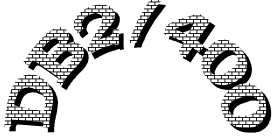


IBM MIDRANGE USER GROUP

November 1995 Newsletter

November Meeting



Our meeting this month will be held on **Wednesday November 8th at 11:00 a.m. at the Murray City Offices, 5025 South State Street.**

From the first System/38 to your present AS/400, a database has existed on these machines. It came standard as an integrated part of the operating system. But it has only been recently that it received its name of **DB2/400** and received some significant enhancements. It's probably a good idea to take another look at this database to see what it has to offer.

DB2/400 will be the topic of our November meeting. Bruce Chapple of **SMS Health Systems, Inc.** will present this topic. We hope you can join us this month.

October Meeting Highlights

Alan Walbeck of **Vyzynz International, Inc.** (pronounced *visions*) was our speaker for our October meeting. He spoke on the topic of the Internet and gave a live Internet demonstration.

The Internet is a hot topic these days. But why should you be interested in the Internet? The answer is information. It is the closest thing we have to the dream of an "Information Superhighway." If you can imagine a network with 30 million users in over 130 countries around the world with information and on-line discussions on more topics than any other electronic forum, then you can get an idea of what the Internet is.

It all began in 1969 with the Department of Defense wanting to tie their mainframes together and share information. As time went on there came a need for universities to have access to this network of computers. In the early 1980s more and more government and university networks became connected, forming what's now known as the Internet.

In the late '80s tools began to be developed to make it easier to access information on the Internet. E-mail began to proliferate. But the Internet didn't really take off until the first "killer application" was developed in 1993 named Mosaic. This was the first graphical web browser that made it possible for the common human being to navigate the Internet. From that point on the Internet has literally exploded with growth.

Now, with the Internet, a company can literally set up an "electronic store front" and suddenly have the world at their doorstep. This is done by creating what is known as a home page on the World Wide Web. This allows anyone in the world who has access to the Internet and a Web browser to "visit" your home page and see what your company has to offer.

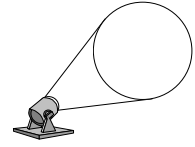
To access the Internet you simply need a PC, a modem, a Web browser software package such as NetScape, and to contact a service provider to set up an account. The service provider will provide a local access phone number and charge you a small monthly fee.

We are grateful to Alan for coming and giving us a great overview and demonstration of the Internet. His company is one of many companies that provides access to the internet for personal and business purposes. He can be reached at 801-568-0999.

Fax Numbers

We want your fax numbers!! In an effort to cut the costs of sending this newsletter, we are trying to fax as many as possible. Please contact Gary Larson at 451-8035 and give him your fax number if you would like your monthly newsletter faxed to you. Thanks.

Member Spotlight



Alan Dixon of the City of Orem is our member spotlight person this month. Alan has been with the City of Orem for 23 years. This was his first job after he graduated from BYU in 1972 and says he will probably stay with the City of Orem until he retires.

Company - Although the City of Orem is a city and not a company, it is organized and run similar to any large corporation. The City of Orem has been in existence for 76 years and employs around 400 people.

A city doesn't produce tangible products to sell but it does provide many kinds of services and has all kinds of things to manage and keep track of. Most of us probably don't realize how much a city really does for us or how complex running a city really is. Some of the services provided by the City of Orem are:

- Local Government
- Public Safety including fire and police
- Public Works such as water, sewer, parks, cemetery and street maintenance
- Development Services having to do with land use
- Utility Billing for water, sewer and garbage
- Public Library

MIS Department - Alan is the Data Processing Division Manager for the City of Orem. His experience starts with the IBM System/3, the Data General Eclipse, the System/38 and now the AS/400. It is interesting to note that the Data General Eclipse computer at the City of Orem was the original computer that WordPerfect was developed on. The founders of WordPerfect used to come in after hours to use the computer to develop their software.

The Data Processing Department consists of 4 programmers, a combination PC coordinator and operator and one computer technician.

Hardware - Currently the City of Orem has two AS/400s. A D45 for finance and an E45 used for public safety. Attached to the AS/400s is a Novell network with over 200 PCs. Also in use is an RS/6000 used to run their Geographical Information System. This system handles all their mapping needs for zoning, election districts, parcels of land and maps of the city's infrastructure such as water and sewer.

Bar code equipment is also used to automate the reading of utility bill payments. If the payment is the same as the amount on the bill it can be scanned right into the computer saving many hours of data entry.

The city also has a fitness center that uses bar code technology. Each member of the fitness center has a pass with a bar code printed on it. To enter the fitness center the person scans the bar code on the pass and an automatic gate opens if the pass is valid. This also enables tracking of pass usage to see who is really using the facility.

Software - All the software the City of Orem uses was developed over the years in-house. The following is a list of those systems.

- ◆ Accounts Receivable
- ◆ Payroll, Personnel and Human Resource System
- ◆ Business Licenses

- ◆ Tax Analysis - analyzes sales tax information from the state to help identify city businesses without licenses.
- ◆ Cash Remittance System - employs PCs and terminals used as cash registers at various locations where funds are collected.
- ◆ Purchase Order System
- ◆ Warehouse Inventory System
- ◆ General Ledger
- ◆ Fixed Assets System
- ◆ City Elections Program - used to enter election returns by district when results are called in. Includes a PC with a screen to graphically display election results to the public.
- ◆ Risk Management System - manages litigation and claims against the city
- ◆ Document Tracking System - used by city recorder
- ◆ Building Permits System
- ◆ Complaint System
- ◆ Fitness Center System - handles memberships, class enrollment, team rosters and facility scheduling.
- ◆ Legal Services - file tracking management system
- ◆ Fleet Maintenance System
- ◆ Cemetery Access System - a terminal at the cemetery where the public can lookup the location of those buried in the cemetery.
- ◆ Tree Inventory System - keeps track of all trees the city has to maintain
- ◆ Vehicle Fuel System
- ◆ Subdivision Permits System - handles the approval process

Successes - Alan was quite pleased with the success of the graphical portion of the election system. The election return program has been around for a number of years but they recently added the ability to display the results to the public and candidates in a graphical way on a PC. The response to this added portion has been very good.

