GEOTECH INSTRUMENTS, LLC

FEATURES

- **Fully automated procedures**
- **Windows applications**
- **Prepare data files for SMARTQuake®**

SMARTOffline is an automated program to retrieve large numbers of files from a number of disks returned from the field in temporary or permanent deployments of recording instruments, and subsequently to convert the data into popular seismological formats like **SUDS, SAC, SEG-Y, SEED, CSS3.0, MatLab®, MiniSEED or SEISAN.** The files are supposed to be recorded with Geotech's **SMART-24R®** or **DL-24** data loggers, but other recorders can be easily accommodated.

The Central Recording Station does the Online data acquisition from and **SMART-24D®** and/or **DR-24** digitizers, forwards data in **CD1.1** protocol to **NDC**, communicates with other data hubs using **Earthworm, LISS** or **SeedLink** protocols, runs **SMARTQuake®**, and uses **SeisPlus** for interactive data analysis.
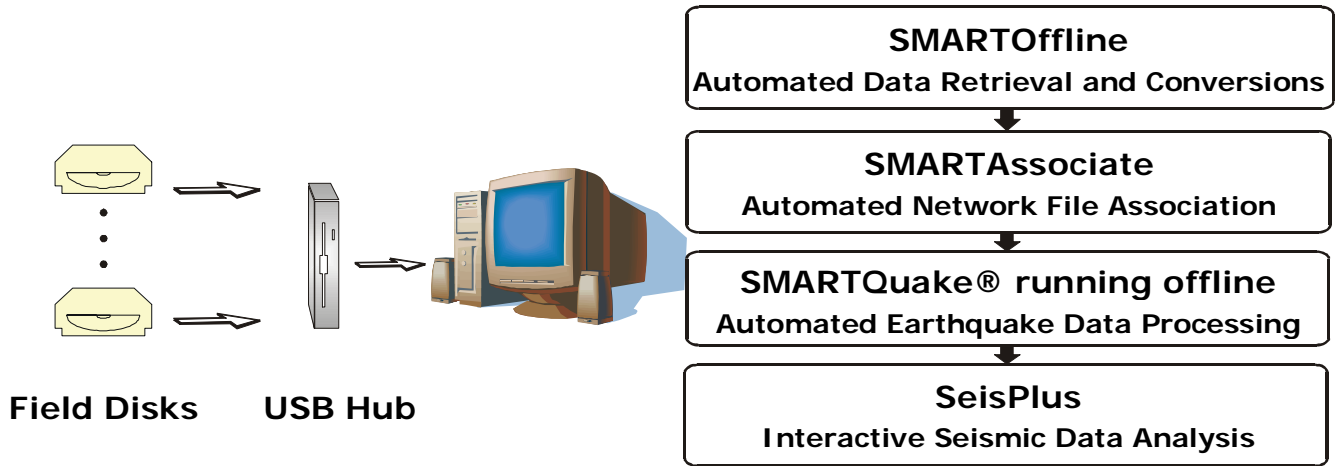
SMARTOffline Data Retrieving and Conversion Tool

SMARTOffline Data Retrieval and Conversion

Field data from multiple input locations are saved to a local database in SUDS, SAC, SEG Y, SEISAN, Mini-SEED, MATLAB, CSS3.0, SEED and ASCII format.

Set the desired parameters, then press OK to run the task or Exit to cancel the execution and return to the main menu.

OK
Exit

Input

Recorder Type
- (•) SMART-24R
- ( ) DL-24

Input data locations (drives or folders)
```
g:
c:\localdata
```
[ ] Delete input data after saving to the local database

Change List

Output

Home folder of the local database
`c:\fielddata`
[ ] Overwrite existing files

[✓] SUDS format   [✓] SAC format
[ ] PASSCAL SEG Y format [ ] SEISAN format
[ ] Mini-SEED format   [ ] MATLAB format
[✓] CSS3.0 format

[ ] SEED format   Calibration folder (optional)
`c:\responses`

[ ] ASCII format   [ ] Single channel files

Home folder for mirrored raw data
`c:\fielddisks`
[ ] Keep a copy of raw data

SMART Offline and Online Data Flow Diagrams

SMART Offline Data Acquisition and Processing System

SMARTOffline
Automated Data Retrieval and Conversions

SMARTAssociate
Automated Network File Association

SMARTQuake® running offline
Automated Earthquake Data Processing

SeisPlus
Interactive Seismic Data Analysis

Field Disks   **USB Hub**

SMART Real-Time Data Acquisition and Processing System

SMART-24D/R/A®

CD1.1

HLCP

DR-24

CD1.1

NDC

SeedLink

Earthworm

SMART Central Station
♦ SMARTGeoHub® Data Server and Database
♦ SMARTGeoViewer® Display Client
♦ SMART24Config Setup and Control Client
♦ SMARTGeoSOH Monitor Client

SUDS

SeisPlus
♦ Interactive Data Analysis

LISS

SMARTQuake® Automated Processor
♦ Automated Earthquake Data Processing
♦ Automated Results Dissemination