

THE OMNI USER

2021 Midwest Road Suite 200 Oak Brook IL 60523 630.953.6312

March Dinner Meeting Tuesday, March 23, 2004

registration & user discussions 5:00, dinner 6:00, presentation 7:00

Real Life iSeries RF Experiences - Why and How

This month's presentation takes us through a real life development and implementation of shop floor applications using RF devices like handheld computers/scanners, shop floor terminals, barcode printers. It also includes the attachment of serial devices (scales) communicating with the terminals to report product weights. The presentation will focus on the KISS method of implementation using 5250 emulation products, will touch on the possibility of using Websphere as a method of front-ending RF applications and will review security aspects of Radio Frequency. The focus will be on what it takes to properly deploy RF devices and applications in your factory or office.

Bill Parks, Alliance Business Systems

Bill Parks is an independent consultant with over 22 years experience developing applications for IBM midrange system users. He has developed applications attaching to many popular software packages including but not limited to JD Edwards, PRMS and Intentia Movex. Bill has a degree from Northern Illinois University, is a CPA and also earned the CDP designation from the ICCP.

Please reserve online at... http://www.omniuser.org by Noon on Thursday, March 18, 2004

The OMNI web site is our preferred method of reserving for the meetings. If you must, you can call (630) 953-6312

and leave your company name, the names of those attending, and their entrée choices.

This month's menu:

Starter Caesar Salad Entrées (choose one)

Meat: Pork Medallions with caramelized bourbon & apples. Served with garlic mashed potatoes.

Veggie: Portabella dish covered in a mushroom sauce

Dessert Key Lime Pie

Dinner Meeting Cost:

\$25 Member or Student, preregistered \$40 Non-Member, preregistered \$5 surcharge for non-registered, if possible Late arrival (post-dinner) \$5 Member, \$20 Non-Member Cash or Check only at door, Credit Cards online only

If you must cancel your reservation...

If your plans change at the last minute and you cannot attend (never happens in our business, right?) the best way to cancel is to use the web. Click the register button, leave your name, company name and in the phone number field, enter "Cancel." That's all it takes! No penalty, no problem. If you can't use the web, call 630-953-6312 to cancel. Please help us with this so we can provide you with the best possible meeting accommodations. Thanks!

Directions to the Embassy Suites Hotel

Our monthly meeting is located in Lombard, on Butterfield Road between Meyers Road and Highland Avenue. An easy on/off at I-88's Highland avenue exit, then turn north on Highland, east on Butterfield to one block east of Yorktown Mall, then south at Technology Drive.

Table of Contents March Dinner Meeting Information 1 2 2 2 3 3 4 4 5 6 7 8 13 Table of Contents Last Month's Meeting President's Letter Arbor Solutions ad OMNI 2004 Golf Outing 7/20 at Tamarack! **RJS Software ad** Open board position: Seminar VP RPG World ad Outsourcing article T.L. Ashford ad **COMMON** Corner–Linux OMNI Midrange Events List OMNI Board Contact Info <u>14</u> edited by Jerome Hughes, jromeh@comcast.net

February meeting notes...

A great big OMNI round of applause and thanks goes out to **Al Grega** of **LANSA**, whose interesting and informative presentation "UCCnet" was featured at our February monthly dinner meeting. Al's presentation provided thorough coverage of the many advantages and issues involved in implementing UCCnet to standardize information sharing within the supply chain, providing a central registry and synchronizing between all parties.

Al's presentation was well received by a large group of OMNI attendees, who had a great time learning about UCCnet. Thanks, Al!

President's letter

by Paul Nelson, OMNI President

Greetings!

This year is getting exciting! Next on the OMNI agenda is the Tuesday, March 23rd dinner meeting, featuring **Bill Parks** of **Alliance Business Systems**. Bill will be doing a presentation on real life experiences with RF (Radio Frequency) applications on the iSeries. Bill's abstract and bio are on the first page, please check them out and get registered to join us for dinner and his presentation.

Coming up in April, we've got our 3rd annual **Spring Day of Education** on Thursday, April 22nd. We're looking forward to several wonderful speakers, including **George Farr**, **Mark Anderson**, and **Kevin Larsen** from IBM, and also our own local boy made good, **Bob Cozzi**.

