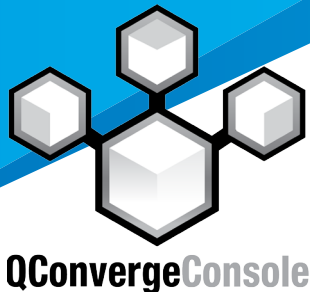


# Unified Adapter Management Across the Data Center

QLogic QConvergeConsole Simplifies and  
Accelerates Deployment and Management  
in Windows and Linux



**QConvergeConsole**

- The QLogic QConvergeConsole® (QCC) management tool maximizes application performance and availability. Available in both Graphical User Interface (GUI) and Command Line Interface (CLI) options, QCC offers application-based wizards that make provisioning quick and easy.
- Administrators can manage the entire QLogic portfolio using one tool, which provides a single-pane-of-glass view for management of Fibre Channel, FCoE, and IP functions.
- The QCC GUI allows for centralized management and configuration of multiple QLogic adapters within the entire network (LAN and SAN).
- Using the QCC CLI increases productivity by automating manual tasks.<sup>1</sup>



## EXECUTIVE SUMMARY

IT managers face several ever-growing challenges to manage the data center, including virtualization; power consumption; reliability, availability, and serviceability (RAS); security; and manageability. One method of addressing these concerns is to implement unified management across the data center, which improves efficiency and saves costs. When taking this approach, it is imperative to select a management solution that is easy to deploy and offers single-pane-of-glass, intelligent, and automated operations management.

The QLogic QConvergeConsole® (QCC) delivers a broad set of powerful Ethernet and Fibre Channel adapter management features for administrators to maximize application performance and availability. Available in both GUI and CLI options, QCC offers application-based wizards to enable the environment to be quickly and easily provisioned based on published best practices.

QLogic's QCC delivers a unified, Web-based, single-pane-of-glass management console across QLogic's broad product line of storage, networking, and caching adapters.

## KEY ADVANTAGES

### Exceed Service Level Agreements

QLogic's QCC delivers seamless, unified management of multiple LAN and SAN fabrics across the data center, enabling IT administrators to optimize the performance and availability of data and network resources.

### Reduce Administration Time

Offering a wizard-driven approach to adapter management, QCC saves time by automating repetitive tasks and providing automatic e-mail notifications on the status of various SAN and LAN components. In addition, a breadth of customized asset management options are also available.

### Comply with Data Center Security Policies

QCC allows flexible definitions of administrator roles and responsibilities, providing LAN and SAN administrators with access to the components they own and manage.

<sup>1</sup> The QCC CLI does not support the 57xx/57xxx/QL45xxx adapters, which you can manage using the QLogic Control Suite (QCS) CLI utility.

## INTRODUCTION TO QLOGIC MANAGEMENT TOOLS

QLogic offers a robust set of management tools to help organizations simplify management and improve efficiency while reducing costs. Available for a wide range of operating systems and server platforms, QCC is capable of managing all generations and types of QLogic adapters. The following tools simplify every step of the QLogic adapter life cycle: deployment, monitoring, troubleshooting, and firmware upgrades.

- **QCC GUI** – A comprehensive, Web-based client and server GUI that allows for centralized management and configuration of multiple QLogic Gen 5/Gen 6 Ready Fibre Channel, QLogic FastLinQ® Converged Network and Ethernet Adapters across the data center.
- **QCC CLI** – A lightweight, agentless CLI interface for generations of QLogic Fibre Channel, Converged Network, and Ethernet Adapters<sup>1</sup>. Available for Windows®, Linux®, and Solaris® environments, the CLI includes both a menu-driven interface for quick operations and a scriptable interface for extensive scripting and integration tasks.
- **SuperInstaller** – Single package to install all required software components for generations of QLogic Fibre Channel, Converged Network, and Ethernet Adapters. Available for Windows and Linux environments, the SuperInstaller (SI) package includes all drivers as well as the QCC CLI and QCC GUI management agents.

### QCC GUI

The QCC GUI unified adapter management tool can be deployed on a management workstation or virtual machine (VM). It communicates with management agents residing on servers with QLogic adapters over a secure channel via HTTPS. Access to QCC is available via any of the supported browsers by pointing the browser to the IP address of the management workstation or VM where QCC is installed. The management agents can be installed on servers with QLogic adapters using SI in Windows and Linux environments.

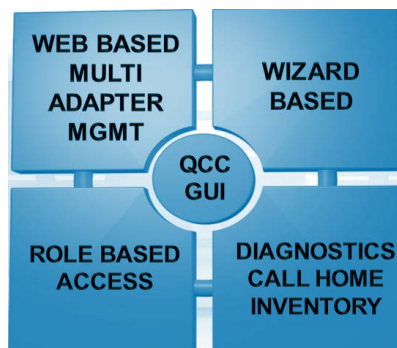


Figure 1. Key Features of the QCC GUI

### Web-Based Unified Adapter Management

Using a browser-based, intuitive, and easy-to-use interface, the QCC GUI provides a single-pane-of-glass management interface that enables IT organizations to manage generations of QLogic adapters. As a result, QCC optimizes technology investments and significantly reduces the overall administrative burden.

