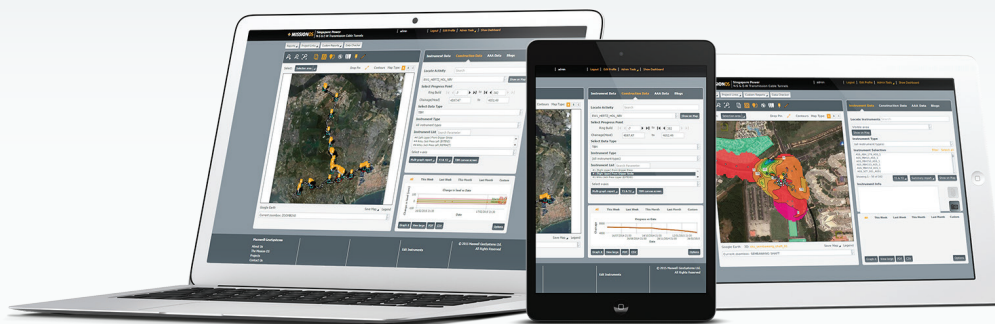


Mission Monitor

The entry level product in the MissionOS suite is aimed at instrumentation projects requiring management and display of instrumentation data with unparalleled configurability, transparency and control. Mission Monitor's flexible architecture and pricing means that the system may be adapted to suit every project and budget.



- » 100% WEB BASED
- » HIGHLY USER CONFIGURABLE
- » FAST RESPONSE - BUILT FOR 3G CONNECTIONS
- » NO USER LIMITS
- » FLEXIBLE BULK PRICING
- » ALL COMMON OS, BROWSERS ON PCs, MACS, SMARTPHONES AND TOUCHSCREENS

Data Management and Processing

- ▶ Import any data format for any instrument
- ▶ Data checks on import
- ▶ Transparent calibration processes
- ▶ Heartbeat function
- ▶ Manual and real-time data capture
- ▶ Audit control for alerts and alarms
- ▶ Automatic error correction
- ▶ Adjustments for temporal effects
- ▶ Alarms to SMS, email and blogs

MISSION Monitor System Description

Architecture

Flexible web based custom mapping system comprising access to the following layers:

- GEO-REFERENCED MAP BACKGROUNDS
- PRE_DEFINED ZOOM BOXES
- DATA LOCATIONS with Metadata
- PINS with Metadata

Other layers can be provided as additional options including:

- CONSTRUCTION ELEMENTS WITH PROGRESS
- DIGITISED POLYGON LAYERS

Platform

Windows, iOS, Android

All common browsers (Explorer v6.5+, Chrome, Firefox, Safari)

Touch screen compatible

Designed by engineers developed by programmers

Multi-language support

Architecture

LAMP (Linus, Apache, MySQL, Php) with Java on Client Side. MySQL database (options for Postgres or other database if required)

Highcharts used for graphing and freely available Sketchup viewer (for 3D viewing). All other system capabilities are developed in house.

Speed and Performance

Ultra-light IT footprint runs on entry level PCs and Macs and handhelds

Bandwidth friendly – operates effectively on standard 3G (1MBit/sec) connections

Advanced pre-processing of data volumes gives speed and responsiveness even with massive data sets which is best in breed. Plot 50 real time instruments with 2 years of data in < 10 seconds. Plot 100 TBM ring data (original data size > 500MB) in map or section in under 20 seconds

Data volumes in excess of 200 million records

Instrument numbers > 40000

Real time data upload within 4 minutes

Administration

Complete client control on system setup and definition

Control over audit and review processes

Separate audit and review processes by manual or automatic data presentation

Highly customizable

Online process monitoring for all data loading and processing functions tracked

Support

24/7 support base with access to skype help from Maxwell agents

GIS/Mapping Functions

Based on simple custom GIS platform with zoom, pan, region of interest functions

Any referencing system can be used (image, map, drawing, in plan or elevation).

Interactive GIS objects – points, lines and polygons,

interactive query and summary of data and graphs

Data highlighted by colour and size relative to triggers or magnitude o type.

Data viewing rights configurable by user, contract and region with definition of interfaces

Definition of active zones of variable shape

Constantly updated as data changes.

Drag and drop functionality for easy adjustment and setup.

Historical review of data at any time.

Show data as change maps for instruments and progress

Apply filters to focus on current information

Interactive legend keys to define layers and labelling

Configurable contouring functionality

Configurable user defined section functionality

User Interaction

Add documents and photos to Map objects

Add pins for non-object specific data

Custom blogging tools for user response management eg

AAA reports

Data types

Any data type can be defined with full control over field definition

Pre-prepared built in instrument packs are available covering setup of :

Settlement points, settlement plates, casagrande, pneumatic and vibrating wire piezometers, recharge wells. rod extensometers, multipoint borehole extensometers (rod and MEX), inclinometers, vibrating wire instruments strain gauges, crack gauges, load cells, tilt meters and electro levels, 3D points, convergence monitoring, hydraulic profile gauges, shape accelerometer arrays, vibration and sound meters

Derived instruments

Abstracted instrument data model enables the definition of derived second order instruments to form new instruments eg. Tilt, distortion, stability etc. Combine instruments visually in display groups in to provide design feedback eg Excavation Lateral support groups, Tunnel Settlement prediction groups.

Observational engineering in real time

Data input

Manual entry from the field over 3G connections

Any structured files can be defined and loaded using the Generic Data Loader (GDL). Input from any ODBC compliant data source files is possible (xls, csv, txt, dbf) to any predefined custom structured format.

Data can be linked via dropbox, FTP scheduler or by using site robot Mission Control.

Automatic import of industry standard formats

Unlimited format definition

Interactively define data import from any data loggers – multiple channels.

Data audit and control

Automated internal audit of data for integrity checking

Two level admin/public data review with data release management

Full change record

Transparent processing

User access statistics

Data processing

Configurable data access and change rights

Transparent processing stages easy for checking

Accommodates raw or processed data

Analysis

Customizable graphing engine. Choose any X any Y1, Y2

Define axis ranges, colours, labels and fonts

Define alarm types

Multiple graphs for types and subtypes using basic and calculated and derived fields

Alarm Systems

Alert, action and alarm triggers for each instrument (absolute or function)

Assign alerts to multiple data fields

Set alarms upward, downward or both

Set alarm frequency, filters and repeats

Display and reporting

Export raw data to Excel at any time for custom analysis.

Custom interactive graphs

User defined cross sections of data

Include surface modelling contours on cross sections

Large suite of PDF report types in library

Save graph, map and section definitions to canvas library

Build user defined reports and screens using the canvas builder.

Combine canvases into complex reports using the binder function

Schedule reports for auto-preparation

Site Process Management

Generate data for daily meetings quickly

Automate alarm response reports using blogging

Conduct daily meeting using live data direct to the web