Session Abstracts for Saturday, July 21, 2018

Includes lunch at 11:45 AM.

1. IBM i Systems Management/Access – Workshop – Tim Rowe – 9:00 AM – 3:00 PM

If you are a Systems Administrator, Systems Engineer, or Manager, you will want to attend this workshop to become familiar with the modern IBM i Operating System. We will take a look at some of the key technologies that are considered modern, including diving into the POWER9 processor and how applications can take advantage of technologies today. Next, we will review how devices today are changing how we access and manage our IBM i. We will look at IBM's strategic direction for both access and system management. Solutions like Access Client Solutions, IBM i Navigator for I, and iAccess Mobile will be discussed as well as how each fits into this strategic direction. IBM i Access Client Solutions is the newest member of the IBM i Access Product Family, and it is a platform independent client that is supported running on multiple Operating Systems like Macintosh, Linux, and Windows. You will learn what to focus on to best deploy Access Client Solutions to your users. Finally, you will learn about what the HTTP server is and how it can work for you, and you'll get to know the fantastic features of the latest IBM HTTP Server for i (powered by Apache). Please see below for more details regarding this workshop.

A Modern Operating System

What is a modern operating system? What key technologies are key to defining a system as modern? Can you create modern applications? This session will look at the key under pinning's of the IBM i operating system and how these stack up to the modern world. We will also take a look at some of the key technologies that are considered modern including divining into the POWER9 processor and how applications can take advantage of technologies today.

How to Access & Manage Your IBM i

This session will first review how devices today are changing how we access and manage our IBM i. We will then look at IBM's strategic direction for both access and system management. Solutions like Access Client Solutions, IBM i Navigator for i and iAccess Mobile will be discussed as well as how each fits into this strategic direction. This is especially true today, with the iAccess for Windows product not supported on Windows 10, we will look at the key solutions you need and help you understand what is available today. This session will not only look at the strategic views, but will also include some live demos and help you understand what additional sessions you should look for to dive deeper in to these key topics.

An Administrator's Guide to ACS

IBM i Access Client Solutions is the newest member of the IBM i Access Product Family, and it is a platform independent client that is supported running on multiple Operating Systems like Macintosh, Linux, and Windows. The future is already here, in April of 2015 IBM announced that there are no plans to support the r7.1 IBM i Access for Windows client on future versions of the Windows OS. So, this IBM i Access Client Solutions product is the only environment fully supported on the Windows 10 OS and it's the strategic direction for

IBM i Access workstation client environments. This session will specifically focus on administrators and what they need to be thinking about to best deploy Access Client Solutions to their users.

IBM HTTP Server

Learn about what the HTTP server is and how it can work for you. Get to know the fantastic features of the latest IBM HTTP Server for i (powered by Apache) version 2.4. Quickly and easily get your HTTP server up and running using the IBM Web Administration for i GUI interface. This session will introduce the HTTP Server on i, some of the key differences on i, some of the areas that are tightly integrated into the IBM i operating system. We will also take a look at the key topic of security and how to configure the HTTP server securely and the different options available. In addition, the very latest new features will be covered, as there are many new additions in the latest Apache 2.4 version. Additionally, the latest addition HTTP 2.0 support will be covered.

2. DB2 &SQL - Workshop – Jim Denton – 9:00 AM – 3:00 PM

Learn about the latest DB2 for i features directly from IBM. Discover indexing technology including features that are unique to Db2 for i, how the optimizer can take advantage of indexes to improve performance, and a simple roadmap for maximizing performance with minimal effort. You will also learn how OLAP (Online Analytical Processing) capabilities allow SQL developers to provide additional value and business insight from your existing data. With each new release and technology refresh, IBM i extends the power of SQL across both database and traditional IBM i functionality. This session will cover three basic areas – catalogs that provide metadata for database objects, services that can be used to manage Db2 for i functionality, and IBM i services which provide alternatives to using CL commands and/or API interfaces. It will also cover best practices and provide practical examples on how to use these services. Please see below for more details regarding this workshop.

All About Indexing

The Db2 for i optimizer was specifically designed to maximize the value of the available indexes for both metadata and query implementation. Creating an index often provides a quick performance fix since you don't have to change any other settings and don't have to make any changes to the SQL statement or program. This session provides an overview of the indexing technology including features that are unique to Db2 for i, how the optimizer can take advantage of indexes to improve performance, and a simple roadmap for maximizing performance with minimal effort.

Db2 for i Advanced OLAP Functions

OLAP stands for Online Analytical Processing. These capabilities allow SQL developers to provide additional value and business insight from your existing data. This session will cover all the key OLAP capabilities of Db2 for i, including RANK, ROW NUMBER, CUBE, ROLLUP and GROUPING SETS.

SQL Catalogs and SQL Based Services

With each new release and technology refresh, IBM i extends the power of SQL across both database and traditional IBM i functionality. This session will cover three basic areas –

catalogs that provide metadata for database objects, services that can be used to manage Db2 for i functionality, and IBM i services which provide alternatives to using CL commands and/or API interfaces. It will also cover best practices and provide practical examples on how to use these services.

3. Procedures and Service Programs from A to Z – Hands-on Lab – Susan Gantner - 9:00 AM – 5:00 PM

Susan doesn't write subroutines any more. These days she much prefers RPG procedures instead. They make great subroutine replacements and make your programs both easier to read and maintain. The result is applications that are faster to build, easier to debug and more reliable. But procedures are just the beginning. To fully exploit them in your applications you need to package them into Service Programs so that you can share them easily and efficiently among multiple programs.

In this full-day hands-on workshop, Susan will explain the advantages of using procedures to modularize your code and show you just how to utilize them to best advantage. We will start with the details of coding procedures - the syntax as well as the best practices for using them as a means of structuring your code.

Specifically, we'll explore such questions as:
- What's the benefit of return values?
- Why is local data important?
- Can prototype keywords make my coding life easier?
- Why should I code prototypes in a separate member?

Once we have mastered the art of RPG procedures, we will move on to Service Programs. In addition to details on creating and maintaining them, we'll explore:
- What Service Programs are
- Why you should use them
- How to package your procedures into them
- Simple ways to update them

We may not make it all the way from A to Z - but we'll give it a try and at least make it all the way to P!

4. Python – Hands-on Lab – Mike Pavlak – 9:00 AM – 5:00 PM

Python is a language that has been perceived as infrastructure or plumbing in the IT department, much like CL. While this is an excellent use for Python, it has emerged as a strategic language for application development, too.

In this workshop we'll explore the implementation, syntax and application use cases of Python on IBM i. From a fundamentals perspective you will get hands on experience using the command line, shell environment, script creation, storage and execution. As we progress through the workshop we will delve into Db2 data access and program calls using XML Service as well as a brief tour of frameworks.

Then we'll wrap things up with how open source applications built in Python can add value to your IT environment.

5. **Open i – Exploring Open Source Solutions on IBM i – Workshop - Erwin Earley – 9:00 AM – 3:00 PM**

    Open Source Solutions continue to be in vogue for businesses large and small and you might be surprised at the wealth of Open Source Solutions that are available for you to leverage directly on the IBM i platform. This workshop will explore a number of popular open source solutions available for IBM i including PHP, SAMBA, node.js, Ruby, and python. Along the way we will also show you how you can install/enable tools such as bash, git, zip, perl, and others in the PASE environment and include hints and tips for working in the PASE environment. This workshop will open your eyes to what is possible on your IBM i.