



IBM Networking OS 7.8 Features Summary (RackSwitch and BladeCenter)

Category	Feature	Virtual Fabric 10Gb Switch Module for IBM BladeCenter	RackSwitch G8052	RackSwitch G8264	RackSwitch G8264T	RackSwitch G8316
Chassis management	PRM	Yes	No	No	No	No
Data Center Bridging	Data Center Bridging	Yes	No	Yes	Yes	Yes
	FIP Snooping	Yes	No	Yes	Yes	Yes
	PFC	Yes	No	Yes	Yes	Yes
	ETS	Yes	No	Yes	Yes	Yes
	Full Fabric Fibre Channel Forwarder (Direct attach FCoE Storage)	No	No	No	No	No
	FCoE	Yes	No	Yes	No	No
	FCoE LAG	Yes	No	Yes	No	No
	FCoE support in NPIV mode	Yes	No	Yes	No	No
	FCoE stacking	Yes	No	No	No	No
	FCoE stacking with 802.1Qbg	Yes	No	No	No	No
	FCoE LAG on uplink ports in a stacked mode	Yes	No	No	No	No
	TAGIPVID	Yes	Yes	No	No	No
	vNIC FCoE in stacked mode	Yes	No	No	No	No
Layer 2	BPDU Guard	Yes	Yes	Yes	Yes	Yes
	Static LAG	Yes	Yes	Yes	Yes	Yes
	Static FDB	Yes	Yes	Yes	Yes	Yes
	Guest VLAN	Yes	Yes	Yes	Yes	Yes
	Hotlinks	Yes	Yes	Yes	Yes	Yes
	Hotlinks + STP	No	Yes	Yes	No	Yes
	802.1d STP	No	No	No	No	No
	802.1s MSTP	Yes	Yes	Yes	Yes	Yes
	802.1w RSTP	Yes	Yes	Yes	Yes	Yes
	802.1x Port Security	Yes	Yes	Yes	Yes	Yes
	LACP	Yes	Yes	Yes	Yes	Yes
	LACP Suspend Port	Yes	No	Yes	No	No
	Static Port Channel and LACP	Yes	Yes	Yes	Yes	Yes
	Flowcontrol	Yes	Yes	Yes	Yes	Yes
	Jumbo frames	Yes	Yes	Yes	Yes	Yes
	MAC address learning	Yes	Yes	Yes	Yes	Yes
	MAC notification	Yes	Yes	Yes	Yes	Yes
	802.1q Port based VLAN	Yes	Yes	Yes	Yes	Yes
	Port flood blocking	Yes	Yes	Yes	Yes	Yes
	Port mirroring	Yes	Yes	Yes	Yes	Yes
	Full Private VLAN	Yes	Yes	Yes	No	Yes
	Protocol VLAN	Yes	Yes	Yes	Yes	Yes
	PVRST	Yes	Yes	Yes	Yes	Yes
	Layer 2 Failover	Yes	Yes	Yes	Yes	Yes
	RMON	Yes	Yes	Yes	Yes	Yes
	Error Disable	Yes	Yes	Yes	Yes	Yes
	LLDP	Yes	Yes	Yes	Yes	Yes
	LLDP Stacking Mode	Yes	No	Yes	No	No
	LLDP vendor information displayed	Yes	Yes	Yes	Yes	Yes
	LLDP MIB	Yes	Yes	Yes	Yes	Yes
	vLAG with Protocol Independent Multicast (PIM) dense mode	No	No	Yes	Yes	Yes
	vLAG with STP on/off	No	Yes	Yes	Yes	Yes
	vLAG with Error Disable (for misconfiguration or cable issues)	No	Yes	Yes	No	Yes
	Root Guard	Yes	Yes	Yes	Yes	Yes
	Loop Guard	Yes	Yes	Yes	Yes	Yes
	Port based trunk hash - static distribution	No	Yes	No	No	No
	Minimum Links per LACP	Yes	Yes	Yes	Yes	Yes
	Auto STG assignment	Yes	Yes	Yes	Yes	Yes
	Rate Limiting	Yes	Yes	Yes	Yes	Yes
	Static ARP entry with Multicast MAC address (NLB)	Yes	Yes	Yes	Yes	Yes
	Decoupling active VLANs from MSTP configuration	Yes	Yes	Yes	Yes	Yes
	Thash--used directly used with LAGs	Yes	Yes	Yes	Yes	Yes
Layer 3	IPv6 Management	Yes	Yes	Yes	Yes	Yes
	IPv6 IPSec	Yes	Yes	Yes	Yes	Yes
	IPv6 IKE	Yes	Yes	Yes	Yes	Yes
	IPv6 MLDv2	Yes	Yes	Yes	Yes	Yes
	IPv6 Address Support VSIDB	Yes	No	Yes	No	No
	Static Multicast FDB	Yes	Yes	Yes	Yes	Yes
	IPv4	Yes	Yes	Yes	Yes	Yes
	IP interface on physical port	No	Yes	Yes	Yes	Yes
	Static ARP	Yes	Yes	Yes	Yes	Yes
	BGPv4	Yes	Yes	Yes	Yes	Yes
	BGP Multi-hop TTL Security (previously eBGP multi-hop)	No	Yes	Yes	Yes	Yes
	Dynamic BGP peers	No	No	Yes	Yes	Yes
	BGP route reflector	No	Yes	Yes	Yes	Yes
	BGP next hop self	No	Yes	Yes	Yes	Yes
	BGP DSCP marking	No	Yes	Yes	Yes	Yes
	Bootp Relay Services/DHCP	Yes	Yes	Yes	Yes	Yes



