



Compare the IBM Informix 14 editions

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Introduction

Informix is IBM's premier database for high-volume online transaction processing (OLTP), embedded database, edge processing, integrated applications, and breathtakingly fast data warehouse / analytical workloads. Informix has built an incredible reputation over time as the database server that "just works!" Informix has kept pace with its customers as they've grown and expanded without costing them a fortune for ongoing maintenance and administration. In most cases, these companies have grown without requiring significant infrastructure upgrades or additional personnel because Informix is so efficient.

In 2015, Informix extended its footprint beyond the traditional on-premise or cloud deployment model to include edge-of-the-network capabilities. Informix is the only enterprise-class database ported to ARM V6 (and above) and the most popular O/S's that run there. This ARM port of Informix is not limited in terms of functionality; it includes all the advanced features such as Sensor Data support, JSON/BSON integration, data replication, dynamic scalability and more. This range of feature and platform support is why Informix is IBM's Internet-of-Things database engine. With Informix v.14.10, Informix now supports the 64-bit ARM V8 platform.

In April 2017, IBM made a significant and positive announcement regarding the Informix product family -- a 15 year [Intellectual Property Partnership \(IPP\)](#) with [HCL](#) to jointly develop, support and sell /market Informix products. It is important to understand this was NOT a sale of Informix, rather HCL assumed responsibility for the development and advanced support of Informix products. Since that time, nothing has changed for existing IBM customers. IBM continues to sell Informix and handle all current IBM Informix customer interactions. IBM continues to control product direction and development. HCL has the option to expand how and where Informix is sold, moving it into new markets not addressed by IBM. This was very good news for those concerned about the continued enhancement and investment in the Informix family of products. Part of the fruit of that announcement, and the work from it, is the newly released Informix version 14.10 discussed here.

Customers choose Informix because of its reliability, flexibility, ease of use, and low total cost of ownership. Informix works without a problem or major administrative issues regardless of the operating system it is running on. As a result, applications can be managed as the business dictates, not by technological limitations. In short, Informix is "Stronger, Faster and more Flexible." Informix is available across a broad range platforms and 64-bit operating systems, including AIX®, HP-UX (Itanium), Solaris (Sparc), Linux®, Linux®-IBM Power (Little Endian), Windows®, and ARM V8. Regardless of which

platform you choose, Informix will be “Stronger, Faster and more Flexible” than other database products you’re familiar with.

Not all customers need the same database features and functionality. In some cases, this is a technological decision. For example, a customer may require advanced data replication, or support for special data types such as spatial, time series, or unstructured data in JavaScript Object Notation (JSON) / Binary JSON (BSON). In other cases, licensing requirements and budgets drive these decisions. The Informix licensing model was designed to address technology, licensing, and budget needs.

IBM continues to enhance and evolve the Informix licensing model to meet market and customer demands. Informix has "no-cost" editions that can be downloaded and used for development, test and limited production workloads, and enterprise-class "for-purchase" editions. All editions are tailored from a price and functionality perspective to a specific market segment. As with a lot of IBM software, Informix provides sub-capacity license options to help clients control costs. All editions may be deployed in on-premise, "virtual," public/private cloud or container environments giving customers complete deployment flexibility. Finally, for the ultimate in flexibility and pricing convenience, customers can take advantage of "pay-as-you-go," ready-to-use public cloud computing technologies featuring Informix through the IBM cloud and other providers.

In addition to being a high-performance operational or OLTP database engine, Informix has additional functionality that can be added to Enterprise Edition to serve as a high-performance data warehouse or data analysis server. Called the Informix Warehouse Accelerator (IWA) and sold as the Advanced Enterprise Edition, this technology uses a number of proprietary data processing technologies as well as compression and a columnar approach to storing and accessing data in-memory as opposed to row-oriented, disk-based system like most database engines. In-memory columnar processing enables Informix to provide virtually unlimited data warehouse growth while providing data response times that are hundreds of times faster than many conventional data-warehouse systems. This technology is available in two editions: Informix Advanced Enterprise Edition for “no-limits” implementations as well as in the Advanced Developer Edition for building and testing applications.

Informix v.14.10 key enhancements

With the release of Informix v.14.10 in March 2019, Informix continued building on its "Simply Powerful" foundation and is now “Stronger, Faster and more Flexible.” To highlight just a few things in Informix v.14.10 from the “Stronger” perspective, Informix expanded its native data encryption at rest feature by adding support for off-site encryption key management services such as AWS Remote Keystore. In addition, Informix now provides a simpler and more secure method to encrypt and decrypt instance backups automatically regardless of the encryption state of the spaces themselves. Similar to the encrypted data at rest feature, the initial release of backup encryption supports Amazon Remote Keystore services. Support for KMIP services for both types of operations will be coming soon. Informix v.14.10 also supports Amazon V.4 Authentication allowing customers to use a broader range of Amazon regions. Other cloud services also use this API allowing Informix to connect with them as well.