Just a week after our Spring Day of Education, Bob brings his own **RPG World** seminar to the Deerfield Hyatt Hotel on April 28-30 for 3 days of highly focused education, featuring iSeries legends **Jon Paris**, **Paul Tuohy**, and **Susan Gantner**. RPG World is the place where you can go to get the kind of AS/400 and iSeries developer information you can take home and start using immediately.

Here's the good part: If you attend OMNI's Spring Day of Education, Bob and his colleagues are offering a discount of \$100 off the early bird or regular RPG World registration! When you register for the Spring Day of Education, we'll email you the \$100 promo code for RPG World. If you can't make the Spring Day, OMNI members still get \$50 off RPG World registration with promo code OMNI!

OMNI is also preparing to launch our new series of events called "**OMNI First Tuesdays**," which will be informal special interest group gatherings on the first Tuesday of each month. On Tuesday, April 6th the topic will be "Java Roundtable Discussion" at the mrc office in Lombard, watch the <u>OMNI event list</u> for upcoming details! Future topics will be whatever you want them to be, so you will be in charge. Just let us know what you want to do, and we will facilitate having a space for you. Remember, OMNI is your user group. We want everyone to have a voice in what we do and where we're going.

In closing let me thank you in advance for your support, and don't be afraid to jump in and help us. We need your involvement to help OMNI grow.

Thanks, and we'll see you at the meetings.



applied experience, effective solutions



700 Commerce Dr. 5th Floor Oak Brook, IL 60523 630.288.4831 wlorimer@arbsol.com



When Experience Matters— Count on Arbor Solutions

Your source for iSeries Services, Hardware and Software

- iSeries (AS/400) Hardware
- Application Development
- RPG Programming
- e-Business Solutions
- · Disaster Planning and Recovery
- Performance Analysis
- Security Analysis/Design
- Lotus Domino/Notes

www.arbsol.com

Arbor Solutions

6th Annual OMNI Golf Outing

by Bill Lorimer, OMNI Vice President

As the days grow longer and the mercury begins its halting but stubborn climb, many of our thoughts turn to planning opportunities to clench a club used for hitting a small dimpled ball into, over and around a variety of natural and man-made obstacles. The goal, of course, is to propel the ball into a hole four and a quarter inches in diameter which is hundreds of yards away, over and over again.

Yes, golf season is upon us and it's never to early to begin planning your schedules (read excuses) so you can join us on Tuesday, July 20th.

This years outing will be held at Tamarack Golf Club. Conveniently located on Route 59 in Naperville, Tamarack offers a wonderfully maintained course which provides fun and challenge to golfers of all skill levels. 18 holes, lunch, great raffle prizes and a day with your fellow OMNI members. Start planning your foursome(s) now!

Advertise in THE OMNI USER newsletter!

Want to reach a large very focused group of iSeries professionals who may be very interested in your products or services?

For more information on advertising in this newsletter, please contact OMNI Advertising Director Matt Gross at (847) 466-2944 or prrgg1@aol.com



RJS Software

OMNI has an available board position!

The position of Seminar Vice-President is currently open. The other board members are covering the duties of this position until it is filled. Please consider helping out by volunteering to assist us with this position. The duties involved are:

- Schedule speakers for regular meetings with the approval of the Board
- Send out confirmation letters to upcoming speakers
- Arrange needed equipment for speakers
- Obtain speaker gifts with the approval of the board
- Introduce speakers at each meeting, thank the speaker and give gift at the end of the regular meeting
- Give briefing of upcoming speakers at each regular meeting
- Distribute, collect, and summarize monthly evaluation forms
- Send out thank you letters to speakers after meetings
- Report to the Board

For now, the other board members are covering the duties of this position. At the February board meeting, speakers were chosen for the March, May, and June meetings. This leaves the scheduling of speakers limited to the remaining August, September, and October monthly meetings, so this board position is a good one for a first time board member to get their feet wet with the OMNI board while not requiring an extra-large commitment of time. If you are interested or have questions about this position, please contact any of the board members listed on the last page of the newsletter.

First Came Orlando Then Anaheim



Chicagoland!

www.RPGWorld.com

Looking for a conference where sessions are focused solely on the RPG skills you need for your daily work? Not Java, not WebSphere, not Domino, not Client Access -- just the latest and greatest in RPG education.

Sound good? If so, then RPG World is the place for you.

