

Installation Instructions
IFPS15.2 (Full)
January 13, 2004

Installation Instructions for IFPS15.2 (Full)

Table of Contents:

PART 0: Prerequisites	Page 3
PART 1: Pre-install Preparations	Page 5
PART 2: Install IFPS15.2	Page 8
PART 3: Post-Install Instructions for IFPS15.2	Page 13
PART 4: Deinstall Instructions for IFPS15.2	Page 15
Attachment 1: New/Merge/Replace File List for IFPS15.2	Page 19
Attachment 2: IFPS15.2 Install Space (<u>What if you don't have enough space?</u>)	Page 29
Attachment 3: Sample IFPS Install Log File (<u>URL provided</u>)	Page 30
Attachment 4: Customer Support Team (CST) Contact List	Page 31

PART 0: Prerequisite

Part 0 represents the portion of the IFPS15.2 install that can be done/verified prior to actually starting the install. Please read over this section and complete the items listed below. You should not continue with the IFPS15.2 install until all of these items have been satisfied.

1. **AWIPS Version Installed**

- a. AWIPS **OB2.2 and IFPS14.2 or IFPS14.3** (for sites using MDL formatters) **MUST** be installed. On ds1 you may perform the following two (2) steps as any user (e.g., awipsusr, ifps, etc.)
 - (1) To determine AWIPS release currently on your system, type the following command on ds1:
> cat /awips/Release_ID
If the result does not match at least OB2.2, please install OB2.2 before continuing with the IFPS15.2 install or contact Robert (Bob) Rood at (301) 713-0211 x 177.
 - (2) To determine the IFPS release currently on your system, type the following command on ds1:
>cat /awips/IFPS_Release_ID
If you are not on ds1, then type either one of the the commands below most appropriate for your system:
 - >remsh ds1 "cat /awips/IFPS_Release_ID"
(From HP)
 - >rsh ds1 "cat /awips/IFPS_Release_ID"
(From Linux)If the result does not match at least IFPS14.2 (IFPS14.3 for sites running MDL formatters), then please install IFPS14.2 or IFPS14.3, if appropriate, before continuing with the IFPS15.2 install.

2. **Backup Copies of Important IFPS Files**

- a. See Attachment 1 for the list of data files, scripts, and database tables that are replaced or merged during the IFPS15.2 upgrade.
- b. Key files that MDL suggests should be backed up prior to starting the IFPS15.2 upgrade appear below. Please note that these files should be owned by user ifps, not root or awipsusr.
 1. Data files and Scripts
 1. /awips/adapt/ifps/localbin/ifps-ccc.env
 2. Ifps_ccc Database Tables
 1. None

3. **Important Note:** The contents of the /awips/adapt/ifps/bin/hp and /awips/adapt/ifps/bin/linux directories will be deleted and repopulated during the

installation process. Therefore, if you have any local files in these directories, **you should save them off to another location**

•

4. **Important Note:** The contents of /awips/GFESuite on LX workstations (i.e. lx1 and lx2) will be wiped out during IFPS15.2 installation, and will be repopulated with baseline GFESuite software. Therefore, if you have created any local directories under /awips/GFESuite on any of the LX that you'd like to preserve, **please make backup copies of these directories, or temporarily save them off to another location.**

5. **DISCLAIMER: Risk of /awips/GFESuite getting erased on RPP machines.**
If you have any RPP machines attached to AWIPS network, please do the following steps to ensure that the contents of /awips/GFESuite directory and/or other important files are not erased from RPP machine.
 - a. As user root on px1, source /etc/rc.config.d/AWIPS file and look up \$LX_WOKRSTATIONS variable.
 1. > ./etc/rc.config.d/AWIPS
 2. > echo \$LX_WORKSTATIONSIf your RPP machine(s) is listed under \$LX_WORKSTATIONS, please edit the /etc/rc.config.d/AWIPS file, and modify the "export LX_WORKSTATIONS=" line, and delete your RPP machine from that list. The install script uses this variable to perform all install/upgrade on LX machines.
6. IFPS15 information important to **IFPS Focal Points** is available at the following URL:
 - a. <http://www-md.fsl.noaa.gov/IFPS/14/IFPS15focal.html>

PART 1: Pre-install Preparations

Part 1 represents the steps necessary to prepare the system for the IFPS15.2 install. Part 1 through Part 3 within the install instructions need to be completed on the same day. It is estimated that the Part 1 and Part 2 will take approximately two hours to complete. The time required for Part 3 depends on the amount of time it will take your site to verify the IFPS15.2 upgrade.

NOTE: During the IFPS15.2 installation, most of the IFPS binaries will be moved:

- **from** /awips/adapt/ifps/bin/linux
- **to** /awips/ifps/primary/bin

Most of GFESuite configuration files will be moved:

- **from** /awips/GFESuite/etc/SITE/* on lx1
- **to** /awips/GFESuite/primary/etc/SITE/* on px1
- **from** /awips/GFESuite/data/databases/* on lx1
- **to** /awips/GFESuite/primary/data/databases/* on px1

NOTE: Due to the radical changes in the IFPS15 infrastructure, contents of /awips/GFESuite on all LX workstations, /awips/adapt/ifps/bin and /awips/adapt/ifps/lib directories will be erased and recreated during the installation. Therefore, please save off any locally created software that you might have under these directories to another location. IFPS15.2 installation does not make backup copy of any locally created software and is not responsible for preserving it.

