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Micromine Pitram Capability Statement



We support mining every step of the way

Micromine offers a suite of solutions that address the entire mining lifecycle.



A single, secure, and streamlined data storage solution.



Secure, reliable and flexible geological data collection and management solution.



Comprehensive exploration, modelling and resource estimation solution.



Mine design, planning, scheduling and surveying solution.



Integrated, intelligent and intuitive open-pit mine planning solution.



Rapid dig scheduling, dump scheduling and mine haulage solution.



Real-time fleet management and mine control solution.



Mine planning, resource estimation, mine feasibility, equipment selection, cost estimation and due diligence consulting services.

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Next Generation Technology For Mining

GLOBAL LEADER

8 innovative solutions spanning the entire mining lifecycle

35+ years of expertise in technology for mining

COMMUNITY FOCUSED

Active in
100+ tertiary institutions



GLOBAL REACH & LOCAL EXPERTISE

90+ countries across 22 offices worldwide

10,000+ licenses sold globally

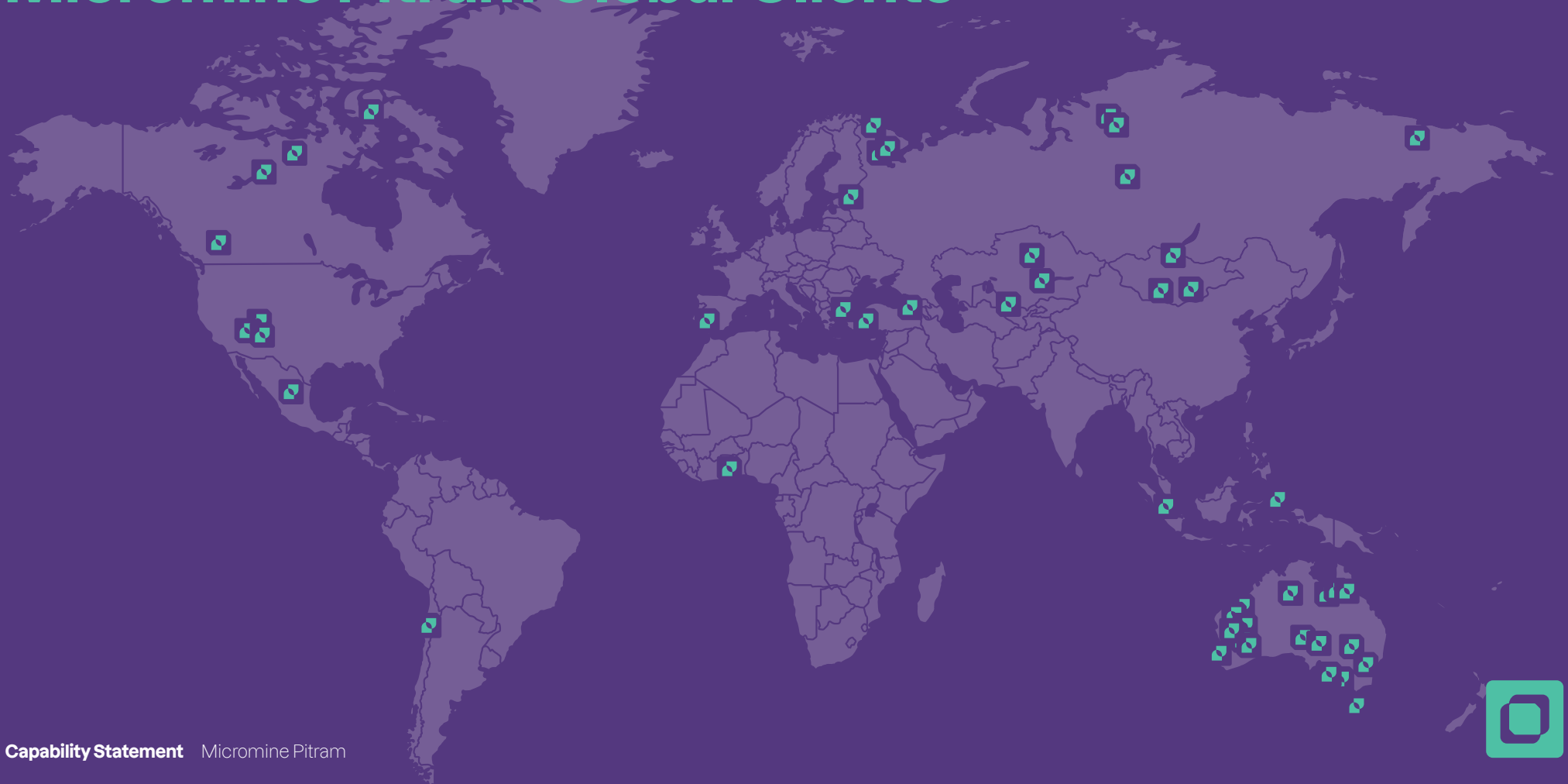
50+ active mine sites

3000+ active projects

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Micromine Pitram Global Clients



Capability Statement Micromine Pitram





Robust and proven fleet
management capabilities
that assist to reduce
cost, improve safety and
maximise profitability

Fleet Management

Dedicated control room functionality to manage, optimise and report on all fleet activities:

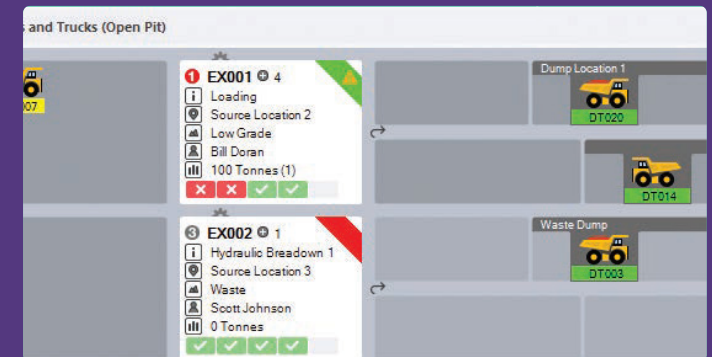
