Ingres Database

The world's most trusted and time-tested transactional database

The Ingres database is a mission-critical on-line transaction processing (OLTP) database that has a proven track record of supporting core business functions with unprecedented reliability, performance, and data integrity. Thousands of enterprises have run billions of OLTP operations over decades of deployments, upgrades, and migrations.
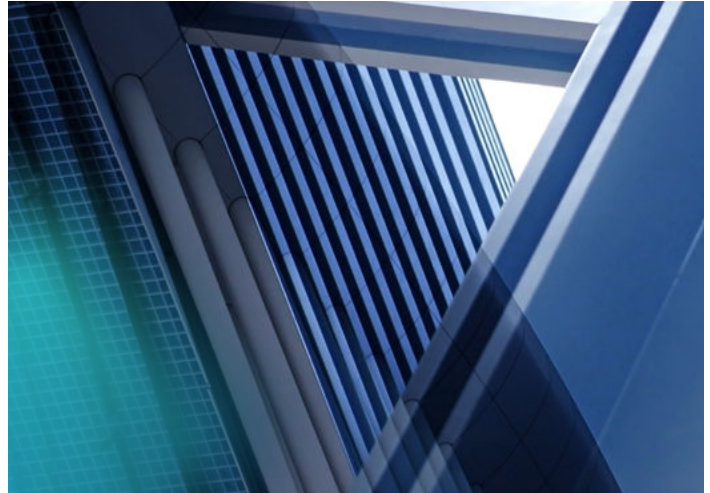
On-Premises and Cloud Flexibility

Actian continues to develop and fully support the Ingres database on on-premises hardware, including modern platforms such as Linux and Windows, as well as traditional platforms whether virtualized or bare metal.

The Ingres database is also available in the cloud, as a virtual machine deployment for fast migration as well as a Docker container to realize value from cloud scale and elasticity. Both options offer 100% compatibility with an on-premises deployment. Docker/Kubernetes/Helm Charts simplify deployment and provide a high degree of portability between public cloud platforms and your private cloud and virtualized environments. Cloud backup and disaster recovery makes it possible to flexibly recover from service disruptions, accidental data deletion, or data corruption.

Exceptional Performance and Workload Automation

Per-query parallelism lets developers easily test and tune query parallelization for application performance. Automated workload management prioritizes queries to further optimize performance and to efficiently use resources. Query result caching with automatic overflow to disk storage eliminates workloads having to wait for memory to free up before they can complete execution. Additionally, communication services optimization improves performance for queries running on heterogenous networks.

Features and Benefits

- Flexible deployment on-premises and on Amazon Web Services (AWS), Google Cloud, and Microsoft Azure

- A choice of platforms, including Linux, Windows, UNIX, and VMS

- Full ACID compliance to maintain data integrity and reliability

- Multi-Version Concurrency Control (MVCC) allows multiple users to access and modify data simultaneously

- User-Defined Functions (UDFs) extend database functionality. Call Java and Python programs and improve SQL's data grouping, data manipulation, time-zone management, and queries

- Distributed Database Support presents a unified view of data across multiple locations or servers

- Comprehensive tools for database administration, monitoring, and performance tuning

High Availability

The Actian Enterprise Monitoring Appliance (EMA) proactively identifies issues that can impact the health of Ingres. Ingres includes Nagios-compatible plug-in scripts that monitor and display the status and history of the environment (disk state and performance, HVR status, transaction log file usage, database resources related to performance, operating CPU load, free memory remaining, and more). EMA can proactively monitor multiple servers, installations, and databases around the clock, providing early warnings and alerts so problems can be quickly resolved or prevented from occurring. For customers using alternative monitoring software, plug-ins are also compatible with a wide range of choices, including CA Unicenter, Microsoft SCOM, BMC TrueSight, ManageEngine, Splunk, and SolarWinds.

"We simply cannot afford to be off the air, and Actian Ingres helps ensure that we're not. It is a scalable and performance database engine."

– John Barron, Chief Information Officer, Office of the Revenue Commissioners, Republic of Ireland

Strong Security and Compliance

Ingres offers robust security and compliance features to ensure secure access to systems and protect sensitive information. These include user access controls, dynamic data masking, column-level encryption, and security auditing.

Semi-Structured and Unstructured Data Support

Today's transactions involve not just traditional structured data, but increasingly JavaScript Object Notation (JSON) data for moving data between heterogeneous applications and platforms. The Ingres database provides full JSON support, enabling you to:

- Move your JSON pre-processing into the database and out of your web application.
- Store your JSON payloads in a secure repository.
- Handle metadata tied to semi-structured/unstructured data such as audio and video.

Extensive Geospatial Data Types and Functions

Ingres provides a solid foundation for handling and analyzing geospatial data across various use cases. Industry standard 2-d, 3-d and 4-d data types, linear reference functions and R-Tree indexing are just a few of the tools available in Ingres that allow developers to add geospatial related features to Ingres applications. A plug-in for Esri's ArcGIS lets users visualize and manipulate Ingres geospatial data. For example, application users can view and select specific data based on a location.

World Class Customer Support Experience

Maintenance and support— with greater than 95% customer satisfaction — is available from Actian's team of data experts 24x7 in multiple languages. We have more than 50 years of database experience and are committed to our customers' ongoing success – wherever they're at on their data journey.

About Actian

Actian makes data easy. We deliver cloud, hybrid cloud, and on-premises data solutions that simplify how people connect, manage, and analyze data. We transform business by enabling customers to make confident, data-driven decisions that accelerate their organization's growth. Our data platform integrates seamlessly, performs reliably, and delivers at industry-leading speeds. Learn more about Actian, a division of HCLSoftware: **www.actian.com**.