a user-defined index number or you can use the index automatically generated.

sidiiii	Event	Log					Sustem Time
Index	Interval	Variable	SampleType	Value	StartupÅlarm	F	11:38:06 AM
							Add
							Delete
							Modify
							Refresh
							Exit

Path: RMON \rightarrow Alarm/Event					
RMON Alarm Table Information	Index, Interval, Variable, SampleType, Value, StartupAlarm, RisingThreshold, FallingThreshold, RisingEvent, FallingEvent, Owner, Status				

DES-3226 Management

RMON Alarm : Add/Modify Parameters	Index, Interval, Variable, Owner, StartUp Sampling, Threshold Value: Rising/Falling, Rising Event: Activate/Index/Description/Community/Type Falling Event: Activate/Index/Description/Community/Type
---	---

The Event controls work in a similar fashion. Add or modify an Event control and define its parameters by clicking the Add or Modify button, the Event Control pop-up menu appears.

Jarm Lven Log							System Time:
Index	Description	Туре	Community	TimeSent	Owner	Sta	11:50:57 AM
							Add
						+	Delete
							Modify
							Refresh
		-				-	Exit

Path: MIBs \rightarrow RMON \rightarrow Alarm/Event					
RMON Alarm Event	Index, Description, Type, Community, TimeSent, Owner, Status				
Table Information	LogEventIndex, logIndex, logTime, logDescription				

DES-3226 Management
Advanced Configuration Menu Button

Advanced Configuration →General

Set Group Address Filtering Mode. Other items are read-only.

	_	.26	, General Info Table : 10.16
			Fast Ethernet Port Bandwidth
sh	Refres)	Gigabit Ethernet Port Bandwidth
:t	Set	vardAllUnregGrpAddr 💌	Group Address Filtering Mode
1		andAllUnregGrpAddr	Group Address Filtering Mode

Advanced Configuration →Device Management →Device Information

Device Info Table :	10.16.79.126	_ 🗆 ×
SystemUp Time	4days, 02:55:23	
Total Port Number	24	Refresh
Number Of Port In Use	2	
Console Status	not-in-use	

DES-3226 Management

Advanced Configuration →Device Management →Device Control

STP State	IGMP Snooping	
🗖 Broadcast Storm	Multicast Storm	Refre
DA-Unknown Storm	n	Set
Threshold(Pkts/sec)	500	
Authentication Failu	ire Traps	

Advanced Configuration →Bandwidth Management →IngrPortBwControl

This table contains current control information about the ingress bandwidth of the port.

70

wL2IngrPortBwCtrlPort	swL2IngrPortBwCtrlPortCountType	swL2IngrPortBwCtrlPortI	
			0 Sample
			Refresh
			Add
)	
Port Index	Request Unit		

Advanced Configuration →Bandwidth Management →Egress PortBwControl

This table contains the current control information about the egress bandwidth of the port.

DES-3226 Management

vL2EgressPortBwCtrlPort	swL2EgressPortBwCtrlPortCountType	swL2Egre	
			0
			Sample
			·
			Refresh
			Add
		•	
Port Index	Request Unit		

Advanced Configuration →Port Management →Port Information Table

This table contains information about every port.

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swL2PortInfoPortIndex	swL2PortInfoType	swL2PortInfoDescr	swL2PortInfoLir 🔺	
1	portType-UTP	Unit 1 Port 1	link-pass	24
2	portType-UTP	Unit 1 Port 2	link-pass	Sample
3	portType-UTP	Unit 1 Port 3	link-fail	
4	portType-UTP	Unit 1 Port 4	link-fail	
5	portType-UTP	Unit 1 Port 5	link-fail	
6	portType-UTP	Unit 1 Port 6	link-fail	Befresh
7	portType-UTP	Unit 1 Port 7	link-fail	
8	portType-UTP	Unit 1 Port 8	link-fail	
9	portType-UTP	Unit 1 Port 9	link-fail	Control
10	portType-UTP	Unit 1 Port 10	link-fail	
11	portType-UTP	Unit 1 Port 11	link-fail	
12	portType-UTP	Unit 1 Port 12	link-fail	
13	portType-UTP	Unit 1 Port 13	link-fail	
14	portType-UTP	Unit 1 Port 14	link-fail	
15	portType-UTP	Unit 1 Port 15	link-fail	
16	portType-UTP	Unit 1 Port 16	link-fail	
17	portType-UTP	Unit 1 Port 17	link-fail	
18	portType-UTP	Unit 1 Port 18	link-fail	
19	portType-UTP	Unit 1 Port 19	link-fail	
20	portType-UTP	Unit 1 Port 20	link-fail	
21	portType-UTP	Unit 1 Port 21	link-fail	
•			•	

Advanced Configuration →Port Management →Port Control Table

This table contains control information about every port.

