

The SeisComP AutoDRM Package

- is based on the present Swiss AutoDRM package (3.00beta),
- is upgraded to support some GSE2.1 features and to handle SEED waveforms as binary attachments.

Present SeisComP AutoDRM features:

- understands GSE1.0, 2.0 and 2.1 syntax, but GSE2.1 is preferred,
- returns inventory information (network, station, channel) only in GSE2.1 format,
- returns only full SEED waveform data – no GSE!
- returns no GSE response information, since response information is included in full SEED,
- supports SDS (SeisComP Data Structure) as archival structure

Planned features:

- to support arbitrary archive structures by implementation of interface to ArcLink,
- to support response return as dataless SEED volume (feature to be discussed within FDSN),
- waveform return in GSE ASCII formats (volunteers needed),
- response return in GSE format (volunteers needed).

Basic SeisComP AutoDRM Commands

GSE2.x-request.	This command causes this AutoDRM to respond in the 'GSE2.1-AutoDRM-language'.
MSG_TYPE request	Should be the second line of a request, if user wants to follow GSE2.x formats. This line is optional on this AutoDRM but not at others.
MSG_ID your_msg_id source_id	Third line of a request message, if user wants to follow GSE2.x formats. The message_ID of the sender; may be up to 20 characters long. This message_id and the source_id will appear as the reference_id (REF_ID) in the response! The source_id's are specified in the GSE2.x documentation (max. 7chars). This line is optional on this AutoDRM but not at others.
E-MAIL email@address.of.the.user	E-Mail address where response should be sent to (EMAIL or E_MAIL is also understood).
HELP	Sends the information (User's Guide) printed here (GUIDE and INFOR are also understood).
FTP email@address.of.the.user	Instead of the 'E-MAIL' command: Sends only short note via e-mail to the requestor and stores the response locally on ftp-directory.
TITLE your subject	The response mail returned to you will have the subject you specify here; if not specified, a default subject is used (SUBJE is also understood).
STOP	This must be the last line of any request

Environmental commands

TIME [StartDateTime] TO [EndDateTime] Definition of Start- and End-DateTime, Format: 1994/02/24
16:23:50.20

If EndDateTime is omitted, the current DateTime is assumed.

NET_LIST AB [,CD] [,EF]

Definition of FDSN network codes. Defaults: *

STA_LIST ABC [,DEFG] [,HIJK]

Definition of stations desired (multiple station codes must be separated by commas). Default: *

CHAN_LIST SHZ [,SHN] [,SLZ]

Definition of channels desired in SEED convention (multiple channel IDs must be separated by commas). Default: *Z

AUX_LIST [aux1] [,aux2]

Definition of SEED location codes (GSE terminology: 'auxiliary' ID's)
Format: e.g. 00, 10, 20 (multiple auxiliary IDs must be separated by commas). Default: *

Request commands

NETWORK GSE2.1	Get network info for specified networks (specify by using NET_LIST environment command).
STATION GSE2.1 (or GSE2.0)	Get station-info for specified stations (specify by using NET_LIST and STA_LIST environment commands).
CHANNEL GSE2.1 (or GSE2.0)	Get channel-info for specified channels (specify by using NET_LIST, STA_LIST and CHAN_LIST, AUX_LIST environment commands).
OUTAGE GSE2.1 (or GSE2.0) NET_LIST,	Get outage-info on specified channels (specify by using TIME and STA_LIST, CHAN_LIST, AUX_LIST environment commands).
WAVEFORM SEED	Get waveforms for specified Time/Channels (specify by using TIME and NET_LIST, STA_LIST, CHAN_LIST, AUX_LIST environment commands). Waveforms are supplied from the continuous recordings in the SeisComP archive structure.

Example:

Command-line sent to AutoDRM:

```
BEGIN GSE2.1
MSG_TYPE request
MSG_ID your_specific_ID MY_DC
TIME 2004/12/18 22:54:4.0 TO 2004/12/18 22:56:12.0
STA_LIST WLF, MALT
CHAN_LIST BH*, LH*
WAVEFORM SEED
NETWORK GSE2.1
STATION GSE2.1
CHANNEL GSE2.1
OUTAGE GSE2.1
E-MAIL user@your.email.address.de
STOP
```

Meaning:

```
Begin of message
This is a request
Your ID
Define Start/End Time
Define station(s)
Define channel(s)
You want waveforms
Send network-info
Station-info needed
Channel-info needed
Send outage info
Your e-mail address
End of request
```