

EGU24-17386, updated on 17 May 2024
<https://doi.org/10.5194/egusphere-egu24-17386>
EGU General Assembly 2024
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Güralp Data Centre Software for Easy Mass Data Acquisition and Station Metadata Monitoring

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Güralp Data Centre (GDC) interface offers 'one click' tools to configure instruments to stream data to a central (typically cloud based) server where it is saved in miniSEED in configurable folder structures. This application is particularly important for operators dealing with large volumes of seismic waveform data from regional/national networks.

Additionally, the data can be transmitted to downstream processors such as Earthworm or SeisComp for more advanced seismic monitoring and data analysis. GDC has a simple interface to set up and monitor the operation of the network and is easy to implement into existing systems and networks with minimal configuration as industry standard protocols are employed throughout.

An integrated VPN/Tunnel circumvents Network Address Translations (NATs) present in internet modems and ADSL connections, providing the facility to remotely update digitizer firmware and upload configuration files to multiple units simultaneously.

Long term latency monitoring, network outages and bandwidth usage are captured and displayed in a number of applets that further simplify maintenance of large networks. The GDC dashboard allows network managers to view data integrity over time so that latency performance can be monitored.

Trigger events from instruments can be recorded and displayed on a map as part of a range of features dedicated to EEW implementations. This information is conveyed using the open Common Alert Protocol (CAP). The CAP messages are created by individual station or sub-network triggers and contain important parameters such the on-site recorded PGA, PGV and PGD, providing the lowest possible latency for network early warning.