Please follow the directions listed below.

1. **Look for Addenda to the IFPS15.2 Install Instructions**
 - a. ***Before starting with the IFPS15.2 install, please review any updated Install Instructions and/or Lessons Learned at the following URL:***

<http://www.nws.noaa.gov/md1/icwf/IFPS15.2Full/IFPS15.2Full.html#LessonsLearned>

The IFPS15.2 web page includes a number of other hypertext links including a link to the IFPS15 User's Guide.

2. **IFPS15.2 Install Space**
 - a. The chart in **Attachment 2** indicates the amount of space needed in each of the partitions for the specified host. If there is not enough space available, the install will stop in order to allow the IFPS-FP to free up space in the specified partition. The install can then be re-run. To save time during the installation, this chart may be used as a pre-install check of available space. All sizes are in kb.

- b. If you need to clear up space under /data/adapt partition, you can safely delete some of the old IFPS and GFESuite backup files located under /data/adapt/ifps/backup directory. Backup files from IFPS13 or earlier (such as GFESuite13.tgz) can safely be removed.

3. New partitions and permissions

- a. Make sure OB2.2 created new partitions correctly and that they have correct permissions and ownership.
 - i. On all PXs and LXs, cd to /awips/ and check that permission to ifps and GFESuite directories are correct.
 - (1) `>cd /awips`
 - (2) `>ls -al`

Sample:

```
drwxrwxr-x  4  ifps  fxalpha  4096  Aug 27 15:02 GFESuite
drwxrwxrwx  4  ifps  fxalpha  4096  Aug 27 15:05 ifps
```
 - ii. If the permissions and ownerships are not the same as shown above, change them as root.
 - (1) `>su root`
 - (2) `>chmod 775 /awips/GFESuite`
 - (3) `>chown ifps:fxalpha /awips/GFESuite`
 - (4) `>chmod 777 /awips/ifps`
 - (5) `>chown ifps:fxalpha /awips/ifps`

4. Hosts.equiv and .rhosts files

- a. Please make sure that you can rlogin from px1 to all other PXs and all the LXs as both user **root** and **ifps**. This is important because IFPS install scripts will need to connect to other machines to install software and without proper permissions, it will fail.
 - i. To check this, login to **px1** as user **root** and issue the following commands,
 - (1) `> rlogin px2` (repeat this for all the other PX machines except px1)
 - (2) `> rlogin lx1` (repeat this for all the other LX machines)
 - ii. Now, login to px1 as user ifps and do the same steps as above. Make sure that when you issue the rlogin commands, it does not ask you to enter a password. If it does, then you need to check the .rhosts and /etc/hosts.equiv files on the machine you are trying to rlogin to, and make sure that px1-ccc, px2-ccc, px1f-ccc and px2f-ccc (where ccc is your site-id) entries are present there.

IMPORTANT: If you have any questions regarding this step, please contact NCF/SST before continuing with the install. It is imperative that rlogin functionality is tested before starting with the install.

5. Read permissions on files residing under ~ifps/localbin, ~ifps/data and ~ifps/Xdefaults.

- a. Since the install of IFPS15.2 will be started from px1, it is necessary to make sure directories under /awips/adapt/ifps have correct permissions. This is necessary so that install scripts can backup appropriate files.
- b. Please make sure that all the files residing under /awips/adapt/ifps/localbin, /awips/adapt/ifps/data and /awips/adapt/ifps/Xdefaults have world readable permission.
- c. If you are unsure about whether files contain proper permissions, you can issue the

following commands as user root on ds1:

- i. > cd /awips/adapt/ifps
- ii. > chmod -R 777 localbin Xdefaults data

- 6. Change the permission of /data/adapt/ifps/backup
 - a. Login to ds1 as user ifps
 - b. Issue the following commands to change permissions
 - i. >chmod 777 /data/adapt/ifps
 - ii. >chmod 777 /data/adapt/ifps/backup

PART 2: Install IFPS15.2

Part 2 represents the steps necessary to install IFPS15.2. Part 1 through Part 3 within the install instructions need to be completed on the same day. It is estimated that this part will take approximately two hours to complete. The time required for Part 3 depends on the amount of time it will take your site to verify the IFPS15.2 install.

Please follow the directions listed below.

1. Notify the NCF

- a. Before starting the IFPS15.2 installation, please open a trouble ticket with the NCF. The NCF will, in turn, alert MDL that you are about to begin your IFPS installation. Should you require any assistance with your installation, a trouble ticket will already be opened.
- b. **If you have any problems with your IFPS installation or have questions about anything related to the installation process during normal business hours, then please call the Site Support Team (SST) at (301) 713-9362 x 325,326, or 327.**
- c. If you encounter any operational problems with IFPS, after successfully installing, then, as usual, contact the NCF at (301) 713 -9344.

2. Ensure System is running

- a. Log into a workstation as root, then rlogin to the ds
 1. > rlogin ds1
- b. Use the following command to verify that Informix is up and running correctly.
 - > onstat -g dri
 1. If you get a response this means that the Informix database is running.
 2. Using the output from the command above, verify that under the **Data Replication** heading, the type is primary and the state is on as indicated below.