RPG World was developed with one aim in mind -- to give RPG developers the information they need to develop today's applications and to give them a sense of where the RPG community is heading. The first two events were a huge success, with the attendees giving them outstanding satisfaction ratings. So we're doing it again - this time in Chicagoland.

Join hosts Bob Cozzi, Jon Paris and Susan Gantner for RPG World III. Now is a great time to fine tune your RPG development skills with the best in RPG IV educational events.

Check out www.RPGWorld.com for more information and to register online.

Join us **April 28 - 30** at the Hyatt in Deerfield, Illinois

Special: OMNI members receive a \$50 discount. Use Promotion code: **OMNI**

Outsourcing: A few years ago nobody in US wanted to talk to Indians, now they are eager

by Thomas L. Friedman, reprinted from the New York Times op-ed section, March 11th, 2004

Nine years ago, as Japan was beating America's brains out in the auto industry, I wrote a column about playing a computer geography game with my daughter, then nine years old. I was trying to help her with a clue that clearly pointed to Detroit, so I asked her: "Where are cars made?" And she answered, "Japan". Ouch.

Well, I was reminded of that story while visiting an Indian software design firm in Bangalore, Global Edge. The company's marketing manager, Rajesh Rao, told me he had just made a cold call to the vice-president for engineering of a US company, trying to drum up business. As soon as Rao introduced himself as calling from an Indian software firm, the US executive said to him, "Namaste" a common Hindi greeting.

Said Rao: "A few years ago nobody in America wanted to talk to us. Now they are eager." And a few even know how to say hi in proper Hindu fashion. So now I wonder: If I have a granddaughter one day, and I tell her I'm going to India, will she say, "Grandpa, is that where software comes from?"

Driving around Bangalore you might think so. The Pizza Hut billboard shows a steaming pizza under the headline "Gigabites of Taste!" Some traffic signs are sponsored by Texas Instruments. And when you tee off on the first hole at Bangalore's KGA golf course, your playing partner points at two new glass-and-steel buildings in the distance and says: "Aim at either Microsoft or IBM."

How did India, in 15 years, go from being a synonym for massive poverty to the brainy country that is going to take all our best jobs? Answer: good timing, hard work, talent and luck.

The good timing starts with India's decision in 1991 to shuck off decades of socialism and move toward a free-market economy with a focus on foreign trade. This made it possible for Indians who wanted to succeed at innovation to stay at home, not go to the West. This, in turn, enabled India to harvest a lot of its natural assets for the age of globalisation.

One such asset was Indian culture's strong emphasis on education and the widely held belief here that the greatest thing any son or daughter could do was to become a doctor or an engineer, which created a huge pool of potential software technicians. Second, by accident of history and the British occupation of India, most of those engineers were educated in English and could easily communicate with Silicon Valley.

India was also neatly on the other side of the world from America, so US designers could work during the day and e-mail their output to their Indian subcontractors in the evening. The Indians would then work on it for all of their day and e-mail it back. Presto: the 24-hour workday.

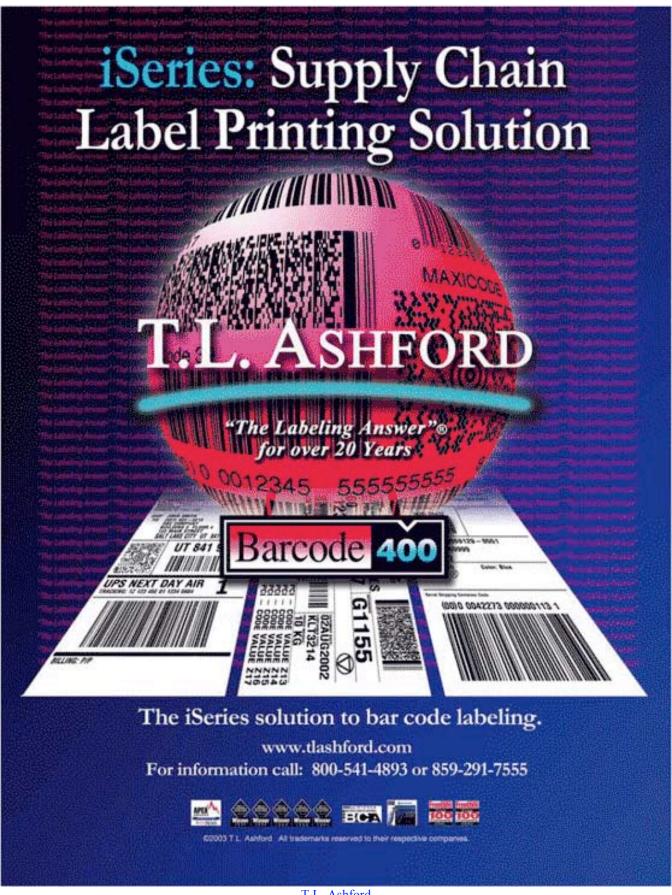
Also, this was the age of globalisation, and the countries that succeed best at globalisation are those that are best at "glocalisation"? taking the best global innovations, styles and practices and melding them with their own culture, so they don't feel overwhelmed. India has been naturally glocalising for thousands of years.

