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SOFTWARE PRE-INSTALL INSTRUCTIONS

The RFC "acr" is used as an example in the PRE_INSTALL INSTRUCTIONS.

NOTES:
1. Please be sure to replace "acr" with the appropriate three letter ID for your site. In addition, be sure that the IP addresses used in the following example are the correct addresses for your office.
2. A script output file could be used in the future to track the commands that are typed in and the systems response. This could be used in the future, but is not included in this version.
    a. For example: script -a -f /tmp/install.out

Do the following on any lx workstation as user "root"

Formatting the NS1 for the Partition "chpsSHARE":

mkdir /usr/java
cp /home/hrl/chps_install/jre-6u17-linux-i586.rpm /usr/java
cd /usr/java
rpm -iv jre-6u17-linux-i586.rpm

cd /usr/lib/mozilla/plugins
ls -al
***option: copy the link libjavaplugin_oji.so to old_link.txt
rm libjavaplugin_oji.so
       *answer "yes" if asked to remove link
ln -s /usr/java/jre1.6.0_17/plugin/i386/ns7/libjavaplugin_oji.so

***Launch the Firefox Browser
***type "http://ns1/" into the location window
***in the pop-up window go to "Open with" and select "other " from
  the drop down menu
***navigate to "/usr/java/jre1.6.0_17/bin" and highlight "javaws"
  and click on the "Open" button
***now click on the "OK" button
***a box will come up with "digital signature cannot be verified"
  click on the "Run" button
***a window will then come up with the ns1 IP address and ask for
  a password - enter the AWIPS root password

When the display comes up, on the far left side click on the button
next to "File Volume Operations" to open a sub menu
Now click on "Create File Volumes/Segments" in the sub menu

Click on "LUN isp1d026"
Enter "chpsSHARE" in the Name box
***the maximum allocation size should already be in the
  Partition Size box (262144)
Click on the "Apply" button
***a create volume progress bar will appear

Click on LUN isp3d067
***"chpsSHARE" should appear in the Name box
***"262144" should appear in the Partition Size box

Click the "segment" radio button in the "Type" box
Click on the "Apply" button
***a create segment progress bar will appear

On the far left side click on the page symbol next to "Attach Segment"
Click on "chpsSHARE" under the "Existing Volumes"
***the ~chpsSHARE segment is probably the entry under

   "Available Segments", if not, click on the "~chpsSHARE" segment
Click on the "Apply" button

On the far left side click on the button next to "Unix Configuration"
to open a sub menu
Now click on the button next to "Configure NFS" in the sub menu
to open a sub sub menu
Now click on "Configure Exports" in the sub sub menu

On the very far right of the display, click on the top button
to "Add export to list"
*** the button will have a symbol of what looks like a sheet of
    paper with the right corner torn off

A window labelled "Add NFS Export" will open
Click on /chpsSHARE in the volume drop down menu
On the far left side in the area labelled
"Map Root User" select "Root User"
Click on the "OK" button
Click on the "Apply" button at the bottom

Click on the "Logout" button - second button from the left
in the upper left-hand corner of Web Admin screen ...
look for an arrow ->
Click on "Yes"
Click on "Cancel"
Click on "Yes"

Create the Linux User "fews":

On dx1 as user "root"
cd /home/ead the "readme.txt" file and make the necessary changes
./setupAwipsUser.sh fews RSH FEWS-Deltares User
     *Answer "y" to the two questions:
         1. WARNING : This script is WFO centric!
                 user group will be fxalpha!
                          You will be able to use ksh (you will be prompted later)!
                              Do you want to continue? (y/n)
         2. WARNING: I've noticed you're an RFC
               Do you want users to use the ksh? (y/n)

passwd fews
**Enter a password

chsh fews
  -> it will then ask for the shell, enter: /bin/bash

cd /etc

vi hosts
**Add the following four lines to the bottom of the file:

#CHPS Systems
165.92.144.91   chps1-acr   chps1 # CHPS Server 1
165.92.144.92   chps2-acr   chps2 # CHPS Server 2
165.92.144.93   chps3-acr   chps3 # CHPS Server 3

/var/yp/ypmake

Create a Tarball for the SSH Keys:

cd /awips
tar -cvf keys.tar .ssh

Add the CHPS Systems to the NS1 Database:

**At the dx1 root prompt:

    ssh nas1

**This will get you to the nas1 prompt (nas1-acr), now issue the following command:

    menu

```
nas1-nhor              StorageTek 5320C NAS Menu
-----------------------------------------------------------------
Operations            | Configuration        | Access Control
1. Activity Monitor   | A. Host Name & Network | K. Admin Access
2. Show Log           | B. Timezone, Time, Date | L. Volume Access
3. Lock Console       | C. Drive Letters     | M. Trusted Hosts
4. Licenses           | D. Disks & Volumes   |
                      | E. Users             | Extensions
                      | F. Hosts             | U. Language Selection
                      |                      | V. EMAIL Configuration
                      | H. DNS & SYSLOGD     | W. ADS Setup
                      | I. NIS & NIS+        | X. CIFS/SMB Configuration
0. Shutdown           | J. NS Lookup Order   | Y. RDATE time update
-----------------------------------------------------SPACE more extensions-----
Version 4.22 M1



   +-----------------------------------------------------------+
   |▊Press the number or letter that corresponds to the        |
   | menu item you want to use                                 |
   |                                                           |
   +-----------------------------------------------------------+
   ESC to exit menu                          Sun Microsystems, Inc.
```

Press the "F" key on your keyboard. This to select "Hosts". You will get a screen that looks similiar to the following:

```
nas1-nhor        StorageTek 5320C NAS Update Local Host Database
pdate
 10.10.10.1  10.10.10.2  ax-nhor      ax-tape      chps1-nhor  chps2-nhor
 chps3-nhor  chps4-nhor  chps5-nhor   chps51-nhor chps52-nhor chps53-nhor
 chps54-nhor chps55-nhor chps56-nhor chps6-nhor   dx1-nhor    dx2-nhor
 dx3-nhor    dx4-nhor    px1-nhor     px2-nhor     rp1-nhor    rp2-nhor




tems, Inc.




      Host Name/IP      [                                    ]

   +-----------------------------------------------------------+
   | Enter an existing host name or address (in dotted decimal),|
   | or a new name to add a host, then press ENTER             |
   |                                                           |
   +-----------------------------------------------------------+
   ESC for Menu
```

****

Enter the system name, such as "chps1-acr", and press the "Enter" key

It will then ask for the IP Address, enter the full address, such as 165.92.144.91 and press the "Enter" key.

It will then ask you to press the "7" key to save it.
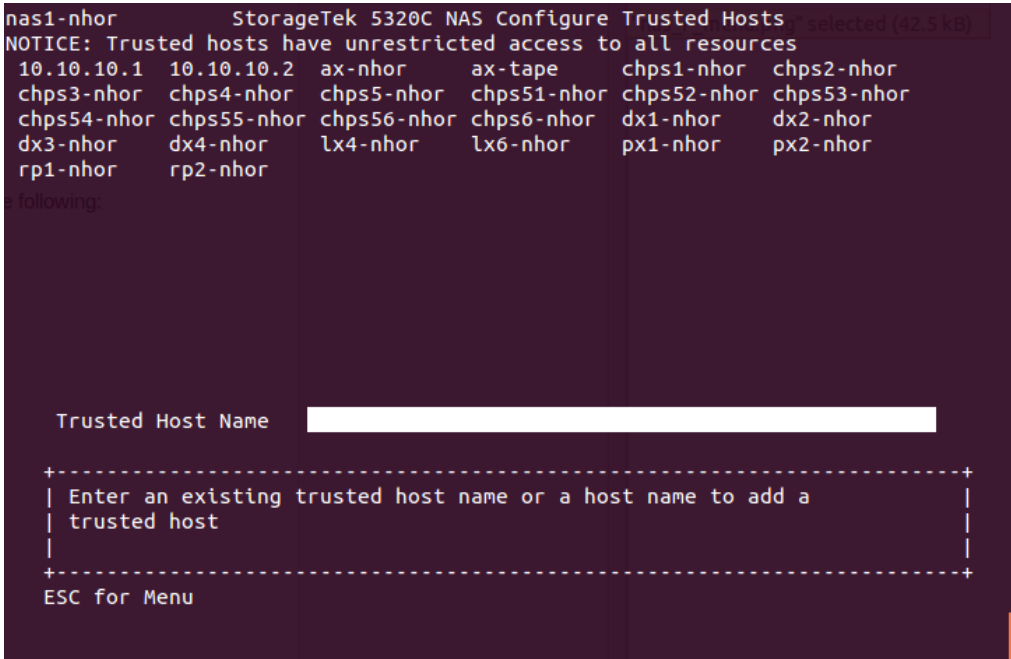***

