

INX SOFTWARE STREAMLINES MANAGEMENT OF THOUSANDS OF FIFO WORKERS AT REMOTE MINES WITH SNOWFLAKE SECURE DATA SHARING

TECHNOLOGY



COMPANY INX Software
LOCATION Western Australia

SNOWFLAKE WORKLOADS USED

COLLABORATION

DATA ENGINEERING

CYBERSECURITY

AI/ML

APPLICATIONS

DATA WAREHOUSE

DATA LAKE

UNSTORE

Founded in Perth, Western Australia, INX Software enables businesses in fast-paced and complex industries to safely mobilise their workforce and navigate health, safety, and environmental challenges, to better protect their people and the planet. They are globally trusted leaders in the delivery of logistics, environment, health, and safety software solutions, supporting their clients in the operation of safer, smarter, and sustainable workplaces across a range of industries, such as mining, utilities, oil & gas, and government sectors.

STORY HIGHLIGHTS:

Shares data that enables clients to make workforce logistics improvements

With Snowflake, INX Software clients can access shared data near-instantaneously, without incurring storage charges, to deliver significant workforce logistics efficiencies and savings.

Protects clients and workforces from unauthorised access to sensitive information

With Snowflake, INX Software can securely share sensitive workforce data from a multi-tenanted platform to individual clients to complement rigorous access policies governing its own team.

Enables the business to share large volumes of data derived from thousands of workers at each mine

Snowflake's near-zero maintenance reduces administrative work and frees up technical staff to focus on increasing analytics.

CHALLENGE:

Provide data and insights as a service to deliver operational improvements

Mines in distant regional locations rely heavily on workers who travel from cities or communities for a set number of days before returning home. In Australia alone, about 100,000 workers operate on a fly-in, fly-out (FIFO) basis.

Effectively managing FIFO travel and accommodation schedules is key to productive mining operations and to maintaining the physical and emotional wellbeing of workers.

This is where INX Software comes in. The business provides INX SAM Suite that enables companies to manage remote workforces. With modules covering workflows and reporting and integrations into third-party travel, accommodation, and ERP systems, INX SAM Suite captures client operations data such as workers' locations and travel arrangements. These data volumes can be considerable—for example, one client was processing 2,300-plus roster, flight, accommodation, and other requests per day from its thousands-strong workforce.

Several clients—including a multinational mining company—asked INX Software for the capability to analyse this data for insights to improve mine operations and workforce welfare. "We decided to provide clients' data in our systems to them as a service, while developing ways of providing more insights back to them," says Alex Maund, Head of Data, INX Software.

Several weeks to 48 hours

Reduction in time to onboard new clients

15 minutes

Regularity with which new data is ingested

30+

Number of new and existing (large/enterprise) clients to which the solution can be marketed

SOLUTION:

Data share and ubiquity of Snowflake client deployments prompt Snowflake selection

The business elected to deploy a Snowflake data platform incorporating Secure Data Sharing to give clients near-instantaneous access to their data. “These features—combined with the fact that so many of our clients in mining and similar sectors had deployed Snowflake to drive efficiencies with data—made selecting the platform an easy decision,” says Maund. The business also opted for Snowflake Dynamic Data Masking to restrict views of columns across databases and schemas as part of its internal data access controls.

To build a data architecture around the Snowflake platform, INX Software selected cloud software and data development specialists Mechanical Rock, and the partner completed the engagement in about six weeks. “Mechanical Rock’s skills and expertise delivered a highly automated data platform, based on Snowflake, that could scale to meet customers’ and INX Software’s internal needs for the foreseeable future,” says Maund.

Andres Walsh, Principal Data Specialist, Mechanical Rock, puts the success of the project down to fast and candid feedback that ensured the consulting firm and INX Software were always on the same page. “We applied our deep expertise in data platforms to help INX Software unleash the power of data to solve its clients’ workforce logistics challenges,” he says.

The consultancy recommended and deployed Fivetran to automate data loading into Snowflake, with Terraform infrastructure-as-code managing objects inside Snowflake and Fivetran, including all connectors and pipelines. INX Software and Mechanical Rock deployed the new platform in February 2023.

Clients already running Snowflake can connect seamlessly via Snowflake Secure Data Sharing, while clients not using the data platform can access data via a reader account, with INX Software providing the tools and credentials to enable them to ingest their data into their systems.

RESULTS:

Proactive management of workforce issues to improve safety and retain talent

With a Snowflake-powered data architecture underpinning the INX SAM Suite, clients can access data and insights that improve workforce logistics management at remote locations with flights and accommodation servicing thousands of people.

They can now proactively manage personnel issues across employees and contractors, such as delays to flights into sites that may disrupt sleep and compromise safety. Furthermore, they can obtain insights around travel patterns and residence that identify the cohorts most likely to leave for less onerous work.

INX Software also captures data that may help mining companies achieve operational improvements during peak events such as maintenance shutdowns.

Accelerate access to data to deliver operational efficiencies

INX Software now uses the standardised raw data and tables and automated processes of its new architecture to onboard INX SAM Suite clients in about 48 hours, rather than the several weeks needed to do so manually.

This accelerated onboarding means the workplace software solution provider can enhance the experience of new clients by giving them rapid access to the data sets and insights they can use to achieve operational efficiencies.

With Secure Data Sharing, INX Software clients access data without needing to make copies or transfer between accounts, meaning they do not incur data storage charges or additional administration loads. The business can now provide a more compelling marketing proposition to up to 150 clients and prospects globally that run Snowflake or other data platforms.

INX Software is also meeting client requirements for data ingestion at 15-minute intervals to enable timely decision-making. Furthermore, all data is secured and accessible only to the client and privileged roles within INX Software.

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—ALEX MAUND,
Head of Data, INX Software

FUTURE:

INX Software plans to continue building out value-added offerings to clients to monetize the data it captures, and extend the architecture from INX SAM Suite clients that comprise about 10% of its user base to other product lines.

ABOUT SNOWFLAKE

Snowflake enables every organization to mobilize their data with Snowflake’s Data Cloud. Customers use the Data Cloud to unite siloed data, discover and securely share data, power data applications, and execute diverse AI/ML and analytic workloads. Wherever data or users live, Snowflake delivers a single data experience that spans multiple clouds and geographies. Thousands of customers across many industries, including 590 of the 2022 Forbes Global 2000 (G2K) as of April 30, 2023, use Snowflake Data Cloud to power their businesses.

Learn more at snowflake.com