Then add some luck. The dotcom bubble led to a huge overinvestment in undersea fiber-optic cables, which made it dirt-cheap to transfer data, projects or phone calls to far-flung places like India, where Indian techies could work on them for much lower wages than US workers.

Finally, there was Y2K. So many companies feared that their computers would melt down because of the Year 2000 glitch they needed software programmers to go through and recode them. Who had large numbers of programmers to do that cheaply? India. That was how a lot of Indian software firms got their first outsourced jobs.

So if you are worried about outsourcing, I've got good news and bad news. The good news is that a unique techno-cultural-economic perfect storm came together in the early 1990s to make India a formidable competitor and partner for certain US jobs, and there are not a lot of other Indias out there. The bad news, from a competition point of view, is that there are 555 million Indians under the age of 25, and a lot of them want a piece of "The Great Indian Dream," which is a lot like the American version.

As one Indian exec put it to me: The Americans' self-image that this tech thing was their private preserve is over. This is a "wake-up call" for US workers to redouble their efforts at education and research. If they do that, he said, it will spur "a whole new cycle of innovation, and we'll both win. If we each pull down our shutters, we will both lose."



March 2004 COMMON Corner Education from COMMON

Linux: What You Need to Know by Richard Dolewski and Garth Tucker

I want to know where this product came from. Can you call it a product if it's free? Is it really free? How can anything free be a real solution for my business? Confused? Join the crowd. Join the "paying for software" crowd. Who is paying the way for all the companies that are coming to the Linux and Open Source parties?

Linux is not new; however, many of us are new to it. A lot of us may be familiar with it on some level, either through work or because we run it at home. It has been around since 1991 when Linus Torvalds, a student at the University of Helsinki, decided to write a UNIX operating system for his PC. He did not accomplish this alone however; he reached out to others via the Internet for input into its design. He made the source code available to anyone who had the knowledge to make changes and it is still a "free" OS

Free? First, let's define what the free Linux operating system kernel provides.

- It manages multiple processes that may run on the system at any time.
- It schedules multiple users.
- It controls the system security.
- It controls the input and output systems of the machine, for example, printers and monitors.
- It manages the disks which are connected to the system.
- It controls access to the files on them.

How Can This Be Free? Let's talk about "free." We often hear free in relation to Linux, and many people ask, "How can anything that's free be any good?" Before we can answer that, we need to discuss and understand how Linux is licensed.

Linux is NOT freeware or public domain; it is covered by the GNU General Public License, or GPL www.gnu.org/copyleft/copyleft.html. Now, you ask, "What is GNU GPL?" The GPL was developed by the Gnu (GNU) project www.gnu.org of the Free Software Foundation (FSF) www.fsf.org. Software covered by the GPL is copyrighted (or copylefted) to the author or authors. This means that standard international copyright laws protect the software and that the author of the software is legally defined. The GPL allows people to:

- Modify the free software, and
- Distribute their own versions of the software.

However, any works derived from GPL software must also be covered by the GPL. In other words, a company could not take Linux, modify it, and sell it under a more restrictive license. If any software is derived from Linux, that software must be covered by the GPL as well. The Free Software Foundation is a foundation dedicated to eliminating restrictions on the right of people to use, copy, modify, and redistribute computer programs.

So What Can I Get For Free?

You can download the Linux kernel free over the Internet with instructions from the Linux Web site, www.linux.org. However, the files are large and you need to work hard (this is a relative term) at the installation. The source code can also be downloaded and changes can be made to suit your needs, if you have the programming skills. Everybody has access to the Linux source code and volunteer software development on the Internet is common practice, with kernel development coordination by Linus Torvalds. Peer reviews play a large role in Linux development for such things as:

- Security
- Performance

The other option is through a distribution from companies such as SuSE, Red Hat, or TurboLinux. These have easier installs and contain other packaged features to make it more viable for business or personal use.