From a “faster” perspective, a lot of work has been done throughout the engine to increase performance and scalability but none more so than with Java and Java UDR processing and in elements of Informix’s High Availability cluster processing. Sending and applying transactions to secondary instances has been completely re-written and optimized for performance under the most trying conditions. Performance tests show over a 500% increase in throughput when compared to Informix v.12 benefiting all customers large or small. Java and Java UDR processing enhancements include support for the latest Java, JDBC and other library packages and standards. The Informix J-Foundation component supporting instance-based Java UDR processing was almost completely re-written to the latest standards and APIs including using the better and more efficient SLF4J with Logback logging framework. While described in more detail in the edition-specific descriptions, the Informix Workgroup and Enterprise Editions received significant

increases in supported resources and functionality allowing customers to do even more work without increasing their license fees or having to upgrade their hardware.

From a “more flexible” perspective, it starts with how Informix is distributed and installed. Instead of separate binaries for each Informix edition, there is a single universal binary but edition-specific license files which control which features are enabled. This allows customers to download one binary bundle and use it throughout their enterprise. With the appropriate license file, customers can select which edition to activate or can easily change editions without extensive downtime or having to re-install the entire system potentially overwriting critical files. Customers using spatial technology now have the ability to choose the geospatial referencing and projection system, including customer-specific or developed systems, that best meet their needs. Customers can also define and use the spatial measurement that works best for their environment (e.g. the US foot or the international foot). Informix v.14.10 supports sub-second GPS readings for spatio-temporal applications. Customers can also create geo-fences for GPS values to easily detect erroneous or potentially fraudulent GPS readings passed to the engine. Informix v.14.10 makes it easier to migrate existing instances (with their data) to newer Informix versions or hardware (including heterogeneous migrations) with the new migrate server functionality. Finally, individual sessions and their owners can be monitored more easily with session-specific tokens.

Finally, Informix v.14.10 includes the InformixHQ (IHQ) graphical tool which replaces the deprecated OpenAdminTool (OAT). It is an elegant and modular tool giving users the ability to monitor instances and the components (disk, memory, load, etc.) they feel are most important to them. The tool can be used to administer instances as well. Written using HTML5 and other current web and other technologies, IHQ provides a dashboard view across a number of instances and their statistics rather than the single instance view OAT provided. IHQ is bundled as a feature of the Informix v.14.10 engine but will soon be available for, and support, Informix v.12 customers.

With Informix v.14.10, a number of edition, O/S support and licensing modifications were made. For example, Informix v.14.10 is only available as a 64-bit product on the supported O/Ss. Earlier Informix versions were selectively available in both 32 and 64-bit versions on some O/Ss. Some O/Ss are no longer supported by Informix v.14.10 such as MacOS, Linux system Z, Solaris Intel, and the Big Endian port for IBM Power systems. The Advanced Workgroup Edition has been retired. The Storage Optimization feature (commonly called data compression) is now included in Enterprise Edition as part of the basic license. Workgroup Edition received a significant increase in supported memory and CPU resources allowing customers using it to do even more work with this cost-efficient edition. Informix v.14.10 can now be purchased using the [IBM Virtual Processor Core](#) (VPC) licensing metric. This metric simplifies licensing particularly for virtual or cloud environments since it uses the lesser of two values -- the number of actual hardware cores or the number of virtual cores.

Some editions have restrictions on the breadth and depth of features and functionality that can be used, and pricing for these editions varies accordingly. Regardless of the edition used, all Informix editions come with the full implementation of the Dynamic Scalable Architecture (DSA) with its unmatched performance, reliability, ease of use, and availability.

Below is a brief comparison of the Informix editions and their feature sets.

No-cost editions

Informix no-cost editions can be downloaded and used for development and test purposes.

- **IBM Informix Developer Edition**— For application development and testing only, this edition packs the full suite of Informix functionality into an attractive price point: free! The Developer

Edition includes all the functionality available in the Informix Enterprise Edition however there are scalability constraints including processing, memory, storage, and connection limitations. It is available on a wide range of operating systems. Since the intent of the Informix Developer Edition is for system development and test only, it cannot be used in a production environment, and there is no optional support package. Customers can migrate to or from the Developer Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