- Intuitive user-interface that details critical production information needed to support intra-shift decision making
- Real-time alerts and notifications
- Rich reporting capabilities providing deep data interrogation capabilities

A suite of OEM integrations to automate production data capture improving data accuracy and minimising disruption to primary activities.

Pitram Mobile is suitable for use in all key mining equipment:

- Load, haul, drill, charge and more
- Easy to use interface enabling digital data capture of key mining metrics
- Configurable prestart forms
- Two-way messaging between the Control Room and Equipment Operators minimising radio comms

Rugged tablet options suited for UG/OP environment to ensure maximum visibility of assets.





A fully customisable
shift execution tool that
streamlines workflows
and enhances task
management

Micromine Pitram Shift Planner and Short Interval Control

Track all planned equipment and location metrics:

- Physicals (tonnes, metres, holes, bolts, etc)
- Maintenance (Preventative Maintenance Schedule)
- States (drawpoint status, ground support cycles, etc)

Shift task management and short-interval control functionality for all operational objectives and complexities.

Detailed resource views (equipment and location) for monitoring and managing key priorities and activity sequences.

Customisable plan-compliance reporting via PRIS and Micromine Pitram Reporting modules.

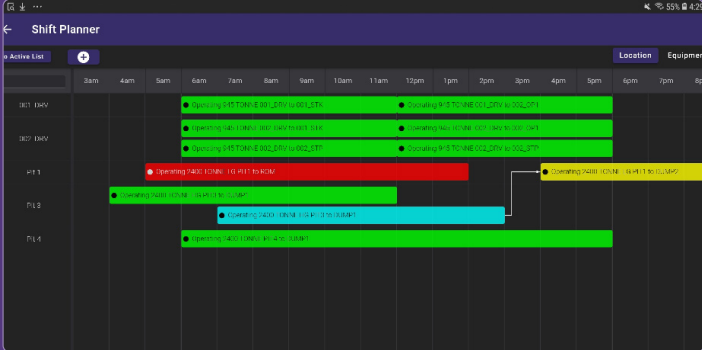
Mobility and awareness increased via Shift Planner on Pitram Connect:

- Auto-caching of data when off-line
- Reallocate resources/activities via drag and drop on your tablet

Short Interval Control capabilities track progress in real-time and alert on at-risk tasks or deviations.

