

DATACOM



DmSwitch

Version 15.2.18

RELEASE NOTES

204.4334.04 - June 16, 2021

Contacts

Technical Support

Datacom has available a support portal - DmSupport, to help the customers in use and config of our equipment.

Access to the DmSupport can be made through link: <https://supportcenter.datacom.com.br>

In this site the following are available: firmwares, technical datasheets, config guide, MIBs and manuals for download. In addition, it allows opening of calls for assistance with our technical team.

Telephone Number: **+55 51 3933-3122**

We would like to highlight that our assistance through telephone support is available from Monday through Friday from 08:00 AM through 05:30 PM.

Important: For support assistance 24x7, please request a quotation to our sales department.

General Information

For any other additional information, please visit the <https://www.datacom.com.br/en> or call:

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Product Documentation

This document is part of a set of documents prepared to provide all necessary information about DATACOM products.

Software Platform

- **Quick Configuration Guide** - Provides instructions on how to set functionalities in a quick manner in the equipment
- **Command Reference** - Provides all the commands related to the product
- **Release Notes** - Provides instructions on the new functionalities, identified defects and compatibilities between Software and Hardware

Hardware Platform

- **Datasheet** - Provides the Hardware and Software technical characteristics of product
- **Installation Guide** - Provides instructions on the procedures covering product installation

The availability of some documents can vary depending on the type of product.

Access <https://supportcenter.datacom.com.br> to locate the related documents or contact the Technical Support for additional information.



Introduction to the document

About this Document

This report provides information regarding a new software release version for DmSwitch product. The Release Notes also intends to inform relevant changes that have occurred in software, hardware and documentation.

It is assumed the reader is familiar with network protocols concepts and has previous knowledge about DmSwitch products.

Audience

This document is intended for Network Administrators, Engineers and any other qualified service personnel who are responsible for configuring and maintaining networks deployed with DmSwitch.

Text Convention

This report uses these text conventions to convey instructions and information:

Convention	Description
Hyperlink	Internet site or an e-mail address. It is also applied to indicate a local link inside the document itself (e.g. a chapter).
Terminal	System commands and screen outputs.
<i>Object</i>	Indicates a reference to something. Used to emphasize this referenced object.
Menu > Path	GUI (Graphic User Interface) menu paths.
[Key]	Keyboard buttons.

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1 Important Notes

The table below provides important notes that should be observed when using the product.

Note	Product
For firmware versions before 15.2.12, it is necessary to remove all configured VRFs before firmware upgrade. After upgrade, the configuration can be applied again without any changes.	All
The firmware upgrade in chassis or devices in stacking must be performed in all interface cards or chassis members simultaneously, observing the supported versions, in order to avoid inconsistencies.	All
In order to restart the control plane of MPLS protocols completely, it is recommended to use <code>clear mpls</code> command.	All
The MPLS access interfaces must not be configured with the feature QinQ external-mode. An exception is a combination of untagged access with vc-type vlan parameter in the VPN. In this specific configuration the QinQ configuration is not overwritten by the VPN. Check the current configuration before upgrading from versions previous than 14.2 in order to avoid traffic loss.	All
The meters using srTcm and trTcm mode must be reconfigured and associated again to the respective filters after firmware upgrade from versions 12.x or 13.x to newer versions.	All
Firmware version prior to 14.2 do not support VPN TE (mplstype te). Firmware downgrade for those versions affects the VPNs with such configuration demanding the VPN neighbor reconfiguration.	All
OSPFv3 authentication configuration is not compatible with previous versions of 13.0. During an upgrade/-downgrade this parameter must be removed before starting the procedure and added after new firmware version is active.	All
Be sure of removing all RSVP tunnels with ID greater than 100 and reduce the number of VPLS ports to maximum eight before starting a downgrade to a previous version before 14.10.	All
For firmware versions after 14.10.8, make sure the feature L2VPN-TE Backup-PW is either removed or reconfigured as mplstype non-te before performing a firmware downgrade.	All
For firmware versions after 14.10.2, the commands <code>ip igmp snooping flood-unknown</code> and <code>ipv6 mld snooping flood-unknown</code> are available only in the VLAN configuration scope. The configuration must be done individually for each VLAN that requires the disabling of flood-unknown multicast. After an upgrade/downgrade the equipment must have this configuration rebuilt because it will return to the default value of flood-unknown multicast.	All
The CPU-Protect functionality may require feature reconfiguration after upgrading to versions higher than 14.2. Consult DATACOM Technical Support for more details.	All
For firmware versions after 14.10.10, in case of firmware downgrading, make sure the configuration has at most 256 MPLS L2VPNs.	All

2 Hardware and Software Compatibility

This chapter lists hardware and software compatibility for this software release.

2.1 Released Software

This session presents the software release details:

Product	Release Version
DmSwitch	15.2.18

2.2 Compatibility Between Software Versions

The table below shows the compatibility matrix between firmware versions, including the notes for the firmware update process.

Software Upgrade

Platform	Initial Version	Mandatory Intermediate Version	Final Version
All	12.x or less	13.8.6	15.2.18

Notes

It is always recommend save the configuration before firmware update process. To save the configuration use the `copy running-config <tftp|scp>` command.

