

How to make your transition to IBM i 6.1 easier



By Pete Massiello and
Roxanne Reynolds-Lair

IBM i 6.1, which you might have called i5/OS V6R1 at one point, is the level of the IBM i operating system that you should be using. This is a release that is rich with functionality, as well as some new features (see the textbox “Benefits of moving to IBM i 6.1”). If you are not already on this release, you should be starting to plan your upgrade, and this article offers some helpful tips on how to make the transition easy.

Before we get into some of the planning issues, there are some important dates to highlight. If you are currently on V5R3, be aware that it will no longer be supported by IBM after April 30, 2009. Therefore, you should be looking to upgrade to either V5R4 or 6.1, with the preference being 6.1. IBM hasn’t stated when support will end for V5R4, but it will be withdrawn from marketing in January 2010.

One of the key differences with upgrading to 6.1 vs. previous operating system releases is that all the programs on your system go through a recreation step at some time during the upgrade process. When we went from CISC to RISC, we called this re-encapsulation. The 6.1 recreation is very similar in concept but much easier in practice. To recreate a program, its creation data, which is a subset of its observable information, must be available. If your program was created at V5R1 of i5/OS or later, you already have creation data. If your program was created prior to V5R1 and you have not removed observability, then you also already have creation data. For those programs with creation data, you do not need to take any special actions to prepare for the 6.1 upgrade. However, if you don’t have creation data, you will need to have the source to recompile the program prior to your upgrade to 6.1.

To help identify programs that could pose problems, IBM has created a tool called ANZOBJCVN, which should be run on V5R3 or V5R4 of i5/OS a few months prior to your upgrade to 6.1. This tool produces reports that tell you which objects will not be able to be converted for 6.1. This is important because a conversion failure means the program will not run once you upgrade to 6.1. Since a missing program will affect your business, it is important to run the ANZOBJCVN utility and make sure everything will convert. If the failing programs were written in your shop, then you should have the source code to recompile them. In the case where you have purchased applications or tools from third-party software vendors, you will need to contact those vendors to get a version that is compatible with 6.1.

In general, it’s a good practice to maintain a list of all the third-party software that you currently have for your IBM i. From my experience, you will have more third-party

software on your machine than you might initially realize. This list should be part of your disaster recovery plan and should contain the name of the software, the company name, company telephone number, website, start and end of maintenance contract, version you are running, and the names of the libraries. As you contact each vendor, this list will be extremely handy to determine if the version of their software that you are running is compatible with 6.1. If you need to get a new version of their application software or tool, ask if it will run on both the current version of your operating system as well as the upgraded version (for example, 6.1). This will help you in your upgrade planning.

The Fashion Institute of Design and Merchandise (FIDM) recently upgraded their operating system to 6.1 and learned several important lessons through their efforts. They were a little startled when several of their 16 independent software application vendors (ISVs) were not yet supporting i 6.1 when FIDM first approached them in September 2008. Some ISVs were very cooperative and began their verification work immediately. Other vendors were hesitant and even reluctant to commit to an availability date. Reasons provided by the vendors varied; some were only verifying 6.1 with a new release of their application so were dependent on their own release timing. Others were just on a much slower adoption rate. After working through a variety of issues, however, FIDM successfully upgraded to 6.1 on Dec 13, 2008 on 8 partitions on three physical boxes. FIDM discovered a successful upgrade requires a team effort among the customer, the ISV, and IBM. As observed by Roxanne Reynolds-Lair, FIDM CIO and CAAC member, “IBM has many tools and services in place to assist ISVs to go to a new release of the operating system, but we as customers have more of a responsibility than we perhaps thought to check with our vendors and help them understand our business needs.”

Roxanne brought her experience to the COMMON Americas Advisory Council (CAAC), and the CAAC created on behalf of all COMMON members a requirement to make this process easier. See the textbox, “Steps to upgrade an application”, for some of the planning recommendations that have come from the discussions between IBM and the CAAC. IBM also has extensive resources available to help ISVs who have not yet verified their software for 6.1. See the ISV section of the IBM upgrade planning for more information (<http://www-947.ibm.com/systems/support/i/planning/upgrade/v6r1/isv.html#isv>). Don’t let their software hold you back from getting to 6.1 of IBM i.