**Enter all three of the chps boxes names and addresses in this fashion.

**When finished, press <ESC>. This will take you back to the Main Menu.

Press the <M> key
**This will select "Trusted Hosts". You will get a screen that looks similiar to the following:
****

```
nas1-nhor         StorageTek 5320C NAS Configure Trusted Hosts
NOTICE: Trusted hosts have unrestricted access to all resources
 10.10.10.1  10.10.10.2  ax-nhor      ax-tape      chps1-nhor  chps2-nhor
 chps3-nhor  chps4-nhor  chps5-nhor  chps51-nhor chps52-nhor chps53-nhor
 chps54-nhor chps55-nhor chps56-nhor chps6-nhor  dx1-nhor    dx2-nhor
 dx3-nhor    dx4-nhor    lx4-nhor    lx6-nhor    px1-nhor    px2-nhor
 rp1-nhor    rp2-nhor
e following:




     Trusted Host Name     [                                              ]

     +-------------------------------------------------------------------+
     | Enter an existing trusted host name or a host name to add a       |
     | trusted host                                                      |
     |                                                                   |
     +-------------------------------------------------------------------+
     ESC for Menu
```

****
    Enter the system name, such as "chps1-acr", and press the "Enter" key

    It will then ask you to press the "7" key to save it.
****

**Enter all three of the chps boxes names in this fashion.

Press <ESC>
**This will take you back to the Main Menu.

Press <ESC>
**This will take you back to the Main Menu.

Type "exit"
**To return to the dx1 prompt

Change the "Volume Access" of chpsSHARE Value to "READ/WRITE":

From dx1:

      [root@dx1-nhor ~]# ssh ns1

This will get you to the ns1 prompt (ns1-acr)

      ns1-nhor > menu

You will get a screen that looks similiar to the following:
```
*************************************************************************
ns1-nhor              StorageTek 5320C NAS Menu
-----------------------------------------------------------------------
Operations              | Configuration          | Access Control
1. Activity Monitor     | A. Host Name & Network  | K. Admin Access
2. Show Log             | B. Timezone, Time, Date | L. Volume Access
3. Lock Console         | C. Drive Letters        | M. Trusted Hosts
4. Licenses             | D. Disks & Volumes      |
                        | E. Users                | Extensions
                        | F. Hosts                | U. Language Selection
                        |                         | V. EMAIL Configuration
                        | H. DNS & SYSLOGD        | W. ADS Setup
                        | I. NIS & NIS+           | X. CIFS/SMB Configuration
0. Shutdown             | J. NS Lookup Order      | Y. RDATE time update
-------------------------------------------------------SPACE more extensions-----
Version 4.22 M0


  +----------------------------------------------------------------+
  | Press the number or letter that corresponds to the             |
  | menu item you want to use                                      |
  |                                                                |
  +----------------------------------------------------------------+
  ESC to exit menu                                Sun Microsystems, Inc.
```

Press "L". This to select "**Volume Access**."
```
*************************************************************************
```

```
ns1-nhor          StorageTek 5320C NAS Control Volume Access

   Volume              General Access    Volume              General Access
A. /chpsARCHIVE         No Access      N. /share.chkpnt       No Access
B. /chpsARCHIVE.chkpnt  No Access
C. /chpsBACKUP          No Access
D. /chpsBACKUP.chkpnt   No Access
E. /chpsSHARE           No Access
F. /chpsSHARE.chkpnt    No Access
G. /cvol                No Access
H. /dvol                No Access
I. /dvol.chkpnt         No Access
J. /home                Read/Write
K. /home.chkpnt         No Access
L. /proc                No Access
M. /share               Read/Write

        ENTER to move through fields   Save changes after last field
    +--------------------------------------------------------------------+
    | Enter the letter next to a volume to change its general access     |
    |                                 0. Cancel                          |
    |                                                                    |
    +--------------------------------------------------------------------+
    ESC for Menu
```

Select "**/chpsSHARE**":
****

```
        ENTER to move through fields   Save changes after last field
    +--------------------------------------------------------------------+
    |█Choose the general access for /chpsSHARE                           |
    |     1. Read/write     2. Read only    3. None                      |
    |                                                                    |
    +--------------------------------------------------------------------+
    ESC to cancel change
```

Press "1" to select "**Read/write**":
****

```
        ENTER to move through fields   Save changes after last field
    +--------------------------------------------------------------------+
    |█Enter the letter next to a volume to change its general access     |
    |                    7. Save changes     0. Cancel                   |
    |                                                                    |
    +--------------------------------------------------------------------+
    ESC to cancel change
```

Press the "7" key on your keyboard to **Save changes**. You will be returned to the main menu.

```
************************************************************************
    Press "L" to select "Volume Access".
    Check that /chpsSHARE is Read/Write
************************************************************************
```

```
ns1-nhor              StorageTek 5320C NAS Control Volume Access
        8
    Volume                General Access     Volume                General Access
A. /chpsARCHIVE           No Access       N. /share.chkpnt          No Access
B. /chpsARCHIVE.chkpnt    No Access
C. /chpsBACKUP            No Access
D. /chpsBACKUP.chkpnt     No Access
E. /chpsSHARE             Read/Write
F. /chpsSHARE.chkpnt      No Access
G. /cvol                  No Access
H. /dvol                  No Access
I. /dvol.chkpnt           No Access
J. /home                  Read/Write
K. /home.chkpnt           No Access
L. /proc                  No Access
M. /share                 Read/Write


       ENTER to move through fields    Save changes after last field
    +---------------------------------------------------------------------+
    | Enter the letter next to a volume to change its general access      |
    |                               0. Cancel                             |
    |                                                                     |
    +---------------------------------------------------------------------+
    ESC for Menu
```

Press <ESC> (You should be back at the Main Menu.)

```
*********************************************************************
    Press"F" to select "Hosts"
    Check that chps1-acr, chps2-acr, and chps3-acr are listed.
    If not, enter those in a similiar fashion described above for nas1.
*********************************************************************
```

Press <ESC> (You should be back at the Main Menu.)

```
************************************************************************
    Press "M" to select "Trusted Hosts"
    Check that chps1-acr, chps2-acr, and chps3-acr are listed.
    If not enter those in a similiar fashion described above for nas1.
************************************************************************
```

Press <ESC> (You should be back at the Main Menu.)

