



Shared LOM support on Modular

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Executive summary

This whitepaper explains the key changes that have been made to iDRAC NIC selection on modular systems.

In iDRAC8 1.0 (13G RTS), there is no support for changing NIC selection from default "Chassis Dedicated". In iDRAC8 1.2, the Shared LOM (LOM1, LOM2, LOM3, LOM4) NIC Selection and failover support on Modular has been added in addition to "Chassis Dedicated". This feature follows existing behavior of NIC Selection and failover on Rack and Tower servers.



1 Introduction

Shared LOM support on Modular is a new feature that was added in iDRAC8. In earlier releases of Modular systems, unlike Rack and Tower servers, they do not have the support to change the NIC selection from default "Chassis Dedicated". In iDRAC8 the shared LOM NIC selection (LOM1, LOM2, LOM3 and LOM4) and failover support is added in addition to the " Chassis Dedicated". VLAN support is also added when active NIC is in Shared LOM mode.



2 NIC Selection and Failover support on Modular Systems

2.1 NIC Selection

iDRAC 8 1.2 supports the following NIC selections on Modular systems.

- Chassis Dedicated
- LOM1
- LOM2
- LOM3
- LOM4

“ Chassis Dedicated ” enables the remote access device to use the dedicated network interface available on the Remote access controller (RAC) via the CMC network Interface port. This interface is not shared with the host operating system and routes the management traffic to a separate physical network, enabling it to be separated from the application traffic This option implies the iDRAC’s dedicated network port routes its traffic separately from the server’s LOM or NIC ports.

The LOM1, LOM2, LOM3, LOM4 enable network interface to remotely access the system based on the LOM selected.

Note: In case of blade servers with 2 NDC ports, two LOM options (LOM1 and LOM2) are available and on server with 4 NDC ports all four LOM options (LOM1,LOM2,LOM3,LOM4) are available

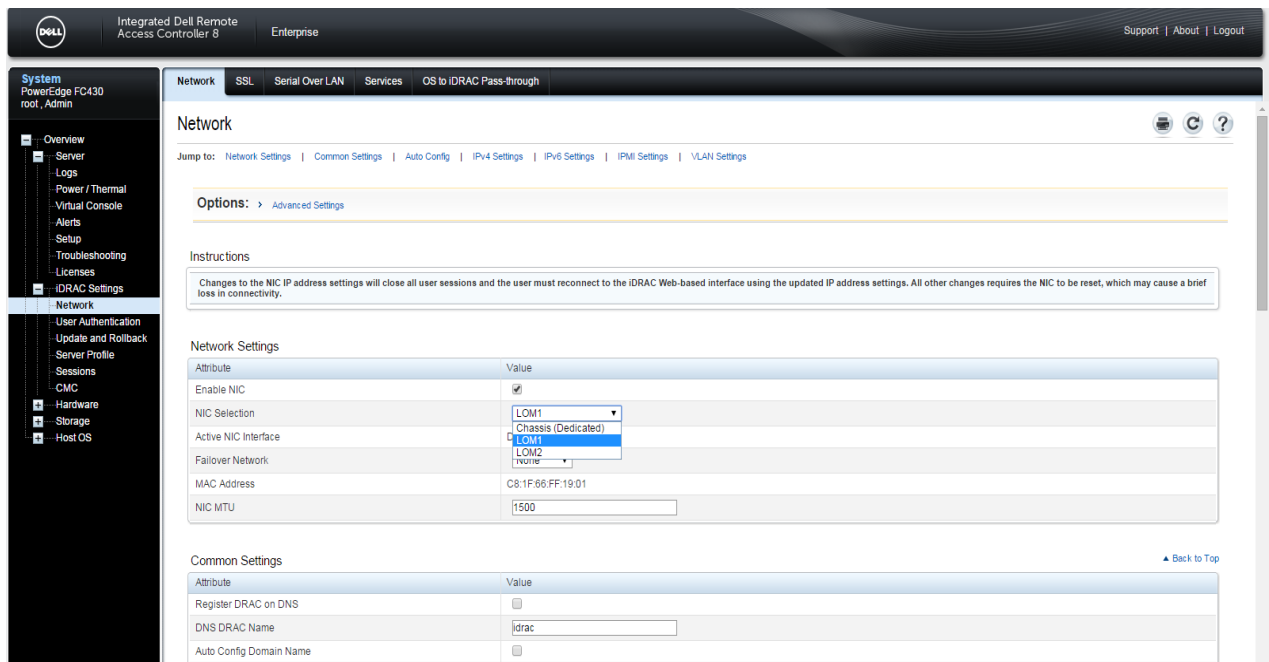


Figure 1 iDRAC GUI - NIC Selection on Blade servers

2.2 Failover Network

If the NIC Selection fails, then the traffic is routed through the selected failover network provided both primary and failover LOM are on the same network. This option is disabled when NIC selection is set to "Chassis Dedicated ". The following failover options are supported:

