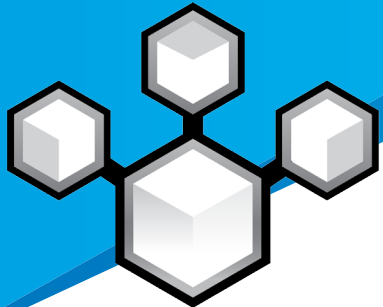


Visualize I/O Connectivity for VMware vSphere



QConvergeConsole

QLogic QConvergeConsole® Plug-in for VMware® vCenter® Simplifies and Accelerates Deployment and Management

KEY FINDINGS

- QLogic® has integrated the management of its adapter portfolio into VMware® vCenter® with the QConvergeConsole® (QCC) Plug-in for VMware vCenter.
- The QCC Plug-in is a set of software components delivered through industry-standard CIM providers that allows for the remote management of QLogic adapters via VMware vCenter. Administrators can centrally manage QLogic adapters from a single-pane-of-glass.
- It provides end-to-end visual representation of network and storage connectivity—from the physical adapter to the virtual machine (VM) for insight into storage and network infrastructure, saving hours of administration time.
- Managing VMware vSphere® servers using the QCC Plug-in and vSphere Web Client enables multi-protocol and multi-fabric management of QLogic adapters, resulting in lower deployment times, faster troubleshooting, and reduced total cost of ownership.

QLOGIC QCONVERGECONSOLE PLUG-IN FOR VMWARE VCENTER

QLogic offers a robust set of management tools to help organizations simplify management and improve efficiency while reducing costs under the umbrella of QCC. The QCC Plug-in and Web Client for VMware vCenter provides a rich set of features that include not only full adapter management but key storage and network visualization maps that significantly enhance the overall value of the QLogic adapter. In VMware virtualized environments, the QCC Plug-in significantly improves business processes, agility, deployment opportunities, and methods for troubleshooting.

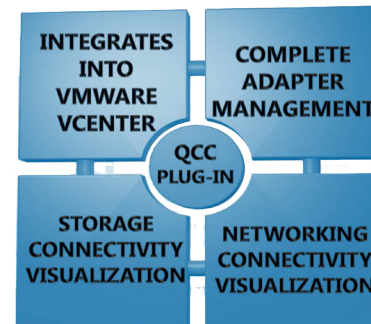


Figure 1. Key Features of the QConvergeConsole Plug-in and Web Client for VMware vCenter

INTEGRATES INTO VMWARE VCENTER

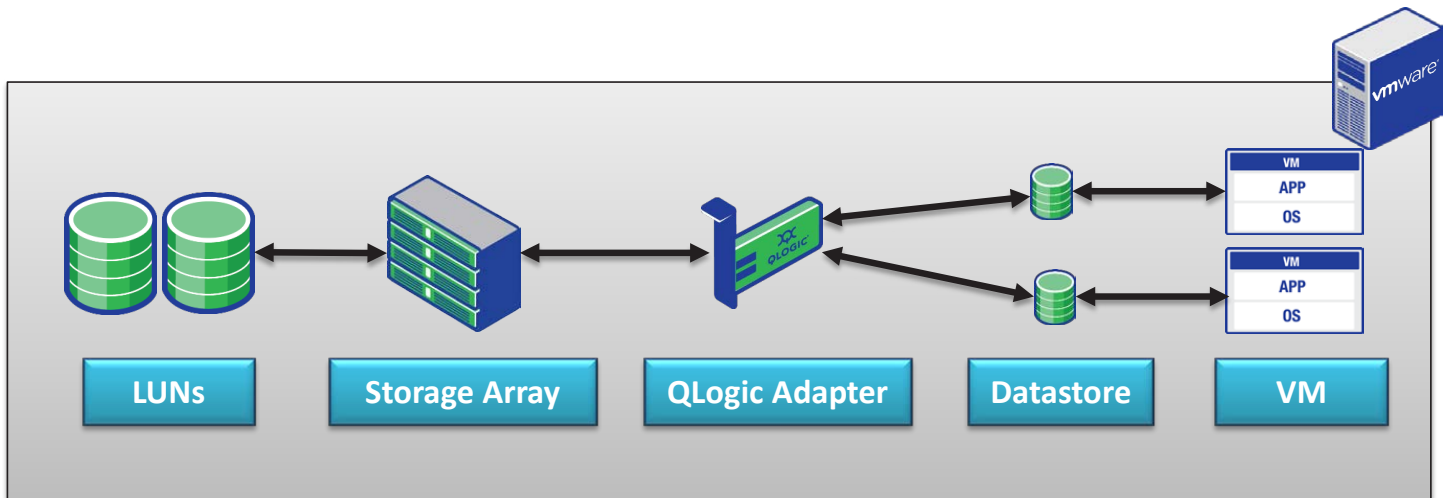
The QCC Plug-in is a set of software components delivered through industry-standard CIM providers that allows for the remote management of QLogic adapters via VMware vCenter. This capability enables administrators to centrally manage QLogic adapters from a single-pane-of-glass view, provided by the VMware vCenter console.