Type "exit"
**To return to the dx1 prompt

Type "exit"
To leave dx1

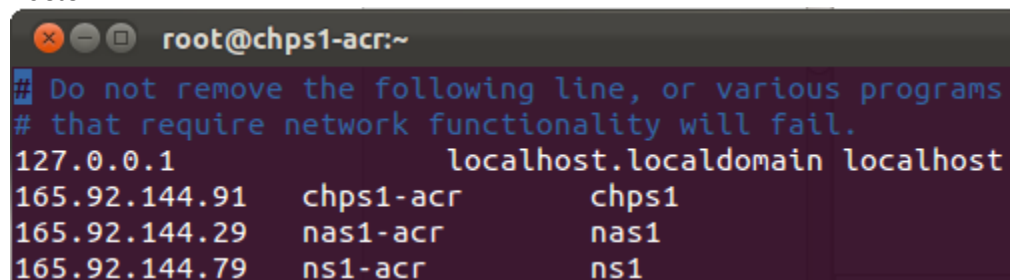
Configure IP Addresses and Firewall for All Three CHPS Systems

** As user "root." **

In the "/etc" directory edit the following files so that they contain the following:
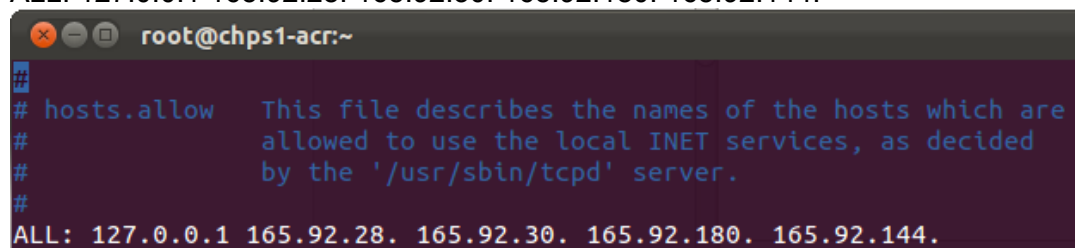
CHPS1

hosts

hosts.allow
**Add the following line to the bottom of the file:
ALL: 127.0.0.1 165.92.28. 165.92.30. 165.92.180. 165.92.144.

***Be sure to replace the 144 with your site IP address

hosts.deny
**Add the following line to the bottom of the file:
ALL: ALL

```
⊗⊖⊚   root@chps1-acr:~
#
# hosts.deny      This file describes the names of the hosts which are
#                 *not* allowed to use the local INET services, as decided
#                 by the '/usr/sbin/tcpd' server.
#
# The portmap line is redundant, but it is left to remind you that
# the new secure portmap uses hosts.deny and hosts.allow.  In particular
# you should know that NFS uses portmap!
ALL: ALL
```

CHPS2

hosts

```
⊗⊖⊚   root@chps2-acr:~
# Do not remove the following line, or various programs
# that require network functionality will fail.
127.0.0.1                   localhost.localdomain localhost
165.92.144.92    chps2-acr          chps2
165.92.144.29    nas1-acr           nas1
165.92.144.79    ns-acr             ns1
```

hosts.allow
ALL: 127.0.0.1 165.92.28. 165.92.30. 165.92.180. 165.92.144.
**Be sure to replace the 144 with your site IP addresss

```
⊗⊖⊚   root@chps2-acr:~
#
# hosts.allow     This file describes the names of the hosts which are
#                 allowed to use the local INET services, as decided
#                 by the '/usr/sbin/tcpd' server.
#
ALL: 127.0.0.1 165.92.28. 165.92.30. 165.92.180. 165.92.144.
```

hosts.deny
**Add the following line to the bottom of the file:
ALL: ALL

CHPS3

hosts

hosts.allow
ALL: 127.0.0.1 165.92.28. 165.92.30. 165.92.180. 165.92.144.
***Be sure to replace the 144 with your site IP address

hosts.deny
**Add the following line to the bottom of the file:
ALL: ALL

```
# hosts.deny    This file describes the names of the hosts which are
#               *not* allowed to use the local INET services, as decided
#               by the '/usr/sbin/tcpd' server.
#
# The portmap line is redundant, but it is left to remind you that
# the new secure portmap uses hosts.deny and hosts.allow.  In particular
# you should know that NFS uses portmap!
ALL: ALL
```

Configure Local/Network Mounts

In the "/etc" directory edit the following files so that they contain the following:

fstab (chps1)

**Be sure to comment out the logical volume /home directory

```
/dev/VolGroup00/LogVol00  /                     ext3    defaults         1 1
/dev/VolGroup00/LogVol07  /awips/chps_local     ext3    defaults         1 2
/dev/VolGroup00/LogVol06  /data                 ext3    defaults         1 2
/dev/VolGroup00/LogVol04  /var                  ext3    defaults         1 2
/dev/VolGroup00/LogVol03  /tmp                  ext3    defaults         1 2
/dev/VolGroup00/LogVol02  /usr                  ext3    defaults         1 2
LABEL=/boot               /boot                 ext3    defaults         1 2
tmpfs                     /dev/shm              tmpfs   defaults         0 0
devpts                    /dev/pts              devpts  gid=5,mode=620   0 0
sysfs                     /sys                  sysfs   defaults         0 0
proc                      /proc                 proc    defaults         0 0
/dev/VolGroup00/LogVol01  swap                  swap    defaults         0 0
nas1:awipsHOME            /home                 nfs     tcp,timeo=600,nfsvers=3
ns1:chpsSHARE             /awips/chps_share     nfs     tcp,timeo=600,nfsvers=3
ns1:chpsARCHIVE           /awips/chps_archive   nfs     tcp,timeo=600,nfsvers=3
chps3:/awips/chps_data    /awips/chps_data      nfs     tcp,timeo=600,rw,nfsvers=2
```

fstab (chps2)

If present, be sure to comment out the LogVol "/home" directory; **not the nas1.

```
root@chps2-acr:~
/dev/VolGroup00/LogVol00  /                        ext3     defaults        1 1
/dev/VolGroup00/LogVol06  /data                    ext3     defaults        1 2
/dev/VolGroup00/LogVol04  /var                     ext3     defaults        1 2
/dev/VolGroup00/LogVol03  /tmp                     ext3     defaults        1 2
/dev/VolGroup00/LogVol02  /usr                     ext3     defaults        1 2
LABEL=/boot               /boot                    ext3     defaults        1 2
tmpfs                     /dev/shm                 tmpfs    defaults        0 0
devpts                    /dev/pts                 devpts   gid=5,mode=620  0 0
sysfs                     /sys                     sysfs    defaults        0 0
proc                      /proc                    proc     defaults        0 0
/dev/VolGroup00/LogVol01  swap                      swap    defaults        0 0
nas1:awipsHOME            /home                    nfs      tcp,timeo=600,nfsvers=3
ns1:chpsSHARE             /awips/chps_share        nfs      tcp,timeo=600,nfsvers=3
ns1:chpsBACKUP            /awips/chps_backup       nfs      tcp,timeo=600,nfsvers=3
```

fstab (chps3)

If present, be sure to comment out the LogVol "/home" directory; **not the nas1.

```
root@chps3-acr:~
/dev/VolGroup00/LogVol00  /                        ext3     defaults        1 1
/dev/VolGroup00/LogVol06  /awips/chps_data         ext3     defaults        1 2
/dev/VolGroup00/LogVol07  /awips/chps_local        ext3     defaults        1 2
/dev/VolGroup00/LogVol04  /var                     ext3     defaults        1 2
/dev/VolGroup00/LogVol03  /tmp                     ext3     defaults        1 2
/dev/VolGroup00/LogVol02  /usr                     ext3     defaults        1 2
LABEL=/boot               /boot                    ext3     defaults        1 2
tmpfs                     /dev/shm                 tmpfs    defaults        0 0
devpts                    /dev/pts                 devpts   gid=5,mode=620  0 0
sysfs                     /sys                     sysfs    defaults        0 0
proc                      /proc                    proc     defaults        0 0
/dev/VolGroup00/LogVol01  swap                      swap    defaults        0 0
nas1:awipsHOME            /home                    nfs      tcp,timeo=600,nfsvers=3
ns1:chpsSHARE             /awips/chps_share        nfs      tcp,timeo=600,nfsvers=3
ns1:chpsARCHIVE           /awips/chps_archive      nfs      tcp,timeo=600,nfsvers=3
ns1:share        /awips/rep        nfs   tcp,timeo=600,nfsvers=3
```

Configure DNS (Domain Name Server) and NIS (Network Information Service)

resolv.conf (chps1 chps2 & chps3)

```
🔴⚪⚫  root@chps3-alr:~
Search sr.nws.noaa.gov awips.noaa.gov
nameserver=165.92.240.2
nameserver=165.92.240.1
options ndots:4
~
```

nsswitch.conf (chps1 chps2 & chps3)

**Add "nis" to the lines shown

```
# Example:
#passwd:      db files nisplus nis
#shadow:      db files nisplus nis
#group:       db files nisplus nis

passwd:       files nis
shadow:       files nis
group:        files nis

#hosts:       db files nisplus nis dns
hosts:        files nis dns
```

yp.conf (chps1 chps2 & chps3)

