Compare the distributed DB2 10.1 database servers

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In a side-by-side comparison table, the authors make it easy to understand the basic licensing rules, functions, and feature differences between the members of the distributed DB2® 10.1 for Linux®, UNIX®, and Windows® server family as of April 30, 2012.

Please read the Notices section before reading this article.

Disclaimer

The licensing and packaging information provided in this article is for marketing and reference purposes only. For full details on DB2 packaging and DB2 license rights and obligations, please consult the DB2 license agreements.

Introduction

"DB2 is DB2 is DB2." This mantra holds true for the distributed platforms that DB2 runs on, the editions available for purchase, and the freely available DB2 Express-C package.

Quite simply, this memorable phrase means no worries when you need to grow. It means any application you write for any edition of DB2 will work with any DB2 database running on any distributed platform that DB2 supports (Windows, HP-UX on Itanium, Sun Solaris on x86 and SPARC, Linux, and AIX®). In fact, there's even

a cross-family SQL reference book you can use to write cross-family DB2 for z/OS® and DB2 for i portable applications with a common SQL API.

In addition, DB2 10.1 builds on the free a IBM Data Studio toolset (the de-facto DB2 management tool you can freely download) with a requirements to retirement Integrated Data Management (IDM) discipline and toolset under the InfoSphere® Optim™ brand. (Some Optim products are also provided free of charge with a DB2 server purchase). The absence of the *DB2* moniker is not accidental; the IBM Optim toolset spans the entire spectrum of the application life cycle (design, develop, deploy, operate, optimize, and govern) for all IBM relational databases and some non-IBM database servers, too. Quite simply, not only do you have a portable SQL API but you also have a toolset that lets you instrument your business logic across the enterprise. This means that skill sets for DB2 for Windows can be easily ported to or from DB2 for z/OS. It also means that your personnel skills investment can be dynamically moved from problem area to problem area, breaking free of costly database skill stove pipes.

To further enhance the DB2 family value proposition, DB2 packaging includes federation across the entire IBM relational database portfolio. This allows you to write a single SQL statement that transparently joins data from DB2 on Windows, or DB2 for z/OS, or Informix — any supported combination you can think of. What's more, you can add Information Integration software to address cross-vendor information integration problems by extending the DB2 SQL API with transparent access to non-IBM relational databases (such as Oracle, SQL Server, etc.,) and materialize non-relational data sources (like XML streams, spreadsheets, message queues, VSAM, IMS™) as relational tables, thereby truly creating a corporate-wide common data model. Truly, DB2 enables in-place access to data wherever it may reside.

Now consider that DB2 10.1 provides native support for the most commonly used Oracle Database PL/SQL syntax, data types, and more. In fact, organizations report that, on average, 98% of their PL/SQL code runs on DB2 10.1 without changes, and they have been able to move their applications from the Oracle database to DB2 in as little as one or two weeks. When you take all this into account, you can see how DB2 truly lets you break free of skyrocketing costs in an economic environment where cost containment is a top priority.

DB2 also comes in different editions and packages, including the Advanced Enterprise Server Edition, which provides the ultimate suite of capabilities for DBAs and developers (including additional storage and performance optimization features and rich administration and development tools) all at a low cost and with one part number.

And let's not forget the highly acclaimed free DB2 Express-C package (or for a modest amount of money, you can get a DB2 Express fixed-term license (FTL) that not only includes full product support from IBM, but also additional capabilities not

found in DB2 Express-C.) It's a small point, but DB2 Express-C is generally not referred to as a DB2 edition, but a package. All DB2 editions and packages share the same code base; they're really just feature and licensing distinctions that try to allocate the appropriate features, functions, and benefits available within DB2 to the appropriate target market at the appropriate price. Again, the underlying technology is *always* DB2, so decisions about what edition to use have nothing to do with portability, ease of use, etc. The distributed DB2 editions are very much a set of Russian nesting dolls — what's in one edition is generally in the higher editions. For example, the Self-Tuning Memory Manager (STMM) is part of DB2 Express and is therefore part of every other DB2 edition. Quite simply, this means if you write an application for the free DB2 Express-C package, it will run on a DB2 Express Edition (DB2 Express), DB2 Workgroup Edition (DB2 Workgroup), DB2 Enterprise Edition (DB2 Enterprise) server, and Advanced Enterprise Server Edition (DB2 Advanced). Quite often, clients (and IBMers, for that matter) need a single location to find quick up-to-date comparisons between licensing rules, features, and functions included in the distributed DB2 server offerings. In this article, we use a simple table to compare and contrast the DB2 editions and packages as of the date this article was published with respect to the most common questions we get from clients as to "what's in what?" and so on. You should be aware that this article doesn't take into consideration specialized packages, such as the InfoSphere Warehouse editions, which all have DB2 as the core database engine.