Closed feedback loop with mine planning through PRIS with API routes to:

- Accept task information from third party planning tools
- Report task progress % or actuals





Traverse network black spots with reliable peer to peer capabilities ensuring a consistent and up-to-date view of your operation

Pitram Peer2Peer (P2P)

Increased network coverage for production data through strategic deployment of P2P enabled hardware.

Existing Pitram Mobile devices can be P2P enabled improving visibility of Load Haul & Drilling activities.

Equip Light Vehicles or personnel carriers to improve frequency of data collection.

Data transmission notifications for operators.

Minimum hardware requirements include dual Wi-Fi equipped Windows tablet:

- Advantech TREK 773 & Motium Tuff PC supported

Improved understanding of network health through detailed logging of access point interactions.





Protect your
resources whilst
maximising productivity
with our proximity
awareness offering

Proximity Awareness – MST Integration

Provides sites the ability to control risks associated with personnel-machine and machine-machine interactions.

Seamless integration with the MST ICA/VIP suite and Pitram Mobile.

In-vehicle proximity event alerts.

Multiple detection zone monitoring:

- Inner 5-15m: Very Low Frequency (VLF) magnetic field
- Outer 60-120m

Enables a consolidation of in-cab hardware.

Active RFID tags and Wi-Fi propagation underground around corners.

Leverage IMPACT VIP units for Asset Tracking and Vehicle Intelligence purposes providing continuous self-diagnosis capabilities.





Providing geologists with optimum visibility of grade aims to reduce mine call factors and optimise product output

Materials Management

Detailed tracking of material from planning to processing covering even the most complex material flows.

Manage dilution and upstream impacts with flexible importing of planned blasts, their attributes and associated meta-data.

Supports multiple grade-types, elements and depletion models ensuring full auditing of material genealogy.

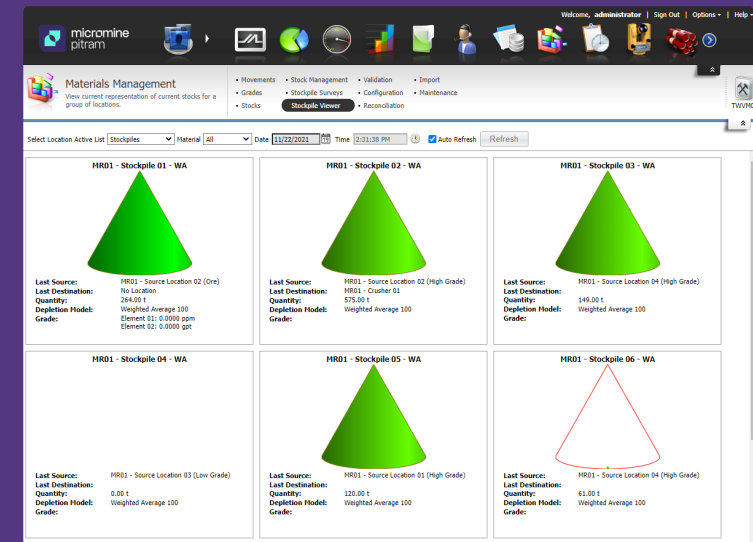
Comprehensive reporting capabilities via PRIS API, geology reporting suite and direct module exports.

Full mine-to-mill reconciliation capabilities:

- Configurable reconciliation intervals
- Control access for authorised personnel
- Simple workflows allowing detailed parcel modification for material weight, grade and metal content

Validation tools and processes to ensure data integrity.

Advanced stockpile management functionality delivered by visual and tabular mediums.





Scalable licencing
options combined with
services that deliver
investment value now...
and as you grow

Subscriptions

Simplicity and flexibility through clearly defined platform levels and optional customer focused feature packs to make the procurement process simpler.

Customer success; the inclusion of service days for training, health checks and onsite visits helps customers get the most out of their Micromine Pitram investment and drive productivity throughout their mine.

Minimise impact on cash flow and capital expenditure budgets through annual subscription and value-based pricing.



Subscriptions For Enterprise Licensing

For Activity Control

Record, track and report mine site production and operational data in a user-friendly and purpose-built tool that can also scale with your operation.

