

# Myriad Pre-Install Network Worksheet

Complete this worksheet in advance for the smoothest installation experience when your system arrives. You might need to consult your IT expert, network administrator, or integrator to gather some of this information, and confirm that you can connect the system to your 10 Gigabit or faster Ethernet switch. Keep a copy of this worksheet nearby when you set up your system.

Before you continue, Quantum strongly recommends you review all the **requirements** and relevant information on the **Site Planning** page within the **Myriad Documentation Center** at <https://qsupport.quantum.com/kb/flare/Content/Myriad/DocSite/Default.htm#Topics/Plan.htm>.

As you set up your system using the **Setup Wizard**, you can move your cursor over the tool tip icon next to many of the fields in the web interface. The tool tips describe the fields and requirements for data entry.

Site Readiness		
Is the correct power available ?		
Is the correct cooling available ?		
Is there adequate rackspace for the installation ?		
Cage nuts and screws available? (Note: 24 are required)		
Myriad Load Balancer Nodes (LBN) Connectivity:	Switch Manufacturer	
	Switch Model	
	Software Version	
	Port Count	
	Port Type	
	Cable Type	
Myriad Deployment Node (DN) Connectivity:	GbE Port Available?	
	DHCP Available?	
	Internet Accessible?	
Network personnel available during installation?		
Myriad Configuration Parameters:	Cluster Name:	
	Ingress FQDN:	
	Internal IPv4 Subnet:	
	External IPv4 Range:	
	Myriad ASN:	
Network Services:	NTP Servers	
	DNS Servers	

Miscellaneous	
<b>Password for Admin Account</b> (Do not write it down but have it ready for the install)	
<a href="#">Do you have a backup Plan?</a> (see Best Practices for a Myriad Backup)	

Unified UI (UI) Settings			
Email address/username(for the UI admin user account)			
Password (for the UI admin user account) (Do not write it down but have it ready during install)			
SMTP Server IP			
Sender Address			
Active Directory Integration (UI Users)	Yes	No	

Certificate Management Settings			
SSL Certificates: By default, Myriad uses a self-signed certificate for browser connectivity. Optionally, you can upload a certificate file and key file, or a PEM chain file.			
Self Signed Certificate (Generated Automatically)	Yes	No	
For certificate and key upload (not self signed / automatically generated):			
Certificate File (Do not write it down but have it ready during install)			
Key File (Do not write it down but have it ready during install)			
For PEM chain file upload (not self signed / automatically generated):			
PEM Chain File (Do not write it down but have it ready during install)			

## Network Requirements

The following network-related items are needed as inputs to the Setup Wizard when you initially configure your Myriad cluster.

- **Cluster Name:** A name for the Myriad cluster to distinguish it from other systems.
- **Ingress FQDN:** The fully qualified domain name (FQDN) that will be used to access the Myriad cluster.
- **ASN:** This is the Autonomous System Number chosen for the Myriad cluster. Any ASN in the private range (64512 – 65534) is acceptable, as long as it is unique within your environment. The default ASN is **65000**.
- **Internal Subnet:** An IP range to be used by Myriad for the internal cluster network. This should be a non-routable range that is not otherwise in use by devices on the customer network that need access to this Myriad cluster. The range must be expressed in **CIDR notation**. Quantum recommends the default of **172.16.0.0/16**, unless there is a conflict with this range.
- **External IPv4 Range (in CIDR notation):** An IP range to be used by Myriad for the external network connections to your network. This should be a private IP range that is routable and must be expressed using CIDR notation. A block as small as /29 (which contains 8 IP addresses) is acceptable for Myriad clusters that may grow to contain up to 40 storage nodes. If more than 40 storage nodes are anticipated, a larger block should be assigned to avoid the need for reconfiguration in the future. The first IP in this range is assigned as the ingress IP for the cluster. The rest of the IP addresses in the range are used sequentially to provide egress IP addresses for the load balancer nodes (Quantum recommends this range is non-routable and not used by any devices on your network).
- **NTP:** To enable NTP, you must provide the hostname or IP address of the chosen NTP server or server pool as well as the time zone. Note, your SMTP server must be configured to accept traffic from the entire Myriad external IPv4 range (for example, **192.168.1.16/28**).
- **SSL Certificates:** By default, Myriad uses a self-signed certificate for browser connectivity. Optionally, you can upload a certificate file and key file, or a PEM chain file.
- DHCP must be able to assign an address to the 1 GbE deployment node management port (eth0).
- All Myriad ethernet ports that connect to the customer's network (1 GbE management and 100 GbE data) must be able to reach the same customer-designated DNS server's IP address.

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# Ports and Protocols

The table below summarizes the TCP/UDP ports used on the external interfaces and the purpose for each.

Node Type	Interface(s)	Port	Protocol	Direction	Purpose
Deployment	1 GbE	443	TCP	In and Out	HTTPS Software Image Download
		67	UDP	In	DHCP
		68	UDP	Out	DHCP
		123	UDP	In and Out	NTP Time Synchronization
Load Balancer	100 GbE	2049	TCP	In	NFSv4 Server Listener
		6343	UDP	Out	sFLOW (Optional)
		161	UDP	In	SNMP (Optional)
		162	UDP	Out	SNMP (Optional)
		587	TCP	Out	SMTPS Email Alerts (Optional)
		123	UDP	In and Out	NTP Time Synchronization
		179	TCP	In and Out	BGP
		53	UDP	In and Out	DNS

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## Planning for a Myriad Backup

Are you storing business-critical data on Myriad? Have you formulated an appropriate disaster recovery plan? Quantum recommends you review the best practices for a Myriad backup on the **Best Practices for a Myriad Backup** page within the **Myriad Documentation Center** at <https://qsupport.quantum.com/kb/flare/Content/Myriad/DocSite/Default.htm#Topics/Backup.htm>.