Installation Guide for

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A GFE Procedure within CAVE
Updated February 2017

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Prototype release

┌─ Outline ───┐
│   │
│   Getting Started User's Guide 🗒   │
│   Software Installation Guide   │
│   Events Guide 🗒   │
│   │
└──┘

Installation Guide

※ *Note, the FEAT tool depends on the Python AWIPS Data Access Framework (DAF) to operate properly.*
*In **AWIPS Build 16.4**, the DAF works as expected. We recommend waiting until your site has upgraded to OB16.4 before installing FEAT.*

Step 1 Download the installation script from the scp. Or, here: FEAT installation featInstall.csh script

Step 2 Download the python software package from the scp. Or, here: FEAT python software gzip tar file (31 Jan 2017)
Confirm the contents of the gzip tar file here: tar file list

Step 3 Run the install script **featInstall.csh** to unpack and install software on an **AWIPS CAVE px2** system. This step will take well a few minutes. There is no config file for the GUI portion.

— The CAVE GFE FEAT is ready. It runs with case data or realtime data.
— Once the tar file has been unpacked, change your default directory to cd $LOCALAPPS_RUN/FcstEventAwareness/

Step 4 File a2SITEpx2cron.Update contains the command (below) to run the data mining software.
Add this cron command to 'gfecron' or, simply run at the command line to generate Event data for FEAT.

> **cd $LOCALAPPS_RUN/FcstEventAwareness**
> **/awips2/python/bin/python src/GenerateEvents.py > logs/generateEvents.log**

Step 5 See the Getting Started User's Guide 🗒

Module Descriptions

~ CAVE GFE Procedures ~

ForecasterEventAwareness.py (top level): - CAVE GUI software to alert the forecaster via visual cues to weather events of significance within the forecast grids. *'import AwarenessEvents'*

> **AwarenessEvents.py** - See below.

EditAreaMakeRepo.py (top level): - To be used once to extract your SITE edit areas into .npz, python data files. Completed automatically with a call to runProcedure. *import EditAreasUtilities.py*

> **EditAreasUtilities.py** - Utility to extract edit area information into data files.

~ System Software ~

GenerateEvents.py (top level script): - This code generates Event Data files usually via cron, outside of CAVE. *import AwarenessEvents, FcstEventConfig, FcstEventDataAccess as fda, EditAreasUtilities.py*

> **AwarenessEvents.py** - This is the python data constructor that accesses data to write, then read the FEAT data files. Also used with the CAVE GUI code. *import some Standard python libraries*

> **FcstEventConfig.py** - This is used to define FEAT event rules. See Events Guide ⧉

> **FcstEventDataAccess.py** *import GFEDataAccess.py*

> **GFEDataAccess.py** - Code to access forecast grids *import standard python libraries, 'from ufpy.dataaccess import DataAccessLayer as DAL'*

> **EditAreasUtilities.py** - Utility to process edit area information.

ReadEvents.py (optional): - Code to read and confirm data files were created correctly. *'import AwarenessEvents'*

> **AwarenessEvents.py** - See above.