

Xcellis Workflow Extender (R520) Site Planning Guide

Product Overview



The Xcellis Workflow Extender combines industry-proven Quantum hardware and StorNext software into one convenient, out-of-the-box solution. Your Xcellis Workflow Extender system software has been pre-installed and is ready to operate with a minimum of additional configuration required at time of installation. This guide provides an overview of site characteristics, physical requirements, and environmental specifications essential for the installation of the Xcellis Workflow Extender.

The Xcellis Workflow Extender is configured to your specifications during system installation. Every Xcellis Workflow Extender configuration arrives with all necessary parts included. Each system comes with an accessory kit containing rack-mount hardware. StorNext licenses are installed and some features are configured during initial system installation.

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Installation Requirements

Rack Compatibility

Nearly all standard four-post EIA 19" server racks are compatible with the Xcellis Workflow Extender rack mount kits. See [Physical Characteristics](#) on page 6 for system rack space requirements.

Setup

After the system has been installed and configured, you are ready to use your Xcellis Workflow Extender.

Required Network Information

- DHCP (Dynamic Host Configuration Protocol) is not supported. You must provide a static IP address at the time of installation.
- The default IP Address is: **10.1.1.1**

Installation and Integration Services

Installation and integration of the Xcellis Workflow Extender will be performed by Quantum Professional Services. Phone support for the installation process is available via the Quantum support number for your area. Quantum World Wide phone support is as follows:

Americas:

800-284-5101 (toll free) or 949-725-2100

Europe, Middle East and Africa:

00800-4-782-6886 (toll free) or +49 6131 3241 1164

Asia Pacific:

+800 7826 8887 (toll free) or +603 7953 3010

Hardware Description

The Xcellis Workflow Extender includes two 3.5" 500GB 7.2K RPM SATA hard disk drives (HDD) in a 1+1 RAID 1 configuration for the Operating System, StorNext, and other required system software.

In addition, the system includes the following components:

- Two 2.4 GHz 6-core CPUs
- 24 GBs of memory (12GB/CPU)
- Redundant cooling fans and power

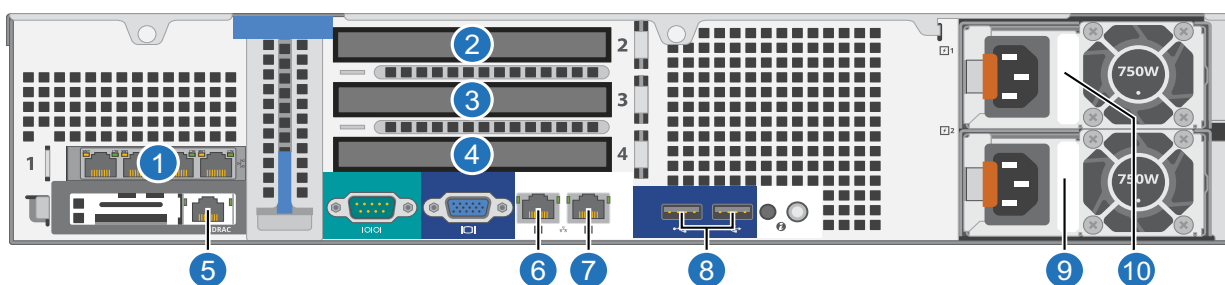
Note: The server ships with one 4-port 1 GbE NIC PCIe card in slot 1 and two embedded 1 GbE Ethernet ports. Xcellis Workflow Extender can support multiple configurations which include different PCIe expansion cards in Slots 2-4. Expansion cards are installed and configured during system installation.

Slots and Expansion Card Options

For the Xcellis Workflow Extender, the MDC network is always a bonded (bond0) network. Two physical Ethernet ports are dedicated to the MDC network, and the remaining Ethernet ports are dedicated to the LAN client network. The LAN client network is either bonded (bond1) or configured as individual network interfaces. The LAN client network can include the on-board embedded 1 GbE port 2. This port can also be bonded to another 1 GbE port on the system.





[Figure 1](#) shows the rear indicators, connectors and buttons of the Xcellis Workflow Extender system. See [Table 1](#) for information on the labeled components.


