

# Move Up to High Performance Cluster Computing with Confidence

Intel® Cluster Ready makes high-performance clusters simpler to select, deploy and maintain.



Select, deploy, and manage a high-performance cluster almost as easily as a desktop PC.

High-performance computing clusters are becoming increasingly important for optimizing and accelerating product development workflows, even in small and medium sized businesses. With an in-house cluster, engineering and design teams can simulate, analyze and visualize even their most complex, data-intensive models quickly and accurately. They can evaluate more design options in less time to deliver better products faster and at lower cost.

However, high-performance clusters are intrinsically complex and are typically built from the ground up for each implementation. This process requires substantial expertise in selecting, integrating and testing hardware and software components. Management is also challenging,

since even subtle software changes to a single node can lead to downtime or performance slowdowns.

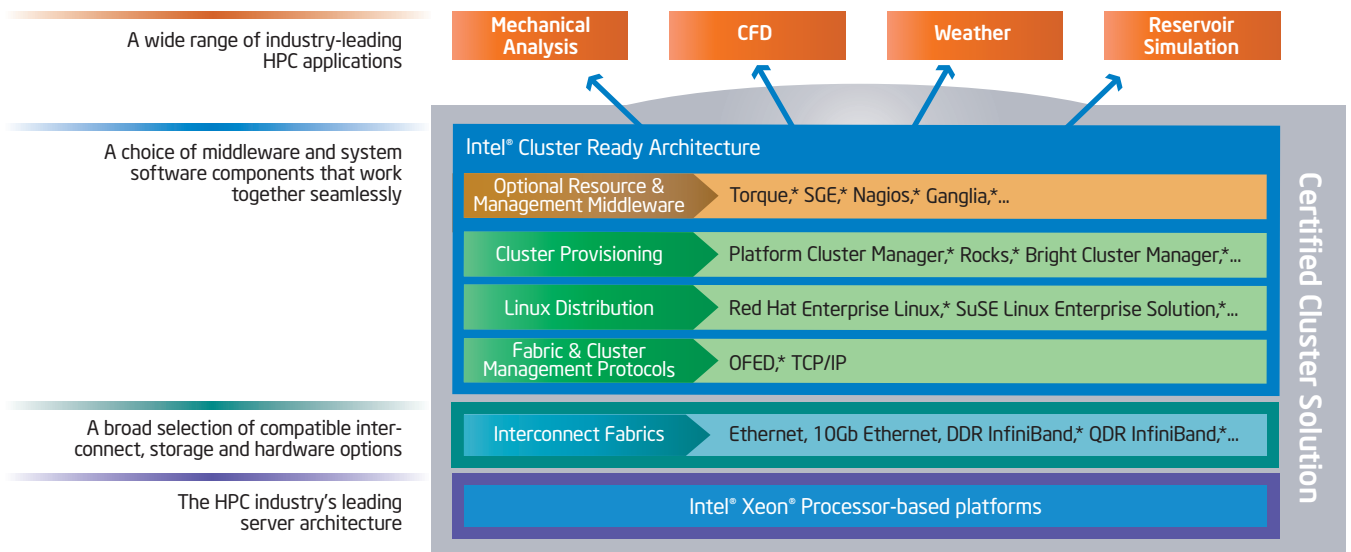
Intel Cluster Ready provides a simpler, faster and more reliable way to bring the power of high-performance computing (HPC) into your business.

## Higher Value with Reduced Risk

Intel Cluster Ready establishes an industry-standard cluster architecture that lets you select, deploy and manage a high-performance cluster almost as easily as a desktop PC. This architecture helps to ensure interoperability across the complete HPC solution stack. It supports small to very large clusters and provides considerable flexibility for hardware and software innovation.

## INTEL® CLUSTER READY ARCHITECTURE

Simplifying HPC by Ensuring Interoperability While Preserving Choice



## INTEL® CLUSTER CHECKER

Intel® Cluster Checker includes over 100 tests to verify the health and performance of your cluster. It includes tests for:

- Network connectivity
- Hardware configuration
- Hardware and software consistency
- Benchmark performance, such as HPCC
- Fabric bandwidth and latency
- Memory and processor performance
- Developer tool installation
- Compliance to industry standards

By choosing systems and software based on the Intel Cluster Ready architecture, you can:

- **Reduce your purchasing and deployment timelines** from months to weeks or even days.
- **Be confident that your system and applications will work** as they should right out of the box, so your design and engineering teams can be more productive immediately.
- **Simplify maintenance and troubleshooting** to reduce downtime, increase your return on investment, and allow your teams to stay focused on their core tasks.
- **Deploy new HPC applications with ease.** Optimized vendor applications are widely available. Custom applications are easily compiled against the Intel Cluster Ready architecture, so they can be run with confidence on any certified cluster.

## Powerful Tools for Managing Your Cluster

Every Intel Cluster Ready certified system comes with Intel® Cluster Checker software. By integrating this powerful tool with your regular maintenance plan, you can run automated health checks throughout the life of your cluster.

- **Ensure Ongoing Productivity.** Use Intel Cluster Checker to verify baseline performance through high-level node and network tests using a variety of standard HPC benchmarks.
- **Resolve Problems Rapidly.** Intel Cluster Checker helps you identify problems in minutes rather than days. It also provides extensive diagnostic information to speed resolution.
- **Verify as You Grow.** Intel Cluster Checker verifies your cluster against the Intel Cluster Ready specification, which makes it easier to maintain system health as you expand and adapt your hardware and software to address growing needs.

## Drive Your Business Forward

With Intel Cluster Ready, you don't have to be a cluster expert. You can deploy the computing power your business needs quickly and with confidence, so you can increase productivity, accelerate your design cycles, and get to market faster with more competitive products.

**Learn More Today.** Intel works with leading HPC vendors to deliver a broad choice of high-quality systems and applications. Visit [intel.com/go/cluster](http://intel.com/go/cluster) for more information, including a list of hardware and software vendors that support the Intel Cluster Ready architecture.

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