By no means can this article, and the accompanying editions table, be complete. Again, it attempts to answer 80 percent of the questions we get when talking to clients or in speaking engagements. (If we haven't covered a topic you have a question about, email us and we'll add it to a future update.)

Note: In the editions table, the term *server* represents the physical server where the DB2 software is running or an IBM price-supported virtualization session (such as VMware, Xen, LPAR, etc.) unless otherwise noted.

Easy comparison table

Comparison table

Check out the side-by-side comparison table, Compare the distributed DB2 10.1 database servers.

The side-by-side comparison in Table 1 is designed to make it easier for you to determine which DB2 edition and package is right for you. If a feature is not listed in the table, you can assume (for the most part) that the feature exists in all editions included in the table. For more information about the different editions of DB2, read "Which distributed edition of DB2 10.1 is right for you?" by Paul Zikopoulos, Steven Astorino, and William Kulju.

That's all for now

Different businesses have different needs. But all businesses need cost-effective, robust, and scalable solutions. The different DB2 editions and packages allows clients to pick the features of DB2 that's right for them, without sacrificing core strengths. Furthermore, since DB2 is DB2 is DB2, you can rest assured that whatever edition or package you choose, it will not limit future decisions if you need to scale or extend the power of DB2 — just upgrade the license key.

Packaging is an ever-changing landscape, so we suggest you refer back to this article often, taking note of update dates.

We have tried to cover the most common questions we get about differences between the DB2 server editions as well as DB2 Express-C. If you have other criteria you would like to see included in this table, or need more clarification, email us at paulz_ibm@msn.com, astorino@ca.ibm.com, or wkulju@ca.ibm.com.

Notices

The information presented in this article is presented on a best-effort basis from the authors' personal knowledge and not intended to be an official communication from IBM. Neither the authors nor IBM are liable for any incorrect information in this article.

Resources

Learn

- Be sure to see the side-by-side comparison table, Compare the distributed DB2 10.1 database servers.
- Read "Which distributed edition of DB2 10.1 is right for you?" for the details on what makes each edition of DB2 for Linux, UNIX, and Windows unique.
- Check out "Licensing distributed DB2 10.1 data servers in a high availability environment" and ensure that you're licensing your DB2 for Linux, UNIX, and Windows data servers correctly in a high-availability environment.
- Learn about DB2 Express-C, the no-charge version of DB2 Express Edition for the community.
- Learn more about Information Management at the developerWorks Information Management zone. Find technical documentation, how-to articles, education, downloads, product information, and more.
- Stay current with developerWorks technical events and webcasts.
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Get products and technologies

- Build your next development project with IBM trial software, available for download from developerWorks.
- Now you can use DB2 for free. Download DB2 Express-C, a no-charge version of DB2 Express Edition for the community that offers the same core data features as DB2 Express Edition and provides a solid base to build and deploy applications.
- Build your next development project with IBM trial software, available for download directly from developerWorks.

Discuss

- Check out the developerWorks blogs and get involved in the developerWorks community.

About the authors

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William Kulju, B.A., MSc, M.B.A is a Product Manager for IBM DB2 for Linux, UNIX, and Windows, and has been with the IBM DB2 group for over 12 years. Prior to becoming a Product Manager, William held various roles of increasing responsibility in development, customer support, quality assurance, and operations. As Product Manager, William's responsibilities include ensuring that current and future versions of DB2 for Linux, UNIX, and Windows are eagerly embraced by the multi-billion-dollar database server marketplace. William is also an expert in DB2 licensing and packaging options and would appreciate your feedback on this article. You can reach him at: wkulju@ca.ibm.com. William lives in Markham, Canada with his wife and children.

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350 magazine articles and 15 books including Understanding Big Data: Analytics for Enterprise Class Hadoop and Streaming Data; Warp Speed, Time Travel, Big Data, and More: DB2 10 New Features; DB2 pureScale: Risk Free Agile Scaling; Break Free with DB2 9.7: A Tour of Cost Saving Features; DB2 Certification for Dummies; DB2 for Dummies; and more. Paul is a DB2 Certified Advanced Technical Expert (DRDA and Clusters) and a DB2 Certified Solutions Expert (BI and DBA). In his spare time, he enjoys all sorts of sporting activities, including running with his dog Chachi, avoiding punches in his MMA training, and trying to figure out the world according to Chloë—his daughter. You can reach him at: paulz_ibm@msn.com.