*Informix dynamic server 7.31.UC2 – On-Line (Prim)–up 012319 –
168592 kbytes*

Data Replication:

<i>Type</i>	<i>state</i>	<i>paired serve</i>	<i>const dr ckpt</i>	<i>id/pg</i>
<i>primary</i>	<i>on</i>	<i>ONLINE_REP</i>	<i>126615/14</i>	<i>28</i>

DR interval 30

DR interval 30

DR interval 30

DR auto 0

DRLOST FOUND /opt/informix/etc/.dr.lostfound

NOTE: If (1) or (2) above are not true, you have a problem and need to start the

Informix database before you proceed. Call the Site Support Team (SST) for assistance.

- c. Verify that the PX, DS, or AS are not currently failed over. You will **not** be able to complete this install, if one of the PX, DS, or the AS servers is failed over. (**Note:** As user root, to check whether or not DS/AS are in failover mode, use the `cmviewcl` command. As user root, to check whether or not PXs are in failover mode, use the `clustat` command.)

Sample Output of cmviewcl:

```
CLUSTER STATUS
```

```
awips up
```

```
NODE STATUS STATE
```

```
as1-ggw up running
```

```
PACKAGE STATUS STATE PKG_SWITCH NODE
```

```
as1swap up running enabled as1-ggw
```

```
NODE STATUS STATE
```

```
as2-ggw up running
```

```
PACKAGE STATUS STATE PKG_SWITCH NODE
```

```
as2swap up running enabled as2-ggw
```

```
NODE STATUS STATE
```

```
ds1-ggw up running
```

```
PACKAGE STATUS STATE PKG_SWITCH NODE
```

```
dsswap up running enabled ds1-ggw
```

```
NODE STATUS STATE
```

```
ds2-ggw up running
```

Sample Output of clustat:

```
Cluster Status Monitor (awips)
```

```
14:36:14
```

```
Cluster alias: Not Configured
```

```
===== Member Status =====
```

```
Member Status Node Id Power Switch
```

```
-----
```

```
px1-ggw Up 0 Good
```

```
px2-ggw Up 1 Good
```

```

===== Heartbeat Status =====
Name                Type      Status
-----
px1-beat <--> px2-beat  network  ONLINE
/dev/ttyS1 <--> /dev/ttyS1  serial   ONLINE

===== Service Status =====

      Last      Monitor Restart
Service  Status  Owner      Transition  Interval Count
-----
px1apps  started px1-ggw    13:04:49 Sep 22 0    0
px2apps  started px2-ggw    13:09:18 Sep 22 0    0

```

- d. Verify that the site is not in service backup mode.
(To verify site is not in service backup mode, check that /awips/adapt/ifps/bin/.svcbuMode file does not exist. If this file exists, please run service backup cleanup script from Fix-It Menu to exit service backup mode).

3. Install IFPS15

- a. Verify that IFPS and WWA are **NOT** running on any workstation in the office. This includes HP as well as Linux workstations.
- b. Ensure the ifpServer and ifpServerWatcher processes **are running on lx1**. You can use this command to make this determination:

```
> ps -fu ifps
```

If either is not running, then **as user ifps**, perform these two commands, substituting your site id for the ccc':

```
> cd /awips/adapt/ifps/bin/linux
```

```
> start_LX_ifps_servers ccc
```

- c. Install the IFPS15.
- Insert the CD labeled "IFPS15" into the CD drive on px1
 - NOTE:** First, close out any terminal you may have logged into as user ifps. If you are on one of the ws machines, then open a new terminal as user **root** and rlogin into **px1**.
 - Start a window to enter commands and make sure you are **user root**. You may choose to open a second window in case you need to enter other commands.
 - Mount the CD drive on **px1** as user **root**,
> mount /mnt/cdrom

This will mount the IFPS15.2 CD in /mnt/cdrom directory on px1.

- e. In the same window, start the script to log install progress (**VERY IMPORTANT**)
- ```
> rsh ds1 -n "touch /home/ncfuser/installIFPS15.2.out"
> rsh ds1 -n "chmod 777 /home/ncfuser/installIFPS15.2.out"
> script -a /home/ncfuser/installIFPS15.2.out
> cd /mnt/cdrom
```
- f. In the same window, run `./installIFPS`. Remember this command needs to be executed as **root** on the **px1**. This script needs to run to completion (i.e., the command line prompt returns). Do not <cntrl>C out of this script unless you are directed to do so by NCF or MDL personnel.
- ```
> ./installIFPS
```
- a. There are a few error checks that may appear during the IFPS15.2 install. These error checks will stop the install until the problem is resolved.
- The first few checks verifies that there is enough space to install IFPS15.2 on all needed partitions. If there is not enough space, then the install will stop while this area is cleaned up. Once the directory has been cleaned, you can start the install by issuing the above command again.
 - The second check verifies that no sessions are connected to the `ifps_ccc` and `wwa_ccc` databases. If this check determines that there is a session connected to this database, it will try to kill the connected processes. But as a precaution, you should always make sure that you are not running any IFPS or WWA processes on any of the HP or Linux workstations.
 - The install script will also check if all the IFPS services are added correctly. If they are not, install script will fail and ask you to correct it.
- g. When the command line prompt is returned, the install script has finished. (The last few lines should indicate that install has finished.)

At that time, type in 'exit' in the same window you issued the above command to stop the script.

```
> exit
```

- h. **Review your IFPS15 install log**

```
> cd /home/ncfuser
```

```
> more installIFPS15.2.out
```

Look for any errors in the log file. **Please be aware that some errors**

may be safely ignored. Examples of such errors are listed below.

