Written by Greg King
Friday, 01 February 2013 09:27

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.

When using the jumpstart process, the client system pulls a small boot (**miniroot**) file system from the jumpstart server. which it then uses to boot itself to complete the installation. If the kernel version of the miniroot is not at the same patch level, or greater, as the flar image you are pushing to the client, the process will abort with a broken-pipe error.

The following steps illustrate how to upgrade the kernel patch level of the miniroot file system that the jumpstart server will push to the client.

A special thanks to **Darrin Ching** for his assistance in documenting the process.

In the example below, we are using the kernel patch 147440-27 from the 10_Recommended patchset dated January 2013.

References:

http://www.oracle.com/technetwork/systems/articles/patchmini-jsp-137348.html

http://docs.oracle.com/cd/E19253-01/821-0439/netinstall-patch/index.html

1). Install the server *(if you have already configured the jumpstart server, you can skip this step as the server files are already installed).*

 # cd /cdrom/cdrom0/Solaris_10/Tools

 # ./setup_install_server /jumpstart/sparc/

2). Unpack the miniroot

 # /boot/solaris/bin/root_archive unpackmedia /jumpstart/sparc /jumpstart/miniroot

3). Save Files

 # cd /jumpstart/miniroot/sbin

 # cp -ip rc2 rc2.orig

 # cp -ip sulogin sulogin.orig

4). Unzip the Recommended patches *(if you already have the patches unzipped, skip this step!)*

 # cd /solab/System_files/patches/current/

 # unzip -q /solab/System_files/patches/current/10_Recommended_CPU_2013-01

5). Add the kernel patch

performing a 'uname -a' on your jumpstart server will indicate the patch you need to apply. 147440-27 is used for reference only.

 # patchadd -C /jumpstart/miniroot/

/solab/System_files/patches/current/10_Recommended_CPU_2013-01/patches/147440-27

6). Set the Environment Variable

 # export SVCCFG_REPOSITORY=/jumpstart/miniroot/etc/svc/repository.db

 # echo $SVCCFG_REPOSITORY

7). Modify the Repository

 # cd /jumpstart/miniroot/etc/svc/

 # mv -i repository.db repository.db_orig

 # cp -ip repository.db_orig repository.db

 # svccfg -s system/manifest-import setprop start/exec = :true

 # svccfg -s system/filesystem/usr setprop start/exec = :true

 # svccfg -s system/identity:node setprop start/exec = :true

 # svccfg -s system/device/local setprop start/exec = :true

 # svccfg -s network/loopback:default setprop start/exec = :true

 # svccfg -s network/physical:default setprop start/exec = :true

 # svccfg -s milestone/multi-user setprop start/exec = :true

8). Restore the Files

 # cd /jumpstart/miniroot/sbin

 # mv -i rc2.orig rc2

 # mv -i sulogin.orig sulogin

9). Repack the Mini-Root

 # /boot/solaris/bin/root_archive packmedia /jumpstart/sparc /jumpstart/miniroot

10). Cleanup

 # rm -r /jumpstart/miniroot