- **IBM Informix Innovator-C Edition**— For customers looking for a robust database environment that can support small production workloads, this edition provides the most widely used data processing functionality. Available on all supported platforms, this edition is limited to one core and a total of 2GB of RAM operating from the same install. The Informix Innovator-C Edition can be used for small end-user production workloads without a license fee. Redistribution requires a separate license. Support is community-based though an optional for-charge service and support package is available for the Informix Innovator-C edition. This Elite Software Support package provides full support and product updates for the term of the contract. For more information about this package, see [IBM Elite Support for IBM Informix Innovator-C Edition](#). Community support is available through discussion forums hosted by the International Informix User Group (IIUG). Customers can migrate to or from the Innovator-C Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

Fee (aka for-purchase) editions

- **IBM Informix Express Edition**— The Express Edition is best suited for in-house or independent application developers or other third-party developers looking to embed a database engine within the application itself to support the application's functionality. Available on all supported platforms, this edition is limited to four cores and a total of 8GB of RAM operating from the same Informix install. In addition, there are other functional limitations including limiting ER / grid clusters to two nodes (root nodes only) and restricting an H/A cluster to one secondary of any type.

Informix Express Edition can be licensed by Authorized User Single Install, PVU, VPC and LU Virtual Server metrics. From a licensing perspective, since ER / grid nodes are stand-alone, each one must be fully licensed. Informix Express Edition supports one H/A cluster secondary node of any type. As long as the secondary node is only functioning as a backup / failover secondary, it can be deployed without an additional Informix license charge. However, if the H/A cluster secondary node is used for SQL or NoSQL operations (read or write), the secondary node must be fully licensed. Customers can migrate to or from the Express Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

- **IBM Informix Workgroup Edition**— Available on all supported platforms, this edition is perfect for midsize companies or departmental servers in an enterprise deployment. With Informix v.14.10, this edition received an increase in supported memory and CPU allocations. Workgroup Edition can now be deployed on up to 24 cores over a maximum of four sockets and 32GB of RAM operating from the same Informix install. Informix Workgroup Edition can be licensed by Authorized User Single Install, PVU and VPC.

Informix Workgroup Edition provides additional database functionality over Express Edition, including unlimited ER / grid cluster nodes of any type to send or receive data updates within the cluster. From a licensing perspective, since ER / grid nodes are stand-alone, each one must be fully licensed. Informix Workgroup Edition supports up to two H/A cluster secondary nodes of any type. As long as the secondary node is only functioning as a backup/failover secondary, it can be deployed without an additional Informix license charge. However, if any H/A cluster secondary node is used for SQL or NoSQL operations (read or write), the secondary node must be fully

licensed. Customers can migrate to or from the Workgroup Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

- **IBM Informix Enterprise Edition**— Includes all Informix features and functionality with unlimited scalability required for the highest OLTP and warehousing performance and full functionality except for the optional Informix Warehouse Accelerator technology in the Advanced Enterprise Edition. Available on all supported platforms, this edition can be licensed by PVU, Authorized User Single Install and VPC metrics. With this edition, full H/A cluster and ER / grid functionality is available, including unlimited nodes. From a licensing perspective, since ER / grid nodes are stand-alone, each one must be fully licensed. For H/A clusters, as long as the secondary node is only functioning as a backup/failover secondary, it can be deployed without an additional Informix license charge. However, if any H/A cluster secondary node is used for SQL or NoSQL operations (read or write), the secondary node must be fully licensed.

With Informix v.14.10, the storage optimization feature is now included in the license instead of being an optional, for-charge option providing more value for customers and their Informix purchase. This feature provides two key elements of functionality. The first is index and data compression on disk to help reduce storage and backup/recovery costs and administration and providing improved performance. The second is backup de-duplication if that functionality is supported in the backup tool.

Customers can migrate to or from the Enterprise Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

- **IBM Informix Advanced Enterprise Edition**— The Advanced Enterprise edition represents the ultimate in data warehouse performance and scalability since it includes entitlements to Informix Enterprise Edition and the Informix Warehouse Accelerator (IWA). This edition is available on 64-bit versions of AIX, Solaris, HP-UX, and Linux. The IWA component is only available on 64-bit Linux either on Intel-based or PowerPC LE systems. This edition can be licensed by PVU, VPC and Authorized User Single Install metrics. With this edition, full H/A cluster and ER / grid functionality is available, including unlimited ER / grid and H/A cluster nodes. From a licensing perspective, since ER / grid nodes are stand-alone, each one must be fully licensed. For H/A clusters, as long as the secondary node is only functioning as a backup/failover secondary, it can be deployed without an additional Informix license charge. However, if any H/A cluster secondary node is used for SQL or NoSQL operations (read or write), the secondary node must be fully licensed. All features and functionality are included with this edition.

The Informix Advanced Enterprise Edition supports the full compliment of Informix technology like H/A clustering, Informix Flexible Grid, spatial analysis, advanced access control as well as NoSQL functionality to build robust, scalable data stores that can answer the most demanding and difficult business questions in almost no time at all.