- a. bash: ...: Permission denied
- b. mv: setting permissions for ... : Operation not permitted
- c. mv: cannot stat ...: No such file or directory
- d. cp: cannot stat ... : No such file or directory
- e. chmod: changing permissions of
`/data/adapt/ifps/backup/gfe_isc15.tar': Operation not permitted
- f. chown: changing ownership of
`/data/adapt/ifps/backup/gfe_isc15.tar': Operation not permitted
- g. tar: lib/tcl_db_interface_config_nwr.so: Warning: Cannot stat:
No such file or directory
- h. ls: *ccc: No such file or directory
- i. ls: ifps-*: No such file or directory
- j. **Also, be aware that, in some instances, your log file may instruct you to contact the NCF. In many instances, that instruction should be ignored. Please click on the link below and take a look at an example of a successful IFPS15.2 install log file. The instances in that sample log file where instructions indicate the NCF should be contacted should be ignored and if you encounter similar instances in your log file, they should also be ignored.**

<http://www.nws.noaa.gov/mdl/icwf/IFPS15.2Full/installIFPS15.2.out>

If you have a questions about anything related to the install process, call the Site Support Team (SST) for assistance. Also take a look at the Lessons Learned section of the IFPS15.2 web page at:

<http://www.nws.noaa.gov/mdl/icwf/IFPS15.2Full/IFPS15.2Full.html#LessonsLearned>

When the install is completed, please call the NCF and close the trouble ticket you opened to begin this process.

- i. Unmount & remove the IFPS15 CD
 - > cd
 - > umount /mnt/cdrom

Take the IFPS15 CD out of the drive by pressing the eject button on the CD-ROM drive.

PART 3: Post-Install Instructions for IFPS15.2

Part 3 represents the steps necessary to verify the IFPS15.2 install. These steps are not comprehensive but just enough to verify that the basic system functionality is up and running. This part of the install instructions includes a list of items that MDL/FSL recommend to complete immediately after the IFPS15.2 install. This list is meant to focus the IFPS Focal Point on particular pieces of the software that were changed during the IFPS15.2 install. Although MDL/FSL attempts to not overwrite the local site configuration of IFPS, sometimes it is not possible. This part of the install instructions should lead the IFPS Focal Point to verify that site configuration is not lost. This section will closely parallel the information listed in Part 0. If the site performed the necessary backups of these data, then the verification and any necessary updates should go smoothly at this time. The last part of this section includes a list of items that will need to be configured, if the site chooses to do so at a later time.

Please follow the directions listed below.

1. Verify System Functionality

- a. Verify that the IFPS servers started correctly

- (1) On px1 as ifps

- i. Check for the IFPS Servers (ifpServer, and ifpServerWatcher)
>ps -ewf | grep ifps

Sample:

```
ifps 29463 1 0 Sep23 ? 01:13:27 /awips/GFESuite/primary/bin/run/ifpServer -D ...
ifps 29840 1 0 Sep23 ? 00:00:17 ifpServerWatcher -s lwx -P 98000000 -H px1f -T ...
```

- ii. If any of the above processes are not listed, then start the server(s)

NOTE: You should see ifpServer and ifpServerWatcher processes running.

```
>cd /awips/ifps/primary/bin
>./start_PX_ifps_servers ccc
where ccc is the 3-letter site identification
```

- b. Verify that the IFPS cron files are running

- (1) On ds1 as ifps

- i. Check for the IFPS cron
>crontab -l

- ii. If the cron is not listed, then start it
>cd /awips/adapt/ifps/crontab
>crontab ifps-ccc.crontab

where ccc is the 3-letter site identification

- (2) On px1 as ifps

- i. Check for the IFPS cron
>crontab -l

- ii. If the cron is not listed, then configure and register it as user root
>su - root

- ```
>cd /etc/cluster
>config.crontabs.px
>register.crontabs.px
```
- (3) On px2 as ifps
- i. Check for the IFPS cron  
>crontab -l
  - ii. If the cron is not listed, then configure and register it as user root  
>su - root  
>cd /etc/cluster  
>config.crontabs.px  
>register.crontabs.px

## 2. **New Functionality that could be Configured within IFPS**

- a. Please refer to Section #1 of the IFPS15.2 Release Notes for more details of new functionality added within IFPS15.2. The URL is:

<http://www.nws.noaa.govmdl/icwf/IFPS15.2Full/Section1IFPS15.2FullRlseNotes.pdf>

## 3. **Cleanup some install related files.**

- a. Delete the textdb file created in localbin directory as **user ifps from px1** using,
  - i. > rm -f /awips/adapt/ifps/localbin/textdb

## 4. **GFESuite host and directory changes to local scripts and applications (For example, XNOW).**

- a. If you have any local scripts that connect to IFPS servers, you will need to change the GFESuite host from lx1 to px1f. We suggest that you use environment variables \$CDSHOST (defined through ifps-ccc.env file). You might also need to change the path of GFESuite. In IFPS15, GFESuite is installed on px1f in /awips/GFESuite/primary directory.

