



# InfiniBand Fabric Suite™ (IFS)

## What's New in Version 6.0

### Efficient Performance

- Industry's lowest end-to-end latency
- World-record message rate performance
- The only solution with true liner scale of core count



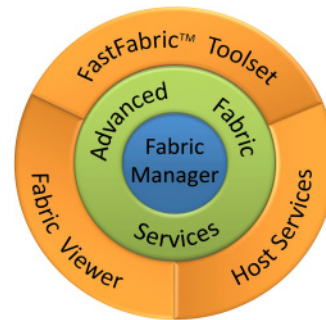
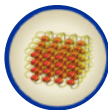
### Efficient Management

- Automation to accelerate installations and upgrades
- Detection and diagnosis of fabric issues in seconds
- Initialization of 2,000 node clusters in seconds



### Efficient Capacity

- 50-percent higher node count in same footprint
- Up to 67 percent improvement in bandwidth utilization
- Better performance with less hardware



### QLogic's TrueScale™ InfiniBand® System Architecture Delivers End-to-End Efficiency

- Hardened Subnet Manager minimizes impact of fabric disruptions
- Complete set of FastFabric Tools maximizes system up-time
- Fabric Viewer provides insights about network performance
- Dispersive routing improves performance for all message passing interfaces (MPIs)
- Extreme message rate delivers unmatched application performance
- Comprehensive set of Host Services software tools quickly optimize High Performance Computing (HPC) environments
- Cost-effectively scale node counts with Advanced Topologies support
- Virtual Fabrics with quality of service (QoS) ensures consistent application performance
- Fabric intelligence through hardware-enabled Adaptive Routing circumvents congestion bottlenecks



### What People are Saying about IFS 6.0

“Effective fabric management has become the most important factor in maximizing performance in an HPC cluster investment and as clusters scale, issues like congestion mitigation and QoS can make a big difference in whether the fabric performs up to its potential. With IFS 6.0, QLogic has addressed all of the major fabric management issues in a product that in many ways goes beyond what others are offering.”

— Addison Snell, President, InterSect 360 Research

## QLogic InfiniBand Fabric Suite 6.0

QLogic leveraged its unique, system-level understanding of communications fabrics to deliver the industry's most powerful feature set available for fabric management software: QLogic InfiniBand Fabric Suite (IFS) 6.0. IFS enables users to obtain the highest fabric performance, the greatest communications efficiency, and the lowest management costs for HPC clusters of any size.

IFS 6.0 components include:

- Fabric Manager
- Advanced Fabric Services
- FastFabric Toolset
- Fabric Viewer
- Host Services

The InfiniBand Fabric Suite architecture is modular: both OpenFabrics® Enterprise Distribution (OFED) and QLogic-developed software modules can coexist in the same fabric. Major components of the architecture include:

**Fabric Manager.** Offers administrative functions for subnet, InfiniBand fabric, and individual component management through HTML and a Java™-based console.

**Advanced Fabric Services.** Delivers efficient fabric performance with industry-leading technologies to automatically tune and optimize an organization's network.

**FastFabric Toolset.** Includes easy-to-use tools that ensure effortless installation, configuration, and verification of the cluster network and virtual gateway I/O resources.

**Fabric Viewer.** Displays the Fabric Manager subnet management facilities using a Java-based, stand-alone GUI.

**Host Services.** Provides a wide range of drivers and installers for products from all adapter vendors, as well as optimized MPI user tools.

It takes a comprehensive and powerful end-to-end software solution to bring the full power of InfiniBand to an organization's business applications. QLogic provides all the features needed for a high-performance fabric with QLogic InfiniBand Fabric Suite 6.0.

## What's New in QLogic IFS 6.0

- **Virtual Fabrics.** Dedicate virtual lanes within the fabric to enable the highest utilization of compute resources by efficiently prioritizing and segmenting traffic.
- **Adaptive Routing.** Eliminate performance slow downs caused by pathway bottlenecks. Only QLogic builds this intelligence into the chips. Changes occur in microseconds rather than minutes. The intelligence of the path selection scales as the fabric grows.
- **Dispersive Routing.** Load-balance traffic along multiple pathways and improve MPI performance. QLogic continues to set and extend the standard with world-record message rate performance.
- **Mesh and Torus Topologies.** Build extremely large fabrics more cost-efficiently. To ensure maximum performance on all nodes, multiple routing algorithms find the most efficient route and eliminate congestion.



Corporate Headquarters QLogic Corporation 26650 Aliso Viejo Parkway Aliso Viejo, CA 92656 949.389.6000 [www.qlogic.com](http://www.qlogic.com)  
 Europe Headquarters QLogic (UK) LTD. Quatro House Lyon Way, Frimley Camberley Surrey, GU16 7ER UK +44 (0) 1276 804 670

© 2010 QLogic Corporation. Specifications are subject to change without notice. All rights reserved worldwide. QLogic, the QLogic logo, TrueScale and InfiniBand Fabric Suite are trademarks or registered trademarks of QLogic Corporation. InfiniBand is a registered trademark and service mark of the InfiniBand Trade Association. Java is a trademark of Sun Microsystems, Inc. OpenFabrics is a registered trademark of OpenFabrics, Inc. All other brand and product names are trademarks or registered trademarks of their respective owners. Information supplied by QLogic Corporation is believed to be accurate and reliable. QLogic Corporation assumes no responsibility for any errors in this brochure. QLogic Corporation reserves the right, without notice, to make changes in product design or specifications.