Customers can migrate to or from the Advanced Enterprise Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

- **IBM Informix Advanced Developer Edition**— Includes all Informix features and functionality of Informix Enterprise and Advanced Enterprise editions with unlimited scalability. Available on all supported platforms, this edition is licensed by Authorized User only and is intended for pre-production development and testing only. This edition can **NOT** be used for production purposes. Customers can migrate to or from the Advanced Developer Edition directly to / from any other edition simply by re-executing the new Edition Installer to install the appropriate license key.

Licensing Informix

Informix can be licensed by one of several pricing metrics depending on your needs. A brief description of each metric is listed below. In 2010, IBM introduced a new definition called an *install* to make sub-capacity licensing conditions (such as logical or physical partitioning of a physical server or virtual machine images) easier to understand and purchase. IBM defines an install as an installed copy of a product (in this case, Informix) on a physical server (or partition thereof) or in a virtual machine image. For example, if a physical server is segmented into partitions, whether logical (LPARs) or physical, each partition containing Informix is considered a separate Informix “install” for licensing purposes and restrictions. The concept of an install applies to the licensing limits specified for all Informix editions. For more information on authorized sub-capacity technology, see the [Limited Use Virtual Server and Limited Use Socket Sub-capacity Licensing Guide](#). You can read more about [eligible virtualization technologies](#) here.

Note: The descriptions are only a summary of the licensing definitions. They are not intended to be full and legally binding. For a full and complete description, refer to the [Informix license information](#) documents that provide the terms for each edition and version.

- **Processor Value Unit (PVU)** (also known as processor-based pricing) — PVU’s are calculated using the number of processor cores in the physical server multiplied by the corresponding value units based on processor architecture as described [here](#). Licensing by PVU’s is an unlimited-user or connection license only dependent on the server processors or cores, and is usually the optimal choice when the user or session load cannot be controlled or counted.
- **Authorized User Single Install (AUSI)**— A single named user or specific individual accessing one Informix instance on one physical or virtual server on a 1:1 basis. The authorized user can establish multiple connections to that single Informix instance however each connection is for the exclusive use of that one authorized user from a single client device. If a specific user needs access to multiple instances, multiple AUSI’s are required. This license type can NOT be used to multiplex connections from multiple clients through a single shared or cached connection to the database.
- **Authorized User (AU)**— Only for use with the Informix Advanced Developer Edition. Purchasing an Authorized User license allows a single named user or specific individual access to all instances using the Informix Advanced Developer Edition regardless of the physical or virtual server where it’s installed.
- **Limited Use Virtual Server (LUVS)**— An LU Virtual Server is a physical server or a virtual server created by partitioning the resources available on a physical server using an [eligible virtualization technology](#). This licensing metric does have specific scalability limitations -- specifically no more than four cores may be allocated to the server created through physical or virtual partitioning.
- **Virtual Processor Core (VPC)**— A relatively new IBM licensing metric, it is available for on-prem or virtual Informix environments. [IBM describes a VPC](#) as a “virtual” core in a virtual machine or a physical core in a non-partitioned server. As such, it is an enhancement to the PVU metric making it easier to determine the correct licensing scheme. For example, before this metric was introduced if a physical server had 16 cores which supported 5 virtual machines, each defined with 4 cores, did a customer license software on 16 or 20 cores? Now the answer is simple, you use the either the physical or virtual core count whichever is lower. In the example given, a customer would license 16 VPCs because that’s the hardware capacity. If the same server supported a single VM with 12 configured cores, 12 VPCs should be licensed since it’s the lower core count. This is the only metric supported in the IBM Cloud Private and IBM Cloud Private for Data systems.

Not all pricing models are available for all Informix fee editions.

Easy comparison table

Confused about which edition to use? The following table is designed to make it easier to determine the unique characteristics of each Informix edition. If a specific feature is not listed in the table, you can assume, for the most part, that it exists in all Informix editions. Again, this is only a general description of the features and license parameters. For exact definitions, refer to the [Software license agreements](#).

Conclusion

To quote a commonly used phrase: “Your needs may vary.” Regardless of the data processing requirements, the “Stronger, Faster and more Flexible” IBM Informix has the right blend of technological capabilities and feature options to provide a cost-effective, robust, and scalable foundation on which to build. And since “Informix just works!” customers can rest assured that Informix has the flexibility to grow and extend the power of their Informix environments when needed.

Related topics

- [Discover the Stronger, Faster and more Flexible Informix technology](#) and find the latest sales and marketing information on Informix.
- Visit the IBM [Informix product trials and downloads](#) site to download the unlimited functionality (though scalability-limited) Informix Developer Edition on the platform of your choice as well as time-limited versions of other Informix editions.
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