Looking Ahead with IBM Informix in 2021

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Agenda

- > Where we are now
- **▶** What's Next?
- Stay Involved!

IBM Informix – Here is what is being said:

Informix is the best Relational Database Management System in the industry bar none.

- Uptime greater than six 9's
- Compatibility between older and current Informix versions near 100%
- Simplest RDBMS to develop software for
- Simple to maintain yet the most configurable and tunable RDBMS
- Industry leading feature set

Compared to MS-SQL Server and Oracle, Informix provides excellent performance and manageability

Lets compare Informix IDS with the most popular database, witch is Oracle I suppose. With Oracle, in case of a server crash, if you lose something called the control files, you're done. With Informix, in the same case, the engine will do its recovery by itself and after a certain amount of time it will get ready again. Uncommitted transaction will be rolled back and this a normal situation. Let me just finish by saying that some limited versions of Informix IDS can be downloaded for free, so anyone can see how this Database engine is simply fantastic

- Independent consultant in Algeria



Case study

"We were looking for an enterprise-class database that was truly tailored for use in an IoT environment, and IBM Informix fit the bill perfectly."

Vladimir Peregoncev, CTO, Petrosoft



Paddy Power Betfair, Grant Beckwith

"As a global leader in the gaming industry, Paddy Power Betfair demands a lot from our transactional database systems. We need to process and store billions of price updates, bets, game plays and event changes for millions of customers, 365 days a year.

Informix has long been the back bone of our Sportsbook betting platforms, but with very significant transactional growth year on year, we started experiencing bottlenecks in the replication between our database nodes. The Informix Development Team rose to the challenge and enhanced the replication functionality in Informix 14.10 that has delivered a 325% increase in replication performance over Informix 12.10.

Not only has this improved our ability to scale, but has given us back the cluster resiliency that the company demands each and every day."

Informix Technology Focus



Unmatched
Distributed
Transactional
Processing

Process +2M transactions per second with full consistency

Seamless scalability from 700 to 100K concurrent users within 30 seconds

Advanced resource utilization extract 10x per core performance

Unmatched Business Continuity

Advanced data availability, active-active clustering, heterogeneous replication and data sharding

On-prem to cloud replication, point-in-time replication

Cross geographic replication, edge computing replication, shared disk clustering

Unmatched Embedded Integration

Run in the smallest capacity devices and gateways

Install footprint under 100MB running on ARM edge gateways

Proven Enterprise database for edge computing

Value of Cloud Pak for Data

Reduce Cost & Improve Operational Efficiency

Improve Data Security & Compliance

Seamless Transition to Cloud

Faster Time to Innovation

Informix – 30+ years enduring differentiators in database market

...2000

2005

2010

2013

2019

Informix v10 & Prior

- Deployed by over 2000 leading clients worldwide
- Enterprise Replication,
 Parallelism
- Extensibility
- Time Series and Spatial

Informix v11.5

- Remote and Shared Disk Secondary
- Mach11
- Data Compression

Informix v11.7

- Flexible Grid
 - Configuration Autonomics
 - Warehouse Accelerator

Informix v12.10

- JSON/BSON native data types
- Embedded devices
- Spatiotemporal built-in analytics
- Simplified and Improved High-Speed Loader for Time Series

Informix v14.10

Advanced lead in performance, security & ease of administration



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Informix 14.10.xC1-xC5

Performance

- 10% OLTP increase
- Replication Log Replay up to 5x faster
- JSON and REST perf 2x faster
- BSON doc queries 10-15% faster
- Connection Pooling in ODBC
- JDBC Large Objects access time improved 60%
- JDBC connections to the server 30% faster

Business Continuity & Scaling

- Simplified ER setup and data migration with "cdr migrate server"
- Query survival across inaccessible nodes
- Sharded Joins
- Scale to 1000's of nodes
- Conversion for HDR and RSS secondaries
- "cdr migrate server" enhancements
- IN clause enhancements for sharded queries
- Show flow control delay statistics for RSS and SDS
- Smart Trigger session survival

Core Engine

- Common Table Expression
- Unicode Specification Updated
- Alter Primary Key syntax additions
- Statement Cache enhancements
- Query char/varchar/lvarhar and treat it like a clob for app compatibility
- Change Data Capture (CDC) available for Java
- Partial Index
- In-place alters replacing slow alters
- Onstat Info for all cached tables
- "usage" keyword for sysadmin task
- Oncheck –pe will display partnum and extent number
- MSG_DATE enhancements
- Onstat –k/K will display table names
- SHMTOTAL and EXTSHMADD are dynamically tunable
- RENAME TABLE statement will now accept IF EXISTS clause



Informix 14.10.xC1-xC5

Security

- Data Encryption at Rest
- Integrated Encrypted Backups
- Support for AWS, Azure key stores
- KMIP compliance
- Enhanced Smart Trigger audit trail