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	Dynamic routes	Yes	Yes	Yes	Yes	Yes
	ICMP redirect	Yes	Yes	Yes	Yes	Yes
	ICMP filtering	Yes	Yes	Yes	Yes	Yes
	IGMP Relay	Yes	Yes	Yes	Yes	Yes
	IGMP v1/v2 snooping	Yes	Yes	Yes	Yes	Yes
	IGMPv3 snooping	Yes	Yes	Yes	Yes	Yes
	IP FWD/Directed broadcasts	Yes	Yes	Yes	Yes	Yes
	OSPF v1/v2, ECMP	Yes	Yes	Yes	Yes	Yes
	RIP v1/v2	Yes	Yes	Yes	Yes	Yes
	Static Multicast routes	Yes	Yes	Yes	Yes	Yes
	Static routing	Yes	Yes	Yes	Yes	Yes
	Policy-based routing	No	Yes	Yes	No	Yes
	VRRP	Yes	Yes	Yes	Yes	Yes
	VRRP Holdoff	Yes	Yes	Yes	Yes	Yes
	IGMP querier	No	Yes	Yes	Yes	Yes
	ECMP Static routes	Yes	Yes	Yes	Yes	Yes
	Protocol Independent Multicast (Sparse Dense modes)	No	Yes	Yes	Yes	Yes
	Server mobility/Bootp Relay	Yes	Yes	Yes	Yes	Yes
	OSPFv3 (RFC 5340), IPv6	Yes	Yes	Yes	Yes	Yes
	SNMP and BBI for OSPFv3	Yes	Yes	Yes	Yes	Yes
	Multi-server DHCP/Bootp Relay	Yes	Yes	Yes	Yes	Yes
	DHCP Snooping	Yes	Yes	Yes	Yes	Yes
	OSPFv3 over IPSec	Yes	Yes	Yes	Yes	Yes
	IP Options	Yes	No	Yes	Yes	Yes
	IP loopback	Yes	Yes	Yes	Yes	Yes
	Autonomous System BGP Multipath	No	Yes	Yes	Yes	Yes
	Terminal Length 0	Yes	Yes	Yes	Yes	Yes
	Increased #static MACs	No	No	Yes	Yes	Yes
Management	Link flap dampening	No	Yes	Yes	Yes	Yes
	User buffer Management	No	No	No	No	No
	Boot schedule	Yes	Yes	Yes	Yes	Yes
	Configurable port for SFTP	No	No	Yes	No	No
	Configurable MTM	No	Yes	Yes	Yes	Yes
	Configuration Tracking	Yes	Yes	Yes	Yes	Yes
	Cisco-like ISCLI	Yes	Yes	Yes	Yes	Yes
	Diff flash in ISCLI	Yes	Yes	Yes	No	Yes
	On Box Scripting	No	No	Yes	No	No
	Dual images	Yes	Yes	Yes	Yes	Yes
	FTP	Yes	Yes	Yes	Yes	Yes
	LDAP	Yes	Yes	Yes	Yes	Yes
	Reset Protection (reset unit with traffic, p.s. failover)	Yes	Yes	Yes	Yes	Yes
	RADIUS	Yes	Yes	Yes	Yes	Yes
	Secured Passwords	Yes	Yes	Yes	Yes	Yes
	SNMP Traps	No	Yes	Yes	Yes	Yes
	SNMP: Support for 8 Read Only (RO) & Read Write (RW) communities (MS)	Yes	Yes	Yes	Yes	Yes
	SNMPv1/v3	Yes	Yes	Yes	Yes	Yes
	SCP/Xmodem	Yes	Yes	Yes	Yes	Yes
	Management Network	Yes	Yes	Yes	Yes	Yes
	Duplicate IP Detection	Yes	Yes	Yes	Yes	Yes
	Ehanced NTP	Yes	Yes	Yes	Yes	Yes
	Stacking	Yes	No	Yes	No	No
	LLDP stacking	Yes	No	No	No	No
	Management ACLs	Yes	Yes	Yes	No	Yes
	MSTP in stacking mode	Yes	No	No	No	No
	Local preference for stacking	Yes	No	No	No	No
	VMready MAC spoofing in stacked mode	Yes	No	Yes	No	No
	TACACS	Yes	Yes	Yes	Yes	Yes
	Telnet	Yes	Yes	Yes	Yes	Yes
	TFTP	Yes	Yes	Yes	Yes	Yes
	TSDmp	Yes	Yes	Yes	Yes	Yes
	BBI/HTTPs	Yes	Yes	Yes	Yes	Yes
	Netboot	Yes	Yes	Yes	Yes	Yes
	Netboot enhancement (Option 7 + Option 12)	No	Yes	Yes	Yes	Yes
	Shift-B Menu	Yes	Yes	Yes	Yes	Yes
	Operation, Administration & Maintenance (OAM)	Yes	Yes	Yes	Yes	Yes
	Netconf XML	No	Yes	Yes	Yes	Yes
	Management ACLs	Yes	Yes	Yes	Yes	Yes
	CLI Output filters	Yes	Yes	Yes	Yes	Yes
	ISCLI	Yes	Yes	Yes	Yes	Yes
	SSHv1	No	No	No	No	No
	SSHv2	Yes	Yes	Yes	Yes	Yes
	ACL logging	No	Yes	Yes	Yes	Yes