## 5. **Export Configuration Data**

- a. After successfully **installing**, **testing**, and **configuring** IFPS15.2, it is important that you export your site's configuration data to the NDFD central server. Having your site's latest configuration data available on the NDFD central server will greatly facilitate service backup should your site require it. For more information related to exporting your site's configuration data, please visit the following references in the IFPS15 Users Guide:

[http://www.nws.noaa.govmdl/icwf/user\\_guide\\_IFPS15/func/svc\\_backup\\_func.htm#Initiating](http://www.nws.noaa.govmdl/icwf/user_guide_IFPS15/func/svc_backup_func.htm#Initiating)

[http://www.nws.noaa.govmdl/icwf/user\\_guide\\_IFPS15/tech/svc\\_backup\\_tech.htm#ConfigDataExp](http://www.nws.noaa.govmdl/icwf/user_guide_IFPS15/tech/svc_backup_tech.htm#ConfigDataExp)

**NOTE:** If you get an error message that your export file is too big, the following files may be safely removed to make more space available:

- /awips/adapt/ifps/data/\*.bp
- /awips/adapt/ifps/data/\*.shp
- /awips/adapt/ifps/data/\*.shx

## 6. Purging GFESuite Logfiles

a. These commands ***must be entered on px1***

1. `>su ifps` (When prompted, enter your ifps password.)
2. `>cd /awips/adapt/ifps/crontab`
3. `>vi ifps-purge.crontab`
  - a. Edit the find command at the end of the file, so it looks like
    1. `0 12 * * * /usr/bin/find /awips/GFESuite/data/logfiles ...(rest of the line)... rather than looking like 0 12 * * * find /awips/GFESuite/data/logfiles ...(rest of the line)...`
4. `>. /etc/rc.config.d/AWIPS`
5. `>for host in $LX_WORKSTATIONS`  
`do`  
`rsh $host -n \`  
`"/usr/bin/crontab /awips/adapt/ifps/crontab/ifps-purge.crontab"`  
`done`

**PART 4: Deinstall Instructions for IFPS15.2**

Part 4 represents the steps necessary to deinstall (if necessary) IFPS15.2. The deinstall is a radical step and should be considered only as a last resort to get the site back up and running with IFPS. As a result, any deinstall of IFPS15.2 should be carefully coordinated between the site, regional headquarters, Office of Science and Technology, MDL, FSL, and OCCWS.

**NOTE:** Any configuration completed since the IFPS15.2 install will be lost upon completing the deinstall. The system will be returned to the state just prior to the IFPS15.2 install. All forecast digital data will be lost and will need to be recreated.

Please follow the directions listed below.

1. **Notify the NCF**
  - a. Before starting the IFPS15.2 de-install, please open a trouble ticket with the NCF. This will alert MDL that you are about to begin your IFPS de-install. Should you require any assistance with the de-install, a trouble ticket will already be opened.
  
2. **Restore IFPS to the previous build (14.x)**
  - a. Verify that IFPS and WWA are **NOT** running on any workstation in the office. This includes HP as well as Linux workstations.
  - b. Verify that /awips/IFPS\_Release\_ID indicates that the current version of IFPS is 15.2. If it is not, stop. You cannot de-install IFPS15.2.
  - c. Deinstall IFPS15.2.
    - (1) **Save the Forecast data.** During the deinstall of IFPS15.2, the forecast grids will be lost. In order to prevent this data loss the grids must be manually saved off and then restored when the deinstallation has finished.
      - i. Log into **px1** as user **ifps**. Check to see that the ifpsServer and ifpServerWatcher processes are running by typing this command:  
`> ps -fu ifps`

If either process is not running, enter these commands, substituting your site id for 'ccc':  
`> cd /awips/ifps/primary/bin`  
`> start_PX_ifps_servers ccc`  
 If the processes are running proceed to step ii.
      - ii. `> cd /awips/GFESuite/primary/bin`
      - iii. Substitute your site id (in upper case) for 'CCC' and note that there are two (2) underscores following 'GRID':  
`> ./ifpnetCDF -o /data/adapt/SaveFcstDB.cdf \  
 -h px1f -r 98000000 -d CCC_GRID__Fcst_00000000_0000`

- iv. This will produce a file named SaveFcstDB.cdf in your /awips/GFESuite directory. Verify the file is there, and then exit px1.
- (2) If not already inserted, load the CD labeled "IFPS15" into the CD drive on px1
  - (3) Log into a workstation as root, then rlogin into the px1  

```
>rlogin px1
```
  - (4) Start two windows. One to run the commands and the other to stop the script files.
  - (5) In the first window, if not already mounted, mount the CD drive  

```
>mount /mnt/cdrom
>cd /mnt/cdrom
```
  - (6) In the first window, start the script to log install progress  

```
>rsh ds1 -n "touch /home/ncfuser/deinstallIFPS15.2.out"
>rsh ds1 -n "chmod 777 /home/ncfuser/deinstallIFPS15.2.out"
>script -a /home/ncfuser/deinstallIFPS15.2.out
```
  - (7) In the first window, run the installIFPS script with a deinstall option (the script may take a second or two, before it sends information to the terminal screen)  

```
>./installIFPS -d deinstall
```

The deinstallation will now start. It should inform you of what is doing by echoing statements to the screen. There may be several steps that may take awhile without displaying any output. Please be patient, and wait for the script to continue.
  - (8) When the first window returns to the command prompt, the deinstallation has finished. Stop install log using this command:  

```
>exit
```

(It will notify you that script has ended with a date/time stamp)
  - (9) In the second window, review the deinstall IFPS15 log  

```
>cd /home/ncfuser
>more deinstallIFPS15.2.out
```

