

Going for the Gold with IBM® DB2® 11

Athletes are always changing training procedures, practice routines, and equipment to get an edge over the competition. Let's discuss the value of DB2 11 for IBM® z/OS®, how you can gain an edge in your IT environment by implementing DB2 11 sooner, and how it can be compared to Olympic athletes—beyond the obvious focus on winning performance.

IBM implemented a new agile methodology when developing DB2 for z/OS releases, enabling customers and vendor partners like BMC to engage earlier in the process. Now BMC can provide solutions that are ready for DB2 11 more quickly than ever following general availability (GA). In the past, supporting a DB2 release might have taken partners and applications teams several months, but now it only takes weeks. This agility is important for today's large, complex DB2 environments. Moving to a new release must be quick, and the back-end code needs to be solid, with strong vendor support. And just as Olympic athletes focus their training on their specific qualities and strengths, the DB2 11 development process at BMC concentrated on the important features, such as extended RBA/LRSN—one reason why some customers are aggressively moving to DB2 11.

During your DB2 for z/OS planning meetings, the following question might come up: “Should we have our eyes on the 2018 Olympics when it comes to DB2 11? Or should we speed up our training and try to go for gold more quickly?” In addition to the improved go-to-market plan from IBM and its business partners, another big advantage is the quality of the code. Earlier releases caused some pain as early adopters fought the fight for the rest of the DB2 for z/OS community; however, the code base has grown in stability, and DB2 11 continues that trend. For example, DB2 11 is the first release that is certified by SAP at GA.

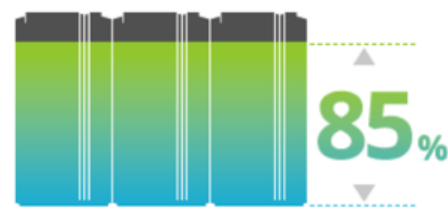
There are a number of reasons to move to a new release of any software, including support and business value. Support is an easy decision; it’s similar to Olympic sports with a finish line—the outcome is easier to see. What release of DB2 are you running? And will IBM continue to support that release? In the case of DB2 for z/OS, the current supported releases are DB2 V9, V10, and DB2 11. IBM will drop DB2 V9 support soon, although it will offer extended support at an additional cost. If your critical business applications are running on DB2 for z/OS, do you really want to run on an unsupported or outdated release?

Business value involves some gray area—the decision may be more of a judgment call, like evaluating snowboarding on a half-pipe or style in figure skating. Business value means different things, depending on who you are and where you are in the organization. For application designers and developers, particular new features and functions can provide facilities to users much more quickly than if they were developed in-house. For mainframe system staff, the flexibility and resource savings might be the most important factors for moving to a new release. Reducing MIPS, which affects hardware and software budget, might be a key metric. All factors must be balanced with the staff requirements and the risk of upgrading.

Let’s start with the system group. For DB2 11, the migration and installation are very similar to DB2 V10. If you are running DB2 V10, this is a good thing because the same staff that completed those functions may still be available. For those on DB2 V9, no skip-level migration is available, so moving to V10 is required. However, looking forward, many of the same procedures serve you well when moving to DB2 11. As we all know, moving to a new release of a major DBMS in your environment involves many starts and stops, sign-offs, scheduling, and risk assessments. If driven from the IT system side for compliance and support issues, the application needs to budget for such an upgrade, which can delay the project by years. Testing and potential changes usually are the order of the day. IBM DB2 11 has given us APPLCOMPAT to reduce the application requirement and allows release-incompatible SQL to run in the new environment. This can certainly help get an upgrade in place, and it allows IT to deal with application SQL release-dependent issues when it makes most sense.

Now that we can get the product installed and scheduled for deployment—why move to DB2 11 now? The priority that your organization places on installing a new release of DB2 must be balanced with the return on investment provided to the business. At BMC, we are constantly building software products that provide high value to the customer, whether it be performance, application enablement, or availability. Address these same topics for DB2 11 and map these enhancements to your DB2 applications to determine how quickly to move.

Performance is addressed with any new release of DB2; DB2 11 continues to show savings in MIPS usage and processing improvements. Many articles and presentations are available that show graphs and charts of increased performance of STATIC SQL and INSERT processing. All mainframe vendors, including BMC, must continue to help customers decrease the demands for resources as IT budgets continue to shrink. [The 2013 BMC Annual Mainframe Survey](#) shows that 85 percent of mainframe professionals consider cost reduction their first priority.



85% of mainframe sites list cost optimization as a top IT strategy

Source: 2013 Mainframe Survey, BMC Software

Moving functionality into the database engine allows developers to support business needs quickly and efficiently. Consequently, it’s a bonus that all maintenance and support of those functions are the responsibility of the DBMS and the vendor. DB2 11 application enablement features include archive transparency, which many application developers have developed manually and maintained over the years. Now DB2 can cross the finish line while the business takes home the medals.

The last topic is availability. We hear from DB2 customers all the time about their need to make DB2 data available for longer periods and minimize offline changes and maintenance. The issue of limited Log RBA had the potential of disabling DB2 production environments completely. Early on in the history of DB2, early designers thought that the current RBA design would never hit the maximum value; however, now we see DB2 environments hitting that maximum RBA within a few months. The success of DB2 and the advancements in technology have increased the speed at which RBAs hit the max. IBM designed the DB2 11 to fix the issue, and now we have extended RBA/LRSN support. Consequently, this was the top feature that BMC implemented in each of its DB2 solutions. The critical nature of this feature can really impact the DB2 for z/OS community. DB2



66% said application availability is a top IT priority

11 availability also includes enhancements beyond the 10-byte RBA/LRSNs. Additional online schema enhancements, data sharing improvements, and instrumentation help with configuring the correct resources.

BMC was very aggressive in supporting DB2 11 because of the high potential adoption rate (see infographic: ["DB2 11 and IMS 13 Have Arrived"](#)). Just as many top class athletes have the best and fastest equipment to power down the slopes and bobsled runs, so too do many first class DB2 environments require BMC DB2 solutions to win a medal. DB2 11 became available on October 25, 2013, and many of the BMC DB2 solutions were released in June 2013. Today, [BMC provides support for the full DB2 11 version.](#)

So why wait years for the next Olympics to get your gold medal? If you've done all the preparation and training, you might be ready now.

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