



# Intel® Cluster Ready

The Intel® Cluster Ready program and technology package makes it easier to acquire and use clusters built with Intel components.

## Program Benefits and Advantages

### Application Portability

First and foremost: Intel Cluster Ready ISV applications have been tested to run on clusters certified as Intel Cluster Ready. You no longer have to worry “if” your applications will run on a given cluster; instead, with a cluster certified as Intel Cluster Ready, you can focus on the features and performance you need to get your job done.

The result is:

- Reduced effort to configure, acquire, and deploy clusters that run the ISV applications you rely on
- Increased productivity

### Common Basis for Clusters

The Intel Cluster Ready Specification is the key to Intel Cluster Ready; it eliminates sources of variability that do not impact performance, usability, or utility, but can spell disaster when left unspecified. Beyond documentation, the Intel Cluster Checker increases fidelity with direct measurements of conformance to specification and system performance. When support is needed, the Intel Cluster Checker speeds problem diagnosis, allowing you to return to productive work as quickly as possible.

You will enjoy:

- Improved operating experience, from initial power-on through continuing production operations
- Reduced support effort and costs

### Component Interoperability

Components certified as Intel Cluster Ready enable you to confidently select from a variety of hardware and software components. This is especially valuable as your computing requirements change, allowing you to modify existing capabilities and add new capabilities as needed.

The result is:

- Greater flexibility in cluster configurations
- Lower total cost of ownership
- Increased application performance

## Penguin Computing\* Joins the Intel Cluster Ready Program

Penguin Computing, a leading provider of integrated high-performance computing solutions, has joined the Intel Cluster Ready program. Penguin Computing’s HPC cluster management offering Scyld ClusterWare\* reduces the complexity of Linux clustering. It allows fast node provisioning and provides cluster configuration consistency at all times.

Penguin Computing realizes the importance of the interoperability of applications, cluster management software and underlying hardware. Penguin Computing has been working closely with Intel and partner ISVs to make the deployment and use of our joint customer’s applications as easy as possible. The Intel Cluster Ready certification of Penguin Computing’s Relion\* servers including Scyld ClusterWare ensures high productivity and usability while reducing efforts and costs.





## Program Description

The program includes:

- **Specification** – ensuring needed uniformity while enabling differentiation
- **Certification** – ensuring the cluster you buy is designed and built to specification
- **Tools** – validating and testing the ongoing operation and performance of all cluster components
- **Labeling** – making it easier to select interoperable hardware and software
- **Communications** – ensuring best practices are well known and readily available

### Intel® Cluster Ready Specification

The Intel Cluster Ready Specification ensures that components in a cluster certified as Intel Cluster Ready conform to industry standards, or, when no appropriate standards exist, implement best-of-class practices.

### What We Specify

- Per-node and cluster-wide hardware and software requirements, to ensure
- Minimal required manageability capabilities
- Minimal required cluster functionality

## How Intel® Cluster Ready Helps You

Platform suppliers and ISVs use tools and resources provided by Intel to ensure the cluster is built per specification.

### Platform Suppliers

The supplier designs and builds their offering according to their processes, subject to the Intel Cluster Ready Specification. When system testing is completed, the Intel Cluster Checker assures specification compliance. Once proper operation of Intel Cluster Ready ISV applications are verified, the cluster is certified Intel Cluster Ready.

### Independent Software Vendors

Every ISV application to be registered as Intel Cluster Ready must be tested on an Intel Cluster Ready certified cluster with realistic workloads. Of particular importance to you, the ISV must describe any software dependencies beyond those required by the Intel Cluster Ready Specification; this ensures the smooth installation and proper execution of registered ISV applications on any certified cluster.

For more information about Intel Cluster Ready, visit [www.intel.com/go/cluster](http://www.intel.com/go/cluster)

### Intel® Cluster Checker

This extensible tool, provided free-of-charge on all clusters certified as Intel Cluster Ready, checks the configuration and performance of the cluster. The Intel Cluster Checker provides a full range of tests, analyzing important aspects of cluster organization, functionality, and performance, ensuring consistent cluster-wide operation. Advanced tests, such as the HPCC suite, evaluate the performance of individual nodes, as well as performance of all compute nodes in the cluster; this ensures maximal cluster-wide performance.