This leads to an interesting question: how do Linux distributors make money? They make money from the service offerings they have, as well as from any applications they write and market (still covered under the GPL). The first commercial distributions of Linux started appearing in 1992 and included such things as an installation program and various tools and utilities, most of which were migrated from UNIX. Commercial Linux distributions generally include:

- The kernel
- X Windows system and window managers like GNOME and KDE
- Web servers, email servers, and FTP servers
- Installation & system configuration support
- Third-party applications
- Development tools

On iSeries, Linux was announced in April, delivered in May of 2001, and runs in a partition on iSeries with V5R1 or V5R2 of OS/400. There are some restrictions as to where it can run and how much processor is required (i.e. a full or partial). We will go into a quick listing of which iSeries servers can run Linux a little further along.

This information is also readily available through IBM or from your iSeries Business Partner.

To help you make the decision on what distribution works best for your shop, check out http://www-1.ibm.com/servers/eserver/iseries/linux/dist_table.html for a great chart outlining the differences in the distributions.

What Are the Benefits of Running Linux on My iSeries?

1. Server Consolidation

Consolidation is a term that is used frequently, but is rarely put into practice due to squabbling over "turf," mistrust of different platforms among the users or administrators of the various platforms. IBM has released statistics that indicate 60 percent of the platforms that get consolidated onto Linux are coming from Windows NT server environments, and just less than 30 percent are coming from Windows 2000 environments.

- a. File and Print Serving For print and file serving, Linux plus Samba (the Windows print and file serving clone) works as reliably as Windows itself, but without the overhead of big ticket licensing.
- b. Mail Serving Bynari is an option to consolidate your Exchange servers. It can be found on the Web at www.bynari.net. There is an overview of Bynari on the IBM site as well at www-1.ibm.com/servers/ eserver/iseries/linux/.
- c. Firewall As a firewall, Linux provides us with NetFilter, www.netfilter.org. The netfilter/iptables project is the Linux 2.4.x / 2.5.x firewalling subsystem. It delivers you the functionality of packet filtering (stateless or stateful), all different kinds of NAT (Network Address Translation), and packet mangling.
- d. Application Serving The release of WebSphere Application Server V5.0.2 for Linux on iSeries opens the door to extend Web applications developed on other platforms to be run on Linux on iSeries. See http://www-1.ibm.com/servers/eserver/iseries/linux/websphere/index.html for more details. These are but a few of the possible solutions available commercially; a quick search through the IBM Linux site will show you even more options.

2. Reduce Wasted Processing Horsepower

People wishing to eliminate underutilized Intel servers or a hardware firewall should take a look at Linux. When we say underutilized Intel servers, we are referring to the fact that you most likely had to purchase a new P4, 2 GHz server with huge amounts of memory and disk to run a single application that could quite comfortably run on a Pentium Pro 200 MHz with 128 MB of RAM and a few gigs of disk. But because it's the current PC standard, we are forced to buy much more processor than required for our applications or if the application has a peak during only part of the day when it requires that much processing and is otherwise sitting idle.

But where can we buy *new* PII 200 MHz PC servers? Nowhere that I'm aware of and so we are stuck buying the latest in PC technology which will likely be outdated before we get around to rewriting or upgrading the applications in question to take advantage of the PC horsepower we now have.

On the other hand, putting business critical applications or data on a PC from the flea market may be a career-limiting move, much like telling your boss he's not the sharpest tool in the shed – which could lead to a quick trip to the parking lot. Linux on iSeries can help you eliminate this pitfall through Dynamic Resource Movement, i.e., when you have processing power available during off hours for a particular partition, you can reassign this to another partition that requires some additional cycles.

On the iSeries, several Linux servers can be set up. In the case of the larger systems, up to 31 Linux partitions can be created and run simultaneously. This opens the door to share resources between OS/400 and Linux or between Linux partitions. With dynamic resource movement, we can move as little as 1/100th of a processor and take advantage of Virtual Storage Spaces. With processor movement, you can tune your servers for times when they have active workloads and reduce processing power when it is not required and add it elsewhere. Storage virtualization allows Linux to share storage resources (disk, tape, CD, DVD) with OS/400 and other Linux partitions, without having to physically add another drive as you would likely have to do with a PC solution.

