Section:	Internals/Trigger

This section describes the trigger merger included in OMNI.

The trigger merger works on network. Two lists of stations are defined for each network : the first defines the pool of station that provide individual trigger files ; the second defines the pool of stations that provide data. The lists are not necessarily related. For each array, a directory must be created in the Trigger/ directory. The only file of the array directory that should be modified is 'config'. Here is a sample file (comments start with '#') :

```
###############################################################
# list of stations used for the input trigger files
STATIONS="PLN STDO LML RIEUX"
# list of station of the array
ARRAY="PLN STDO LML RIEUX"
# number of triggers within the window
MINSTATIONS=3
# length of the moving window
WINDOWLENGTH=40
# how long should triggers be ignored after a valid trigger
IGNORELENGTH=30
# Pre event
PREEVENT=120
# Post event
POSTEVENT=300
###############################################################
```

- STATIONS defines the first list (the stations providing their trigger list)
- ARRAY defines the second list (the pool of stations providing data)
- MINSTATIONS is the minimum number of simultaneously triggering in a given time window
- WINDOWLENGTH is the length of the time window mentioned above
- IGNORELENGTH avoids repeated triggers, it should be smaller than WINDOWLENGTH
- PREEVENT and POSTEVENT define the data request after a positive trigger

The other files all begin with "`trig.`" so after so change, they can be easily removed.

When a positive trigger is detected, a data request is built after the name of the network and the trigger time. Then the request is processed as regular requests.