**GFE File System Layout**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#GFEFileSystemLayout)

**Note**: This page is currently under construction - check back for updates!

The following describes the GFE File System for AWIPS-2, which is markedly different than AWIPS-1.

**AWIPS-2 Directory Structure**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#AWIPS-2DirectoryStructure)

**Server Configuration File Directories**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#ServerConfigurationFileDirectories)

GFE server configuration files, which includes localConfig.py, siteConfig.py, and smart inits, are only located on the EDEX cluster in the following directories:

/awips2/edex/data/utility/edex\_static/site/XXX/config/gfe/ - localConfig.py & siteConfig.py

/awips2/edex/data/utility/edex\_static/site/XXX/smartinit/ - smart inits

These files must be edited/created directly on the system. Changes to localConfig.py and siteConfig.py require a GFE server reactivation - <https://collaborate.nws.noaa.gov/trac/siteconfig/wiki/GfeActivateSite>

**Tools, Procedures, Utilities, Formatters, gfeConfig Directories**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#ToolsProceduresUtilitiesFormattersgfeConfigDirectories)

These file types should be edited/created using the Localization Perspective, which handles files permissions, syntax, and location properly. Use of the Localization Perspective lessens the need for extensive knowledge of the GFE file structure.

**BASE Files**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#BASEFiles)

The concept of "BASE" files has changed some in AWIPS-2, and these files are now split into two categories:

* **BASE** - files with no site-specific data installed in the /usr/local/viz/cave/etc/gfe directory on the workstations. Since they should never need to be changed, they are not stored on the EDEX servers.
* **Configured** - files with site-specific data (i.e. - Formatter "Definition" files) created by EDEX. Since these files contain site-specific information, they are stored on the EDEX servers in the following locations:

/awips2/edex/data/utility/common\_static/configured/XXX/gfe/ - Edit Areas, Edit Area Groups, Sample Sets

/awips2/edex/data/utility/cave\_static/configured/XXX/gfe/ - Combination Files, Text Formatters

**SITE Files**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#SITEFiles)

SITE and USER versions of these are found on the EDEX cluster and workstations:

* **EDEX cluster** - files are stored for access by all users and workstations
* **Workstation caveData directory** - used as a cache for CAVE localization. **Files in caveData should not be manually modified or created**, as these changes will not be shared with EDEX, and will be lost if the directory is deleted.

SITE-level files on the EDEX cluster (XXX is the Site ID):

Smart Tools - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/smartTools/

Procedures - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/procedures/

Text Products - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/textProducts/

Text Utilities - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/textUtilities/

Utilities - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/utilities/

gfeConfig - /awips2/edex/data/utility/cave\_static/site/XXX/gfe/userPython/gfeConfig/

SITE-level files on the workstation (XXX is the Site ID, user.id is the user running the CAVE session):

Smart Tools - /home/user.id/caveData/etc/site/XXX/gfe/userPython/smartTools/

Procedures - /home/user.id/caveData/etc/site/XXX/gfe/userPython/procedures/

Text Products - /home/user.id/caveData/etc/site/XXX/gfe/userPython/textProducts/

Text Utilities - /home/user.id/caveData/etc/site/XXX/gfe/userPython/textUtilities/

Utilities - /home/user.id/caveData/etc/site/XXX/gfe/userPython/utilities/

gfeConfig - /home/user.id/caveData/etc/site/XXX/gfe/userPython/gfeConfig/

USER-level files on the EDEX cluster (user.id is the user running the CAVE session):

Smart Tools - /awips2/edex/data/utility/cave\_static/user/user.id/gfe/userPython/smartTools/

Procedures - /awips2/edex/data/utility/cave\_static/user/user.id/gfe/userPython/procedures/

Text Products - /awips2/edex/data/utility/cave\_static/user/user.id/gfe/userPython/textProducts/

Text Utilities - /awips2/edex/data/utility/cave\_static/user/user.id/gfe/userPython/textUtilities/

Utilities - /awips2/edex/data/utility/cave\_static/site/user/user.id/userPython/utilities/

gfeConfig - /awips2/edex/data/utility/cave\_static/site/user/user.id/userPython/gfeConfig/

USER-level files on the Workstation (user.id is the user running the CAVE session):

Smart Tools - /home/user.id/caveData/etc/user/user.id/gfe/userPython/smartTools/

Procedures - /home/user.id/caveData/etc/site/user/user.id/userPython/procedures/

Text Products - /home/user.id/caveData/etc/user/user.id/gfe/userPython/textProducts/

Text Utilities - /home/user.id/caveData/etc/user/user.id/gfe/userPython/textUtilities/

Utilities - /home/user.id/caveData/etc/user/user.id/gfe/userPython/utilities/

gfeConfig - /home/user.id/caveData/etc/user/user.id/gfe/userPython/gfeConfig/

**AWIPS-1 Directory Structure**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#AWIPS-1DirectoryStructure)

dx:/awips/GFESuite/primary/data/databases/BASE/TEXT/Procedure

dx:/awips/GFESuite/primary/data/databases/BASE/TEXT/TextProduct

dx:/awips/GFESuite/primary/data/databases/BASE/TEXT/TextUtility

dx:/awips/GFESuite/primary/data/databases/BASE/TEXT/Tool

dx:/awips/GFESuite/primary/data/databases/BASE/TEXT/Utility

dx:/awips/GFESuite/primary/data/databases/SITE/TEXT/Procedure

dx:/awips/GFESuite/primary/data/databases/SITE/TEXT/TextProduct

dx:/awips/GFESuite/primary/data/databases/SITE/TEXT/TextUtility

dx:/awips/GFESuite/primary/data/databases/SITE/TEXT/Tool

dx:/awips/GFESuite/primary/data/databases/SITE/TEXT/Utility

dx:/awips/GFESuite/primary/data/databases/<user>/TEXT/Procedure

dx:/awips/GFESuite/primary/data/databases/<user>/TEXT/TextProduct

dx:/awips/GFESuite/primary/data/databases/<user>/TEXT/TextUtility

dx:/awips/GFESuite/primary/data/databases/<user>/TEXT/Tool

dx:/awips/GFESuite/primary/data/databases/<user>/TEXT/Utility

**sys.path[¶](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories" \l "sys.path" \o "Link to this section)**

The SmartTool interpreter passes the following path elements to <cave>/etc/gfe/userPython/utilities/SmartToolInterface.py, giving it access to the following python code

