



Mira Geoscience
...modelling the earth

Geoscience INTEGRATOR

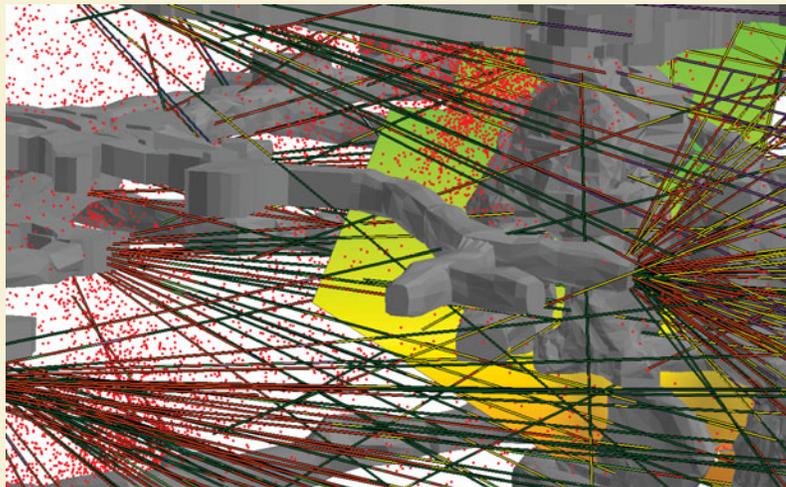
4D multi-disciplinary data management system for mine sites

Summary

At the mine site, a vast array of multi-disciplinary data is collected each day. Analysis, integration, modelling, storage and knowledge transfer is a growing challenge.

Geoscience INTEGRATOR is a 4D (3 spatial dimensions and time) web-based data management system that can manage the mine's data and contextual information. It has powerful and intuitive

query capabilities that can generate and manage scheduled, data-triggered or on-demand reports. It is the foundation to bring many types of different data together for integration and modelling.



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Features

- » Provides a user friendly system to query and analyze 4D data
- » Facilitates knowledge transfer amongst mine personnel
- » Focuses users on interpretation and analysis; not on data handling
- » Adds value to systems already in place by increasing their efficiency and scope without removing any important outputs
- » Ensures data integrity in a secure, managed environment
- » Provides a stable archive of the mine's geotechnical and production data which is captured for long-term archive, query and retrieval

Analysis and reporting

- » Direct web browser access to data and reports
- » Comprehensive chart and tabulation options for data analysis
- » Innovative tags, shifts and neighbourhood queries to personalize and interrogate data
- » Custom-designed summary reports dispatched by email to designated recipients
- » Scheduled, data-triggered or on-demand reports
- » Powerful 3D visualization environment with a query interface that allows the selection of data by type, data set, time range, spatial location, value ranges, and other query parameters

Integration and data management

- » Standardizes data structures with simple access and reporting rather than relying on spreadsheets
- » Stores primary data, models, analysis results, meta-data, files and documents as well as maps and level plans in DXF/DWG and other formats
- » Enables simple data entry that can be automated and customized
- » Controls data quality with customized validation rules
- » Connects to site data sources for real-time, continuous or ad-hoc update
- » Captures, quality-controls and conditions data streams from underground or other data sources:

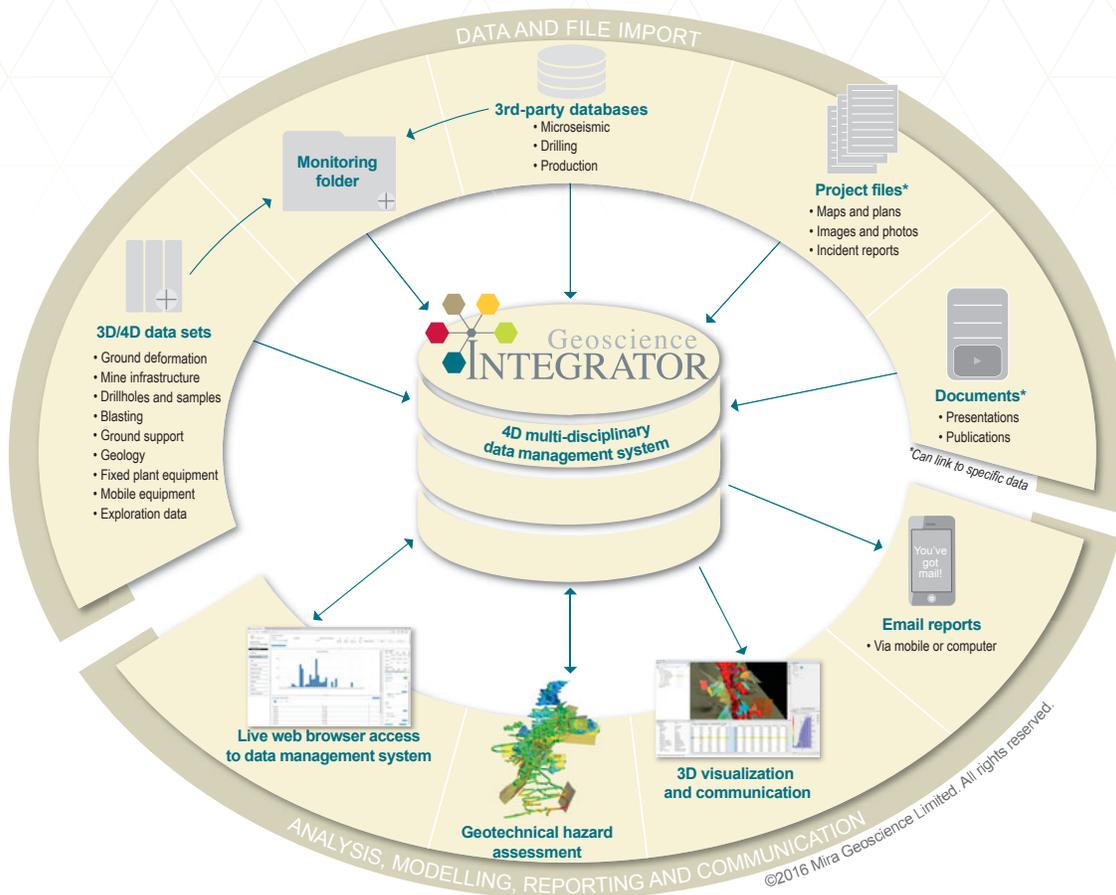
from web browser entry, from other site databases, or from flat files on a file network system

- » Manages static and time-dependent data and models, along with their contextual information
- » Automates capture and quality control of mine geotechnical data in an integrated system

Admin IT

- » Multiple mines can be supported simultaneously with the same system
- » Data can remain on site under client control or be remotely hosted
- » User administration with fine-grain control on permissions

The industry's most comprehensive and advanced geotechnical data management and hazard computation system; automated from import to report.



Geoscience INTEGRATOR for geotechnical hazard assessment

At the mine site, geohazard assessment cannot be addressed properly without a 4D data management system. This is because the underlying data are time-dependent and results of analysis must be routinely updated. Only a proper data management framework, that handles the entire range of both static and dynamic data, enables accurate modelling and analysis of the geotechnical hazard problem.

Geoscience INTEGRATOR can support, track and automatically report on 4D dynamic mine models and their associated geohazards. It has powerful 4D data query capabilities and a 3D visual query interface.

It supports real-time reporting and decision making.

- » Improves personnel safety and mine production
- » Scheduled, hazard-triggered or on demand reports
- » Uses all spatial and time-based data for analysis and assessment of geotechnical hazards such as: microseismic data, geology, structure, rock quality, mine infrastructure geometry, etc.