- LOM1
- LOM2
- LOM3
- LOM4
- All LOMs

These values depend on the NIC Selection mode setting. All the values appear except for the one used for the NIC Selection mode.

If failover mode is used or while switching from one failover mode to another

- There is no connectivity loss
- All existing sessions are maintained
- Data transfer is not terminated

Note: In case of blade servers with 2 NDC ports, two LOM options (LOM1 and LOM2) are available and on server with 4 NDC ports all four LOM options (LOM1,LOM2,LOM3,LOM4) are available

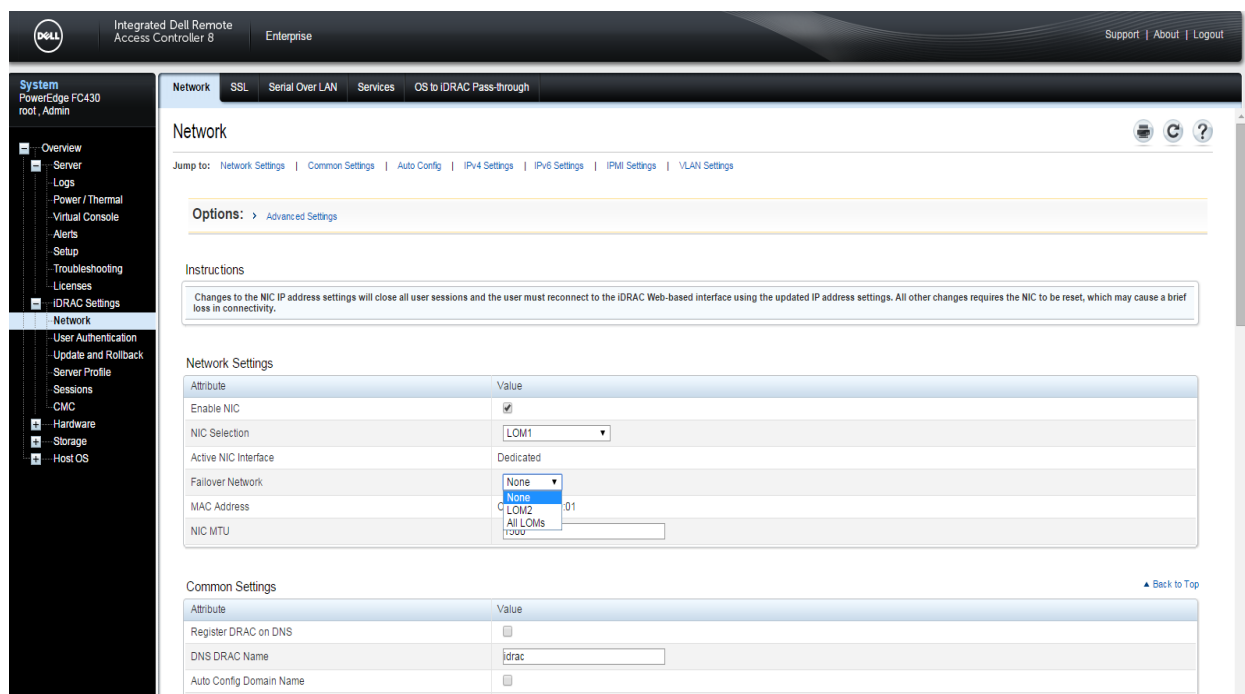


Figure 2 iDRAC GUI –Failover Network selection on Blade servers

2.3

iDRAC 8 1.2 release supports the VLAN feature on blade servers. The iDRAC applies the saved iDRAC VLAN settings when NIC Selection is in shared LOM mode. However this is overwritten by CMC if NIC Selection is "Chassis Dedicated " during iDRAC boot. Modular systems doesn't support iDRAC VLAN configuration options when active NIC is "Chassis Dedicated"(Refer Figure 4 below) instead CMC VLAN settings are used.

