

Exporting iSeries Data to Other Formats

By Don Rima

As we increasingly develop in a more heterogeneous systems environment, we often find the need to send or share data between not only different systems but different database engines. The systems' need to interface exported data directly into XML, Access, Oracle, CSV, text, etc., isn't going to diminish in the near future. Rather, it's likely to increase.

I would prefer that a utility package be consolidated with one part handling exporting and the other part handling importing, I also want all of the functions in one package. But not everyone agrees with the concept of bundling products. And to be fair, some companies only export data from their OS/400* systems. That's life.

This month I'm examining a product that exports data from OS/400 into several other systems, file formats and database engines - Route One from UTI 400 Limited (www.uti400.com).

(Note: I know I've reviewed several data-transfer tools recently. Because many are on the market, I'll be examining more in the future.)

Installation

My installation problems stemmed from two causes - my lack of understanding of the install instructions as written and a problem with some .dll files on my Windows* XP box. But, there's nothing like a Web demonstration to show what's wrong and have tech support solve your problems on the fly. I'm told that my installation issues aren't the norm, but then, neither is my XP box. And, the manual issues should be clearer for your install, which is totally cool with me.

Other than that, installation is a simple process. Allocate a little time for Route One to build the internals on the OS/400 side - about enough time to go get your coffee refilled and get back to your chair.

Ease of Use

The package is almost totally green-screen menu and command driven. The basic tenets are that the datasets are organized, collected and prepared on the OS/400 side, and then FTP'd to a client node for final format preparation. In short, the data-extracting workload is performed on the server side and the reformatting and final presentation prep is handled by the client.

The package builds its own data dictionary of tables and historical relationships for you to build and extract against. This comes in handy when you're doing repetitive and semi-repetitive extracts.

I'm a green-screen bigot. But the reality is that there are some GUI bigots out there and like it or not, the market trend is toward a GUI front end. To that end, it would be nice to see a GUI front end on the client side. However, having said that, I didn't have any real issues with navigating around the menu options, finding what I wanted or getting where I needed to be.

Documentation

The Route One manuals are well done and contain enough pictures. The installation sections that caused me problems

Spotlight Profile

Product: *Route One*

Company: *Utilities 400 Ltd.*

Version: *5*

URL: *www.uti400.com*

Overall Rating: *3.865*

should be revised for your installs. But the interesting part is the cookbook that comes with this product. UTI 400 has taken the time to actually walk you through most of functionality that you'll be using, in a step-by-step format. I guess you could say that it's a vendor's version of a Redbook. It's a really good thing to have. It would be nice if these samples were also available via some form of downloadable Web demo or video file that I could play locally and see the process flow, as the manual only shows periodic screens. But what you get is plus to any product - and not many products have this.

Certifiability

Overall, everything I looked at worked as advertised.

Functionality / Usefulness

This package does a nice job of letting you develop an extracted dataset, and then download it into many of the more popular and needed formats and database definitions.

The extraction options have some good front ends to let you build some intelligence into the definitions. The usual functions you'd expect in terms of building and selecting fields are easy to use. Date functions are available along with access to the local data area (LDA), which isn't very common among vendors. And as you'd expect, the products capability to extract over multiple joined tables isn't difficult to use. Route One also offers a nice set of built-in functions. But when you look at this product, be sure to examine the array-handling capabilities. This product allows you to use arrays for building analysis tables or lookups internally in the extract definition. I don't recall any other products that let you build internally defined arrays on the fly like this one does. If you're used to being able to manipulate or define data the way COBOL handles tables, Perl does hashes, etc., you'll find this to be a useful surprise.

You can also do some nice extracts from spooled-file data streams into a spreadsheet, and some of this can get fairly complex. Imagine writing a macro to extract your invoicing data from an invoice print run, convert it to a spreadsheet and then e-mail it to a marketing rep in the northern Italian Alps. Frankly, it's not hard to do. I was impressed at how this interfaced with my existing e-mail configuration. It took longer for the e-mail to leave my desktop and go to a target account than it did to set up the project to create the e-mail content.

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Once established and tested, these requests can be embedded into your mainline CL program calls. In effect all of the data conversion and exporting is done as part of your nightly operations.

Now, keep in mind that you'll need some form of Intel* technology on the receiving end. Yes, you can export to a UNIX* box, but that doesn't provide the full set of functionality on the target as you'd have in a Windows target. Although Route One allows you to convert a table or spooled file and transfer it to a desktop, you're better off, for the most part, exporting it to a server that you know is secure and will be up and running when these tasks start being offloaded to it. The reason is that some users tend to turn off their desktops when they leave for the day, and cleaning crews have been known to pull plugs out of walls to plug in vacuum cleaners. You get the idea. In short, for most of what you're going to be doing, you'll need to handshake with a Windows box to complete the data-conversion tasks.

Support

I received knowledgeable and timely answers from UTI 400's support folks.

What I'd Like to See in the Next Release

- Video / Web demo samples
- GUI interface from the client

Summary

Frankly, this product provides some of the best depth of functionality I've seen in a data-transfer package. Granted I wish it were all done on one box without the need for an additional Windows box, but that's life. And I wish the package handled importing as well as exporting, but the unbundling issues are UTI 400's policy, not mine.

The help cookbook is a super idea, and its depth makes this a product that should fill most niche needs for data and transfer targets. If you're involved in a major data-conversion or interface development, this is a tool you should seriously consider.

The extracting methods are fairly straightforward and easy to develop and execute, providing several target formats to receive the extracts in. This form of flexibility is nice.

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The Rima Report

Category	Points	Weighting	Overall Score
Certiability	4.00	.100	0.400
Installation	3.66	.150	0.549
Ease of Use	3.80	.150	0.570
Documentation	3.99	.150	0.5985
Functionality	3.80	.150	0.570
Usefulness	3.85	.150	0.5775
Support	4.00	.150	0.600
Total	27.10		3.865



KICK THE TIRES: If you're doing any form of data transfer and reformatting, this is some thing that should be on your short list of products to evaluate.

(Points given are on a scale of 0 to 4, with 4 being the highest. Each category is assigned its own weighting from a total of 100 percent.)

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