**Add the following line at the bottom

domain acr.awips1 broadcast

ntp.conf (chps1 chps2 & chps3)

**Edit the file so that the last five lines appear similiar to as shown

#restrict 0.rhel.pool.ntp.org mask 255.255.255.255 nomodify notrap noquery
#restrict 1.rhel.pool.ntp.org mask 255.255.255.255 nomodify notrap noquery
#restrict 2.rhel.pool.ntp.org mask 255.255.255.255 nomodify notrap noquery
server 165.92.144.1
restrict 165.92.144.1 mask 255.255.255.0 nomodify notrap noquery

cron.allow (chps1 & chps3)

**Create this file if needed
fews

cron.allow (chps2)

**Create this file if needed
fews
postgres

Configure NIC and Ethernet Interfaces

cd /etc/sysconfig (chps1 chps2 & chps3)

network (chps1 chps2 & chps3)

**Edit the file so that it looks like the following:
NETWORKING=yes
GATEWAY=165.92.144.70
HOSTNAME=chps1-acr   <-HOSTNAME will changed base on the system (chps1 chps2
chps3)
NISDOMAIN=acr.awips1

cd network-scripts (chps1 chps2 & chps3)

ifcfg-eth0 (chps1 chps2 & chps3)

**Edit the file so that it looks like the following:
DEVICE=eth0
BOOTPROTO=static
HWADDR=00:22:19:0B:F6:1E <-Do NOT change this line it is very specific to the hardware on
your system
ONBOOT=yes
BROADCAST=165.92.144.127
IPADDR=165.92.144.91   <-Last number will change based on the systems (91 92 93)
NETMASK=255.255.255.128

**Set the local time to GMT by issuing the following command:

cp /usr/share/zoneinfo/GMT /etc/localtime (chps1 chps2 & chps3)
   -> it will then ask if it can overwrite, so enter: y

**Set the local time to GMT (chps1 chps2 & chps3)

system-config-date
        -> a window will pop up
        -> click on the "Network Time Protocol" check box
        -> click on "Show advanced options"
      -> click on the unchecked box
        "Synchronize system clock before starting service"
          so that it is checked
      -> click on the "Time Zone" tab
        -> drag the slider bar to the bottom and click on
        "Non-geographic timeszones" and then click on
          the triangle to the left so that it is pointed
          down
        -> drag the slider bar down one line and click on
          "GMT"
        -> make sure that the box in front of
          "System clock uses UTC" is checked
        -> click on "OK"

**Update some runlevel system services (chps1 chps2 & chps3)

chkconfig --level 2345 ypbind on
chkconfig --level 2345 ntpd on
chkconfig --level 2345 sendmail off

**Reboot each system after completing the above setup.
reboot

On chps1, as user "root"

vgdisplay
lvcreate -L 5G -n LogVol06 VolGroup00
lvdisplay
mkfs -t ext3 /dev/VolGroup00/LogVol06

```
vgdisplay
lvcreate -L 20G -n LogVol07 VolGroup00
lvdisplay
mkfs -t ext3 /dev/VolGroup00/LogVol07
```

**Remove the logical volume that originally contained the /home directory
**Check the /etc/fstab file

```
lvremove /dev/VolGroup00/LogVol05
```
  **answer "y" when asked if you are sure

```
vi /etc/fstab
```

**Add the following lines:
```
/dev/VolGroup00/LogVol07 /awips/chps_local      ext3    defaults      1 2
/dev/VolGroup00/LogVol06 /data                ext3    defaults      1 2
```

**Remove the following line:
```
/dev/VolGroup00/LogVol05 /home   ext3   defaults     1 2
```

```
cd /usr/bin
ln -s /bin/bash sh
```

```
cd /
mkdir /data
mkdir -p /awips/chps_local/schemas
cd /awips
mkdir hydroapps
mkdir chps_share
mount -a
```

***ERROR NOTE: If you get the following error:
        "mount: mount to NFS server 'ns1' failed: RPC Error: Program not registered."
        Go check /etc/hosts for an error in the ns1 address

```
cd /awips
chmod -R 775 *
chown -R fews:fxalpha *
```

```
mkdir -p /var/awips/hydroapps
ln -s /awips/chps_local /var/awips/hydroapps/chps
ln -s /awips/chps_local /opt/fews
ln -s /awips/chps_local /awips/hydroapps/chps
ln -s /awips/chps_share /var/awips/rep
```

On chps3 as user "root"

```
cd /usr/bin
ln -s /bin/bash sh
```

```
vgdisplay
lvcreate -L 20G -n LogVol06 VolGroup00
lvdisplay
mkfs -t ext3 /dev/VolGroup00/LogVol06
```

```
lvcreate -L 20G -n LogVol07 VolGroup00
lvdisplay
mkfs -t ext3 /dev/VolGroup00/LogVol07
```

**Remove the logical volume that originally contained the /home directory
**Check the /etc/fstab file

```
lvremove /dev/VolGroup00/LogVol05
```
  **answer "y" when asked if you are sure

```
vi /etc/fstab
```

**Add the following lines:
```
/dev/VolGroup00/LogVol06 /awips/chps_data      ext3    defaults     1 2
/dev/VolGroup00/LogVol07 /awips/chps_local     ext3    defaults     1 2
```
**Remove the following line:
```
/dev/VolGroup00/LogVol05 /home   ext3   defaults    1 2
```

```
mkdir -p /awips/chps_data
```

```
cd /awips
mkdir chps_local
mkdir hydroapps
mkdir chps_share
mount -a



cd /awips
chmod -R 775 *
chown -R fews:fxalpha *




mkdir -p /var/awips/hydroapps
ln -s /awips/chps_local /var/awips/hydroapps/chps
ln -s /awips/chps_local /opt/fews
ln -s /awips/chps_local /awips/hydroapps/chps
ln -s /awips/chps_data /awips/hydroapps/chps/data
ln -s /awips/chps_share /var/awips/rep




cd /awips/chps_local
mkdir install
mkdir -p /awips/chps_local/scripts/logs
mkdir -p /awips/chps_local/fss/aprfc

cd /awips/chps_local
chmod -R 775 *
chown -R fews:fxalpha *




cd /awips/chps_data
mkdir toCHPS
mkdir fromCHPS

cd fromCHPS
mkdir aprfc

cd /awips/chps_data/toCHPS
mkdir aprfc

cd aprfc
mkdir cardfiles failed grib1 modifiers ofsde pixml ratings shef
cd grib1
mkdir fle flf pe pef qpe qpf qte qtf

cd /awips/chps_data
```

```
chmod -R 775 *
chown -R fews:fxalpha *
```

```
cd /usr/lib
scp -r root@lx1:/usr/lib/libg2c.so.0.0.0 .
ln -s libg2c.so.0.0.0 libg2c.so.0
```

On chps2, as user "root"

```
cd /usr/bin
ln -s /bin/bash sh
```

```
lvcreate -L 100G -n LogVol06 VolGroup00
lvdisplay
mkfs -t ext3 /dev/VolGroup00/LogVol06
```

**Remove the logical volume that originally contained the /home directory
**Check the /etc/fstab file

```
lvremove /dev/VolGroup00/LogVol05
  **answer "y" when asked if you are sure
```

```
vi /etc/fstab
```

**Add the following line:
 /dev/VolGroup00/LogVol06 /data   ext3   defaults   1 2
**Remove the following line:
 /dev/VolGroup00/LogVol05 /home   ext3   defaults   1 2

```
cd /
mkdir /data
mkdir -p /awips/chps_share
mount -a
```

```
cd /awips
chmod 775 *
chown fews:fxalpha *
```

```
mkdir -p /var/awips/
ln -s /awips/chps_share /var/awips/rep
```

As user "root" on all three systems, do the following:

Issue the following command:
```
uname -a
```

***Check the results to make sure a 64 bit operating system
was loaded

On chps1 and chps3 as user "root"

