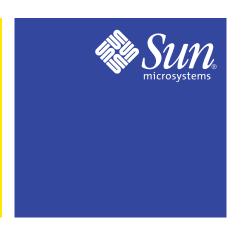# N1 and Sun Fire Blades: Virtualizing IT Infrastructure

First solution to virtualizing hardware resources, dramatically lowering TCO, and accelerating time to deployment.

Key feature highlights

- Enhanced System Management: Increase resource utilization by provisioning applications and services across multiple blades. Each blade can perform multiple tasks, allocated according to need.

- Heterogenous Platform: Choose Sun Fire SPARC/Solaris or x86/Solaris & Linux general purpose blades and Sun Fire SSL Proxy and Content Load Balancing Blades, all Sun Fire Blades are managed seamlessly through N1.

- Intelligent Shelf: Raise availability and quality-of-service levels while reducing costs. The Intelligent Shelf contains dual switches, system controllers, and power supplies, supporting up to 16 blades.

- Solutions Community:Resources such as iForce, the Sun Developer Network, and the Customer Ready Systems Program provide best-of-breed applications and solutions to help maximize ROI.

- N1 automates configuration & deployment of Sun Fire Blades, Sun Fire B1600 Intelligent Shelf, and network resources, delivers multi-tenancy capabilities, and enables the deployment of an entire server farm in under an hour.

Solve your most complex technology-related problems.

Sun announces two important products that drive the cost and complexity from network computing: the Sun Fire™ Blade Platform and N1 Provisioning Server. These products comprise the first truly integrated blades platform, designed for network computing, and work hand-in-hand to bring the power of Sun's N1 architecture to our customers.

Together, the Sun Fire Blade Platform and the N1 Provisioning Server create a wired-once solution that can be managed, configured, and deployed through integrated software. It's an unbeatable combination of power and intelligence which results in bottom line benefits.

N1 and Sun Fire Blades: Virtualizing IT Infrastructure

N1 is Sun's groundbreaking strategy for making entire data centers appear as one system. With N1, administrators can provision all types of network elements. N1 "virtualizes" servers, switches, and other devices into dynamic resource pools. This dramatically improves resource utilization, increases network availability, and reduces management complexity.

Managing Sun Fire Blades

The new N1 Provisioning Server brings the benefits of N1 to Sun customers, with its capability to manage multiple Sun Fire Blades and Sun Fire B1600 Intelligent Shelf as a single system.

Deployment of a server can often take days or weeks. This includes time to rack, cable, install blades and install networking, load OS, and configure blades, load balancers and firewalls. N1 automates the configuration of blades to deliver a server farm in under an hour.

N1 Provisioning Server is a comprehensive management environment for Sun Fire Blades and Sun Fire B1600 Intelligent Shelves that automates configuration and deployment chores. It offers both Web- and command-based management interfaces so customers can control their blades from the top down. N1 also provides software image management, Sun Fire Blade monitoring and automated failover. It offers customers the ability to easily scale, manage and redeploy groups, shelves and racks of blades.

N1 Management
• Blade and Chassis Setup
• Image Provisioning
• Load Balancer configuration
• Automated device failover
• Interface with 3rd party tools

Automates the deployment of General Purpose & Specialty Blades
• SPARC Blade Servers running Solaris
• x86 Blade Servers running Solaris or Linux
• Content Load Balancing Blade
• SSL Proxy Blade

NAS Storage
• Software image repository

What's different when you have N1 on Blades?

BEFORE	AFTER
Manage components individually	Manage server farms
Manual processes	Automated deployment
Silos of hardware	Pooled resources
Specialized skills required	Simple GUI
Days or weeks	Hours or minutes

Hardware Support

N1 Provisioning Server software supports Sun Fire blades, shelves, and associated infrastructure. The software manages:

• Sun Fire B1600 Intelligent Shelf

• Sun Fire B100s SPARC® Blade Server

• Sun Fire x86 Blade Server

• Sun Fire Content Load Balancing Blade

• Sun Fire SSL Proxy Blade

• Built-in Sun Fire B1600 Layer 2 switches

• Optional external switches, connected in a specified manner to provide layer additional Ethernet connectivity between multiple blade shelves