Another recent success has been the scanning of bar codes on utility bills as mentioned above. This has worked out very well and saved the city a lot of money.

Alan mentioned the installation of the Novell network as another success he is pleased with.

Biggest Future Challenge - Although the network was cited above as a recent success, it is an expanding and evolving project. The goal is to install the network citywide at all city locations. The future challenge and vision is to eventually allow any citizen with a PC to be able to dial into the network and lookup various kinds of city information and even conduct various kinds of business with the city.

We want to thank Alan for sharing with us this information about himself and the City of Orem. He can be reached at 229-7005.

Humor Department

There was a pilot flying a small single engine charter plane, with a couple of very important executives on board. He was coming into the Seattle airport through thick fog with less than 10 miles visibility when his instruments went out. So, he began circling around looking for a landmark. After an hour or so, he starts running pretty low on fuel and the passengers are getting very nervous.

Finally, a small opening in the fog appears and he sees a tall building with one guy working alone on the fifth floor. The pilot banks the plane around, rolls down the window and shouts to the guy, "Hey, where am I?" To this, the solitary office worker replies, "You're in a plane." The pilot rolls up the window, executes a 275 degree turn and proceeds to execute a perfect blind landing on the runway of the airport 5 miles away. Just as the plane stops, so does the engine as the fuel has run out.

The passengers are amazed and one asks how he did it. "Simple," replies the pilot, "I asked the guy in the building a simple question. The answer he gave me was 100 percent correct but absolutely useless, therefore that must be Microsoft's support office and from there the airport is just five miles away."

Found on **FORUM/400**

From IBM Local

YEAR-END AS/400 PROMOTIONS

High Availability Promotion: If you are considering a high availability solution using MIMIX or OMS, there is a substantial discount on hardware if you install either software package by December. Both software packages allow you to synchronize one or more machines so that you have redundant systems in case of power failure, disaster, or need 24 x 7 hour availability.

Disk Trade-In Program: The current trade-in program on OEM and 9336 DASD ends December 15. So, if you've wanted to upgrade your disk to new Starfire technology, now is the time before the trade-in offer expires.

FOLLOWUP

If anyone was unable to attend the AS/400 Visual Expo and would like information, CDs, flyers on any of the following products, please give me a call at 328-6817.

Visual RPG, VisualGen, VisualAge, GUI/400, CODE/400

Sincerely,
Robin Van Wagenen
AS/400 Specialist

Calendar of Events

November 8

IBM Midrange User Group monthly meeting held the 2nd Wednesday of each month at the Murray City Offices at 11:00 a.m.

November 8

Utah Computer Society (Blue Chips) monthly meeting held the 2nd Wednesday of each month at 7:00 p.m. at the U of U Engineering classroom building, room 104. For more information call 521-7830.

November 9

Monthly meeting of the **Association of Contingency Planners, Utah Chapter**, held the 2nd Thursday of each month at 9:30 a.m. at Intermountain Health Care.

November 13-17

COMDEX/Fall, held at Las Vegas. Contact Softbank Comdex, Inc. at 617-449-6600.

November 14

AS/400 Future Directions Conference Call - If you are interested in participating, call 1-800-IBM-4YOU, Dept. 125 to enroll. You will be sent a packet and telephone number to call before the conference.

November 15

Monthly meeting of the **Midrange Programmers Association (MPA)** held the 3rd Wednesday of each month at 5:30 p.m. at the HBA fifth floor conference room, 5295 South Commerce Drive, Murray. For more information call Ken Duke at 284-6555.

November 28-30

AS/400 System Operator Workshop (S6029) - This is a 3 day course taught at the Salt Lake City IBM offices. To enroll in this class call 1-800-IBM-TEACH.

December 4-6

AS/400 Advanced Operator Training - Another 3 day course taught in the Salt Lake City IBM offices. To enroll in this class call 1-800-IBM-TEACH.

AS/400 Tips and Techniques

Physical File UNIQUE

Q: Some of my physical files are created with the UNIQUE DDS keyword, and some are created without it. In both cases, these files should never have duplicate keys. Is there any advantage or disadvantage to using the UNIQUE keyword?

A: The UNIQUE keyword guarantees that the keyed physical or logical file member contains no duplicate keys. Your question can be rephrased, then, to ask whether it's better to let the system check for duplicate keys (with the UNIQUE keyword) or to perform the check yourself within your HLL programs.

One of the first principles of database design is that you must ensure that a primary key exists for every physical file. Therefore, at least one of your logical files or the physical itself must use the UNIQUE keyword to enforce the unique key.

It is not sufficient to code your programs so they perform the necessary checking to ensure key uniqueness. Consider that not all updates may be performed via your "good" programs - those that supposedly enforce the unique key. For example, perhaps you use SQL or Data File Utility (DFU), or update records via PC Support; in these cases, there is no guarantee that keys will be unique unless there's a UNIQUE keyword in the file's DDS.

Checking for a key value's existence in a unique database index is a relatively fast operation, because the whole index doesn't need to be traversed. So you needn't be overly concerned about the performance consequences of using UNIQUE.

Compliments of NEWS/400 magazine. For subscription information, call (800) 621-1544.

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