Integrates into VMware vCenter	QCC Plug-in
Manage QLogic Adapters from within VMware vCenter	✓
Heterogeneous and multi-adapter single-pane-of-glass management	✓
Manage Gen 6 and Gen 5 FC, FCoE, iSCSI, and Ethernet functions	✓

The vSphere® Web Client Plug-in configures QLogic Gen 6 and Gen 5 Fibre Channel Adapters along with QLogic® FastLinQ® Intelligent Ethernet and Converged Network Adapters by using a browser within a VMware vSphere

environment. This plug-in is part of the QLogic QCC suite of management tools, that include the QCC Web-based GUI and CLI, which are used in operating system environments other than vSphere, such as Windows and Linux. The plug-in provides an interactive GUI that is similar to the QCC Web-based tool.

Integrates into VMware vCenter	vSphere Web Client Plug-in
Management for FC, FCoE, iSCSI, and Ethernet Adapters	✓
Storage and Network Maps with End-to-end View	✓
Dynamic Management of QLogic NIC Partitioning (NPAR) for Supported Adapters, Including the Ability to Modify Partition and Function Type	✓
Querying and Modifying Driver Parameters for All Supported Protocols	✓
Viewing and Managing Initiators, Targets, and LUNs for FC, FCoE, and iSCSI Ports	✓
Querying Statistics, Running Diagnostics, and Obtaining Transceiver Information	✓



Storage Connectivity Visualization with QConvergeConsole

Figure 2. QConvergeConsole Plug-in Storage Connectivity Maps

STORAGE CONNECTIVITY VISUALIZATION

The QCC plug-in delivers advanced technology to improve and enhance the user experience. The QCC plug-in can instantly display how data stores are related to VMs as well as which storage targets and LUNs the data stores reside on. QCC gives administrators an instantaneous view of all those relationships along with a mouse-over feature they can use to view key configuration information for each of the hardware components throughout the fabrics. So regardless of the VM mobility situation, administrators can always see where resources are allocated.

Storage Connectivity Visualization	QCC Plug-in
End-to-end Visual Representation	✓
Health Status Using Color Coding	✓
Mouse Overs Provide Key Device Attributes	✓