Application Development

- Easier container deployment
- Upgraded BSON library w/ better BSON support (faster, more APIs)
- Core drivers for Python, NodeJS, Go ...
- JDBC 4.2 compliance (150+ new APIs)
- Query char/varchar/lvarchar and treat it like a clob for app compatibility
- New Java API for CDC streaming
- Enable setting of keystore/truststore per connection instead of per application instance
- .NET Core Provider
- Full explain output can now be returned as Ivarchar
- Min & Max connection pooling counts
- JUDR enhancements
- Removed Limitation of prior CSDK install for python and node.js drivers

Multi - Cloud

- IBM Cloud and BYOL on other cloud providers
- Informix addon Cartridge for Cloud Pak for data



Informix 14.10.xC1-xC5 – InformixHQ

Our Landing place for fast and easy client experience with Informix

Customization

- Custom SQL sensors
- Extensible Alerting
- Export, Import Custom Dashboards
- Bar, Pie, Tabular chart Panels
- Customize and Save Dashboard preferences

Usability

- Centralized user permission management
- Group incidents page
- New logging framework
- Saving Graph Preferences
- Enhanced UI for server and agent setup
- Start and stop scripting along with JVM options
- Stronger password support

Administration

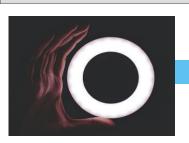
- Schema Manager
- Storage > Tables and Indexes
- High Availability
- Enterprise Replication
- Auto Update Statistics
- Privileges
- System Reports
- Task Scheduler
- Memory Manger
- Backups
- Connection Manager administration
- Additional Info and actions in the Schema Manager
- Custom SQL based system reports



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Informix Priorities



12.10, 14.10, and v.next

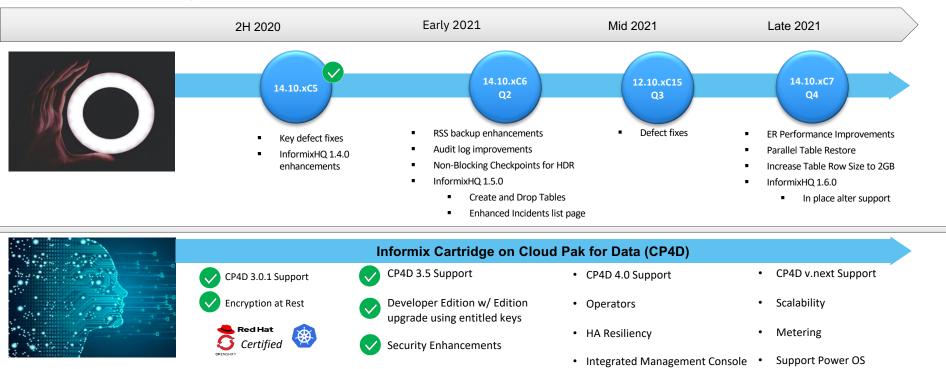


Informix Cartridge on Cloud Pak for Data



Informix Container and Edge

Informix Roadmap





Informix Containerization and Edge





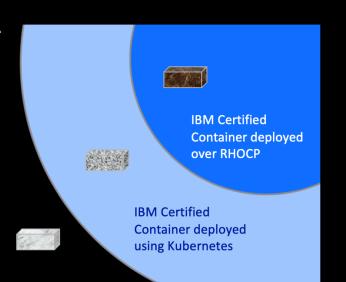




Bring-your-own-license: Supports Edge, Workgroup & Enterprise Database OpenShift/OCP Certified Container in RedHat Marketplace

Certified Container on RHOCP delivers highest value

High



Enterprise Ready

Fast

Time to Value

Slow

Low

DIY Containers

Any Platform



Informix on

Docker

Red Hat

Informix Cert.

Cont.

Over RHOS

Integrated CPD

Introducing IBM Cloud Pak for Data

Simplifies, unifies and automates your journey to AI

Analyze & Infuse

Plug and play 45+ data, analytics and AI apps. Manage your favorite open source capabilities along side IBM's market leading differentiators.

Organize

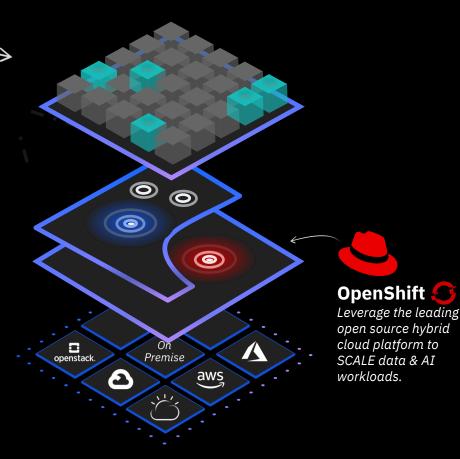
Catalog and govern all enterprise data, models, rules, and insights through a common experience

Collect

Virtually connect, manage and query data & AI assets no matter where they live.