DES-3226 Management

vL2PortCtrlPortIndex	swL2PortCtrlAdminState	swL2PortCtrlNwayState	swL2Po 🔺	
k	enabled	nway-enabled	disabled	24
2	enabled	nway-enabled	disabled	24
3	enabled	nway-enabled	disabled	Sample
4	enabled	nway-enabled	disabled	
5	enabled	nway-enabled	disabled	
6	enabled	nway-enabled	disabled	Refresh
7	enabled	nway-enabled	disabled	
8	enabled	nway-enabled	disabled	-
9	enabled	nway-enabled	disabled	Set
10	enabled	nway-enabled	disabled	-
11	enabled	nway-enabled	disabled	
12	enabled	nway-enabled	disabled	
13	enabled	nway-enabled	disabled	
14	enabled	nway-enabled	disabled	
15	enabled	nway-enabled	disabled	
16	enshled	nusuenabled	disablad	
🔽 Admin State	Port Nway State	nway-enabled	•	
Flow State	Clean Statistic Counte	r normal	•	

Advanced Configuration → Cos Management

Class of Service Configuration Table.

74

0	
0	
U	[
0	Refresh
, and the second	
	Set

Advanced Configuration →Port Security Management

This is a port security feature which controls the address learning capability and the traffic forwarding divisions. Each port can have this function enabled or disabled.

DES-3226 Management

1 1 deleteOnReset 2 1 deleteOnReset 3 1 deleteOnReset 4 1 deleteOnReset 5 1 deleteOnReset 6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	swL2PortSecurityPortIndex	swL2PortSecurityMaxLernAddr	swL2PortSecurityMo +	
2 1 deleteOnReset 3 1 deleteOnReset 4 1 deleteOnReset 5 1 deleteOnReset 6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	1	1	deleteOnReset	04
3 1 deleteOnReset 4 1 deleteOnReset 5 1 deleteOnReset 6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	2	1	deleteOnReset	24
4 1 deleteOnReset 5 1 deleteOnReset 6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	3	1	deleteOnReset	Sample
5 1 deleteOnReset 6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	4	1	deleteOnReset	
6 1 deleteOnReset 7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	5	1	deleteOnReset	
7 1 deleteOnReset 8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	6	1	deleteOnReset	Refresh
8 1 deleteOnReset 9 1 deleteOnReset 10 1 deleteOnReset	7	1	deleteOnReset	
9 1 deleteOnReset 10 1 deleteOnReset	8	1	deleteOnReset	1 100
10 1 deleteOnReset	9	1	deleteOnReset	Set
	10	1	deleteOnReset	-
11 deleteUnReset	11	1	deleteOnReset	
12 1 deleteOnReset	12	1	deleteOnReset	
13 1 deleteOnReset	13	1	deleteOnReset	
14 1 deleteOnReset	14	1	deleteOnReset _1	
15 I I I I I I I I I I I I I I I I I I I	15		J-1	
	•		F	
deleteOnReset	1	F Ac	deleteOnReset	
Max Learn Address[U-10] Administration State	Port Security Mode	deleteOnTimeout 🛛 💌		
Port Security Mode deleteOnTimeout				

Advanced Configuration ->DiffServ Settings

This is a table that contains Differentiated Service type information of each port.

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Port	DiffServ	Mode	Value			0.4
1	Disabled			1	1	24
2	Disabled					Sample
3	Disabled					
4	Disabled					
5	Disabled					Befresh
6	Disabled					Tichican
7	Disabled					Cat
8	Disabled					360
9	Disabled					
10	Disabled					
11	Disabled					
12	Disabled					
13	Disabled					
14	Disabled					
15	Disabled					
16	Disabled					
17	Disabled				-	
	DiffSer Type	Disabled	¥			
	Mode	Force-Overwrite	*	Value		

Help Menu Button

About

Gives release version, authorship, and copyright date for DES-3226 Management Module.



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