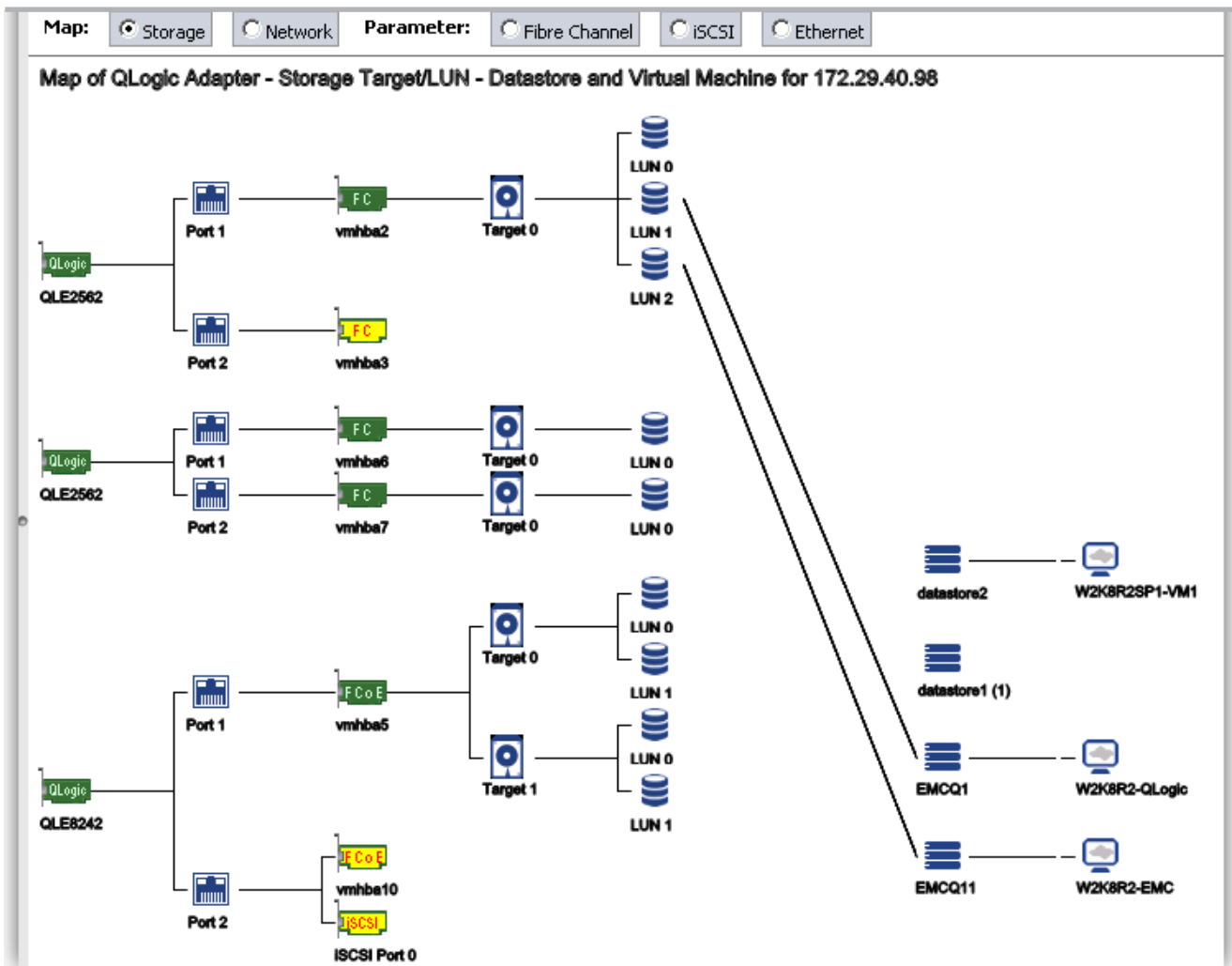


Figure 3. QConvergeConsole Plug-in Storage Connectivity Maps

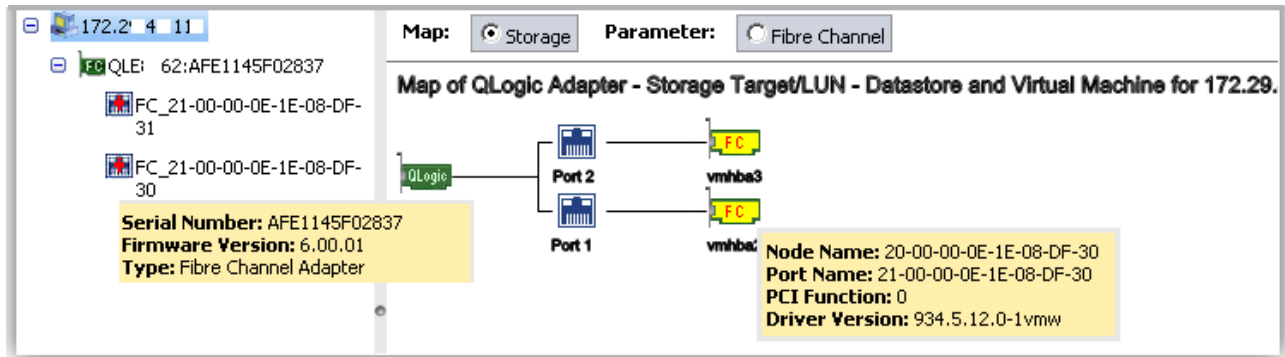


Figure 4. QConvergeConsole Plug-in Mouse Overs Provide Key Information

NETWORK CONNECTIVITY VISUALIZATION

The QCC Plug-in can instantly display how a QLogic network adapter and ports are related to VMs, as well as the VMware vSwitch/dvSwitch and port group to which they are connected. QCC gives an instantaneous view of the relationships