Figure 1 Xcellis Workflow Extender – Rear View



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Table 1 Xcellis Workflow Extender – Rear Panel Features and Indicators

Item	Indicator, Button, or Connector	Icon	Description
1	PCIe slot 1		4-port 1 GbE NIC - provides access to the MDC network and LAN client network
2	PCIe slot 2	n/a	Options: <ul style="list-style-type: none"> • 4-port 1 GbE NIC - provides access to the LAN client network • 2-port 10 GbE NIC - provides access to the LAN client network • 2-port 40GbE HCA • 2-port 56 Gb Infiniband FDR HCA • Empty
3	PCIe slot 3		Options: <ul style="list-style-type: none"> • 4-port 1 GbE NIC - provides access to the LAN client network • 2-port 10 GbE NIC - provides access to the LAN client network • Empty
4	PCIe Slot 4		Options: <ul style="list-style-type: none"> • 4-port 16 Gb Fibre Channel HBA • 2-port 16 Gb Fibre Channel HBA • 2-port 8 Gb Fibre Channel HBA • Empty
5	iDRAC Enterprise port		Reserved for Quantum Service
6	Service Port (Eth0)		Reserved for Quantum Service
7	LAN Client Ethernet Port (Eth1)		Embedded 1 GbE NIC port - can provide access to the LAN client network. This port could also be bonded with other 1 GbE NIC port connections. Note: This port cannot be bonded with any 10 GbE ports in the system.

Item	Indicator, Button, or Connector	Icon	Description
8	USB Ports (2)		USB 2.0-compliant connection for USB devices
9	Power supply 2 (PS2)		750 W redundant power supply
10	Power supply 1 (PS1)		750 W redundant power supply

Service

Warranty

The Xcellis Workflow Extender warranty includes one year of Quantum's Bronze Support Plan. This delivers support essential during business hours, including access to skilled technical support, next business day delivery of replacement parts, and installation of non-customer replaceable components to ensure trouble-free problem resolution.

This warranty covers the Xcellis Workflow Extender and all drives, and includes firmware downloads, telephone support, and Internet access to Quantum's online Customer Support web site.

The Quantum Customer Support web site features online service request processing, web-based event status tracking, and a comprehensive Knowledge Base. Quantum's Knowledge Base gives you 7x24 real-time electronic access to complete product and support resources and the expertise of Quantum's Global Services organization.

Service Package Upgrades

Quantum's Global Services organization is geared towards delivering the fastest possible response and root cause resolution, helping you maximize your backup investments, better manage processes, and make the best use of your resources. We ensure total customer satisfaction by providing comprehensive, responsive services on a worldwide basis.

Quantum's tiered hardware support plans provide a variety of support options to meet a range of budget and availability needs.

Quantum's Support Plans include:

- **Next Business Day Gold** – (Next Business Day Onsite, 7x24 Phone Support)
- **Gold** – (7x24x4 Hr on-site, 7x24 phone support)
- **Customized Platinum** offering – a **Bronze** (5x9xNBD on-site, 5x9 phone support) warranty extension is also an option for the second and third year of ownership.

Features of these plans include: 24-hour telephone support, on-site response, access to strategic account management (available with select service packages), priority call

handling, strategically located spares parts, online resources, and software/firmware upgrades.

For more information on these service plans, please visit www.quantum.com or contact your Quantum Sales Representative.

Quantum service engineers are available around the world and are deployed to respond to on-site service demands. In addition, spare part depots are strategically located around the globe so that service technicians have access to the parts and equipment necessary to maintain or repair your Xcellis Workflow Extender.

Shipping Information

The Xcellis Workflow Extender is delivered in the following configuration (see [Table 2](#)).

Table 2 Xcellis Workflow Extender Configurations

Shipping Component	Number of Shipping Boxes	Shipping Box Weight
1 Xcellis Workflow Extender	1	69.3 lbs (31.4 kg)

System Specifications

This section lists characteristics and specifications of the system. These characteristics and specifications are categorized as follows:

- [EMI Certification](#)
- [Physical Characteristics](#)
- [Environmental Specifications](#)

EMI Certification

This product is certified under the regulatory model name E19S.

