Inform All Your Stakeholders

gempa’s communication, dissemination and publication tools, GDS, QuakeLink and GIS collect event information and disseminate template-based messages through various communication channels such as SMS, email, fax and web. Using a plug-in technology they import and filter earthquake information from different sources before dissemination. GDS, QuakeLink and GIS complement the functionalities of SeisComP3 and TOAST in the domain of dissemination of notifications and warnings.

With GDS you keep your customers and stakeholders informed, saving lives and protecting essential infrastructure.
GDS – Dissemination
In GDS, the central configuration unit is a queue having information filters and associated subscriptions. If any of a queue's criteria matches the received earthquake information, processing of the configured subscriptions is triggered. Queues can be configured to require manual review before dissemination.

QuakeLink – Communication
QuakeLink is the recommended utility for communication between a SeisComp3 system, GDS and GAPs. It is new protocol with a software implementation to exchange earthquake information in real time or in time windows. QuakeLink offers plug-ins to import earthquake information from different sources.

GIS – Image Rendering
GIS is a Web server rendering map and trace images for a particular earthquake. Maps can be plotted with epicenter, station and moment tensor symbols and even polygons indicating warning zones or administrative borders. Traces may be sorted and may include estimated and observed arrival times of various seismic waves.

TECHNOLOGY
GDS consists of a set of individual modules to
• acquire earthquake information,
• filter dissemination queues,
• generate various message formats based on templates,
• automatic and interactive bulletin dissemination through various communication channels.

gempa developed a new protocol with a software implementation (QuakeLink) for exchanging earthquake information in real-time or based on time windows. QuakeLink offers plug-ins to import earthquake information from different sources such as a SeisComP3 system. Combining with GIS, GDS can include images in disseminations.

GDS connects to QuakeLink for earthquake updates. Based on predefined criteria new earthquake information are filtered and forwarded to all matching queues. Based on configurable templates bulletins are created, stored in spool directories and sent by email, SMS, fax, Web or almost any other service to the subscribed recipients. Bulletins may contain figures created by GIS. Web interfaces allow configuration, interactive bulletin dissemination and history review. The Web interfaces ship with a user management supporting assignment of fine-grained privileges to users or groups and separation of configuration and dissemination. Any modification to the configuration is tracked and can be reviewed.