in the network. In addition, a mouse-over feature provides key configuration information for each of the hardware components throughout the network internal to the VMware vSphere server.

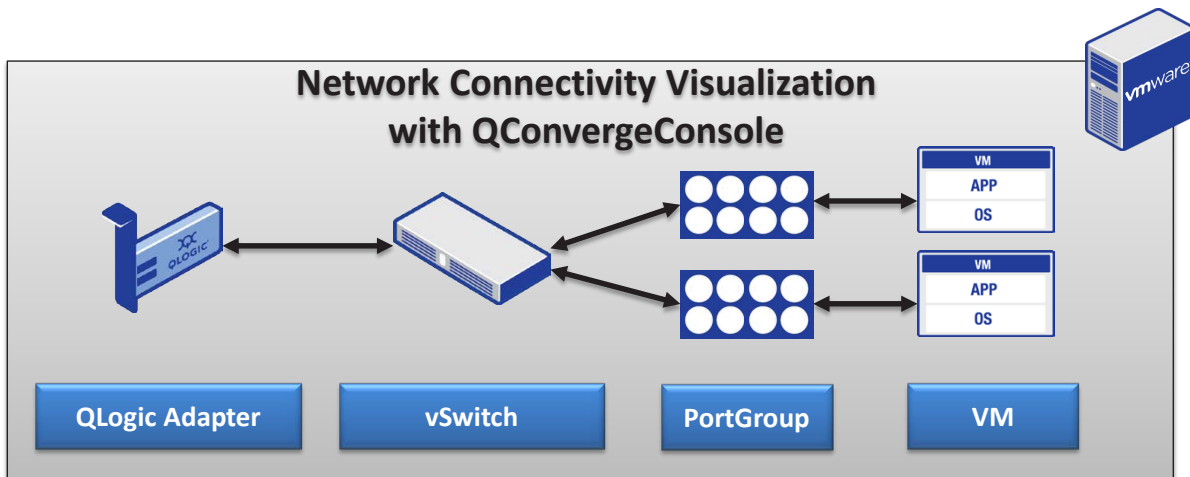


Figure 5. QConvergeConsole Plug-in Network Connectivity Maps

Network Connectivity Visualization	QCC Plug-in
End-to-end Visual Representation	✓
Health Status Using Color Coding	✓
Mouse Overs Provide Key Device Attributes	✓
VLAN and Port Group Information	✓