Physical Characteristics

The following tables provide dimensions and other physical characteristics of the Xcellis Workflow Extender system components:

- [Physical Characteristics](#)
- [Cable Drops](#)
- [Power Requirements](#)

- [Environmental Specifications](#)

Table 3 Physical Characteristics

Xcellis Workflow Extender Chassis	
Height	2U, 3.5 inches (8.89 cm)
Width (side to side)	17.25 inches (43.8 cm)
Depth (front to back)	24.5 in (62.2 cm)
Weight (stand alone)	37.3 lbs (16.9 kg)
Rack Space Required	2U
Air clearance	Open 4 in (10.2 cm) behind unit for proper air flow

Table 4 Cable Drops

Xcellis Workflow Extender Cables	
Ethernet Cables	Gateway LAN Client direct Ethernet connections, Ethernet switch connections, and Ethernet connections for SAN metadata.
InfiniBand Cables and SFPs	InfiniBand network connections require either IB cables with QSFPs built into the cables, or QSFPs installed in the InfiniBand ports connected to InfiniBand cables.
Fibre Channel Cables	Some Fibre Channel cards come with SFPs connections built into the cards, and some require either SFPs to be installed into the cards and connected to the Fibre Channel cables, or cables with SFPs built into the cables.
Power Outlets	System - 2 USA type 3-prong power outlets (Nema 5-15) or 2 C13 type 3-prong power outlets (IEC320 C13).

Table 5 Power Requirements

Xcellis Workflow Extender Power Requirements	
Power Supplies and Cords	Two (2) hot swappable redundant power supplies Two (2) USA type 3-prong power cords with IEC320 C13 to Nema 5-15 connectors Two (2) C13 to C14 type 3-prong power cords with IEC320 C13 to IEC320 C14 connectors
Input Voltage	100–240 VAC
Input Frequency	50–60Hz
Rated Current	10-5 amps

Maximum Operating Current	3.1-1.3 amps
Inrush Current	5.2-5.1 amps
Maximum Operating Wattage	293 watts
Maximum Operating BTUs	1000 BTU/hr

Caution: To safeguard continuous operations in the event of a power outage, Quantum recommends that you connect the Xcellis Workflow Extender to a UPS (uninterruptable power supply). Two circuits should be used (one for each power supply).

Environmental Specifications

[Table 6](#) provides environmental specifications for the Xcellis Workflow Extender.

Table 6 Environmental Specifications

Climatic Environment		
Temperature and Altitude	Operating	10 to 35°C (50 to 95°F) with a maximum temperature gradation of 10°C per hour Note: 35 °C (95 °F) is the maximum temperature for the Xcellis Workflow Extender server at sea level. For altitudes above 2,950 ft (899.2m), decrease the operating temperature 0.9°C for every 1,000 ft (304.8m) of altitude.
	Shipping and storage	-4 to 140°F (-20°C to 60°C)
Relative humidity	Operating	20% to 80% (non-condensing)
	Shipping and storage	5% to 95% (non-condensing)
Altitude	Operating	0 to 10,000 ft (0 to 3,048m)
	Shipping and storage	0 to 35,000 ft (0 to 10,688m)
Vibration and Shock		
Maximum Vibration	Operational: 0.26 G's random vibration, 5 to 350Hz Non-operational: 0.5 G's random vibration, 5 to 350Hz	
Maximum Shock	Operational: 2 G's for 11ms, ½ Sine Non-operational: 3.5 G's for 11 ms, ½ Sine	
Acoustic		

Acoustic output	Operating	< 67 dBA at 1 meter, room temperature (20C)
Agency Approvals		
Safety	IEC 60950-1, CSA 60950-1-03/UL 60950-1	
Emissions	EN55022 Class A, FCC Part 15 Class A, ICES-003 Class A, VCCI Class A, CISPR 22 Class A, CNS13438 Class A, KN22 Class A	
Immunity	EN55024/KN24: EN 61000-3-2 - Harmonic current emissions test EN 61000-3-3 - Voltage fluctuations and flicker in low-voltage supply systems test EN 55024:1998 - Information technology equipment - Immunity characteristics - Limits and methods of measurements EN 61000-4-2 - Electrostatic discharge immunity test EN 61000-4-3 - Radiated, radio-frequency, electromagnetic field immunity test EN 61000-4-4 - Electrical fast transient/burst immunity test EN 61000-4-5 - Surge immunity test EN 61000-4-6 - Immunity to conducted disturbances, induced by radio-frequency fields EN 61000-4-8 - Power frequency magnetic field immunity test EN 61000-4-11 - Voltage dips, short interruptions and voltage variations immunity test	



For assistance, contact the Quantum Customer Support Center:

USA: **1-800-284-5101 (toll free) or +1-720-249-5700**

EMEA: **+800-7826-8888 (toll free) or +49-6131-3241-1164**

APAC: **+800-7826-8887 (toll free) or +603-7953-3010**

Worldwide: **<http://www.quantum.com/ServiceandSupport>**

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