**Load the "Postgresql 8.2.11 64-bit" RPM's

```
cd /usr
scp fews@dx1:/home/hrl/chps_install/pg.tar.gz .
tar -zxvf pg.tar.gz
cd zzz
rpm -Uvh *rpm
cd /usr
rm -rf zzz
rm pg.tar.gz
```

On chps2 as user "root"

**Load the "Postgresql 8.2.11 64-bit" RPM's

```
cd /usr
scp fews@dx1:/home/hrl/chps_install/pg.tar.gz .
tar -zxvf pg.tar.gz
cd zzz
rpm -Uvh *rpm
cd /usr
rm -rf zzz
```

rm pg.tar.gz

cd /data
mkdir -p fewsdb/acrdb00_data
mkdir -p fewsdb/acrdb00_idx
mkdir pg_data
chmod -R 700 *
chown -R postgres:postgres *

cd /var/lib/pgsql
rm -rf data

ln -s /data/pg_data data

**Start the PostgrSQL Server

su - postgres
initdb <-Do NOT run this command again

pg_ctl -D /var/lib/pgsql/data -l logfile start

exit

**You are now user "root"

chkconfig --level 345 postgresql on

**Reboot all three computers
reboot

On dx1 as user "fews"

**Replace the content of the /home/fews/.bash_profile file with the following:

****
# Source global definitions
if [-f /etc/bashrc]; then

```
. /etc/bashrc
   fi

   export JAVA_HOME=/awips/chps_local/java
   PATH=${JAVA_HOME}/bin:$PATH:$HOME/bin
   export FEWS_MC_HOME=/awips/chps_local/mc/mcs/acrmc00
   export FEWS_JBOSS_HOME=/awips/chps_local/jboss

SYSx=`hostname | cut -c1-5`
if [ "$SYSx" = chps4 ]
then
export FEWS_MC_HOME=/awips/chps_local/mc/mcs/acrmc01
fi

   export PATH
   unset USERNAME
   alias mcstop='cd $FEWS_MC_HOME && NFFS_HOME=$(pwd) build/scripts/stopall.sh'
   alias mcstart='cd $FEWS_MC_HOME && NFFS_HOME=$(pwd) build/scripts/restart.sh
nl.wldelft.fews.master.mc.systemmonitor.main.SystemMonitor'
   alias mccomp='cd $FEWS_MC_HOME && NFFS_HOME=$(pwd) build/scripts/restart.sh'

   alias startjboss='nohup ${FEWS_JBOSS_HOME}/bin/run.sh -c fews &'
   alias stopjboss='${FEWS_JBOSS_HOME}/bin/shutdown.sh -S'
```

****

****NOTE****
Do not understand NFFS_HOME setting
****

On chps1 as user "root"

cd /awips
scp fews@dx1:/awips/keys.tar .
tar -xvf keys.tar
service sshd restart

su - fews

mkdir -p /awips/chps_share/install/mc_2010.01.24695
mkdir /awips/chps_share/install/release_20091215

cd /awips/chps_share/install/release_20091215
scp fews@dx1:/home/hrl/chps_install/Release_NWS_CHPS_20091215.tar.gz .

```
tar -zxvf Release_NWS_CHPS_20091215.tar.gz
rm Release_NWS_CHPS_20091215.tar.gz

cd mc
cp release.jboss.24695.zip /awips/chps_share/install/mc_2010.01.24695
cd /awips/chps_share/install/mc_2010.01.24695
unzip release.jboss.24695.zip
cd scripts
chmod +x *.sh

cd /awips/chps_share/install/
scp fews@dx1:/home/hrl/chps_install/3party.tar.gz .
tar -zxvf 3party.tar.gz
rm 3party.tar.gz
cd /awips/chps_share/install/3rd_Party_Software/JBoss
unzip jboss-jms.zip
  **answer "A" when asked:
    replace app-jboss-jms/mssql/config/mssql-ds.xml? [y]es, [n]o, [A]ll, [N]one, [r]ename:
```

On chps2 as user "root"

```
cd /awips
scp fews@dx1:/awips/keys.tar .
tar -xvf keys.tar
service sshd restart

cd /var/lib/pgsql
mkdir -p fews/jboss

cd fews/jboss
cp -r /awips/chps_share/install/mc_2010.01.24695/postgresql/8.x .
cd 8.x
rm -rf *.bat
chmod +x *.sh

cd /var/lib/pgsql/data

vi postgresql.conf
----------------------
shared_buffers = 1024MB
work_mem = 4MB
commit_delay = 200
effective_cache_size = 256MB
stats_reset_on_server_start = on
```

```
autovacuum = on
stats_start_collector = on
stats_row_level = on
timezone = GMT
listen_addresses = '*'       !!!make sure the # comment is removed!!!
----------------------
```

```
vi pg_hba.conf
----------------------
# TYPE  DATABASE   USER      CIDR-ADDRESS        METHOD

# "local" is for Unix domain socket connections only
local   all       all                   trust
# IPv4 local connections:
host    all       all     127.0.0.1/32        ident sameuser
host    all       all     165.92.144.0/24      trust
host    all       all     165.92.28.0/24       trust  <- support system
                                            access
# IPv6 local connections:
host    all       all     ::1/128             ident sameuser
----------------------
```

```
cd /var/lib/pgsql/fews/jboss/8.x

./db_user_creation.sh acrdb00 fews00 pass01word

./tbs_creation.sh acrdb00 fews00 /data/fewsdb/acrdb00_data /data/fewsdb/acrdb00_idx

./schema_creation.sh acrdb00 fews00

./view_creation.sh acrdb00 fews00
```

```
su - postgres
pg_ctl -D /var/lib/pgsql/data -l logfile restart
```

On chps3 as user "root"

```
cd /awips
scp fews@dx1:/awips/keys.tar .
tar -xvf keys.tar
service sshd restart
```

DO THE FOLLOWING ON ALL THREE (3) OF THE chps COMPUTERS as user "root"

cd /etc

**Put the usual warnings in the issue file & remove anything already
  in the file
vi issue

**Note: the usual warning is as follows:

************** WARNING *************** WARNING *******************

"This is a United States National Weather Service computer system,
which may be accessed and used only for official Government business
by authorized personnel. Unauthorized access or use of this computer
system may subject violators to criminal, civil, and/or administrative.
action. All information on this computer system may be intercepted,
recorded, read, copied, and disclosed by and to authorized personnel
for official purposes, including criminal investigations.
Access or use of this computer system by any person whether authorized
or unauthorized, constitutes consent to these terms."

************** WARNING *************** WARNING *******************

cp issue issue.net
  *answer "y" when assked: cp: overwrite `issue.net'?

cp issue motd
  *answer "y" when assked: cp: overwrite `issue.net'?

On chps3 as user "root"

cd /etc

vi /etc/exports

**Add the following line:
/awips/chps_data chps1-acr(ro,root_squash)

vi /etc/hosts

**Add the following line:
165.92.144.91   chps1-acr   chps1

service nfs restart

exportfs -a -v

On chps1 as user "root"

cd /awips
mkdir chps_data
chmod 775 chps_data
chown fews:fxalpha chps_data

vi /etc/fstab

**Add the following line at the bottom:
chps3:/awips/chps_data /awips/chps_data   nfs   tcp,timeo=600,nfsvers=2

vi /etc/hosts

**Add the following line:
165.92.144.93   chps3-acr   chps3

service nfs restart

mount -a

chkconfig --level 345 nfs on

su - fews

```
ln -s /awips/chps_data /awips/hydroapps/chps/data

cd /awips/chps_local
cp /awips/chps_share/install/3rd_Party_Software/Apache/apache-tomcat-5.5.27.zip .
cp /awips/chps_share/install/3rd_Party_Software/JBoss/jboss-4.0.2.zip .
cp /awips/chps_share/install/3rd_Party_Software/Java/jre-6u10-linux-i586.bin .



unzip apache-tomcat-5.5.27.zip
mv apache-tomcat-5.5.27 tomcat
rm apache-tomcat-5.5.27.zip



unzip jboss-4.0.2.zip
mv jboss-4.0.2 jboss
rm jboss-4.0.2.zip
cd jboss/bin
chmod +x *.sh



cd /awips/chps_local
./jre-6u10-linux-i586.bin
        *hit <spacebar> to question
        *answer "yes" and NOT "y"
mv jre1.6.0_10 java
rm jre-6u10-linux-i586.bin



On chps2 as user "root"


cd /var/lib/pgsql/fews/jboss/8.x
cp -r /awips/chps_share/install/3rd_Party_Software/JBoss/app-jboss-jms/postgresql/sql/8.x/* .
chmod +x *.sh



su - postgres

cd /var/lib/pgsql/fews/jboss/8.x
./user_and_tbs_creation.sh 2 4
```

