Using arclink data for SH's inventory

Using the script `fetch_build_inventory.py` ([download](#)) you can transfer the meta data information from arclink into the Seismic Handler's inventory. This script is located in recent installation in the directory `$SH_UTIL/inventory`.

**Prerequisites**

The script uses _ObsPy_. Please make sure that you have `obspy.core` and `obspy.arclink` installed.

**Usage**

Information is saved into `STATINF.DAT`, `sensitivities.txt` and `filter_lookup.txt` in `/tmp/`. You should check these files before you append the content to your regular input data in `$SSH_INPUTS`. Then copy the transfer function files into `$SH_FILTERS` and start the creation of the simulation filters (see also simulation filters how-to).

Here's an example for GR.GRA1:

```
$ python fetch_build_inventory.py

Arclink Seismic Handler inventory tool

Your e-mail address for arclink query: walther@szgrf.bgr.de

Please enter the network and station code. It may contain wildcards, e.g. 'EI.*' for the whole irish network or 'GR.GRA1' for Graefenberg A1.
Enter code: GR.GRA1
Fetched data for 1 stations.
Fetched data for 9 channels.

Saving station information to /tmp/STATINF.DAT...
GR.GRA1

Saving sensitivity information to /tmp/sensitivities.txt...
GR.GRA1..HHN
GR.GRA1..LHN
GR.GRA1..HHE
GR.GRA1..BHZ
GR.GRA1..LHE
GR.GRA1..LHZ
GR.GRA1..BHE
GR.GRA1..HHZ
GR.GRA1..BHN

Saving filter information to /tmp/filter_lookup.txt...
GR.GRA1..HHN
GR.GRA1..LHN
GR.GRA1..HHE
GR.GRA1..BHZ
GR.GRA1..LHE
GR.GRA1..LHZ
GR.GRA1..BHE
GR.GRA1..HHZ
GR.GRA1..BHN
```

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Now check the files in /tmp/. Afterwards append the information to the corresponding files in $SH_INPUTS. Alternatively configure additional input locations. Copy the transfer function files to $SH_FILTER.

In order to create simulation filters (e.g. WWSSN-SP), run the following commands:

```bash
$SH_UTIL/prep_simfilters.csh 3D842A
$SH_UTIL/prep_simfilters.csh E6D9F0
$SH_UTIL/prep_simfilters.csh 3C01AF
```

You can also pass your email address and station code on command-line:

```bash
$ python fetch_build_inventory.py walther@szgrf.bgr.de gr.wet
```

You can fetch information for a whole network using wildcards like 'EI.*' (irish network).

**Notes**

1. The script tries to create a minimum number of transfer functions.
2. The names of the transfer functions are random generated but not necessarily unique. If you use this script several times, please check for conflicts before copying into $SH_FILTERS
3. The script doesn't make use of wildcard options available in sensitivities.txt and filter_lookup.txt (e.g. GRA1-BH-?). So every channel is represented by one configuration line.
4. Please enter a valid email address for arclink access to allow the data centers to monitor and improve their service.