

# **Naming Services Transition**

## **Kit 1.2**

## **TOI**



# Agenda

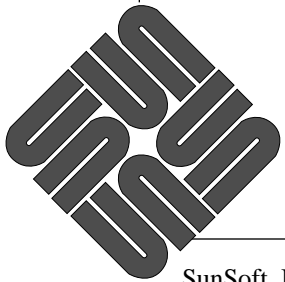
- Overview
- Features and Enhancements
- Installation and Administration
- Summary



# Overview

## Generic Solaris 2

- NIS/YP Server is NOT supported
- Only NIS+ Server is supported
- NIS/YP client library is supported



# Overview

## NSKit 1.0

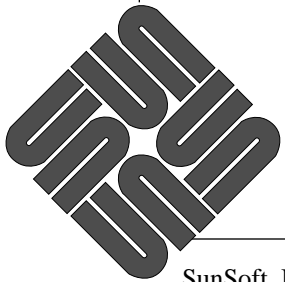
- Ported NIS server from 4.1.3 source
- Released in BCP mode
- Fully included in patch 101363-08
- Lacks shadow file support
- Lacks multi-home support
- Made obsolete by NSKit 1.2



# Overview

## NSKit 1.1

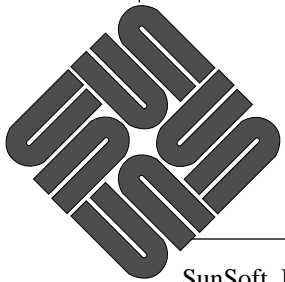
- NOT A SUPPORTED PRODUCT
- Never left beta stage
- Does not do DNS lookups well
- Made obsolete by NSKit 1.2



# Overview

## NSKit 1.2

- Runs native on Solaris 2
- Provides SPARC & Intel architecture support
- Contains bug fixes and enhancements
- Supports shadow file format
- Supports multi-homed hosts
- Asynchronous DNS lookups
- Includes AnswerBook documentation
- Is more reliable than NSKit 1.0



## Features and Enhancements

- Supports multiple password formats
- Implements C2 security
- Uses improved DNS forwarding mechanism
- Contains built-in multi-home capability



## Features and Enhancements

### Multiple Password File Formats

- Supports both Solaris 1 and Solaris 2 style password formats
  - Solaris 1: passwd
  - Solaris 2: passwd and shadow
- Includes enhancement to rpc.yppasswdd to support both formats
- Includes built-in codes in /var/yp/Makefile to support both formats





# Features and Enhancements

## C2 Security

- Supports C2 Security
  - passwd.adjunct
- Works with and without shadow file
  - uses the passwd information from shadow if shadow file exists



## Features and Enhancements

**Passwd information is determined by the following algorithm:**

- First, the `$PWDIR/shadow` file is checked
- Second, the `$PWDIR/security/passwd.adjunct` file is checked
- Third, the `$PWDIR/passwd` file is checked

**The Makefile macro `$PWDIR` is set in `/var/yp/Makefile`**



## Features and Enhancements

### **/var/yp/Makefile change**

- Make macro **DIR** specifies /etc files
- Make macro **PWDIR** specifies password files

### **/usr/lib/netsvc/yp/rpc.yppasswdd change**

- The **-D** command option specifies the directory for password files



## Features and Enhancements

### DNS Forwarding

- Fully asynchronous
- Uses NIS+ DNS forwarding daemon
  - /usr/sbin/rpc.nisd\_resolv
- References the file /etc/resolv.conf on the server
- Returns all addresses for multi-home entries from DNS



## Features and Enhancements

### DNS Interface changes

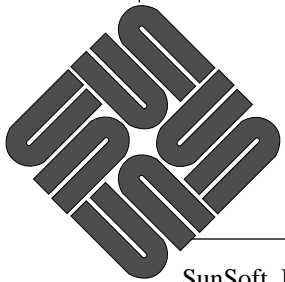
- `/usr/lib/netsvc/yp/ypserv -d` option used to turn on DNS forwarding
- `/usr/sbin/makedbm -b` option is also used to support DNS forwarding compatibility with existing NIS installations



# Features and Enhancements

## Multi-home Functionality

- Built-in multi-home functionality
- Conforms to the SUNWcluster package
- Multi-home NIS query returns closest match



# Installation and Administration

- Package Installation
- NSKit Administration
- Troubleshooting



# Installation and Administration

## Installation

- Make sure SUNWspro is already installed
- Remove any old version of NSKit
- Install the NSKit packages
  - SUNWnsktu - usr files that comprise NSKit 1.2
    - *the NIS startup script and files in /var/yp directory*
  - SUNWnsktr - root files that comprise NSKit 1.2
    - *NIS manpages and files in /usr/lib/netsvc/yp and /usr/sbin directories*
  - SUNWnskta - NSKit 1.2 AnswerBook





# Installation and Administration

## Installation (cont.)

- Install the mandatory Solaris patch from CD
  - Patch 102707-02 for Solaris 2.3 Sparc
  - Patch 102704-02 for Solaris 2.4 Sparc
  - Patch 102705-02 for Solaris 2.4 Intel
- No pre-install patches for Solaris 2.5



# Installation and Administration

## Administration

- `/var/yp/Makefile` - minimum change required
  - requires admins to set the PWDIR and DIR macros
  - requires admins to set the `-b` flag for DNS forwarding
- `/etc/init.d/yp` - fully automated
  - turns on DNS forwarding automatically if `/etc/resolv.conf` file exists
  - automatically sets the passwd directory for the password daemon to the PWDIR macro specified in the `/var/yp/Makefile`



# Installation and Administration

## Troubleshooting

- Solaris patch
- /usr/ccs/bin in PATH
- /var/yp/Makefile
- /usr/lib/netsvc/yp/rpc.yppasswdd
- /usr/sbin/rpc.nisd\_resolv
- /etc/resolv.conf
- /etc/nsswitch.conf



## Summary

- NSKit 1.2 is a fully supported SunSoft unbundled product
- NSKit 1.2 provides all the functionality, and more, of the NSKit 1.0 version
- NSKit 1.2 is supported on Solaris 2.3 and 2.4, including 2.4 Intel (see patches)
- NSKit 1.2 will also be available on the Solaris 2.5 Migration CD and Server Supplement CD