As with any upgrade, you should be reading the IBM upgrade planning website <http://www-947.ibm.com/>

systems/support/i/planning/upgrade/v6r1/index.html. I can tell you from my experience, that I have had only one customer pass the ANZOBJCVN step on the first iteration. You should plan to run it once, contact all your vendors for software updates, install and test those updates, and then run ANZOBJCVN again. You shouldn't upgrade to 6.1 until your ANZOBJCVN report is clean, or you understand that anything left on that report will not run once you upgrade to 6.1. For a summary of the steps required to upgrade your applications for IBM i 6.1, see the box below.

I have found that a release upgrade can be a great exercise in cleaning your machine up as well. You will get rid of old libraries you no longer need, identify demonstration software no longer under consideration, and you will get on the latest versions of all your third-party applications.

There are many steps to perform when it comes to do an upgrade, but I have always found that the success of any upgrade comes from the planning done prior to the upgrade. This is definitely the case with 6.1 and ANZOBJCVN. You will need to contact your ISVs early in this process, and allow plenty of time to update your application software. Remember, that 6.1 is ready for production; just make sure you follow **all** the steps required in the upgrade process so that your upgrade goes as smooth as possible. ■

Benefits of moving to IBM i 6.1 include:

- Improved system integrity and performance.
- Exploitation of new processor capabilities.
- Support for regulatory requirements with encryption of backups and data on disk.
- New high availability solutions manager for IBM i.
- Improved performance for Java and WebSphere applications on IBM i.
- Expanded virtualization capabilities.
- Enhanced performance for IBM i environments with IBM System Storage.
- Improved support for IBM i on BladeCenter technology.

About the Authors

Pete Massiello has been working with the AS/400, iSeries, i5 since 1989, focusing on systems management and technical support. He has held numerous technical positions through out his career. He is the President of iTech Solutions Group, an IBM Advanced Business Partner delivering solutions and services to System i shops throughout the US. He is a member of IBM's certification test writing team, an IBM eServer Certified Systems Expert with certifications in iSeries Design, Administration, Implementation, LPAR, and HMC management. Pete has a BS in Computer Science from Hofstra University, and an MBA from the University of New Haven. He is President of the Fairfield, CT AS/400 User Group (FASUG), a past member of the COMMON Board of Directors, a COMMON Speaker of Merit, and a frequent speaker at user groups.

Steps to upgrade an application include:

1. Identify all Partner applications and tools being used across all your machines.
 - A. Check all production and test machines.
 - B. If the application or tool is still needed, identify the complete ISV company name, product name and version info being used today.
2. Determine where you obtained the product.
 - A. Can you go to the reseller or do you need to go directly to the ISV who developed the product?
 - B. Do you have a sales contact?
3. Using information from the **IBM Global Solutions Directory** or the application web site, contact the ISV or reseller.
 - A. Is the product still available, or has it been renamed or withdrawn?
 - B. Do you have current software subscription or support license for the product?
 - C. Is the latest version of their application or tool supported on IBM i 6.1? If not, when is the expected GA date?
 - D. Is the latest version of their application or tool supported in your current release of IBM i (V5R3, V5R4)?
4. Run Analyze Object command in collect mode using recommendations in the Redbook to determine if there are any problems with current version of the product.
5. Install and test any new product version prior to upgrading the operating system, if possible, to reduce the number of changes at one time.

Roxanne is the CIO and Director for Management of Information Technology at The Fashion Institute of Design & Merchandising (FIDM). She is responsible for all aspects of technology implementation at FIDM. A recent project under her guidance, "IP Telephony" was a winner in the third IBM/COMMON Innovation Awards in the category Infrastructure Simplification. This project saves FIDM several thousand dollars a month and provides the ability to integrate data and voice applications. Two years previously, FIDM IT received one of the first IBM/COMMON Innovation Awards in the Software Innovation Solution category. Roxanne has been quoted in several industry publications over the years providing her opinion on IBM products and their benefits to the business.