OHD-CORE-23.1.1 Install Instructions

Release Date: 11/29/24
Release Type: Scheduled
CHPS Build: 24.1.1
OHD-CORE Build: 23.1.1
OHD-CORE Build and Package Date: 11/5/2024
Tested against FEWS: 2023.02 build 135114, patched from 130690

Introduction

These instructions describe the installation procedure to update OHD-CORE. If you have any questions during the installation, please contact the CHPS Support Group (part of the Field Support and Infrastructure team in the Office of Central Processing). The following sections are included to guide one through the installation steps and, if necessary, rolling back an installation.

With this release there is an installation script (*ohd_core_install.sh*)   to automate the process of installing OHD-CORE. You will find instruction below to install using this script.

Installation Instructions

1. Install the OHD-CORE-23.1.1 Package
2. Standalone Installation and Testing
3. Operator Client Installation and Testing for Dev/Test purposes
4. FEWS Forecast Shell Installation and Testing for Dev/Test purposes
5. FEWS Forecast Shell Installation for your Operational systems
6. Roll out update to all Operator Client

Rolling Back an OHD Release

1. Stand Alone (SA)
2. Operator Client (OC)
3. FEWS Forecast Shell (FSS)

The ohdPlugins directory (../OHD-CORE-23.1.1/ohd/plugins) includes a script for executing OHD plugins (e.g. graphics generator) named *fews_ohdPlugins.sh*. This is a modified fews.sh script and the contents added by OWP **MUST** be used for starting up FEWS with an OHD plugin. You can either use our script to start FEWS or alternatively you can add the contents in between *# start - added for running ohd-plugins* and *# finish - added for running ohd-plgins* to your default *fews.sh* script.

Commands that have to be entered will be displayed in a fixed width font like this:
```
$ ls –l /awips/chps_share/
```

Note: Logs for each script can be found here:
```
/awips/chps_share/install/CHPS-24.1.1/installScripts/logs
```

Assumptions

It is assumed that the RFC is at FEWS 2023.02 build 135114, patched from 130690 and OHD-CORE-22.1.1.

New Elements

None

Installation Instructions using the ohd_core_install.sh Script

1. Retrieve and Install the OHD-CORE-23.1.1 package

1.1. Log in to an LX workstation as user *fews*. Navigate to the CHPS- 24.1.1 directory.
```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
```

1.2. Run the install script to untar the package (which was included in the CHPS- 24.1.1 tar file 'pushed' by AWIPS):
```
$ sudo -u fews ./ohd_core_install.sh
```

1.3. (optional) Edit the fews_ohdPlugins.sh script (located in /awips/chps_share/install/CHPS- 24.1.1/OHD-CORE-23.1.1/ohd/plugins) to incorporate your current –Xmx values.
```
$ sudo -u fews ./ohd_core_install.sh xmx <Xmx value>
Example: $ ./ohd_core_install.sh xmx 2048
```

1.4. From here on the path /awips/chps_share/install/CHPS- 24.1.1/OHD-CORE-23.1.1 will be referred to as <23.1.1>.

1.5. Once complete, you may move onto standalone installation and testing.

2. Standalone Installation and Testing

2.1. Log in to an LX workstation as your user.

2.2. Create an up-to-date Standalone client for testing.

2.3. Run the install script to make a link to point to the downloaded software inside the SA's Models directory.
```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ ./ohd_core_install.sh sa </path/to/your/test/sa/Models/ohd>
```

2.4. Verify the SA global properties file points OHDBINDIR to the *bin* in the above step.

2.5. Test to make sure all workflows complete as expected. Raise any issues with CHPS Support Group through Redmine. You may move onto the next step once satisfied with Standalone testing.

*3. Operator Client Installation and Testing for **Dev/Test** purposes*

NOTE: These instructions will walk you through installation and testing using a Dev/Test system. **Perform these actions using your Dev/Test OC Client.**

3.1. Log in to an LX workstation.

3.2. Verify that your Dev/Test OC client is set up properly for testing. (See the CHPS Support Group VLab article https://vlab.noaa.gov/group/chps/wiki/-/wiki/How-Tos/Configure+an+OC+for+DevTest(789)+System on how to *Configure an OC for DevTest(789) system*).