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	Digital Optical Monitoring	Yes	Yes	Yes	Yes	Yes
	Out of profile notification	Yes	No	No	No	No
	MP Packet logging	Yes	Yes	Yes	Yes	Yes
	Precision Time Protocol (PTP)	No	No	Yes	Yes	Yes
	SNMP and BBI support for MLDv2	Yes	Yes	Yes	Yes	Yes
	SNMP Host-Resources MIB (RFC1514)	Yes	Yes	Yes	Yes	Yes
Network Monitoring	sFLOW	Yes	Yes	Yes	Yes	Yes
Infrastructure	Syslog	Yes	Yes	Yes	Yes	Yes
	Syslog console and buffer severity	Yes	Yes	Yes	Yes	Yes
OpenFlow	Openflow v1.3.1	No	No	Yes	No	Yes
	Openflow v1.0	No	Yes	Yes	Yes	Yes
	Openflow hybrid mode	No	No	Yes	Yes	No
Performance	QoS	Yes	Yes	Yes	Yes	Yes
	QoS monitoring	No	Yes	Yes	Yes	Yes
	Microburst Detection	No	No	Yes	No	Yes
	CPU MIB (Improved process and CPU monitoring)	Yes	Yes	Yes	Yes	Yes
	Weighted random early detection/ Enhanced Congestion Notification	No	Yes	Yes	Yes	Yes
Security	Watchdog	Yes	Yes	Yes	Yes	Yes
	UDLD	Yes	Yes	Yes	Yes	Yes
	Syslog tracking of ISCLI configuration changes	Yes	Yes	Yes	Yes	Yes
	Error disable support with UDLD	Yes	Yes	Yes	Yes	Yes
	Security Enhancement (Updated default protocols used for configuration to be secure)	Yes	Yes	Yes	Yes	Yes
	Use SHA-256 as default hashing algorithm	Yes	Yes	Yes	Yes	Yes
	NIST SP 800-131A Compliance	Yes	Yes	Yes	Yes	Yes
System	Control Plane Policing (CoPP)	Yes	Yes	Yes	Yes	Yes
	ACL6 Metering	Yes	Yes	Yes	Yes	Yes
	ACL Boot profiles	No	No	Yes	Yes	Yes
Virtualization	VMready	Yes	Yes	Yes	Yes	Yes
	VMready stacking	Yes	No	Yes	No	No
	VMready with 802.1Qbg Edge Virtual Bridging	No	No	Yes	No	No
	VMready with 802.1Qbg with Stacking	Yes	No	Yes	No	No
	VMready with 802.1Qbg/ Vepa Phase 2	Yes	No	No	No	No
	VMready with 802.1Qbg/Vepa Phase 2 with Stacking	Yes	No	Yes	No	No
	VMready Distributed vSwitch and vSphere 5.0 support	Yes	Yes	Yes	Yes	Yes
	VMready with 802.1Qbg with FCoE	Yes	No	No	No	No
	VMready MAC spoofing (VMware)	Yes	Yes	Yes	Yes	Yes
	VMready support for up to 4K groups	No	No	Yes	Yes	Yes
	Universal Fabric Port (UFP)	Yes	No	No	No	No
	vNIC	Yes	No	Yes	Yes	Yes
	Multi-hop RoCE with LAG	Yes	No	No	No	No
	vNIC Data Center Bridging eXchange	Yes	No	Yes	Yes	Yes
	LACP support vNICs	Yes	No	No	No	No
	support multiple vNIC groups per uplink	Yes	No	No	No	No
	vNIC FCoE and pNIC FCoE	No	No	No	No	No
	vNIC ETS bandwidth sharing	Yes	No	No	No	No
	Preconfiguration of VM MAC addresses	Yes	Yes	Yes	Yes	Yes
	Maunal Reflective Relay Mode for SRIOV/VEPA NICS	Yes	No	Yes	No	No
	HTTPS support for FSM to download the Qbg VSIDB	Yes	No	Yes	No	No
	vNIC iSCSI	Yes	No	Yes	Yes	Yes

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