* caveData/common/base/python
  + BaseTool.py
  + DecoderInterface.py
  + JUtil.py
  + LogStream.py
  + MasterInterface.py
  + PyLogStream.py
  + UnitConvertor.py
* caveData/common/base/python/gfe
  + AbsTime.py
  + DatabaseID.py
  + ParmID.py
  + TimeRange.py
* caveData/etc/user/<user>/gfe/userPython/smartTools (gui created tools go here). e.g.,
  + !AdjustValue\_Down.py
  + MyTool.py
* <cave>/etc/gfe/userPython/utilities
  + CombinationsInterface.py
  + Exceptions.py
  + HazardUtils.py
  + MessageBox.py
  + ProcedureInterface.py
  + ProcessVariableList.py
  + ProductParser.py
  + SmartScript.py
  + SmartToolInterface.py
  + VTECPartners.py
  + VTECTable.py
  + WarningVtec.py
  + WxMethods.py
* <cave>/etc/gfe/userPython/smartTools
  + !AdjustValue\_Down.py
  + !AdjustValue\_Up.py
  + Assign\_Value.py
  + HeatIndexTool.py
  + MaxRH\_Tool.py
  + MaxT\_SmartTool.py
  + MinRH\_Tool.py
  + MinT\_SmartTool.py
  + QPF\_SmartTool.py
  + RHTool.py
  + Smooth.py
  + !SnowAmt\_SmartTool.py
  + WindChillTool.py
  + WindGustFromAlgorithm.py
  + !WindGust\_Tool.py

**test cases (r1g1-6)**[**¶**](https://collaborate.nws.noaa.gov/trac/ncladt/wiki/BaseSiteUserDirctories#testcasesr1g1-6)

1. Creating text products
   * Open the GFE perspective
   * Click GFE->Define Text Products...
   * Create a new text product named "AAATest" and select the Smart product type
   * Verify no errors are thrown when opening the new product
   * Close the Localization perspective that opens
   * Delete the AAATest product
2. Built-in formatter script regression checks
   * Launch the Formatter Launcher.
   * Verify you can create products of the existing types, like ZFP or one of the hazard products and no errors occur.
3. User product manipulation
   * Click GFE->Define Text Products...
   * Create a new text product named "AAATest".
   * Close the Localization perspective that opens.
   * Verify that AAATest appears as a product that can be generated using the formatter launcher.
   * Go back to the Define Text Products window and delete the AAATest item. Ensure the confirmation window that appears states that this product does not appear at any other Localization level.
   * Ensure AAATest has been removed from the list of available text products.
4. Creating site-level products
   * Create a new text product named "AAATest".
   * Add a distinctive comment to this file, save the file, and then close the Localization perspective.
   * Right-click on AAATest and click on Make SITE.
   * Verify your file exists at ~/caveData/etc/site/OAX/gfe/userPython/textProducts/modified/AAATest.py.
   * Create another new text product named "AAATest".
   * Click OK on the Confirm Override window that appears.
   * Add a distinctive comment to this file (different than the one used above), save the file, and then close the Localization perspective.
   * Right-click on AAATest and click on View.
   * The file that opens in the Localization editor should contain the second comment you used.
   * Close the Localization perspective and return to GFE.
   * Right-click on AAATest and click Make SITE Override.
   * Ensure you have an AAATest and AAATest\_OVERRIDE item in your text products list.
   * Create a new text product named "AAATest".
   * Click OK on the Confirm Override window that appears.
   * Close the Localization perspective that opens and return to GFE.
   * Delete the AAATest item. Ensure the confirmation window that appears states that this product also appears at the SITE level.
   * Ensure AAATest has not been removed from the list of available text products.
   * Confirm that no option appears to delete the remaining AAATest and AAATest\_OVERRIDE items.
5. Overriding built-in products
   * Create a new text product named "AFD" and select the Smart product type.
   * Click OK on the Confirm Override window that appears.
   * Close the Localization perspective and return to GFE.
   * Right-click on AFD and click on Make SITE.
   * Verify your file exists at ~/caveData/etc/site/OAX/gfe/userPython/textProducts/modified/AFD.py.
   * Create a new text product named "AFD" and select the Smart product type.
   * Click OK on the Confirm Override window that appears.
   * Add a distinctive comment to this file, save the file, and then close the Localization perspective.
   * Verify your file exists at ~/caveData/etc/user/dgilling/gfe/userPython/textProducts/AFD.py.
   * Right-click on AFD and click on Make SITE.
   * Verify a Confirm Overwrite window appears stating the file is already at site level. Click OK.
   * Right-click on AFD and click View. Verify it contains the comment you added above.

NOTE: site admin functionality is not yet available. To delete all site products,

1. Ensure CAVE is not running.
2. On your local workstation, delete contents of ~/caveData/etc/site/<site>/gfe/userPython/textProducts/modified.
3. From edex server, delete contents of awips/edex/data/utility/cave\_static/site/<site>/gfe/userPython/textProducts/modified.