



IBM and Interoperability: the Migration Competency Center

A Cyon Research Interoperability Report
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Executive Summary

A unique player in the product data interoperability market is the IBM Migration Competency Center, in Boca Raton, Florida. This center, which is virtually unpublicized, provides interoperability consulting and services through IBM's Product Lifecycle Management organization. Because the center serves both IBM and its marquee customers, it is staffed with senior consultants, and is able to provide interoperability consulting and services for all major CAD systems.

The IBM Migration Competency Center bills for its consulting and services on an hourly basis, not charging for compute time. On large interoperability projects, the center is often the low-cost provider. The center emphasizes maintaining a high-level of intelligence in translated files, and works on a project-by-project basis to provide results optimized to the ultimate use of the data.

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The CAD and product data interoperability market is fragmented, with software vendors and service bureaus all scrambling to find customers. At the same time, customers have to do quite a bit of work to find the tools and services they need. There are few places to turn which can provide expertise, tools, and services.

Tucked away in Boca Raton, Florida, is a small gem called the IBM Migration Competency Center. You won't find it using a web search, and you won't even find it listed in an obvious place on IBM's web site. Its purpose is to support the sales team in IBM's Product Lifecycle Management division, and the Business Consulting Services division of IBM Global Services, providing product data interoperability consulting and services. When a customer asks IBM for help with an interoperability problem, or needs to migrate data from one CAD system to another, the call goes out to the Migration Competency Center.

The Center has roots reaching back to England, in 1986. It was moved to Boca Raton in April, 1999. Supporting most major CAD products (including CATIA V5/V4, Unigraphics, I-DEAS, Pro/E, CADAM, MicroCADAM Helix, and TogoCAD), the center is understandably most often called on to provide support in migrating IBM customers' legacy CAD data (often CATIA V4) to CATIA V5.

While CATIA V5 includes specific tools for supporting interoperability and multi-CAD installations, it is CAA V5 (component application architecture V5) which gives the product true flexibility, allowing it to work effectively in heterogeneous environments. (The architecture of CATIA V5, in conjunction with CAA V5, is extensible enough that it can even encapsulate foreign data structures, such as those from third-party software developers.) One of the differentiating capabilities of the Migration Competency Center is its ability to handle complex migration projects which require substantial CAA V5 expertise.

What is possibly most intriguing about the Migration Competency Center is that, even though IBM itself has a predisposition towards CATIA (since they sell it), the center has both expertise and experience in moving CAD data in all directions. That begs a question: Why would a customer who, for example, wants to migrate data between Unigraphics and Pro/E want to have IBM do it for them?

The answer to this lies in the fact that the primary charter of the Migration Competency Center is to provide expertise—not only to customers, but to IBM Global Services itself. When the phone rings at the center, it could be a Global Services consultant looking for guidance in a small account, or it could just as easily be an IBM marquee customer with 100,000 files that need to be translated pronto. Because of this, the center is staffed with industry veterans who have deep expertise in all facets of product data interoperability. (Just for clarity, those in the industry rather like the term “interoperability,” as it doesn't have some of the negative historical baggage as does the term “translation.” The term “migration” is for practical purposes the same as translation, but it has the connotation that the data is being moved, and is going to stay moved—such as might happen when a customer retires an old CAD system in favor of a new one.)

The center charges for its services—whether consulting or translation—on a flat hourly basis, with an emphasis on automating the process, thus reducing computer cycle time. (You might appreciate that, for IBM, computer cycle time is fairly inexpensive.) This puts IBM in the position of often being the low-cost provider on large data migration projects. The center handles all types of projects, including archival translations, one-time bulk migrations, ad-hoc translations for current projects, as well as extended projects where files are moved from one CAD system to another on a daily basis.

On a typical project, the consultants at the competency center will first ask the customer to provide a limited number of sample files—a cross-section of the most complicated ones in the project. The center will then do any setup work required, and move the files to the new format. Once the customer has accepted the results with the sample files, the center can provide them with a cost estimate to run the entire project. Most of the cost is involved in getting the project set-up initially, which may not be trivial. But, after the setup is done, the cost to translate a large number of files is quite reasonable, since little human intervention is required. (This is assuming that the customer really did provide the center with sample files representing the worst-case.)

After running a project, the center keeps the setup information, so the customer can run more files at any time. Historically, most projects at the center involve mass-migrations of data, but their cost structure economically supports periodic translations of smaller numbers of files. For companies which use multiple CAD systems, this can be rather handy.

If there is a challenge that the Migration Competency Center faces, it is that their customers traditionally have a high level of expectation. Many customers are new users of CATIA V5, migrating from CATIA V4 or other CAD systems. They want their data to come across in such a way that they can work with it just as they did in the past. They expect not only that the migrated data will be of high quality, but that it will also retain its intelligence. (They also expect low pricing and fast turnaround, but that's a given.)

In order to achieve consistent quality, the center uses a wide variety of translation, healing, and workflow management tools. Some tools—particularly those which would be otherwise unavailable—are developed in-house. But many tools are commercial off-the-shelf products from best-in-class vendors. IBM adds value by knowing how to use these tools to get the best results.

Beyond providing service-bureau data migration, Migration Competency Center experts travel to customer sites, providing expertise to those who are implementing in-house data migration projects. The center often takes a management roll in these projects, bringing in specialty suppliers who can provide specific domain expertise and software.

The Migration Competency Center serves customers in every industry, but is particularly strong in aerospace, automotive, and consumer products. The center processes many millions of files each year, and does consulting work worldwide for customers of all sizes. Not bad for a place you can't even find on Google.

About Cyon Research...



Cyon Research Corporation was formed by CAD industry consultants Brad Holtz, Joel Orr, and Evan Yares to foster clarity and provide vision to users and vendors of CAD and PLM tools. Current products include: CADwire.net, a leading provider of online news and analysis; COFES: The Congress on the Future of Engineering Software; Engineering Automation Report, A-E-C Automation Newsletter, Extranet News, and The CAD Rating Guide™. More information can be found at: www.cyonresearch.com, 301-365-9085.



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