Look for any errors in the log file. If you have questions about anything related to the de-install process, call the Site Support Team (SST) for assistance. When the de-install is completed, please call the NCF and close the trouble ticket you opened to begin this process.
  - (10) **Restore the forecast data.**
    - i. Log into lx1 as user ifps. Ensure the ifpServer and ifpServerWatcher processes are running by typing.  

```
> ps -fu ifps
```

If either process is not running perform these two commands, substituting your site id for the 'ccc':  

```
> cd /awips/adapt/ifps/bin/linux
> start_LX_ifps_servers ccc
```

ii. > cd /awips/GFESuite/bin

Substitute your site's id (upper case) for the 'CCC' and note that there are two (2) underscores in the following command:

```
> ./iscMosaic -h 1x1 -r 98000000 -d \
CCC_GRID__Fcst_00000000_0000 -z -n -f \
/data/adapt/SaveFcstDB.cdf
```

iii. Move the SaveFcstDB.cdf file to the backup directory:

```
> cd /data/adapt
> mv SaveFcstDB.cdf \
/data/adapt/ifps/backup/
```

(11) If your site has multiple domains configured, you will need to drop domain specific databases using the following **sqlcmd**:

```
> echo "DROP DATABASE ifps-aer" | sqlcmd -d ifps-aer
> echo "DROP DATABASE ifps-alu" | sqlcmd -d ifps-alu
```

**Attachment 1: New/Merge/Replace File List for IFPS15**

The table below tracks changes in the IFPS data files and database tables associated with the transition from IFPS15.x to IFPS15

The following **key** is used in the table.

**Merge** Attempt to preserve edited changes to this file/database table while providing any new information needed for IFPS to run in the IFPS15 environment. The IFP focal point should **back these files up** and **confirm that no site changes were lost during the IFPS15.**

**Replace/Update** This file/database table must be completely replaced in order for IFPS to run in the IFPS15 environment. The IFP focal point should **back these files up** and **be prepared to merge his/her changes into the file once IFPS15 has been installed.**

**Delete** This file/database table was removed during the IFPS15 install.

**New** New files/database tables required for IFPS to run in the IFPS15 environment. There is no additional work required. The IFP focal point may have to customize these files, after IFPS15.2 is installed in order for a particular application to work correctly. For IFPS15.2 details and links to IFPS15.2 Release Notes and the IFPS15 User's Guide, go to:

<http://www.nws.noaa.gov/mdl/icwf/IFPS15.2Full/IFPS15.2Full.html>

**If a particular file/database table is not mentioned in the report below, assume that no changes are occurring during the IFPS15.2 install.**

**File/Database Table****Use Key Above**

~ifps/Xdefaults

Master

New

| <u>File/Database Table</u>          | <u>Use Key Above</u> |
|-------------------------------------|----------------------|
| ~ifps/crontab (/awips/adapt/ifps)   |                      |
| ifps-ccc.crontab                    | New                  |
| ifps-purge.crontab                  | New                  |
| ifps_mosingest_crontab.sh           | Delete               |
| ifps_diskmirror.crontab             | Delete               |
| ~ifps/crontab (/awips/ifps/primary) |                      |
| ifps-combined.crontab               | New                  |
| ifps-grdexport.crontab              | New                  |
| ifps-mosingest.crontab              | New                  |
| ~ifps/localbin                      |                      |
| ifps-ccc.env                        | Merge                |

| <u>File/Database Table</u> | <u>Use Key Above</u> |
|----------------------------|----------------------|
| ~ifps/data                 |                      |
| brisk_jfgdir.ccc           | New                  |
| climo                      | New                  |
| config_bm                  | New                  |
| detail_levels_503.unl      | New                  |
| fixit_breaklock.cfg        | New                  |
| fixit_failover.cfg         | Delete               |
| fixit_main.cfg             | New                  |
| fixit_selector.cfg         | New                  |
| georemap_bm                | New                  |
| ifps_main.cfg              | New                  |
| ifps_wwa.cfg               | New                  |
| igr_bm                     | New                  |
| marine_mask.00             | New                  |
| marine_mask.12             | New                  |
| master_bm                  | New                  |
| period_layout_saf_503.unl  | New                  |
| period_layout_zfp_503.unl  | New                  |
| slider                     | New                  |
| svcbu_export_elements.ccc  | New                  |
| template_sft.503.ccc       | New                  |
| ifps_ccc database          |                      |
| cntrl_const_update.unl     | Merge                |
| const_descr.unl            | Update               |
| geo_groups_descr.unl       | Update               |
| wwa_ccc database           |                      |
| No Changes                 |                      |

The following are some of the scripts in /awips/adapt/ifps/bin/hp and /awips/adapt/ifps/bin/linux that have changed with the IFPS15.2 install. If the IFP focal point has made any adjustments to these script within /awips/adapt/ifps/localbin, they will need to be **merged**.