3. Total Cost of Ownership

In my opinion, this is open for debate due to the fact that Linux is still relatively new to the iSeries and solid Total Cost of Ownership numbers are not readily available. However, there are tools, such as TCOnow! from CIOview. They are an independent TCO tool vendor, so their TCOnow! tools are based on independent data from IT experts, and can help you understand the full financial impact of your IT purchase decisions over a three, four or five year period.

4. IBM's Backing

On the highest level, what would lead me to look at Linux on iSeries would be IBM's investment to support Linux on iSeries, which means support will be readily available through 1-800-IBMSERV, Business Partners as well as from your Linux distributor. According to statistics compiled by Gartner's Dataquest research unit, IBM captured 41.6 percent of the \$385 million in Linux server sales in the U.S. market alone last year. So we know the Big Blue Machine is in our corner when we decide to move onto Linux.

5. New Development Paradigms

Linux on your iSeries will allow you to take advantage of a new generation of applications, thus enhancing iSeries flexibility, by enabling another application environment. Also, it doesn't hurt that you get to brag that your shop is using leading edge technology. The iSeries is now able to capitalize on the open source movement, leverage the Linux virtual worldwide development team and when a 400 shop includes Linux in its repertoire, it is encouraging a broader skill base to deliver iSeries based solutions. Linux to OS/400 application integration can utilize such tools as ODBC and JDBC to provide access to DB2/400 or Samba and NFS for file access.

A recent IBM survey across companies in the Western economies found that about 65 percent of businesses are using Linux for Web serving, with another 50 percent using it for network serving, another 50 percent using it for Web appliances, and nearly another 50 percent using it for firewalls. Yet

another 45 percent use it for application development, and another 40 percent use it for email serving. A small number of customers are using Linux for e-commerce, workgroup, technical applications, data warehousing, or other things.

This will change as Linux gains a reputation for reliability on the iSeries and you will see more and more applications ported to run on Linux. With iSeries providing a 64 bit environment to run in, it makes sense that companies will want to take advantage of that extra processing power.

6. Storage Area Network facilities

iSeries provides SAN facilities for the Linux partitions' full OS/400 system backup. It provides DR for Linux, and daily backups performed by Linux support file level save/restore. Linux also utilizes iSeries tape devices for backup operations. iSeries protects the disks via RAID, when adding, moving, and deleting disk space for Linux. It manages OS/400 & Linux disks from one system. Linux partitions are able to access disk, tape, CD-ROM, and DVD resources in OS/400 partitions. With Virtual I/O, Linux is able to leverage the performance availability, and manageability of the advanced iSeries storage architecture.

The Good and the Bad News

This is not to say that Linux will someday take over everything. There will always be a place for "Best of Breed" software, and Linux's use of open protocols means its advantage is always in ease of use, never in locking out the competition. Face it: it's a Windows world. Whether you use Linux on your home system or at your job, the chances are that you have to work with Windows users and their systems, and – more important – that you exchange data with them on a regular basis. The trick will be to turn them into Linux users. Linux and Open Source are becoming inevitable forces in the world of IT. Personally, I would have never believed it. Then again neither did IBM.

Installing Linux

Okay, so now you're hooked on Linux from our amazing sales pitch and want to know how to do it. Call us, we're available at a reasonable daily rate and will even let you buy us lunch.

No sale? Okay, so here's a 10,000- foot view of getting Linux onto your iSeries. We are not going to reprint all the steps to follow from the manual, but will give you the major steps and you can decide if you're comfortable enough to dig deeper and DIY.

Linux has many applications available to be installed "right out of the box" with your preferred distribution. Before starting the install, you should determine what applications you require so that when you reach the point where you are prompted, you know exactly which selections to make.

Can My iSeries Run Linux?

If you have one of the following iSeries servers, chances are you can configure a Linux partition:

270
820
870
890
825
890

• 830

There may be some restrictions as to how much of a processor is required, but that information is readily available.

It runs in a partition, so you must dust off your LPAR skills and configure a partition to support Linux as either virtual or direct. You must determine what amounts of disk, memory, processor, and other assorted hardware your partition or partitions should have. A good planning session with IBM or your Business Partner is recommended.

Virtual? Direct? What's the Difference?