System
PowerEdge FC430
root, Admin

- Overview
- Server
 - Logs
 - Power / Thermal
 - Virtual Console
 - Alerts
 - Setup
 - Troubleshooting
 - Licenses
 - iDRAC Settings
 - Network**
- User Authentication
- Update and Rollback
- Server Profile
- Sessions
- CMC
- Hardware
- Storage
- Host OS

Integrated Dell Remote Access Controller 8 Enterprise

Support | About | Logout

Network

SSL Serial Over LAN Services OS to iDRAC Pass-through

Autoconfiguration Enable	<input checked="" type="checkbox"/>
Static IP Address 1	<input type="text"/>
Static Prefix Length	<input type="text" value="64"/>
Static Gateway	<input type="text"/>
Link Local Address	<input type="text"/>
Use DHCPv6 to obtain DNS Server Addresses	<input type="checkbox"/>
Static Preferred DNS Server	<input type="text"/>
Static Alternate DNS Server	<input type="text"/>

IPMI Settings

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Attribute	Value
Enable IPMI Over LAN	<input checked="" type="checkbox"/>
Channel Privilege Level Limit	Administrator ▼
Encryption Key	00

VLAN Settings

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Attribute	Value
Enable VLAN ID	<input checked="" type="checkbox"/>
VLAN ID	<input type="text" value="201"/>
Priority	<input type="text" value="6"/>

Apply

Figure 3 iDRAC GUI –VLAN settings enabled when NIC selection is Shared LOM on Blade servers

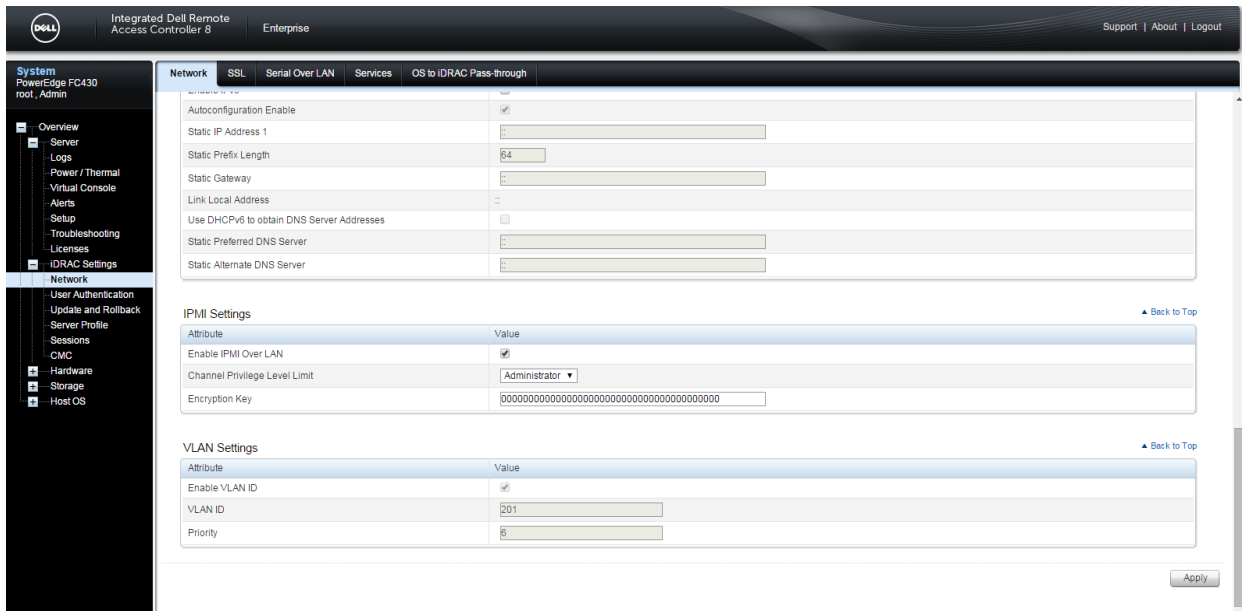


Figure 4 iDRAC GUI –VLAN settings disabled when NIC selection is “Chassis Dedicated” on Blade servers