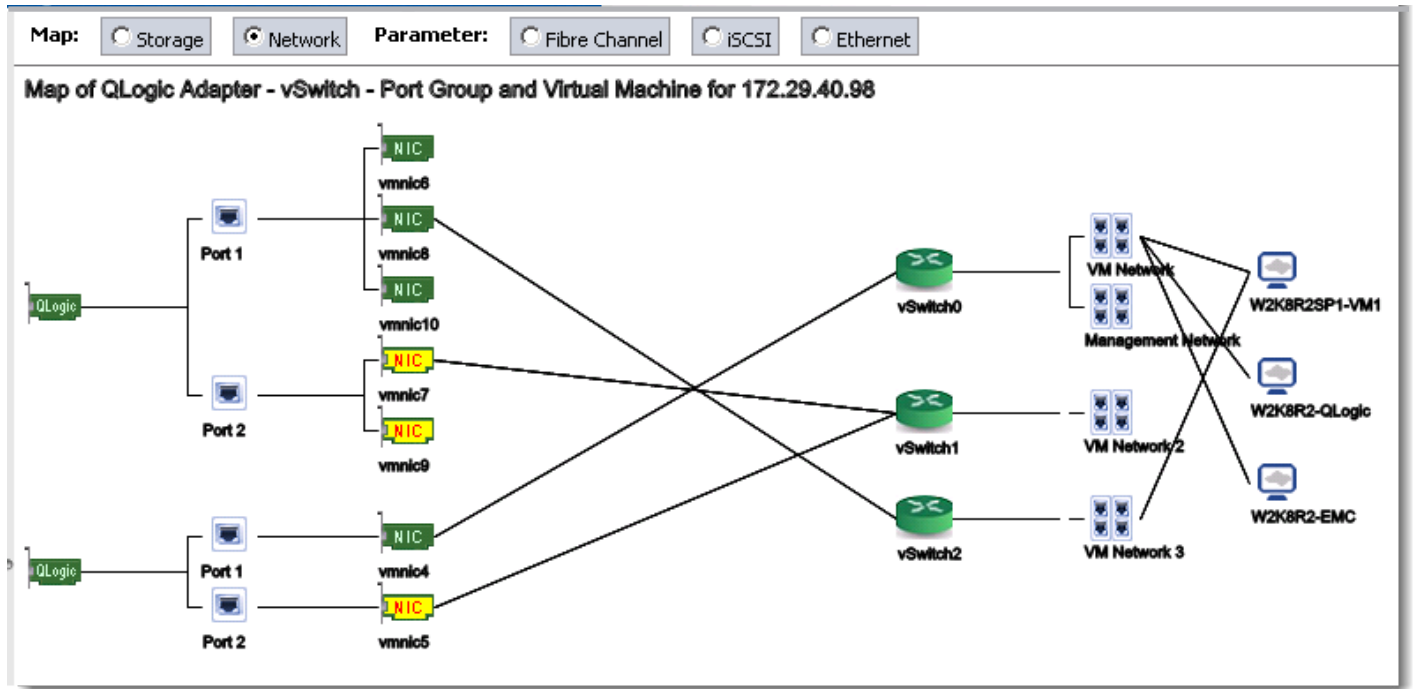


Figure 6. QConvergeConsole Plug-in Network Connectivity Maps

COMPLETE ADAPTER MANAGEMENT

The QCC Plug-in enables comprehensive management of all aspects and functions of the QLogic FC, Converged Network, and Intelligent Ethernet Adapters in a VMware vSphere environment. Capabilities such as the ability to deploy firmware updates remotely, full integration into VMware Update Manager (VUM), and an array of diagnostics allow for a powerful yet intuitive interface while lowering administration costs.

Complete Adapter Management	QCC Plug-in
Network Partitioning (NPAR) Configuration	✓
System-wide Firmware Updates	✓
Integrated Diagnostics	✓
Adapter Parameter Tuning	✓
Boot from SAN Configuration	✓
Transceiver (SFP+) Health Information	✓