Web-Based Unified Adapter Management	GUI
Single Tool to Manage ALL QLogic Adapters	✓
Heterogeneous and Data Center-Wide Single-Pane-of-Glass Management	✓
Manage Fibre Channel, FCoE, iSCSI, and NIC Functions	✓

### Wizard-Based Approach

The QCC GUI limits decision making and errors by integrating best practices into a wizard-driven approach to most common management functions relating to QLogic adapters. Intuitive wizards provide IT administrators with an extensive set of features that enable them to perform key administrative tasks, which could normally take hours to be completed, in less than a few minutes.

Wizard-Based Management	GUI
Data Center-Wide Firmware Updates	✓
Driver Update Wizards	✓
Driver Parameters Update Wizard	✓
Management Agent Update Wizard	✓
Protected Operations Password Update Wizard	✓

### Role-Based Access Control

All critical and disruptive operations that can be performed using the QCC GUI are protected from unauthorized access and erroneous use by using role-based authentication that allows for separate access for SAN and LAN administrators. This approach allows organizations to converge their LAN and SAN infrastructure without changing their organizational structure.

Role-Based Access Control	GUI
Password Protected Operations	✓
Segregated Access for LAN and SAN Administrators	✓
Password Update Wizards to Comply with Security Policies	✓

<sup>1</sup> The QLogic 57xx/57xxx/QL6344x/QL6844x/QL45xxx do not use the QCC CLI but instead use the QLogic Control Suite (QCS) CLI utility.

## Enterprise-Class Management Features – Diagnostics, Inventory, and Call Home

The QCC GUI provides a rich set of features designed for the business needs and SLAs of an enterprise-class deployment. A wide range of proactive and user-initiated diagnostics help detect potential issues in the SAN and LAN before enterprise applications dependent on the QLogic adapters are affected. Managing the inventory of several hundred QLogic adapters is simplified with a wide range of inventory gathering techniques and built-in reports. E-mail alerts for various critical, error, or informational messages can be easily configured for quick problem resolution.

Enterprise-Class Management	GUI
Integrated Diagnostics	✓
Inventory Reports	✓
E-mail Alerts	✓
Web-Based Application Updates	✓

## QCC CLI

QCC CLI provides a lightweight, text-based interface for managing generations of QLogic adapters. Restricted to local mode adapter management for enhanced security, the QCC CLI provides both interactive modes for IT administrators who are unfamiliar with the syntax and a scriptable mode with a rich set of commands and options for scripting. QCC CLI is available for Windows, Linux, and Solaris environments and is available as a standalone package for installation, or it can be installed as part of the SI.



Figure 2. Key Features of the QCC CLI

## SUPERINSTALLER

SuperInstaller (SI) is an alternative and highly efficient way to deploy all the required and optional software components for use with a QLogic adapter. SI is available for supported Windows and Linux platforms and contains all the latest and interoperable software components for generations of QLogic adapters. Administrators can deploy SI using either an interactive, menu-driven interface or a scriptable silent installation. The following components can be installed using SI:

- Fibre Channel, FCoE, iSCSI, and Ethernet Networking (NDIS) drivers for QLogic adapters
- VLAN and teaming driver for QLogic 10GbE adapters
- QCC CLI management utility
- Fibre Channel, FCoE, iSCSI, and networking management agents to enable remote access using the QCC GUI management utility. Using SI significantly reduces deployment time and enables IT administrators to rapidly deploy their IT infrastructure and save costs.



Figure 3. Components of SuperInstaller (SI)

## QLOGIC ADVANTAGE

While other adapter vendors also offer management tools to monitor and manage their adapters, these tools often lack the ease of use, maturity, and feature set required for the enterprise data center. QLogic QCC leverages decades of QLogic experience in understanding the management and monitoring needs of the IT administrator and provides seamless, single-pane-of-glass management of all QLogic adapters.

Adapter Management Features	QCC	Emulex® OneCommand®
Unified LAN and SAN Adapter Management	✓	✓
Fully Featured Ethernet Adapter Management	✓	✗
Menu-Driven CLI	✓	✗
Single-Pane-of-Glass Management of Physical and Virtual SAN Functions	✓	✗
Physical and Logical Topology Maps	✓	✗

Related Video: QLogic KnowHow: QConvergeConsole GUI: Getting Started



Click on the Image to Watch a YouTube Video

## CONCLUSION

QLogic offers a robust management solution to help organizations simplify management and improve efficiency while reducing costs. QLogic’s management solutions, under the umbrella of QCC, are designed to simplify storage, Ethernet, and converged networking environments. They offer cross-functionality views and support for QLogic’s Fibre Channel Adapters, Converged Network Adapters, and Intelligent Ethernet Adapters. QLogic’s QCC enables IT departments to standardize on one tool for management of all data, storage, and converged QLogic infrastructure.

## ABOUT CAVIUM

Cavium, Inc. (NASDAQ: CAVM), offers a broad portfolio of infrastructure solutions for compute, security, storage, switching, connectivity and baseband processing. Cavium’s highly integrated multi-core SoC products deliver software compatible solutions across low to high performance points enabling secure and intelligent functionality in Enterprise, Data Center and Service Provider Equipment. Cavium processors and solutions are supported by an extensive ecosystem of operating systems, tools, application stacks, hardware reference designs and other products. Cavium is headquartered in San Jose, CA with design centers in California, Massachusetts, India, Israel, China and Taiwan.



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