Conclusion

Site Specific setup for new machines

Hands-Off installation

New capabilities

Auto-Install Advanced Features and Directions

Advanced Features

- Generating profiles
- Writing your own Installation Program

Directions

- upgrade
- new rules
  - disksize
  - installed
- profile extensions
  - server & dataless
  - disk partitioning
  - locale
- dry-run

Auto-Install Example

```
mount -t hsfs -r /dev/sr0 /cdrom
cd /cdrom
./setup_install_server /export/install
```

```
cd /export/install
cp -r auto_install_sample /data/auto_inst
cd /data/auto_inst
```

edit rules and profiles

`rules`

```
network 129.152.223.0 && model 'SUNW,Sun 4/50' - eng -
network 129.152.223.0                          - mkting -
network 129.152.224.0                          - eng -
```

`eng`

```
install_type initial_install
system_type standalone
partitioning default
cluster SUNWCprog
filesys any 50 /opt
```

`mkting`

```
install_type initial_install
system_type standalone
partitioning default
cluster SUNWCuser
cluster SUNWCown delete
```

```
./check -p /export/install
```

export configuration directory

```
/data/auto_inst -ro,anon=0
```

```
cd /export/install
./add_install_client -c server:/data/install mach1 sun4c
```

Auto-Install on Existing Machines

Booting

```
boot net - install
boot cdrom - install
```

re-preinstall

```
re-preinstall /dev/dsk/c0t3d0s0
```

/AUTOINSTALL

Auto-Install Begin and Finish Scripts

Bourne Shell Scripts

pre- and post-installation tasks

filesystems mounted on /a

- /a
- /a/usr

Example

```
#!/bin/sh
cp ${SI_CONFIG_DIR}/license.dat /a/etc
```

Warnings

- mount bug

Auto-Install Class File

Installation commands

Syntax

key value(s)

Keys

`install_type`	`initial_install`
`system_type`	`standalone`
`product`	`Solaris_2.1`
`partitioning`	(`default` | `existing`)
`cluster`	cluster_name [`add` | `delete`]
`package`	package_name [`add` | `delete`]
`filesys`	`any` size mntpnt

Example

install_type	initial_install
system_type	standalone
partitioning	default
cluster	SUNWCuser
filesys	any 40 swap

Auto-Install Rules File (cont.)

Begin, Class, Finish

Example Rules file

hostname mymachine - aaa -
network 129.152.223.0 && karch sun4c - bbb -
network 129.152.223.0 - ccc -
any - - ddd -

Auto-Install Rules File

Classify a machine for installation type

Syntax:

[!] match_key match_value [&& [!] match_key match_value]*   begin class finish

pattern match in order

Match Keys

Key	definition	example value
`any`	always match	-
`arch`	ISA	sparc
`domainname`	domain	rmtc.Central.Sun.COM
`hostname`	hostname	mymachine
`karch`	kernel architecture	sun4c
`memsize`	memory size range	16-64
`model`	machine model	'SUNW,Sun 4/50'
`network`	network number	129.152.223.0