In a virtual Linux partition, the hardware is owned by OS/400 and shared to Linux. OS/400 lets Linux have the illusion that it's in charge while actually controlling things from behind the scenes. Virtual I/O devices supported include: disk, tape, CD-ROM, and DVD. Disk space is owned by OS/400 and is reserved for Linux. A Network Storage Space is defined and associated with a given NWSD. In the direct paradigm, Linux actually controls the devices. OS/400 does not see the devices and cannot

directly use them. Specific iSeries I/O adapters are supported in Direct I/O environment. Specific Ultra SCSI Adapters for Disk, Tape, CD-ROM, and DVD connections are supported.

In addition, selected iSeries Ethernet and Token Ring adapters are also supported. These are also referred to as Hosted (Virtual) and Non-hosted (Direct), but are the same thing.

Next, we must create a network server description (NWSD) and network server storage space (NWSSTG). To create the NWSD, use the Create Network Server Description (CRTNWSD) command. This gives us our server description that can be varied on and off (started and stopped), but does not give us any disk space. To accomplish this, we must configure a network server storage space (NWSSTG). This is a stream file in the IFS that look like a local hard drive to the server and you may configure several. These can contain the kernel and boot images or be linked on OS/400 and mounted as a separate partition or partitions to contain user data.

After creating our server storage space, we link it to our network server description so that it has parameters to control its usage. In the case that the server is booting from a network server storage space, it should be the first drive linked.

Where Do I Log On?

On iSeries, Linux utilizes a virtual console to access the Linux partition to do the initial installation, diagnostic searches for messages or to access Linux if you can't access it from the network. The virtual console is a Telnet program, such as PuTTY, running in the low level code below the operating system listening for requests on port 2301 of the hosting partition or the primary partition. Unlike the IXS or IXA, there is no directly attached PC hardware used as the console. In order to sign on to the console, you must configure a service tools (SST) user ID, through DST, with the appropriate privileges. This should be done at the time you are creating your partition.

Are We There Yet?

Now you have the necessary blocks to build your Linux server and the CD is in the drive and the NWSD has been configured to boot from it (or an image catalogue – but that's a whole other article). You issue the VRYCFG command against your NWSD and the Linux install program takes over from here. All that remains is to install the application software that you have determined you require.

We Are There!

Now you have your Linux partition installed and configured. Welcome to the most dynamic operating system available today. Keep current with what's happening with Linux, as there are updates, changes, and new applications becoming available each and every day. Some good sites to take a regular pass through are:

http://www.linux.orghttp://www.redhat.comhttp://www.tsanet.orghttp://www.ibm.com/linuxhttp://www.linuxhq.comhttp://www.linux-support.nethttp://www.suse.comhttp://www.linuxfund.org

About the Authors

Garth Tucker is an iSeries Technical Specialist. He is IBM Certified in Technical Solutions, Sales and Linux for iSeries with OS/400 versions V4R3 through V5R2. Garth has many years of experience with AS/400 and iSeries. His specialties include Back- Up, Recovery and Media Services, Linux, Operations Navigator/ Management Central, Educational Services and Disaster Recovery as well as experience with Help Systems Robot products. Garth has helped write the Technical Overviews of V4R4, V4R5 and V5R1 with IBM/ITSO in Rochester, Minnesota, and has traveled extensively throughout North America, Europe, the Middle East and Africa teaching both Technical Solutions and Sales Solutions for iSeries (Shark Camp) as well as Linux for IBM. In addition, he has written articles for the Toronto User Group Magazine, Midrange Magazine as well as presenting at COMMON. He can be reached at 905- 940-1814 or via email at garth@midrange.ca.

Richard Dolewski is a certified systems integration specialist and disaster recovery planner. As a Managing Director of the technical and contingency services provided by Mid-Range Technical Services, he has extensive experience in Disaster Recovery Planning, Backup & Recovery program design, and Server consolidation. Richard has implemented a variety of IBM iSeries solutions for customers in Canada, the U.S. & Mexico. He has supported multiple computer room disasters, and conducted over 120 disaster recovery tests. Richard is a frequent speaker at technical conferences including COMMON – A Users Group, IBM Executive Series, and Local Users Groups. Winner of the "Best New Speaker Award" in COMMON New Orleans and "Best Conference Speaker" at COMMON Mexico and 4 Bronze speaker awards. In addition, he writes numerous

articles and teaches hands-on technical education. He can be reached at 905-940-1814 or via email at rdolewski@midrange.ca. Parts of this article appeared previously in the TUG eServer magazine, published by the Toronto Users Group for Midrange Systems.