In case of doubt, please call the technical support.

Card Compatibility

The following table shows the compatibility between MPUs and Interface Cards for DM4000 Chassis.

Card	MPU384	MPU512
ETH24GX H Series	X	X
ETH24GX E Series	X	X
ETH24GX L Series(*)	X	X
ETH24GT H Series	X	X
ETH48GX H Series	X	X
ETH48GT H Series	X	X

Card	MPU384	MPU512
ETH24GX+2x10GX H Series	X	X
ETH24GX+2x10GX E Series	X	X
ETH2x10GX H Series	X	X
ETH4x10GX H Series	X	X
ETH4x10GX E Series	X	X
PWE3 ETH20GX+32E1 H Series	X	X
PWE3 ETH20GX+2x10GX+32E1 H Series	X	X
PWE3 ETH16GX+4STM1 H Series	X	X
PWE3 ETH16GX+2x10GX+4STM1 H Series	X	X

(*) L Series equipment is compatible only in standalone operation through the use of a DM4001 Chassis or DM4001 L.

3 New Features and Enhancements

This chapter lists the new features and enhancements introduced in the release.

3.1 New Features

Feature	Description
-	-

3.2 Enhancements

Feature	Description	ID
Config Compatibility	When loading a configuration on the MPU512 that was saved from a MPU384, the "Invalid Configuration" error was generated.	142466

4 Solved Issues and Restrictions

This section lists solved issues and known restrictions for this software release.

4.1 Solved Issues

Feature	Description	ID
-	-	-

4.2 Restrictions

Feature	Description	ID
Interface	Digital Diagnostics is not updated for XFP interfaces in PWE3 cards.	110397
Port-channel	Load balance doesn't work properly with DLF traffic when port-channel interfaces are in different units.	71064
Port-channel	In order to change the port-channel state from shutdown to no shutdown when using LACP, it is also required to change the member interfaces state.	82881
SNMP/TACACS+	It's not possible to configure source-iface for SNMP/TACACS services with IPv6.	107670
MPLS	It's not possible to configure MPLS uplinks with LACP.	104336
MPLS	Using RSVP services in MPLS scenarios with external memory fully enabled for MAC table entries may take a long time in tunnels stabilization.	
MPLS	The graceful-restart feature is not supported when RSVP is enabled on MPLS infrastructure.	
MPLS	Use of RSVP services in MPLS scenarios with external memory enabled (for L3 routes) requires the configuration of the memory external-resource vlan command. Note that the VLAN used in this command is reserved and can not be used for other purposes.	34841
MPLS	In order to know the supported uses cases for MPLS TE, consult DATACOM Technical Support for more details. MPLS	
MPLS	RSVP tunnels re-convergence time below 50ms is not guaranteed on DM4100 Series.	
MPLS	There may be temporary traffic loss during graceful-restart period in LDP scenarios.	80474
MPLS	LDP-IGP Sync is not supported when interfaces do not have IPv4 address.	71825
MPLS	A mixed configuration of tagged and untagged interfaces is not supported on the attachment circuit of a VPLS.	
MPLS	The MTU signaled by either VPWS or VPLS is derived from the access interface which has the lowest MTU value, even if this interface is logically disabled.	

Feature	Description	ID
MPLS	Firmware downgrading is not supported to a version lower than 14.8 when the configuration has VPNs with both vc-type vlan and vc-type ethernet on the same physical interface.	85180
MPLS	Overlaying VPLS with PIM on the same physical interface is not supported.	
MPLS	RSVP tunnels with affinity may not reestablish after reboot of an adjacent equipment.	115648
L3VPN	IP address overlapping is not supported in L3VPNs.	-
L3VPN	Ping and traceroute in VRFs are only supported between PEs and CEs directly connected. Ping and traceroute in VRFs are not supported between PEs.	-
L2	The use of VLAN 1 (default) in L2 and L3 applications is not recommended.	52555
L2	The storm control default values (multicast/broadcast/unicast) for interfaces 1GE and 10GE have been changed in version 14.6.2. On interfaces 1GE it has changed from 1000pps to 10000pps and in interfaces 10GE it has changed from 10000pps to 100000pps.	83273
L2	Selective QinQ is not supported on VPN access ports for DM4000/DM4100.	
L2	The use of 8k hosts on a L3 VLAN may result in high CPU usage.	
L2	In a DM4100 ETH44GP+4GC+** or ETH44GT+4GC+** equipment model it is recommended to use a maximum of 7 xSTP instances.	83317
L3	It is not possible to perform a ping to broadcast addresses.	77008
L3	Scenarios with dual-homed equipment, most commonly used with firewalls, require the sending of messages Gratuitous ARP Request Packets (GARP) for the correct switching between active and stand-by elements.	
IPv6	It is not possible to ping addresses with 127 <i>prefix-length</i> .	112534
IPv6 Filters	Certain features can use filter priorities, limiting the number of filter priorities available to the user.	
Filters	When egress filters with meters are configured in VPN VLAN-based access ports (ethernet or local-tunnel), all VPN egress traffic going through that port will be discarded. That happens due to an incompatibility with the exp ingress mapping feature, enabled by default. As a workaround, the new command <code>no exp-ingress-mapping</code> will be available, which will disable the exp to pri mapping in VPN's and will allow the egress filter to work as intended.	