On chps1 as user "fews"

cd /awips/chps_share/install/3rd_Party_Software/JBoss/app-jboss-jms/postgresql/lib
cp postgresql-8.3-603.jdbc3.jar /awips/chps_local/jboss/server/fews/lib

cd /awips/chps_share/install/3rd_Party_Software/JBoss/app-jboss-jms/postgresql/config
cp postgres-ds.xml /awips/chps_local/jboss/server/fews/deploy
cd /awips/chps_local/jboss/server/fews/deploy

vi postgres-ds.xml

   <connection-url>jdbc:postgresql://chps2:5432/jbossmq</connection-url>
----
  *Change "localhost" to "chps2"

cd /awips/chps_share/install/3rd_Party_Software/JBoss/app-jboss-jms/postgresql/config
cp postgres-jdbc2-service.xml /awips/chps_local/jboss/server/fews/deploy/jms
cd /awips/chps_local/jboss/server/fews/deploy/jms
rm mysql*

****
***************** Open a terminal window on a workstation *********************

< open a new terminal window on the workstation >

cat /etc/hosts *locate IP Address of workstation
       *decide which screen you want the DBVisualizer to come up on
xhost +

ssh -X fews@chps1
cd /awips/chps_share/install/3rd_Party_Software/DBVisualizer
./dbvis_linux_6_5_1.sh

******
  If X complains export the Display:
  export display=165.92.xx.xx:0.2

Then rerun:
    ./dbvis_linux_6_5_1.sh
******

<next
<accept the license - next
<Destination Directory: /awips/chps_share/DbVisualizer-6.5.1 - next
<Both components - next
<select "Don't create symlinks" - next
<next
<Finish

cd /awips/chps_share/
mv DbVisualizer-6.5.1 DbVisualizer
cd DbVisualizer
./dbvis

**Wait for the "Log" to show "PostgreSQL" along with
  "/awips/chps_share/DbVisualizer/jdbc/postgresql"

**If it seems to be stuck click on "Tools->Connection Wizard"
  near the bottom of the DbVisualizer window

<connection alias: acrdb - next
<select database drive: PostgreSQL <from drop down menu> - next
<connection window
        <server: chps2
        <port: 5432
        <database: acrdb00
        <userid: fews00
        <password: pass01word

        <Test Connection - click on the button
                    if successful
        Finish
<close any boxes

-under "Connections" you should see your "connect alias"
-under the "connect alias" you should see your <database
-click on the little button in front of your <database
-"fews00" should appear
-click on "fews00" and a listing of items should appear

-click on "File"
-highlight "Exit"

************** Exit from the terminal window on a workstation *******************
****

On chps1 as user "fews"

cd /awips/chps_share
cp /awips/chps_share/install/3rd_Party_Software/Java/jre-6u10-linux-i586.bin .
./jre-6u10-linux-i586.bin
    *hit <spacebar> to question
    *answer "yes" and NOT "y"
mv jre1.6.0_10 java
rm jre-6u10-linux-i586.bin

mkdir -p /awips/chps_share/install/configurator/output
cd /awips/chps_share/install/mc_2010.01.24695/configurator
ln -s /awips/chps_share/install/configurator/output /awips/chps_share/install/mc_2010.01.24695/
configurator/output

cd /awips/chps_share/install/configurator
scp fews@dx1:/home/hrl/chps_install/installation_configurator_sh.zip .
unzip installation_configurator_sh.zip
chmod +x *.sh

****
***************** Open a terminal window on a workstation ***********************

< open a new terminal window on the workstation >

< as user hrl
< cd chps_install

< nedit config.dat
< click on "Search"
   < highlight "Replace"
     < check boxes "Case Sensitive" & "Keep Dialog"
       < click cursor to top line of file
       < String to Find: APRFC
       < Replace With: the rfc you are at
       < repeat for aprfc, ACR, acr

< make necessary changes for the RFC being installed
< save the file "config.dat"

< exit for the terminal window

************* Exit from the terminal window on a workstation *******************
****

On chps1 as user "fews"

cd /awips/chps_share/install/configurator
scp fews@dx1:/home/hrl/chps_install/config.dat .
./fews_installation_configurator.sh -p config.dat

cd /awips/chps_share/install/configurator/output/jboss
cp jbossmq-destinations-service.xml /awips/chps_local/jboss/server/fews/deploy/jms

startjboss
cd /awips/chps_local/jboss/server/fews/log
tail -100 server.log
***Look for "Started" at the bottom

mkdir -p /awips/chps_local/mc/mcs/acrmc00
cd /awips/chps_share/install/mc_2010.01.24695/configurator/output/APRFC_ACRMC00/mc
cp * /awips/chps_local/mc/mcs/acrmc00

mkdir -p /awips/chps_local/mc/builds
cd /awips/chps_local/mc/builds
cp -r /awips/chps_share/install/mc_2010.01.24695 .
cd /awips/chps_local/mc/mcs/acrmc00
ln -s /awips/chps_local/mc/builds/mc_2010.01.24695/ build

cp fews.master.mc.conf build/populater
cd build/populater
unzip populater.zip
java -jar populate.jar
cd ../scripts
chmod +x *.sh