Reprinted from the first issue of COMMON.CONNECT Magazine.

Join COMMON! Attend our IT Education Conference and Expo...

...in the Spring: San Antonio, May 2-6, 2004. Special focus is on Linux, and there will be the latest information on V5R3. http://www.common.org/conference.html

...in the Fall: Toronto, October 17-21, 2004. Special focus is on Enterprise Application Modernization. http://www.common.org/toronto.html

OMNI Midrange Event List

March 18 10:00 am

Linux for iSeries and WebSphere Portal Express for iSeries with Craig Johnson, IBM Rochester & John Quarantello, IBM Dallas

March 22-24

Architecture-Driven Modernization (ADM) Workshop: "A Model-driven Approach to Modernizing IT Systems" at Hyatt Regency Chicago <u>register online</u>

March 23 5:00 pm

OMNI Monthly Dinner Meeting

Real Life iSeries RF Experiences - Why and How with Bill Parks register online

Embassy Suites, 707 E. Butterfield Rd, Lombard, IL

March 31 6:30 pm

OMNI Board of Directors Meeting

all are welcome, contact a board member to confirm time/place

Midwest Road Building, 2021 Midwest Rd, Oak Brook, IL

April 6 6:30 pm

OMNI First Tuesdays SIG meeting – Java Roundtable discussion

No previous Java experience necessary to attend. We'll discuss Java from an iSeries perspective and look at how some iSeries shops have utilized Java to help modernize the image of the iSeries. Pizza will be provided by mrc. If you'd like to attend, please email Sal Stangarone at sals@mrc-productivity.com michaels, ross & cole office, 1920 South Highland, Suite 203, Lombard, IL

April

OMNI Monthly Dinner Meeting

There will be no dinner meeting in April due to the Spring Day of Education 4/22

April 19 6:30 pm

OMNI Board of Directors Meeting

all are welcome, contact a board member to confirm time/place

Midwest Road Building, 2021 Midwest Rd, Oak Brook, IL

April 22 8:00am

Omni's 3rd Annual Spring Day of Education

IBM Corporation, Two Lincoln Centre, Oakbrook Terrace, IL

April 28-30

RPG World - Spring 2004 register online

Deerfield Hyatt

May 2-6

Common Spring 2004 Conference, San Antonio, TX register online

May 20 5:00 pm

OMNI Monthly Dinner Meeting

V5R3 Announcements (tentative)

Embassy Suites, 707 E. Butterfield Rd, Lombard, IL

May 24 6:30 pm
OMNI Board of Directors Meeting
all are welcome, contact a board member to confirm time/place
Midwest Road Building, 2021 Midwest Rd, Oak Brook, IL
June 17 5:00 pm
OMNI Monthly Dinner Meeting
V5R3 CL Enhancements (tentative)
Embassy Suites, 707 E. Butterfield Rd, Lombard, IL
June 21 6:30 pm
OMNI Board of Directors Meeting
all are welcome, contact a board member to confirm time/place
Midwest Road Building, 2021 Midwest Rd, Oak Brook, IL

The OMNI User 2004 Board of Directors Contact Information

position	name	phone	email address
President	Paul Nelson	708.670.6978	pnelson@arbsol.com
Vice-President	Bill Lorimer	630.288.4831	wlorimer@arbsol.com
Secretary	Ray Frazer	630.203.6861	rfrazer@daubert.com
Treasurer	Bill Parks	708.748.6272	wparks@worldnet.att.net
Seminar Vice-President	open		-
Membership/DB Director	Sal Stangarone	630.916.0662	sals@mrc-productivity.com
Communications Director	Jerome Hughes		jromeh@comcast.net
Advertising Director	Matt Gross	847.466.2944	prrgg1@aol.com
Conference Director	Ron Boris	847.520.5550	ronboris@comcast.net
Webmaster	Dale O'Leary	847.836.9920	doleary@sitebuilder.org
Past President	Jean Dietsch	847.318.7495	j.dietsch@comcast.net
IBM Liaison	Joe Thompson	630.568.1189	jwthomp@us.ibm.com
Advisory Board Member	Yomi Kuforiji	630.271.3831	ykuforiji@hubgroup.com