

Configuring A Jumpstart Server

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DISCLAIMER! This document is nothing more than the musings of the author as he attempts to perform the stated tasks. Conclusions and approaches may very well be incorrect, inefficient, or otherwise outside of professionally accepted best practices. Use this document at your own risk! In this document, screen outputs will be presented in **green**. Where keyboard input is required, the prompt will be in bolded red. **#** means you should be at the super user prompt, **\$** means you should be at an unprivileged user prompt. Do not include these prompts in your input! The command to be typed will be shown in **blue**.

ls -al

means you type ls -al at the super user prompt. **DEFINITIONS**

In this document, we will refer to Architecture and Platform. They are almost interchangeable, with one important distinction. The PLATFORM is cpu manufacturer dependent. IE, SPARC, INTEL x86. The ARCHITECTURE is also based on CPU's, but seperates the SPARCs. Our Architectures can be x86, sun4u, sun4us and sun4v.

While you jumpstart services can span different computers and networks (for deployment on a wan), this document focuses on the single server method.

Our lab uses the Zetabyte file system (ZFS), so our instructions will be for that environment. If you are using UFS, this documentation will still work, but the NFS exports are shared differently, so you will need to share them out accordingly.

For clarification, the system named **14ADM** is being configured to be jumpstart server.

PREREQUISITES

Solaris offers system administrators an easy way to install new systems on the network. It is called JUMPSTARTING. In order to setup a JumpStart server, you need the following:

1. A Solaris Installation DVD for each platform you wish to jumpstart (in our case, we are only concerned about the SPARC).
2. A flar image for each architecture we are attempting to jumpstart.
3. A network connected system to configure to offer jumpstarting.

Step 1: Verify Enabled Services

The first thing we want to do is ensure we have the proper services running.

svcs -a|grep inetd

```
online      17:32:02 svc:/network/inetd:default
```

svcs -a|grep tftp

```
online      17:32:06 svc:/network/tftp/udp6:default
```

if the return is blank, edit your /etc/inetd.conf and see if (at the bottom) the entry for tftp is commented out.

Configuring A Jumpstart Server

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If so, uncomment it and run

```
# inetconv -i /etc/inetd.conf
```

If not, navigate to your cdrom Product directory and issue a

```
# pkgadd -d . SUNWtftp and
```

```
# pkgadd -d . SUNWtftp
```

and then edit the /etc/inetd.conf file, uncomment the tftp line at the end and run the # `inetconv -i /etc/inetd.conf` file again.

```
# svcs -a|grep rarp
```

```
online      17:32:07 svc:/network/rarp:default
```

```
# svcs -a|grep nfs/server
```

```
online      17:32:07 svc:/network/nfs/server:default
```

You will need to resolve any 'disabled' or 'maintenance' statuses to proceed. These services all need to be online for jumpstarting to work.

Step 2: Set Up Shares

We need to ensure our files are properly shared, so we are going to create some datasets, set the mountpoints in our file system and share them with other computers via NFS.

```
# zfs create rpool/jumpstart
```

```
# zfs set mountpoint=/jumpstart rpool/jumpstart
```

```
# zfs set sharenfs='ro,anon=0' rpool/jumpstart
```

If you are following along in our documentation, you created and shared the flar image directory in the previous article and do not need to perform the next three commands. If the `showmount -e` does not show your flar directory, complete these steps.

```
# zfs create rpool/flar
```

```
# zfs set mountpoint=/flar rpool/flar
```

```
# zfs set sharenfs='rw,root=' rpool/flar
```

```
# zfs list
```

```
rpool/jumpstart      31K 81.8G  31K /jumpstart
```

```
rpool/flar           31K 81.8G  31K /flar
```

```
# showmount -e
```

```
export list for 14ADM:
```

```
/jumpstart (everyone)
```

```
/flar (everyone)
```

Step 3: Install Boot Files

This step will be needed for each architecture you are going to support.

Configuring A Jumpstart Server

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create a platform based subdirectory in /jumpstart

```
# mkdir -p /jumpstart/sparc
```

look for the Tools path on your dvd-rom and navigate there and run the setup_install_server pointed to your export directory and platform.

```
# cd /cdrom/sol_10_811_sparc/Solaris_10/Tools
```

```
# ./setup_install_server /jumpstart/sparc
```

When above script completes, our jumpstart server is configured!

the last step is to create a config directory

```
# mkdir /jumpstart/config
```

The kernel patch level of the miniroot needs to be updated if you intended to deploy flar images created from systems that have the 10_Recommended patches applied. See the article [Patching the JumpStart Server Mini-Root](#) for instructions on how to accomplish this task. Failure to keep the kernel patch level of the miniroot equal to, or above, the flar image's kernel will result in a broken pipe error when the client begins the flar image install.

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