Inclusions: Activity Sheet, Reporting, Survey and Targets

For Voice-Enabled Productivity

Optimise your operation and monitor adherence to plan with near-real-time data management of mine site activities.

Utilising your existing radio infrastructure, record, track and report on key operational assets, including your equipment, people and locations.

Inclusions: Data Acquisition, Event Editor, Dashboards, Targets, Reporting, Survey, OLAP, PRIS and Activity Sheet

For Mobile-Enabled Productivity

Boost productivity and uncover economic benefits with direct and automated data capture of key mine site activity.

Bring even more of your operation into view with extensive equipment and system connectors, advanced material management, and revolutionary P2P technology that shines a light on Wi-Fi blackspots.

Plus take control of everyday tasks with dynamic shift planning tools that support adherence to plan.

Inclusions: Data Acquisition, Event Editor, Dashboards, Targets, Reporting, Survey, OLAP, PRIS, Activity Sheet, Mobile, Peer2Peer and FMS



Feature Packs

Feature packs can be added to select commercial offerings for:

- 3D Mine
- Materials: Materials Management and Drill and Blast
- Shift Execution: Shift Planner and Controlled Areas
- Open Pit: Surface Optimiser and MGS Preflight
- Pitram Vision

Also available:

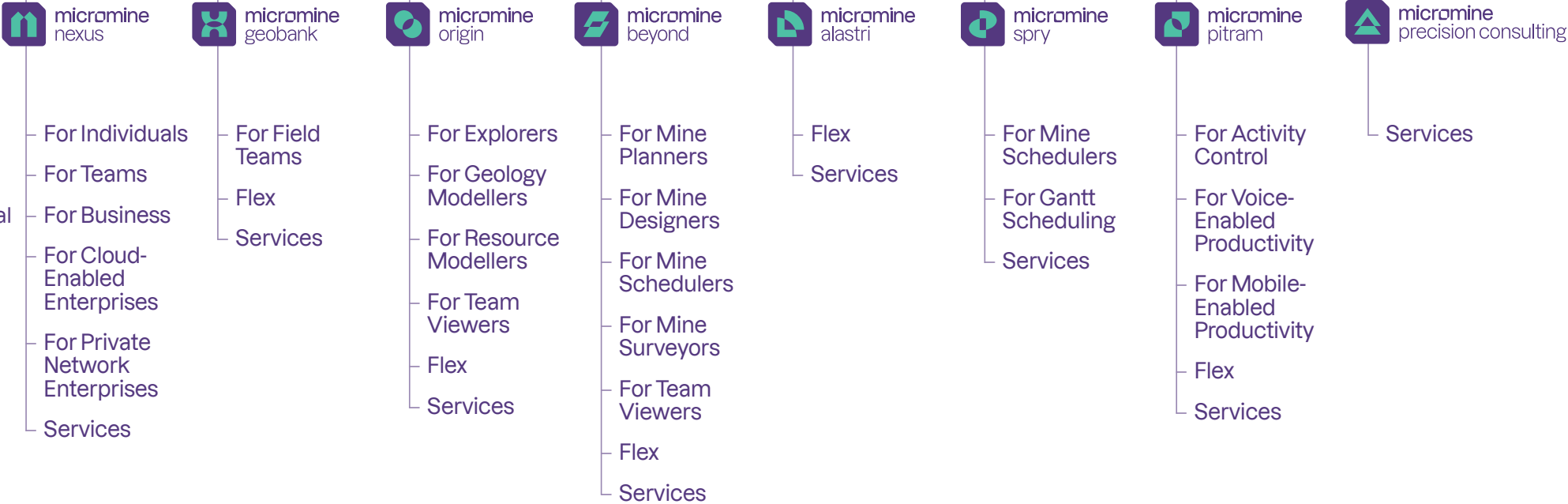
- Infrastructure Connectors
- Machine Guidance



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Product extension

Commercial offering



The background of the slide is a solid dark purple. Overlaid on this is a graphic of a hand, with the fingers pointing towards the top right. The hand is composed of numerous thin, white, wavy lines that follow the contours of the fingers and palm, creating a sense of motion or energy.

Thank you

from the micromine team

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