Configuring A Jumpstart Server

Written by Greg King
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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 Architecure and Platform. They are almost interchangeable, with one important distinction. The PLATFORM is cpu manufacuturer 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.

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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 . SUNWtftpr
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.

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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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