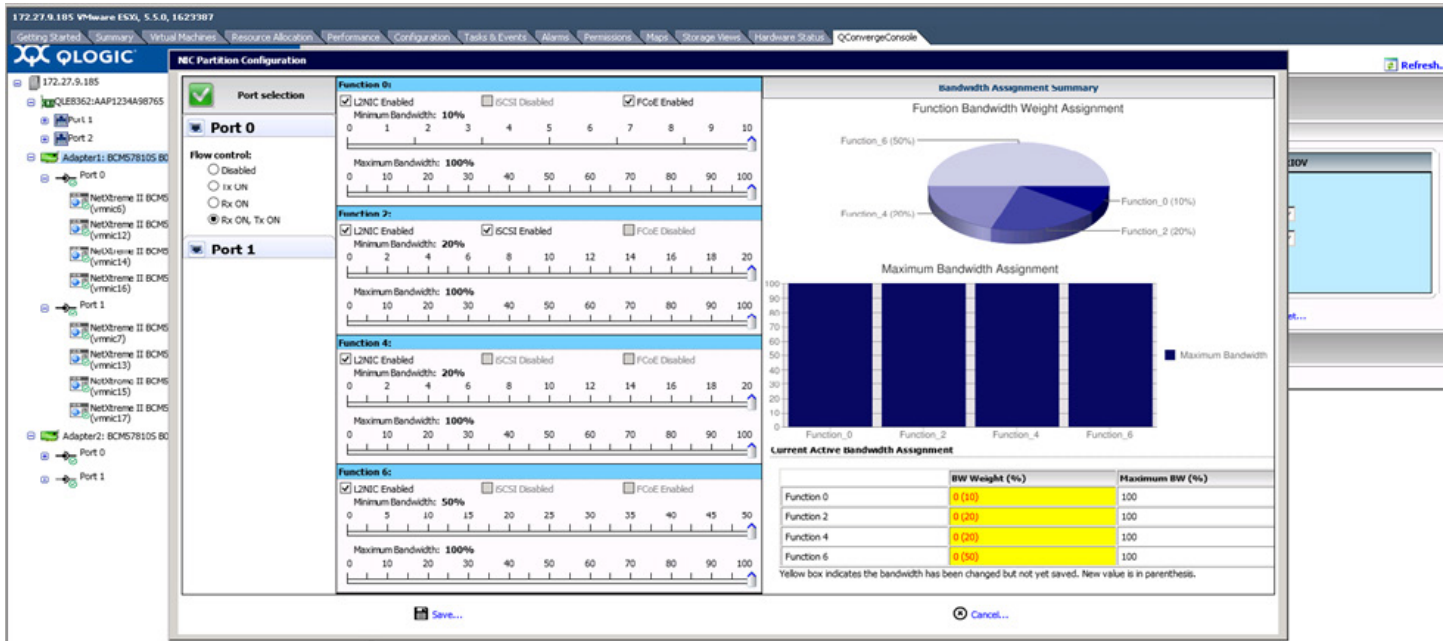


Figure 7. NPAR Configuration

THE QLOGIC ADVANTAGE

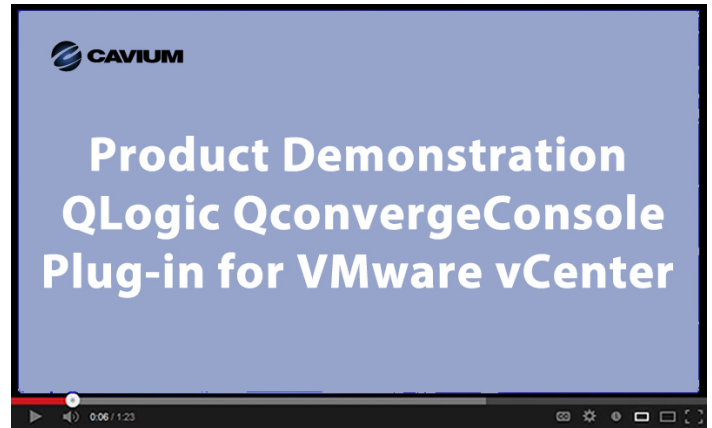
While other adapter vendors also offer a management tool to monitor and manage their adapters, the tools lack the ease of use, maturity, and feature set required for the enterprise data center. The QLogic QCC Plug-in for VMware vCenter leverages years of QLogic experience and expertise in understanding the management complexity of virtualized environments.

Adapter Management Features	QCC Plug-in	Emulex OneCommand
Adapter Management from within vCenter	✓	✓
Storage Connectivity Visualization	✓	✗
Network Connectivity Visualization	✓	✗
Discover and Display vSphere I/O Path Components – vSwitch, Data stores, and VMs	✓	✗

CONCLUSION

The QLogic QConvergeConsole (QCC) Plug-in for VMware vCenter gives administrators insight into their virtual environments and provides a flexible and easy-to-manage infrastructure for protocol assignment, connectivity, and data flow management, enhancing the overall virtual experience.

RELATED VIDEO – PRODUCT DEMONSTRATION: QLOGIC QCONVERGECONSOLE PLUG-IN FOR VMWARE VCENTER



Click on the Image to Watch a YouTube Video

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