- Under /awips/adapt/ifps/bin/hp:
  - capture\_off\_words.bat
  - choose\_host

- clean\_up.sh
  - dump\_tdlfs
  - dump\_tdlfs\_controller
  - ifps-main.env
  - myschema
  - new\_fixit.bat
  - new\_wwa.bat
  - run\_ccf\_trans.bat
  - run\_dump\_tdlfs
  - run\_ifps
- 
- Under /awips/ifps/primary/bin:
    - 10\_503\_script.sh
    - Icdf\_message
    - MOSInterp
    - ProgressBar.py
    - add\_stntwr.sh
    - add\_tables.tcl
    - avg\_dfms
    - avi.bat
    - avn\_unldr
    - backup\_static
    - bpfextract
    - breaklock
    - build\_indexes
    - capture\_off\_words
    - ccf\_trans
    - ccf\_trans.bat
    - change\_cwa
    - choose\_domain
    - clean\_svbkup.bat
    - clean\_svbkup.tcl
    - clean\_up.sh
    - cleanup\_svbk
    - cleanup\_temp\_tables
    - config\_cat\_element
    - config\_cntrl\_const
    - config\_edit
    - config\_forecasters
    - config\_fwx\_prods
    - config\_geo
    - config\_geo.bat
    - config\_ifps
    - config\_prodgroup

- config\_proinfo
- config\_wildcard
- copy\_previous\_dfms
- correct\_ifps\_permissions
- cow.bat
- cpydfms
- create\_firewx
- create\_log.tcl
- create\_marine
- create\_progress\_dialog
- create\_temp\_tables
- create\_tempfwx\_tables
- createIFPSdatabase
- createIFPSdatabasesYesterday
- createNewDatabase
- cwa\_change.bat
- cwfes
- cwfes.bat
- cwfca.bat
- cwca\_marine\_no\_working.bat
- cwfca\_no\_working.bat
- cwfes.bat
- detnwrchnges
- detupdchnges
- detupdchnges.bat
- do\_imprt\_grd\_proc
- dumpcombos
- dumpdfms
- dumpgrids
- edit\_dfms
- efpc
- eshef
- eshef.bat
- export\_GFEconfig\_for\_svcbkup
- export\_Xdef\_for\_svcbkup
- export\_bksite\_grid\_data
- export\_datadir\_for\_svcbkup
- export\_dtbase
- export\_files\_for\_svcbkup
- export\_grid\_cron
- export\_grid\_data
- export\_localbin\_for\_svcbkup
- export\_svc\_backup\_data.bat
- fetch\_glerl.bat
- fetch\_nowglerl.bat

- fix\_it.bat
- frmt
- frmt.bat
- frmt\_save\_update.bat
- fwf
- fwm
- fwm.bat
- fwt.bat
- fwx.bat
- fwx\_cwfca.bat
- fwxtab
- georemap
- get\_IFPSver
- gform
- glcfs\_ingest.sh
- glcfs\_nowingest.sh
- grib.bat
- grid2shefb
- hanging\_app.env
- hanging\_app.tcl
- hanging\_app\_warn.env
- hanging\_app\_warn.tcl
- hangingapp
- ics
- ics.bat
- ics.move.bat
- ics.ro.bat
- ics\_fwx.bat
- ics\_marine.bat
- ics\_marine\_move.bat
- ics\_move.bat
- icwf\_msg
- ifps\_config\_menu
- ifpServerWatcher
- ifps\_config\_menu
- ifps\_master\_menu
- igr
- igr.bat
- igr\_fwx.bat
- igr\_stn\_vs\_cmbo.bat
- image.bat
- import\_GFEconfig\_for\_svcbkup
- import\_Xdef\_for\_svcbkup
- import\_datadir\_for\_svcbkup
- import\_dtbase

- import\_files\_for\_svcbkup
- import\_grid\_data
- import\_localbin\_for\_svcbkup
- import\_svc\_backup\_data
- import\_svc\_backup\_data.bat
- ingest\_stn\_guidance.sh
- init\_cwf\_stn\_dfms\_frm\_grd.bat
- init\_cwf\_zone\_dfms\_frm\_grd.bat
- init\_firewx\_stn\_dfms\_frm\_grd.bat
- init\_firewx\_zone\_dfms\_frm\_grd.bat
- init\_glf\_stn\_dfms\_frm\_grd.bat
- init\_glf\_zone\_dfms\_frm\_grd.bat
- init\_marine\_files\_and\_db
- init\_nsh\_stn\_dfms\_frm\_grd.bat
- init\_nsh\_zone\_dfms\_frm\_grd.bat
- init\_off\_stn\_dfms\_frm\_grd.bat
- init\_off\_zone\_dfms\_frm\_grd.bat
- init\_public\_stn\_dfms\_frm\_grd.bat
- init\_public\_zone\_dfms\_frm\_grd.bat
- initmarine
- iur
- iur.bat
- kill\_wwa.sh
- killer
- killit
- launch\_icwf\_product.bat
- lexwx
- list\_cwa\_changes
- list\_cwa\_changes\_zone
- load\_ftable
- load\_prev\_row
- make\_default\_combos
- make\_default\_combos.sh
- maketime
- manual\_detupdchngs.bat
- marine.bat
- marine\_cwfca.bat
- marine\_cwfcs.bat
- mexwx
- mfp
- mk\_brt
- mk\_brt.bat
- mk\_fwx\_dfm.bat
- mk\_new\_tables
- mk\_new\_tables.bat

- mk\_isc\_send
- modclimo
- mos\_maintenance.sh
- mvf
- mvf.bat
- myschema
- new\_table.sql
- no\_fwx.bat
- noaa\_radio.bat
- percent.tcl
- phrstrat
- phrstrat.bat
- prepare\_ftable
- prepare\_grib2
- prepare\_stations.bat
- prepare\_tbls\_for\_db
- prod\_hdr
- proc\_impert\_config\_data
- proc\_impert\_grd\_data
- process\_export\_svc\_backup\_data
- process\_import\_svc\_backup\_data
- propagate\_le
- qc
- rd\_icwf\_site
- rdfs.bat
- rdfz.bat
- re\_ingest.env
- re\_ingest.tcl
- recommend\_wwa.bat
- rerun\_model.bat
- rescan\_zfp.env
- rescan\_zfp.tcl
- restore\_cycle\_tables
- retrieve\_svc\_backup\_data
- rcmd\_remap
- rcmd\_remap.bat
- rm\_combo\_locks
- rmv\_locks
- rmv\_old\_tables
- run\_as
- run\_ccf\_trans.bat
- run\_bpfextract
- run\_gform
- run\_ifps\_lx
- run\_lexwx

