NIS+ Update

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Current State of NIS+

NIS+ is a Stable and Robust Enterprise Naming Service

- **145 Bug Fixes Integrated into 2.6**
- **Focused on Enhancing Quality and Performance of NIS+**
- **Uptime of Heavily Loaded Servers Measured in Months**
- **Seamless and Transparent, Clients Unaware They are Using NIS+**

Success Stories from the Field

Our Customers Using NIS+

Smith Barney

- “NIS+ has Increased our Productivity and Made it Much Easier to Administer the Network.” said Peter Fischer, Senior Vice President at Smith Barney. “We Chose Sun for Its Leadership in Key Areas... Including the Availability of a Robust, Enterprise Naming Service.”

More NIS+ Customers.....

- **AT&T**
- **Fanny Mae**
- **Finger Hut**
- **PacBell**
- **Swiss Bank**
- **US West**

What's New For NIS+

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Upcoming Release of Solaris 2.6

- **Includes Many Fixes, Enhancements and New Functionality for NIS+**

NIS+ Over WAN/Binding

- **Improves the Server Discovery Process and Reduces NIS+ Server Discovery Traffic**
- **Server Discovery Process is Now Centralized in the nis_cachemgr (1m)**
  - **Was Done in Individual Applications as NIS+ Clients**
- **System Administrators Can Define Preferred Servers for Clients**
  - **nisprefadm (1m)**

NIS+ Backup and Fast Restore

- **Two New Commands, nisbackup(1m) and nisrestore(1m)**
- **Nisbackup Takes a Snapshot of the NIS+ Database**
  - **Need Only be Done on the Master Server**
  - **Backup Data is Platform Independent**
- **Nisrestore Restores a Backup Copy of the NIS+ Database Created by nisbackup**
  - **Can Be Run on the Master or Any of the Replicas**
  - **Enables the Rapid Deployment of Newly Created Replicas in Minutes**

NIS+ Fast Replication

- **Fast Replication**
  - **Full Resynchronization of Database from the Master to the Replicas takes Minutes Instead of Hours**
  - **Increased Availability of Replicas**
  - **Speeds Deployment of New Replicas**

NIS+ Hard Lookup

- **Provides Similar Behavior as NIS**
- **NIS+ getXbyY Lookups Now Retry Rather Than Timing Out**
- **Avoids Spurious Errors in the Face of Overload Networks**

Other Naming Updates in 2.6

NIS Server for Solaris

- **Eases Transition from Solaris 1.x to Solaris 2.x**
- **The Previously Unbundled NSKit 1.2 is Now Bundled in Solaris 2.6**
- **Includes an improved DNS Forwarding Daemon**
- **Supports both SunOS 4.x passwd and 5.x passwd/ shadow formats**

Other Naming Updates in 2.6

XFN 2.0

- **Conforms to the X/Open Standard**
- **Continued Backend Support**
  - **NIS+, DNS and X.500**
- **New Backend Support**
  - **NIS, Files, LDAP**
- **New Features**
  - **Access of Machines Using XFN Via the Name Service Switch**
  - **Attribute Based Search Support for NIS+, NIS and Files**
  - **Full X.500 style Searches for LDAP/X.500 Backends.**

Other Naming Updates in 2.6

BIND 4.9.5

- **Bind 4.9.5-P1**
  - **New Resolver Library, libresolv.so.2**
  - **Old Resolver Library, libresolv.so.1, Still Exists for Compatibility**
- **Address the CERT Advisory, CERN ca-96.02**
- **The DNS Server, in.named, has Round Robin Enabled**
  - **Caveat: nscd(1m) Breaks Round Robin by Caching IP Address**

Future of NIS+

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Increase Scalability with a New Multi-Threaded NIS+ Server.

- **Eliminates Forks for Callbacks, Checkpoints and Replication**
- **Increased Availability**
  - **Eliminates “Offline” Mode**
- **Exploits SMP Hardware**
- **Increased Throughput to Support Larger Intranet Community**

Simplified NIS+ Security

- **Makes Use of GSSRPC Over GSSAPI**
- **Allows NIS+ to Use Other Security Methods**
  - **Kerberos V5, SPKM**
- **Allows Server to Live in the Domain it Serves**
- **Allows AUTH_NONE for Those Not Wanting the Overhead of Security**

Ease of Use Issues Addressed

- **Management Tools to Simplify the Administration of NIS+**
- **JMAPI Solution to Simplify Administration Tasks**
- **SNMP Interface to NIS+**
  - **SNMP Subagent Access to NIS+ Servers**
  - **NIS+ MIB Defined**
  - **Allows Monitoring of NIS+ Servers**

NIS+ Over WAN

Cascading Replication

- **Updates Sent Over Slow Links to Remote Sites Once**
  - **Replica(s) at Remote Site Receive Updates, Then Propagate Updates to Other Replicas**
- **Configurable Replication Scheme**
- **Allows NIS+ to Better Adapt to Complex Network Topologies**

Other Naming Plans on the Horizon

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BIND 8.1

- **DNS Security Support**
- **Dynamic Updates and DNS Change Notification**

LDAP

- **Provide LDAP Clients Access to the NIS+ Name Space**
- **Interoperability Protocol Between Naming Services**