Feature	Description	ID
Filters	Versions 14.10 and newer do not allow the same meter and filters association in case of filters with different priorities. The same priority level has to be used if one intends to use the same meter.	87368
Filters	Workaround to <code>cpu-dos-protect block l3-slow-path</code> in DM4000: uses a pre-ingress filter to allow determined traffic to CPU and other pre-ingress filter with lower priority to deny packets with TTL=1. For DM4100 it is recommended to use the lower value in queue 11 in <code>cpu-dos-protect</code> .	
Filters	A total of 48 control queues were added in version 14.2 allowing more accurate selection and controlling over the packets to CPU (command: <code>cpu-dosprotect queue</code>). The commands <code>cpu-dosprotect block arp request</code> and <code>inlinecmdcpu-dosprotect block reserved-multicast</code> were removed.	79564
Filters	Due to the introduction of new meter modes that allow the combination of hierarchical meters to the filters it has caused an incompatibility with versions minor than 14.0 in the case that meters were using srTcm and trTcm mode. Such meters are removed from the configuration during the firmware upgrade. Therefore, they must be recreated and associated again to the filters after update ending.	
OSPF	The usage of command <code>no ipv6 mld snooping flood-unknown</code> causes OSPFv3 adjacencies to go to down state.	85920
OSPF	Metric cost and metric type manipulation in redistributed routes from RFC3107 to OSPF is not supported.	84902
OSPF	OSPF default originate does not guarantee reasonable convergence times and can cause momentaneous traffic unavailability in a scenario with many routes when using VLAN link-detect.	75811
OSPF	The command <code>auto-cost reference-bandwidth</code> should not be used in OSPFv3 configuration.	46005
BGP	DM4100 does not support RFC3107.	
BGP	More than one RFC 3107 session (BGP address-family IPv4 with send-label) is only supported in the same PE when neighbors advertise different prefixes in each session.	82907
BGP	BGP IPv6 Peer-Group is not supported.	
BGP	Route-map match in extended community does not work.	110290, 73339
RIP	It is recommended to avoid RIP configuration with VLAN IP address using network mask /31.	29265

Feature	Description	ID
ECMP	The use of ECMP along with BFD or BGP can cause issues in the control plane of these protocols, when the main path drops. It can occur if the error detection interval for a BFD session that is configured in the BGP neighbor is less than 7 seconds or if the BGP holdtime is less than 21 seconds in a session without BFD.	82927
VRRP	No support for multiple IPv6 network protection using VRRP.	
VRRP	Duplicated IPv6 address is not reported by VRRPv3.	84873
VRF	VRF-Lite does not allow IP addresses overlapping.	79391
Flow	Open Flow is not supported in DM4100 line for hardware versions 10 or higher.	90695
Flow	The feature ipfix is not released for DM4100 ETH24G+** (PD1209 model firmware) equipment.	66900
CESoP	The lowest recommended DmView version to use with CESoP feature is the 8.2.	
Stacking	All DM4100 devices when operating in stacking mode must use the same software license.	
Stacking	DHCP Snooping database presents inconsistent records after releasing some client IPs right after a master switchover operation in Stacking.	83598
Stacking	MPLS is not supported on switches in stacking mode.	
Local-tunnel	Local Tunnel is a specific feature of the DM4001 Chassi product with any interface cards except for PWE3 interface cards.	
DHCP	DHCP Snooping can not be used simultaneously with the features DHCP Server and DHCP Client.	71586, 71587
CLI	The command dump can take several minutes to be executed. As a result, the CLI becomes unavailable during this period.	87178

(**) - Represents any interface type available for this model.

5 Document Versions

The following table lists all documents for DmSwitch products. DATACOM do not recommend the usage of previous versions.

5.1 Software Platform

Document	Version
DmSwitch - Command Reference	204.4096.19
DmSwitch - DM4000 Datasheet	134.4072.62

5.2 Hardware Platform

Document	Version
DM4000 Series - Installation Manual	204.4252.07
DM4000 Series - Product Manual	204.4262.07

Legal Note

In spite the fact that all the precautions were taken in development of the present document, DATACOM shall not be held responsible for eventual errors or omissions as well as no obligation is assumed due to damages resulting from the use of the information included in this guide. The specifications provided in this manual shall be subject to changes with no prior notification and are not acknowledged as any type of contract.

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Warranty

DATACOM's products are covered by a warranty against manufacturing defects during a minimum period of 12 (twelve) months including the legal term of 90 days, as from the date of issue of the supply Nota Fiscal (Invoice).

Our warranty is standard counter warranty, this means, for exercise of the warranty, the customer should send the product to DATACOM Authorized Technical Assistance with paid freight. The return freight of the equipment will be DATACOM responsibility.

To obtain additional information, see our warranty policy in <https://www.datacom.com.br/en>.

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