Mapping SSA hdisks and pdisks

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About This Document

This document explains how to map SSA hdisks to pdisks and applies to AIX 3.2.5.1 and AIX 4.1.

Using The SSA Service Aids

You can use the diagnostic service aids if you are logged in as root. Use the following procedure:

1. Run "diag"
2. Choose "Service Aids"
3. Choose "SSA Service Aids"
4. Choose "Configuration Verification"
5. Choose the pdisk or hdisk you want the corresponding hdisk or pdisk for. This will show the mapping.

Using The Information in the ODM

Part of the information stored in the ODM database for the hdisks and pdisks is the unique serial number for every SSA disk. You can display the serial number for a pdisk or hdisk with the following command:

```
lsattr -El <hdisk# or pdisk#> -a connwhere_shad
```

Then by finding the pdisk and hdisk with the same serial number, you can determine the mapping. Alternatively, you can use the following shell script

```
#!/bin/ksh
#
# 1. Create this script using your favorite editor.  Name it
#     "lsssa".
# 2. Change it's permission to allow execution with
#    "chmod +x lsssa".
#
# This script lists all SSA hdisks, it's associated pdisk,
# serial number, physical volume ID (PVID) and volume group
# membership.
#
# First get a list of the SSA hdisks
hdisks= lsdev -Cc disk | grep SSA | cut -f1 -d" "
   hdisks= lsdev -Cc disk -s ssar -F name
pdisks= lsdev -Cc pdisk | cut -f1 -d" "
   pdisks= lsdev -Cc pdisk -F name
touch /tmp/hdisk.$$           # Temporary file - hdisk & SN
touch /tmp/pdisk.$$           # Temporary file - pdisk & SN

for i in $hdisks
do
print -n "$i "  >> /tmp/hdisk.$$
lsattr -El $i -a connwhere_shad | cut -c20-27 >> /tmp/hdisk.$$
done

for i in $pdisks
do
print -n "$i "  >> /tmp/pdisk.$$
lsattr -El $i -a connwhere_shad | cut -c20-27 >> /tmp/pdisk.$$
done

# Print header
print "hdisk\tpdisk\tSerial Number\tPVID\t\t\tVG"

# Get PVID and VG for each hdisk and print it out
for i in $hdisks
do
sn= grep $i /tmp/hdisk.$$ | cut -f2 -d" "
    sn= grep "$i " /tmp/hdisk.$$ | awk '{ print $2 }'
pdisk= grep $sn /tmp/pdisk.$$ | cut -f1 -d" "
    pdisk= grep $sn /tmp/pdisk.$$ | awk '{ print $1 }'
pvid= lspv | grep $i | sed -e 's/ \{2,\}/ /g' | cut -f2 -d" "
    pvid= lspv | grep "$i " | awk '{ print $2 }'
vg= lspv | grep $i | sed -e 's/ \{2,\}/ /g' | cut -f3 -d" "
    vg= lspv | grep "$i " | awk '{ print $3 }'
print "$i\t$pdisk\t$sn\t$pvid\t$vg"
done

rm /tmp/pdisk.$$ /tmp/hdisk.$$
```

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