mcstart

```
cd /awips/chps_share/install/configurator/output/tomcat
cp * /awips/chps_local/tomcat/conf
cd /awips/chps_share/install/mc_2010.01.24695/lib
cp postgresql-8.3-603.jdbc3.jar /awips/chps_local/tomcat/common/lib
cp log4j-1.2.14.jar /awips/chps_local/tomcat/common/lib



cd /awips/chps_local/tomcat
mkdir fews
cd /awips/chps_share/install/mc_2010.01.24695/admin_interface
cp fewsadmin.war /awips/chps_local/tomcat/fews
cd /awips/chps_share/install/configurator/output/ai
cp fewsadmin_acrmc00.xml /awips/chps_local/tomcat/fews



cd /awips/chps_local/tomcat/fews
cp fewsadmin_acrmc00.xml /awips/chps_local/tomcat/conf/Catalina/localhost
cd /awips/chps_local/tomcat/bin
chmod +x *.sh
./startup.sh



< go to netscape  http://chps1:8080/manager/html >
< admin                          >
< pass                       >
< select fewsadmin_acrmc00             >
< admin                          >
< pass                       >
< admin pass !! may need to be entered a 2nd time >


**If "status 500" do the following:              !!
cd /awips/chps_local/tomcat/bin
./shutdown.sh
./startup.sh
!!now run netscape again as shown above           !!



mkdir -p /awips/chps_local/scripts/logs
cd /awips/chps_local/scripts/
scp -r fews@dx1:/home/hrl/chps_install/fews_scripts/* .
chmod +x *.sh
```

```
**********************************************************************
*** We cheated and ftp the 3 files over using: scp in the above lines***
**********************************************************************


cd /awips/chps_share/install/mc_2010.01.24695/scripts
cp sysmon_watcher.sh /awips/chps_local/scripts/
cd unix_rc/jboss
cp jboss_init_redhat.sh /awips/chps_local/scripts/
cd ../tomcat
cp tomcat_init_redhat.sh /awips/chps_local/scripts/
cd /awips/chps_local/scripts/
chmod +x *.sh

vi jboss_init_redhat.sh
----------------------
JBOSS_USR=${JBOSS_USR:-"fews"}
JBOSS_HOME=${JBOSS_HOME:-"/awips/chps_local/jboss"}
JAVA_HOME=${JAVA_HOME:-"/awips/chps_local/java"}
JBOSS_CONSOLE=${JBOSS_CONSOLE:-"/awips/chps_local/jboss/log/jboss.log"}
----------------------

vi tomcat_init_redhat.sh
--------------------
TOMCAT_HOME=${TOMCAT_HOME:-"/awips/chps_local/tomcat"}
JAVA_HOME=${JAVA_HOME:-"/awips/chps_local/java"}
TOMCAT_CONSOLE=${TOMCAT_CONSOLE:-"/awips/chps_local/tomcat/logs/
tomcat_boot.log"}
TOMCAT_USR=${TOMCAT_USR:-"fews"}
--------------------

vi sysmon_watcher.sh
--------------------
MC_ROOT_DIR=/awips/chps_local/mc/mcs/
-------------------
**********************************************************************
**********************************************************************
**********************************************************************


su -


cd /etc/init.d
ln -s /awips/chps_local/scripts/jboss_init_redhat.sh jboss
chkconfig --add jboss
chkconfig --list jboss
chkconfig --level 35 jboss on



ln -s /awips/chps_local/scripts/tomcat_init_redhat.sh tomcat
chkconfig --add tomcat
```

```
chkconfig --list tomcat
chkconfig --level 35 tomcat on

exit
**You are now user "fews" on chps1



crontab -e
-----------
0-59/5 * * * * /awips/chps_local/scripts/sysmon_watcher.sh 2>&1 > /awips/chps_local/scripts/
logs/sysmon_watcher.log
-----------

On chps3 as user "root"

su - fews

cd /awips/chps_local
cp /awips/chps_share/install/3rd_Party_Software/Java/jre-6u10-linux-i586.bin .
./jre-6u10-linux-i586.bin
      *hit <spacebar> to question
      *answer "yes" and NOT "y"
mv jre1.6.0_10 java
rm jre-6u10-linux-i586.bin
chown -R fews:fxalpha java



cd /awips/chps_share/install/configurator/output/APRFC_ACRMC00/FSS
cp -r FSS00 /awips/chps_local/fss/aprfc
cp -r FSS01 /awips/chps_local/fss/aprfc



cd /awips/chps_share/install/mc_2010.01.24695/mcproxy
cp * /awips/chps_local/fss/aprfc/FSS00/mcproxy
cp * /awips/chps_local/fss/aprfc/FSS01/mcproxy



cd /awips/chps_local/fss/aprfc/FSS00/mcproxy
vi fews.master.mcproxy.conf
        ***do a search for "class"
                find the line: <arg id="1" value="../apgrfc"/>
                change it to : <arg id="1" value="/awips/chps_local/fss/aprfc/FSS00/FewsShell/
aprfc"/>
./mcproxy.sh start

cd /awips/chps_local/fss/aprfc/FSS01/mcproxy
vi fews.master.mcproxy.conf
```

```
        ***do a search for "class"
                find the line: <arg id="1" value="../apgrfc"/>
                change it to : <arg id="1" value="/awips/chps_local/fss/aprfc/FSS00/FewsShell/
aprfc"/>
./mcproxy.sh start
```

```
< On the workstation, start netscape  http://chps1:8080  >
< "TOMCAT MANAGER"                          >
<  admin                                    >
<  pass                                     >
<  select fewsadmin_acrmc00                 >
<  admin                                    >
<  pass                                     >
< See if it is green.                       >
```

```
cd /awips/chps_share/install/mc_2010.01.24695/scripts/mcproxy
cp mcproxy_watcher.sh /awips/chps_local/scripts
cd /awips/chps_local/scripts
chmod +x *.sh
```

```
vi mcproxy_watcher.sh
-------------
FSS_ROOT_DIR=/awips/chps_local/fss
-------------
```

```
crontab -e
-----------
0-59/5 * * * * /awips/chps_local/scripts/mcproxy_watcher.sh 2>&1 > /awips/chps_local/scripts/
logs/mcproxy_watcher.log
-----------
```

```
******************************Can't get this done

        cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc
        cp -rf /awips/chps_local/install/aprfc/FSS_APRFC/* .


        cp /awips/chps_local/install/fews/fews-bin-development-20466.zip .
        unzip fews-bin-development-20466.zip
```

```
cd /awips/chps_local/fss/aprfc/FSS01/FewsShell
cp -rf /awips/chps_local/fss/aprfc/FSS00/FewsShell/* .
```

*******************************Can't get this done

```
cd /awips/hydroapps/chps/data/fromCHPS/aprfc
mkdir import_backup
mkdir import_failed
mkdir DumpFiles
chmod 775 *
```

```
cd /awips/chps_share/install
scp fews@dx1:/home/hrl/chps_install/Release_NWS_CHPS_20100129.tar.gz .
tar -zxvf Release_NWS_CHPS_20100129.tar.gz
```

```
cd /awips/chps_local
mkdir fews hec ohd
chmod 775 fews hec ohd
```

```
cd /awips/chps_local/ohd
cp -r /awips/chps_share/install/20100129/fss/Models/ohd/bin .
chmod -R +x *
```

```
cd ../fews
cp -r /awips/chps_share/install/release_20091215/delft_fews_binaries/bin .
chmod -R +x *
chmod -R -x bin/*.jar
ln -s /awips/chps_local/java jre
```

```
cd ../hec
mkdir hecras
cd hecras
scp -r fews@165.92.28.93:/opt/fews/hec/hecras/bin .
```

****STOPPED HERE FOR THE EVENING****

```
cd /awips/chps_share
mkdir oc fews hec migration_scripts ohd scripts
mkdir -p sa/oper
chmod -R 775 *



----------------------------> In each of the OC's created in /awips/chps_share/oc
                    the following logical links need to be created:
                        ln -s /awips/chps_share/fews/bin bin
                        ln -s /awips/chps_share/fews/jre jre
--------------------------



cd ohd
cp -r /awips/chps_share/install/oct2010_boc/fss/Models/ohd/bin .
chmod -R +x *



cd ../fews
cp -r /awips/chps_share/install/oct2010_boc/delft_fews_binaries/bin .
chmod -R +x *
chmod -R -x bin/*.jar
ln -s /awips/chps_share/java jre



cd ../hec
cp -r /awips/chps_local/hec/* .



cd ../migration_scripts
scp fews@165.92.28.1:/awips/chps_share/install/jun2010/migration_scripts/
migrationscripts_May2010.zip
unzip migrationscripts_May2010.zip


cd ../scripts
scp fews@dx1:/home/hrl/chps_install/setdisplay.tar.gz
tar -zxvf setdisplay.tar.gz


cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/
ln -s /awips/chps_local/fews/bin bin

mkdir -p /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/ohd
mkdir -p /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/hec/hecras
```

```
mkdir -p /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/hec/ressim

cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/ohd
ln -s /awips/chps_local/ohd/bin bin
cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/hec/hecras
ln -s /awips/chps_local/hec/hecras/bin bin
cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Models/hec/ressim
ln -s /awips/chps_local/hec/ressim/bin bin


cd /awips/chps_local/fss/aprfc/FSS01/FewsShell/
ln -s /awips/chps_local/fews/bin bin

mkdir -p /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/ohd
mkdir -p /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/hec/hecras
mkdir -p /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/hec/ressim

cd /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/ohd
ln -s /awips/chps_local/ohd/bin bin
cd /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/hec/hecras
ln -s /awips/chps_local/hec/hecras/bin bin
cd /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Models/hec/ressim
ln -s /awips/chps_local/hec/ressim/bin bin


mkdir /awips/chps_share/install/deltares_init_config
chmod -R 775 /awips/chps_share/install/deltares_init_config


cd /awips/chps_share/install/deltares_init_config
scp fews@165.92.28.1:/home/oper/CHPS/root_config/aprfc.tar.gz .
tar -zxvf aprfc.tar.gz
tar -zxvf aprfc_root.tgz
mv aprfc_sa.tgz /awips/chps_share/sa/oper


cd /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/*.xml .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/201001_patch.jar .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/fss_global.properties .
rm oc_synchConfig.xml

cd /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/*.xml .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/201001_patch.jar .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/fss_global.properties .
rm oc_synchConfig.xml


mkdir -p /awips/chps_share/oc/oper/aprfc_oc/Models/ohd
```

```
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/Models/hec/hecras
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/Models/hec/ressim
ln -s /awips/chps_share/fews/bin /awips/chps_share/oc/oper/bin
ln -s /awips/chps_share/java /awips/chps_share/oc/oper/jre
ln -s /awips/chps_share/ohd/bin /awips/chps_share/oc/oper/aprfc_oc/Models/ohd/bin
ln -s /awips/chps_share/hec/hecras/bin /awips/chps_share/oc/oper/aprfc_oc/Models/hec/hecras/
bin
```

```
cd /awips/chps_share/oc/oper/aprfc_oc
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/*.xml .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/201001_patch.jar .
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/oc_global.properties .
cd /awips/chps_share/sa/oper
cp /awips/chps_share/install/deltares_init_config/RootConfigFiles/sa_global.properties .
```

```
cd /awips/chps_share
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/DumpFiles
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/temp
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/Export
mkdir -p /awips/chps_share/oc/oper/aprfc_oc/ColdStates
```

```
mkdir -p /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/DumpFiles
mkdir -p /awips/chps_local/fss/aprfc/FSS00/FewsShell/aprfc/Import
mkdir -p /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/DumpFiles
mkdir -p /awips/chps_local/fss/aprfc/FSS01/FewsShell/aprfc/Import
```

```
cd /home/fews
scp fews@dx1:/home/hrl/chps_install/taskp.tar .
scp fews@dx1:/home/hrl/chps_install/workflows.tar .
tar -xvf taskp.tar
tar -xvf workflows.tar
rm taskp.tar
rm workflows.tar
```

```
cd /awips/chps_share/install/deltares_init_config
rm aprfc.tar.gz
rm aprfc_root.tgz
```

```
*************************************************************************
```