3.3. Run the install script to make a link to point to the downloaded OHD-CORE software under the OC's Models directory.
```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ ./ohd_core_install.sh dev oc </path/to/your/test/oc/Models/ohd>
```

3.4. Update and Upload OC global.properties file under the RootConfig files:

```
OHDBINDIR=/awips/chps_share/install/CHPS-24.1.1/OHD-CORE-23.1.1/ohd/bin
OHD_SCRIPTS_DIR=/awips/chps_share/install/CHPS-24.1.1/OHD-CORE-23.1.1/ohd/scripts
```

Note: Please also update the NWC FSS and OC global.properties to point to the new OHD-CORE. Refer to the following wiki for location and changes:
https://vlab.noaa.gov/redmine/projects/owp-rfc-service-backup/wiki/UPGRADE_TO_FEWS_202202_FROM_202102#1-Update-FSS-global-properties-xxxmcnwc_fss_globalproperties

3.5. Test to make sure all workflows complete as expected. Raise any issues with CHPS Support Group through Redmine. Install on your Dev/Test FSS once satisfied with Dev/Test OC testing.

4. *FEWS Forecast Shell Installation and Testing for **Dev/Test** purposes*

NOTE: These instructions will walk you through installation and testing on a Dev/Test system. **Perform these actions on your Dev/Test system.**

4.1. Log in to your Dev/Test system's FSS machine (usually chps9).

4.2. Check the Admin Interface if any tasks are running at the FSSs. If no tasks are running, run the install script with the following command.
```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./chps_setEnvironment.sh
$ sudo -u fews ./ohd_core_install.sh fss
```

4.3. Test to make sure all workflows complete as expected. Raise any issues with CHPS Support Group through Redmine.

5. *FEWS Forecast Shell Installation for your **Operational systems***

NOTE: These instructions will walk you through installation on your Operational Systems. **These actions will affect your Primary and Secondary (backup) Operational systems.**

5.1. Log in to your **Primary Operational system's FSS machine** (usually chps3) as user *fews*.

5.2. Check the Admin Interface if any tasks are running at the FSSs. If no tasks are running, run the install script with the following command.
```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./chps_setEnvironment.sh
$ sudo -u fews ./ohd_core_install.sh fss
```

5.3. Test to make sure all workflows complete as expected. Raise any issues with CHPS Support Group through Redmine.

5.4. Repeat steps 5.1 through 5.3, this time logging into your **Secondary (backup) Operational system's FSS machine** (usually chps6).

6. *Roll out update to all Operator Client*

Once the tests with the Operator Client are satisfying, the OHD-CORE binaries can be rolled out to all OCs.

NOTE: These instructions will walk you through installation on your Operational systems. **These actions will affect your Primary and Secondary (backup) Operational systems.**

6.1. Log in to an LX workstation as user *fews*.

6.2. Run the install script with the following command to install.

```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./ohd_core_install.sh oc
```

6.3. Create a link for the OHD FEWS plugins at the same level as the FEWS bin and jre if not already there.

```
$ cd /awips/chps_share/oc/<user>
$ sudo -u fews ln -s /awips/chps_share/ohd/plugins ohdPlugins
```

6.4. Test to make sure all workflows complete as expected. Raise any issues with CHPS Support Group through Redmine.

Rolling Back an OHD Release using the ohd_core_install.sh Script

In the case where the OHD release needs to be rolled back to a previous version:

Log in to an LX workstation as user *fews*.

1. For an SA, delete the new bin and plugin links, and restore the old links and references in your SA global properties to the previous release (i.e. bin_22.1.1). Run the script with the following command.

```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./ohd_core_install.sh rollback sa </path/to/your/test/sa/Models/ohd>
```

2. For an OC, delete the new bin and plugins directories, restore the old bin and plugins. Run the script with the following command.

```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./ohd_core_install.sh rollback oc
```

3. For your FSS, stop the shell servers, delete the new bin and plugins directories, and restore the old bin and plugins. Finally, restart the shell servers. Run the script with the following command.

```
$ cd /awips/chps_share/install/CHPS-24.1.1/installScripts/
$ sudo -u fews ./ohd_core_install.sh rollback fss
```