Run on ANY Cloud

Decoupling enterprise data, analytics and AI will prevent lock in and accelerate polyglot eco-systems.



IBM Watson / Data and AI / © 2020 IBM Corporation

Why Informix on Cloud Pak for Data

Reduce Cost & Improve Operational Efficiency

- Reduce Infrastructure and Storage needs
- Elastic Scalability on demand
- Reduce Latency and ETL between transactional & analytics environment

Improve Data Security & Compliance

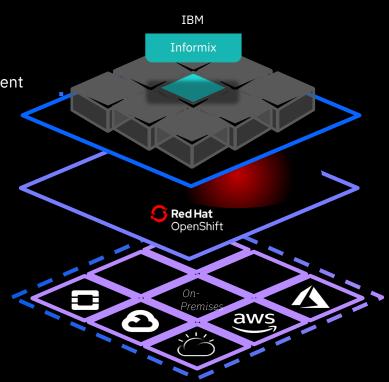
- Quickly perform system upgrades and patches
- Rapid provisioning and deprovisioning of environments

Seamless Transition to Cloud

- Architect Informix environment to be cloud-ready
- Centralized management & orchestration of services
- No vendor lock-in

Faster Time to Innovation

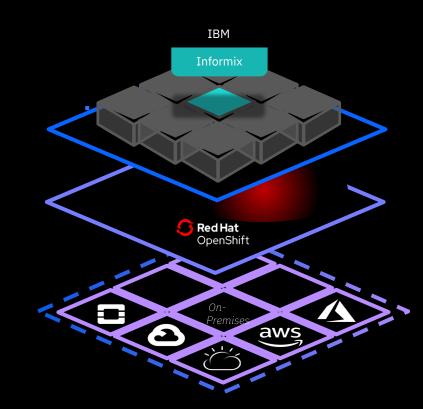
- Leverage data virtualization, data governance, analytics and ML capabilities
- Deliver self service capabilities for LOB users



Trade-up to IBM Cloud Pak for Data Informix

Trade in your existing Informix license towards a "cartridge" that will provide you with dual entitlement towards IBM Cloud Pak for Data and IBM Informix.

With this cartridge, you can begin incrementally containerizing your Informix applications – OR – simply enjoy the benefits of the additional services that come with Cloud Pak for Data. The choice is yours!



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IIUG - International Informix Users Group

The IIUG is a communication channel to disseminate news and other information efficiently to the Informix user community:

- Website (http://www.iiug.org)
- Insider monthly newsletter
- User Group Events
- Access to Software Repository and Tools
- Access to slide decks from past event sessions
- NEW! monthly Informix tech talks and new IIUG YouTube channel!

If you are not a member, please join now! Become one of the thousand of IIUG members around the world to network, share knowledge and influence IBM, HCL and other vendors.

COMING SOON! – IIUG Virtual Conference

Help us influence the future of Informix!



IBM Informix Webinars

In case you missed any of the recent webinars:

- IBM Informix Containers and Modernization Replay here
- From GSKit to OpenSSL Replay here
- What's new in Informix 14.10 CSDK & InformixHQ? Technical Deep Dive Replication and Java & System Administration <u>All 3 replays available here</u>
- Plan for a Smooth Upgrade from 11.70 to 14.10 Replay here
- Learn more about Common Table Expression (CTE) and see a demo with Informix 14.10.
 Replay here
- Streaming Analytics Using Asynchronous Post Commit Triggers. Replay here
- Informix 14.10 for App Dev. Replay here
- Easy Replication from On Prem to Cloud. Replay here
- Informix 14.10 Tuning Tips to Go Beyond Secondary Performance Improvements. Replay here
- New Remote Encryption Key Storage in Informix Database Server 14.10. Replay here

IBM Informix Client Advocacy Program



The Client Advocacy Program strives to deliver a high-touch, highly interactive approach to customer relationships, together with our partners, and to provide the greatest value and service to customers through strong connections to our product experts.



Cohesive and collaborative approach to partner & client relationship



Proactive communication on product news and updates



Deeper understanding of the client's business and challenges



More frequent touchpoints with product roadmaps



Incessant support for product usage and business needs

Engagement Opportunities

Client Advocacy & Design Partner

ShellyC@HCL.com

Client Advocacy Manager

Stay Connected

IIUG - International Informix User Group

Request for Enhancements: IBM Analytics Ideas Portal

IBM NPS Surveys: Provide feedback

IBM Community: IBM Hybrid Data Management

Community



