

Better Webicorders

From PNSNWikiDocs

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Better Webicorders

Better webicorders looks to leverage the map interface of google maps, with the webicorder capabilities of the winston to

1. Simplify the generation of webicorders
2. Make all stations available in a webicorder plot

The page is located at this address:

[http://www.pnsn.org/WEBICORDER/BETTER/pnsn_staweb/index.html]

Nuts and Bolts

- Webicorder scripts are run on grasso obtaining data from winston on pele running scripts and and saving image data on spike.
- Better webicorders runs out of two directories:
 1. /spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/ARCHIVE
 - Directory for static images generated using a crontab
 2. /spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/pnsn_staweb
 - Directory for the javascript and html codes

Note: /spikehome/HTML is mounted on grasso:/auto/HTML

Generation of Static Images

The generation of static images is run on the crontab on grasso under user eworm. Two csh scripts are used

1. /earthworm/webi2scripts/get10minWebi.csh
 - This code runs once an hour (originally meant to run every 10 minutes) and generates new static images for the 12 and 24 hour webicorder plots
2. /earthworm/webi2scripts/getDailyWebi.csh
 - This code runs once a day (just after the UTC day) and generates a new webicorder for the previous day

Generation of Station Locations

Station locations are generated by querying the winston database for the stations that exist. The stations within the database are then compared to wash2.sta for the latitude and longitude of the station. An xml file is output. The file is called

```
spike:/web/SEIS/PNSN/WEBICORDER/BETTER/pnsn_staweb/sta_files/makePNSNxml.m
```

and is run out of matlab. Steve reports that this script no longer works. It would be useful for the author to check this and clarify the usage instructions, fix errors or delete this section as appropriate.

Alternatively, this can be done without matlab using makePNSNxml.py on any machine that has access to pele's database and has python with the MySQLdb module installed. Unlike the matlab script the python version makes an effort to choose the best channel on a given station for display, rather than the last one returned by the database.

makePNSNxml.py is under version control in the /svn/webi2/webicorder/pnsn_staweb/sta_files directory. Currently, the pele MySQL database can only be accessed from pele. For this reason, a current copy of this script will be kept in pele:/earthworm/Winston1.1/python/. The latest version has been enhanced to install the resulting xml file on

/spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/pnsn_staweb/purplepig/sta_file.xml. To implement, log into pele as eworm and switch into Winston1.1/python and execute:

```
makePNSNxml.py -i
```

You will be asked for the earthworm password on spike.

Both the matlab and python scripts are in the svn repository described below.

adding a new station

The station list is ultimately derived from the winston database. For this reason, the first step in adding a new station to webi2 is making sure the metadata in pele's winston is up to date. This can be done on pele by executing /earthworm/Src/python/updateWinstonMetadata.py as eworm.

The next step is updating sta_file.xml. Generation of this file is described in the #Generation of Station Locations section. Once generated, this file must be put in the /spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/pnsn_staweb/purplepig/ directory.

Once this is all done, you will have to wait for the cron script to copy results to the actual public-facing machines (PNSN01 and PNSN02) before you can find out if it works.

Files of Interest

The main directory (/spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/pnsn_staweb) for html and javascript is broken up into several self-described directories.

- index.html
 - Drives the layout and makes calls to the main program, plot_stations.
- js_scripts/plotStations.js
 - The main program for generating
 1. Station markers
 2. html webicorder links
 3. pdf links (optional)
 4. sidebar (optional)

Starting from scratch

- Run makePNSNxml.m from matlab (see "Generation of Station Locations")
- Move xml_file.xml from sta_files/ to purplepig/
- Update server and port in
 - /earthworm/webi2scripts/get10minWebi.csh
 - /earthworm/webi2scripts/getDailyWebi.csh
- Modify plotStations.js with the correct server and port

Subversion repository

The core software behind the new webicorders is maintained in a subversion repository on onyx.

/svn/webi2 - svn repository root

/scripts - script files for installation in grasso:/earthworm/webi2scripts.

/get10minWebi.csh
getDailyWebi.csh

/webicorder - files for installation in /spikehome/HTML/SEIS/PNSN/WEBICORDER/BETTER/

/ARCHIVE - empty placeholder directory. Do not add archive contents to repository!
/pnsn_staweb - all scripts, style sheets, images, etc.

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