Setting up Auto-Install

Configuration Directory

auto_install_sample
check script
export directory
floppy

Bootparams

install_config keyword
-c option to `add_install_client`
bootparam wildcard

rules

profile

Factory Preinstalled Machines

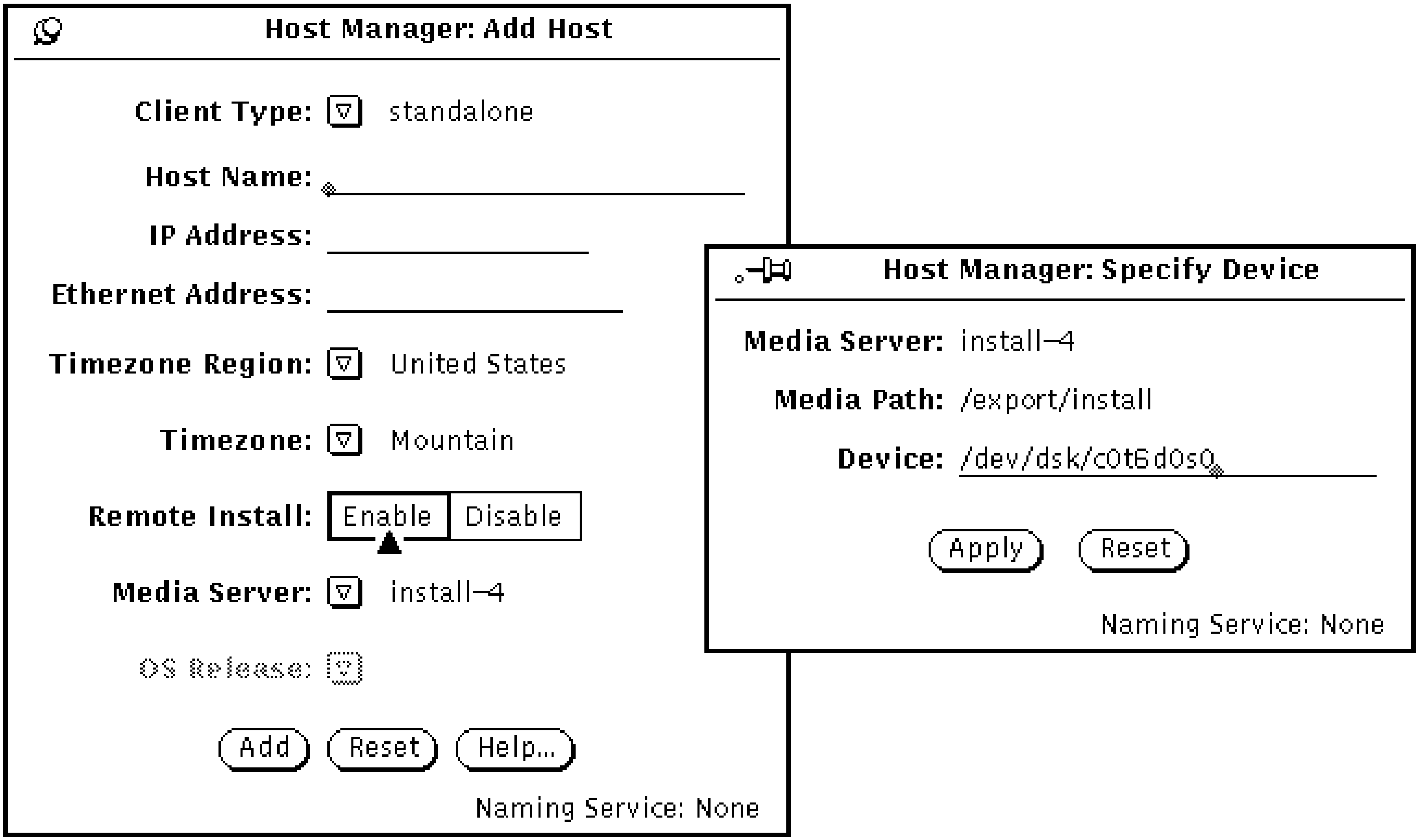
Use auto-install

Find the media and reboot

Default auto-install profiles

Installation Media (cont.)

5.x admintool



Installation Media

Network vs. CD-ROM

Install Servers and Boot Servers

New Script `setup_install_server`

```
setup_install_server /export/install
setup_install_server -b /export/install sun4m
```

4.x Server setup script `add_install_client`

./add_install_client client karch

-s flag - ./add_install_client -s server:/path client karch
-c flag - auto-install configuration setup

Automatic System Configuration Procedures

Hostname, IP Address, Domainname

update ethers table - ethernet address
update hosts table - hostname and IP address
start rarpd
mkdir /tftpboot
update bootparams table - hostname
start bootparamd

Name Service

NIS+
NIS
ask

Timezone

timezone table

timezone	domainname
US/Mountain	rmtc.Central.Sun.COM

timehost alias in hosts

129.152.223.12 rmtc loghost timehost

Automatic System Configuration

Available since 4.1.1 rev B

Set up manually or by `add_install_client` or `admintool` in Solaris 2.X

Configures:

- hostname
- IP address
- domainname
- name service
- netmask
- timezone
- time

Introduction

Installation is consistently rated as one of the top ease-of-use problems

Pre-Installed Machines

- pre-installed system inappropriate for most customers
- inventory management problem for system vendors and VARs

Provide tools for the system administrator to automate installation

- Automatic System Configuration
- Auto-Install

Auto-Install