To reset the hardware clock to the system time run the following command:

hwclock --systohc


```
**************************************************************************
```


```
***************************************************************************************
***************************************************************************************
```
WORKSTATIONS CHANGES FOR RUNNING THE CHPS SOFTWARE
**** Adding additional dedicate unallocated vg00 disk space to the /tmp and /data ****
**** directories on any workstation to be used for chps ****
**** Instructions for adding the display option are located at the bottom of ****
**** this section ****

On any lx workstation - set up to run chps - as user "root"

su - fews
cd /awips/chps_share/scripts/setdisplay

**Edit the "sudoers" file and make any additions to the file as needed for
  for your site.

**Changes will need to be made in two areas of the file specific to your location:
  1. "Host alias specification"
  2. "User alias specification"

**Use the editor "visudo".

visudo

exit

**You are now user "root"

cd /awips
mkdir chps_share
chmod 775 chps_share
chown fxa:fxalpha chps_share
ls -alrt |grep chps_share

mkdir -p /var/awips
cd /var
chmod 775 awips
chown fews:fxalpha awips
ls -alrt |grep awips

su - fews

ln -s /awips/chps_share /var/awips/rep
cd /var/awips
ls -alrt

exit
**You are now user "root" on the workstation

vi /etc/fstab

**Add the following line to the bottom:
ns1:chpsSHARE   /awips/chps_share   nfs   tcp,timeo=600,nfsvers=2

mount -a
df -h

cd /var
vgdisplay

**Look for the following line:
  Free PE / Size   1206 / 4.71 GB
  **The second number (4.71 GB) will indicate the amount of unallocated
    disk space in vg00. There should be over 2 GB available. We will
    assign 1GB to the "/tmp" partition.

df -h |more

**Check for the lvol group /tmp belongs to lvol2
**Check for the lvol group /data belongs to lvol11

lvextend -L 1G /dev/vg00/lvol02
resize2fs /dev/vg00/lvol02

lvextend -L 5G /dev/vg00/lvol11
resize2fs /dev/vg00/lvol11

**Check that it worked
df -h |more

```
cd /data
mkdir chps
chmod 775 chps
chown fews:fxalpha chps
ls -al |grep chps
```

*****Adding the multiple screen options*****

```
cd /etc
```
**Be sure that you have edited the "sudoers" file in
  /awips/chps_share/scripts/setdisplay as instructed
  at the beginning of this sections

```
chmod 640 sudoers

cp /awips/chps_share/scripts/setdisplay/sudoers .
```
**Since you are overwriting an existing file,
  it will ask you if it is ok, so answer "y"

```
chmod 440 sudoers
```

Login as any user , but start with user "fews".

Click on the RedHat Symbol located on the panel and then click on "Control Center"

On the left side of the "Control Center" Window click on "Desktop".

This will expand the options, now click on "Behavior".

On the right side of the Behavior-Control Center window. Find the
"Mouse Button Actions" section and click on the "Edit..." button on the
same line as "Left button:" and "Custom Menu 1"

A "Menu Editor - Control Center" popup window will appear. Clink on
the "New..." button.

A "Choose Applications" window will open. Near the top on the right hand side
of the window will be a button with what looks like a folder, this is the
browse button, click on it.

A "Control Center" window will open up. In the top box, it will have the
image of a folder on the left side of the box, type in
"/awips/chps_share/scripts/setdisplay/" and hit <Enter>.

Highlight "changeDisplay.sh" in the large, middle box and click the "OK"
button.

Click the "OK" button on the next two windows and then clcik on "Apply".

Finally test the install

Log out and then log back in as the same user.

Click the left mouse button and choose "changeDispaly.sh"

Choose the first or second otion.

Log out and then log back in again.

What do you see???

****

****
****
INSTALLING THE APACHE WEB SERVER ON CHPS1
****

Get out the box containing the RedHat Enterprise Release DVD's

Find the DVD labelled:
	DVD1
	For 64-BIT INTEL
	REDHAT ENTERPRISE RELEASE 5.3

Place it into the DVD Drive on chps1
chps1 is located on the bottom of the RP Rack

Get out the system monitor in the RP Rack and press number 3 on the "Rose" or "Black Box"
monitor selector

Log in as user "root"

When the screen comes up you will see the image of a DVD with the name:
"RHEL5.3x86_64"
Place the pointer over the DVD image and double-click on it

Find the folder labelled "Server" and double-click on it.

Find the file labelled httpd-2.2.3-22.elm5x86_64rpm and double-click on it
It will come up and tell you about two dependances, load them
It will ask about loading a "Key" ... load it.

When it has finished loading the program, close the window and left-click on the
DVD image and select "Eject ..." The DVD tray should pop out of chps1

Log off chps1 and put the system monitor away.

Log on to chps3 as user "fews"

cd /awips/chps_local

ls -al

**Check for a directory named "schemas" if it is not there, that is fine
  If it exists remove using the following command:
rm -rf schemas

cd /awips/chps_share/install
scp fews@dx1:/home/hrl/chps_install/apache.tar.gz .
tar -zxvf apache.tar.gz

ssh chps1
**You are now user "fews" on chps1

cd /awips/chps_local
mkdir schemas

cd schemas
cp /awips/chps_share/fews/bin/Delft_FEWS_schemas.jar .
unzip Delft_FEWS_schemas.jar

cd apache_install
vi httpd.conf
**Search for "ServerName" and include the RFC's three letter id after "chps1-"
  For example for ACR you would have "ServerName chps1-acr"
**Search for "DocumentRoot" and remove the following: /schemas
  It should now look like DocumentRoot "/awips/chps_local"

su -
**You are now user "root" on chps1

cd /etc/httpd/conf
cp /awips/chps_local/schemas/apache_install/httpd.conf .
**If asked if you want to overwrite answer "y"

cd /etc/httpd/conf.d
cp /awips/chps_local/schemas/apache_install/welcome.conf .
**If asked if you want to overwrite answer "y"

chkconfig --level 2345 httpd on
chkconfig --list httpd

service httpd start

Bring up Mozilla Firefox and enter "http://chps1/"
You should now see the schema files