- run\_model\_unld\_to\_zns.sh
- run\_stn\_guidance.sh
- run\_tsfp.bat
- runMDLProductGeneration.sh
- saf
- saf.bat
- saf.bat
- save\_cycle\_data
- select\_wfos
- selectMarineProduct.tcl
- sendGridsToNDFD.sh
- setup\_mvf\_for\_svcbkup
- setup\_tsfp\_for\_svcbkup
- sexwx
- shef.bat
- show\_cwa\_changes
- showProgress.py
- sirssrv
- slider
- slider.bat
- sliderParameterSrv
- specifyhangapp
- specifykillsrv
- sqlcmd
- start\_PX\_ifps\_servers
- start\_PX\_ifps\_servers\_for\_svcbkup
- start\_backup\_wwa.bat
- start\_ifpsSvrWtchr
- start\_impvt\_grd
- start\_impvt\_grd\_frm\_bksite
- start\_sirs\_server
- start\_slider\_servers
- start\_sliderParm\_server
- start\_wwa.bat
- start\_wwasetup.bat
- stop\_PX\_ifps\_servers
- stop\_PX\_ifps\_servers\_for\_svcbkup
- stop\_slider\_servers
- stn\_ingest\_controller.sh
- streamsaf.bat
- swap\_lx\_script
- tpinj
- tpinj.bat
- tsfp
- tsfp.bat

- tsfp\_alert
- tsfp\_alert.bat
- tsfp\_cron\_wrapper.bat
- unld\_to\_zns
- unld\_to\_znes.bat
- upd\_dfms\_frm\_grd.bat
- upd\_fwx\_dfms\_frm\_grd.bat
- upd\_marine\_dfms\_frm\_grd.bat
- upd\_stns\_frm\_grd.bat
- update\_cwa\_info
- update\_dbdata
- update\_inherit
- update\_history\_table
- update\_mos
- update\_progress\_dialog
- update\_s2g.bat
- update\_statistics\_ofen
- update\_statistics\_weekly
- updt\_grid.bat
- updt\_map\_proj
- upload\_grib
- wafd
- wafd.bat
- wafp
- wafp.bat
- wccf
- wccf.bat
- wcwf.bat
- wglf.bat
- wnsh.bat
- woff.bat
- wwa\_ifps\_backup.bat
- wwainj
- wwarcmd
- zfp
- zfp.bat

**Attachment 2: IFPS15.2 Install Space**

**NOTE:** The install space requirements for IFPS15.2 are outlined in the table below. All sizes are in kilobytes (KB). If you do not have sufficient space in any of the partitions listed below, please contact the Site Support Team (SST) at 301-713-9362x325 for assistance in identifying files that may be safely deleted.

**Sites without Multi-domain configuration:**

|                  | <b>Host</b> |           |           |           |         |
|------------------|-------------|-----------|-----------|-----------|---------|
| <b>Partition</b> | ds1         | lx1       | lx2       | px1       | px2     |
| /awips/ifps      | -           | 300,000   | 300,000   | 300,000   | 300,000 |
| /awips/GFESuite* | -           | 1,500,000 | 1,500,000 | 1,500,000 | -       |
| /awips/adapt     | 80,000      | -         | -         | -         | -       |
| /data/adapt      | 1,300,000   | -         | -         | -         | -       |

**\*NOTE:** For lx# (where # = 1, 2, 3, 4, ...), the available install space should be at least 500,000.

**Sites with Multi-domain configuration:**

|                  | <b>Host</b> |           |           |           |           |
|------------------|-------------|-----------|-----------|-----------|-----------|
| <b>Partition</b> | ds1         | lx1       | lx2       | px1 & px3 | px2 & px4 |
| /awips/ifps      | -           | 300,000   | 300,000   | 300,000   | 300,000   |
| /awips/GFESuite* | -           | 1,500,000 | 1,500,000 | 1,500,000 | -         |
| /awips/adapt     | 80,000      | -         | -         | -         | -         |
| /data/adapt      | 1,400,000   | -         | -         | -         | -         |

**\*NOTE:** For lx# (where # = 1, 2, 3, ...), the available install space should be at least 500,000.

**Attachment 3: Sample IFPS Install Log File**

A Sample IFPS Install Log File is available at the following URL:

- <http://www.nws.noaa.gov/mdl/icwf/IFPS15.2Full/installIFPS15.2.out>

**Attachment 4: Customer Support Team (CST) Contact List**

- [Iris.Boon@noaa.gov](mailto:Iris.Boon@noaa.gov)  
(301) 713-0224 x 145
- [Carl.McCalla@noaa.gov](mailto:Carl.McCalla@noaa.gov)  
(301) 713-1065 x 169
- [Edward.Mandel@noaa.gov](mailto:Edward.Mandel@noaa.gov)  
(301) 713-1768 x 153