Important Note for SGI[®] Altix[®] 1350 Cluster Systems

This document describes the Silicon Graphics (SGI) and third party customer manuals that may be used with your Altix 1350 cluster system.

Notations after each third-party document explain any discrepancies between products or features described and those that SGI supports as standard or optional components of the Altix 1350 Cluster systems.

Altix 1350 Configuration Overview

The configuration of a cluster system generally requires the same steps as configuration of individual hosts. However, there are some additional methods required and tasks that may need to be done. The SGI Altix 350 System User's Guide can help you configure the Altix 350 hosts in your cluster system, and additionally when a cluster management package is being used, it can also help you install and configure all hosts on the system.

SGI's Message Passing Toolkit (MPT) MPI implementation is tuned to run efficiently within Altix hosts as well as when MPI jobs span multiple hosts connected with a NUMAlink or InfiniBand interconnect network. MPT requires that Array Services be configured to permit multi-host MPI jobs to be launched. The procedure for configuring Array Services on your cluster is in the Array Services release notes, which are viewable online with the ProPack software at:

/usr/share/doc/sgi-arraysvcs-*/README.relnotes.

The release notes are also available at: http://docs.sgi.com

SGI System Documents

The following Silicon Graphics system documents may be useful or necessary while operating your Altix 1350 cluster system:

• SGI Altix[®] 350 System User's Guide, Publication Number 007-4660-00x (2004)

This guide covers general operation and configuration of the Altix 350 compute modules that act as the core technology within the Altix 1350 cluster.

• Porting IRIX[®] Applications to SGI[®] Altix[®] Platforms: SGI ProPack[™] for Linux[®] Publication Number 007-4674-00x (2004)

This manual may be useful for any administrator porting existing IRIX applications to the Linux environment.

• SGI Altix[®] Systems Dual-Port Gigabit Ethernet Board User's Guide, Publication Number 007-4326-00x (2004)

This guide describes the two versions of the optional SGI dual-port Gigabit Ethernet board, shows you how to connect the boards to an Ethernet network, and explains how to operate the boards. You can use the dual-port Gigabit Ethernet board to replace or supplement the built-in Ethernet network adapter in your system.

• Message Passing Toolkit (MPT) User's Guide, Publication Number 007-3773-00x. (2004)

This publication documents the SGI implementation of the Message Passing Interface (MPI). MPI consists of a library, which contains both normal and profiling entry points, and commands that support the MPI interface. MPI is a component of the SGI Message Passing Toolkit (MPT).

Also see the *mpi* and *mpirun* man pages.

• Linux Resource Administration Guide, Publication Number 007-4413-00x. (2005)

Chapter 3 in this document covers Array Services Configuration information that may be useful when working with the Altix 1350 cluster system.

For internet access to these and other SGI documents, see the SGI Technical Publications Library at: http://docs.sgi.com. Various formats are available. This library contains the most recent and most comprehensive set of online books, release notes, man pages, and other information

Third-Party Clustering Documents

The SGI Altix 1350 Cluster is provided in different configurations (different interface speeds) and not all the third-party documents listed here will be applicable to every system. Note that Linux is the only operating system supported with the Altix 1350 cluster.

• Voltaire® HCA-400 User Manual, Publication Number 399Z00007 (2004)

This document describes how to install and configure the Voltaire HCA-400 Linux based InfiniBand software and the hardware interface cards needed for a cluster.

Note: Do not install the InfiniBand cards adjacent to the base I/O board in the Altix 350 compute module as the bus speed is limited to 66 MHz and will impair cluster performance.

The HCA-400 User Manual covers a number of technical features that are not supported with the Altix 1350 cluster products. These include SDP, CM and GSI.

For a complete listing of supported and non-supported host stack components, see the release notes section on: "Voltaire InfiniBand Stack for SGI Altix Systems". The release notes for the stack will be included in the Voltaire software CD.

• Voltaire® ISR Installation Manual, Publication Number 399Z00002 (2004)

This manual covers unpacking, installation, configuration, and power-up information as well as basic troubleshooting information for the 24-port InfiniBand Switch Router (ISR9024).

• Voltaire[®] Switch User Manual, Publication Number 399Z00004 (2004)

This manual covers technical descriptions and use of three different switches; ISR9024, ISR6000, and ISR9600. Only the ISR9024 is a standard supported component of the Altix 1350 cluster product. Information on managing switch usage via the Voltaire Device Manager CLI or GUI, and basic diagnostics are also covered in this manual.

Note: The other two switches (ISR6000 and ISR9600) may be supported only under a special agreement with SGI Professional Services.

• Foundry Networks EdgeIron 24G-A and 24G Installation Guide, (2005)

Use this guide to install the EdgeIron 24G-A switch. Note that only the 24G-A switch is supported with the Altix 1350.

• EdgeIron Series Installation and Basic Configuration Guide, (2005)

This guide provides general installation and login configuration guidelines for the EdgeIron 2402CF, 4802CF, 24G-A, 48G, 24GS, 48GS, 8X10G, and RPS products. Note that only the 24G-A is supported with the Altix 1350 cluster.

• EdgeIron User Guide, (2005)

This guide provides information for the configuration of the EdgeIron 24G-A, 24G, 2402CF, 48G and 4802CF Switches. Only the 24G-A is supported with Altix 1350 clusters.

• Scali Manage Users Guide, (2004)

This document provides an overview of a Scali system in terms of instructions for building a Scali system. Configuration guidelines for hardware and software are covered along with instructions on use and general management of the cluster system.

SGI Customer Support

SGI provides a comprehensive product support and maintenance program for its products. If you are in North America and would like support for your SGI products, contact the Technical Assistance Center at 1 800 800 4SGI, or contact your authorized service provider. If you are outside North America, contact the SGI subsidiary or authorized distributor in your country.

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