Datasheet

SGI™ Network Load Balancing Software

Features

- Load distribution and bandwidth aggregation for mixed IP traffic (i.e., multiple connections or connections to multiple hosts)
- Supports Challenge and SGI Origin family systems with multiple Ethernets connected to a switch
- Interoperability with Silicon Graphics Octane, O2, Indy, and Indigo2 and any other client that supports gratuitous ARP
- Dynamic session shifting
- No-switch configuration for Layer 2 devices
- Compatible with Cisco Fast EtherChannel enabled switches
- Supports 2–40 adapter ports per subnet, 1–20 trunk groups per system (assuming 2 ports minimum per group)
- IP alias support

Network Load Balancing Software

A Balanced Approach

Network Load Balancing Software (NLBS) is the SGI solution for SGI systems needing load balancing, bandwidth aggregation, and adapter fault tolerance. NLBS delivers these features across multiple Ethernet, Fast Ethernet, and Gigabit Ethernet devices and enables customers to grow their networks incrementally while maintaining the equity of the existing hardware and software.

Automatic Traffic Balancing

Network Load Balancing Software enables multiple, same-speed Ethernet devices or ports to be collected under a single IP address, with application data dynamically balanced across the physical interfaces of the Ethernet adapter(s). NLBS supports 2 to 40 adapter ports per subnet or 1 to 20 trunk groups per system (assuming two ports minimum per trunk group). Traffic is balanced automatically and requires no special adapter or switch configuration. Outbound packets are distributed on a per-connection basis, and inbound packets are distributed on a per-client basis.

Superior Performance

NLBS collects multiple Ethernet ports, each of which has been configured with a unique IP address, under a single IP address. It is the single IP address that is advertised to the clients and switch, not the addresses of the individual Ethernet ports. All IP addresses must be on the same VLAN; data striping is not supported. Once configured, the server and clients must be connected by a Layer 2 switch. NLBS will not function in point-to-point configurations. NLBS is not required on the clients and does not necessitate special client or switch configuration. The software has been lab tested and found to be interoperable with a wide variety of third-party networking switches.

Load balancing, bandwidth aggregation, and adapter fault tolerance are mission-critical features that customers require in their networks. SGI Network Load Balancing Software delivers these features and is a strong complement to the award-winning line of SGI Ethernet, Fast Ethernet, and Gigabit Ethernet devices.

SGI Network Load Balancing Software
Technical Specifications

Platform Support

The following server platforms are supported with NLBS:

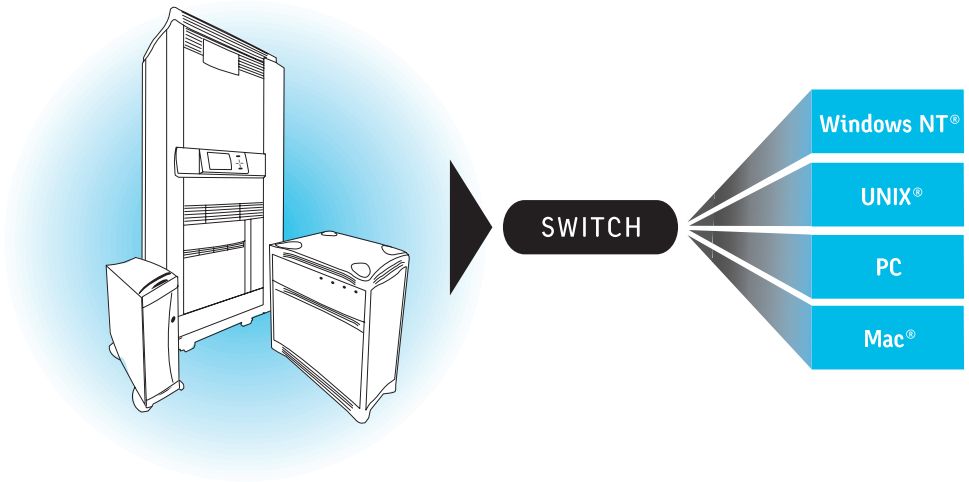
- Challenge® DM, L, and XL with 2-port VME Fast Ethernet adapters
- SGI™ Origin™ 200 with up to 3 PCI Fast Ethernet adapters per module
- SGI Origin 200 GIGAchannel™ 2-module system with 2 PCI Gigabit Ethernet adapters
- SGI Origin 200 GIGAchannel 2-module system with up to 5 XIO 4-port Fast Ethernet adapters
- SGI™ 2000 series, SGI™ Origin™ 3000 series, SGI™ Onyx® 3000 series, or Silicon Graphics® Onyx2® with up to 6 4-port Fast Ethernet adapters per module
- SGI 2000 series, SGI Origin 3000 series, or Silicon Graphics Onyx2 with 2 to 6 Gigabit Ethernet adapters per module

Operating System Support

IRIX® 6.5 ASE and future IRIX 6.5 ASE maintenance releases

Supported Topology

NLBS allows one SGI server to be connected by multiple 10/100/1000 Ethernet connections to a Layer 2 switch, with a single IP address being used for the multiple connections; client systems from any vendor may also be connected to the switch, with each client having a single connection to the switch



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