

Application Development

Whether you are new to the world of programming on the iSeries platform or have been doing it for years, you will find something you need in this Course of Study. Need some basic information about creating files and CL Programs? Want to learn some advanced CL programming? Need some reminders about subfiles and other DDS tricks of the trade? Want to understand ILE from the beginning to the end? This is the COS for you!! Topics cover everything from basic elements of programming on OS/400, to Advanced CL Programming through to ILE Binder Language and Message Handling.

System i Debugger F06 Miami Sessions: Thursday, 9/21/2006

21MF: Mon 8 - 9:15, B118, Miami Conv Ctr

ID:430241

Level:
Advanced

Course:
Application
Development

Speaker:
Cary Bates
IBM Corporation

A new graphical user interface to the system debugger was shipped in V5R2 and PTF'd back to V5R1. It supports integrated features such as call stack, local variables, monitors, hex memory display, threads display, breakpoint groups, saved program environments (i.e. saved breakpoints, programs, and service programs), fly-over variable evaluation with the mouse. This new user interface is written in Java, thus will run on many different platforms. It supports all of the languages currently supported by the green screen debugger: ILE C/C++, ILE RPG, ILE Cobol, ILE CL, Java, OPM RPG, and OPM Cobol. The iSeries Graphical System Debugger offers a variety of start up modes such that all existing debug scenarios are still supported. The user can initiate debug sessions directly from the client user interface; or can register such that the STRDBG command from an emulation session initiates graphical debug instead of the traditional green screen interface.

The iSeries Graphical System Debugger has also been enhanced to support debug of PASE applications. All the integrated features that appear in the ILE debugger, also appear in the PASE debugger. In addition the PASE debugger has additional features such as: disassembler display, loadmap display, and support for multiple process applications (i.e. fork() and exec() of child processes). The iSeries PASE Debugger is sure to be a hit with users porting unix applications to the iSeries platform.

IBM's AD Strategy for RPG and COBOL Languages, WDS c and RSE

21MM: Mon 8 - 9:15, B212, Miami Conv Ctr

ID:500105

Level:
Beginner

Course:
Application
Development

Speaker:
George Farr
IBM Corporation

If you care about the future and Application Development for System i and you are an RPG or COBOL user then this session is a must attend for you. In this session we will unveil the 6 major themes for System i AD which includes RPG in an SOA environment as well as enabling RPG to be device independent. Discussions will center around what RPG and the tooling will look like three years from now!

F06 Miami Sessions: Thursday, 9/21/2006

OPEN LAB: Introduction to System i Program Development

21LC: Mon 8 - 9:15, A202, Miami Conv Ctr

22LC: Mon 9:30 - 10:45, A202, Miami Conv Ctr

ID:510209

Level:

All

Course:

Application Development

Speaker:

Bill Hansen
Manta Technologies Inc.

Moving to System i servers can be a new experience for programmers familiar with mainframe, PC, or other midrange systems. This session introduces experienced programmers to the i5/OS programming environment. Compiling and testing programs using both the Original Program Model (OPM) and the Integrated Language Environment (ILE) processes are discussed.

This session is presented using student-paced computer-based training. Students who complete the session early will have the opportunity to also take a session covering the Screen Design Aid (SDA).

After completing this session, attendees should be able to:

1. List the steps required to create an executable program.
2. Describe the difference between the original program model (OPM) development process and the integrated language environment (ILE) development process.
3. Access the Source Entry Utility (SEU) to create or edit a source program.
4. Compile a source program
5. Bind modules into an executable program.
6. Execute a program.
7. Describe the difference between external data and program described data.
8. Describe how external data is created.
9. (Optional) Use SDA to create and test a display file.

Real-Life Examples in Modernization for Employee & Internal Customer Apps Using Newlook

22ML: Mon 9:30 - 10:45, B211, Miami Conv Ctr

ID:510106

Level:

All

Course:

Application Development

Speaker:

F. Rexford
Smith II
Information Consultants, Inc.

This presentation will recap many of the general interest items we accomplished when modernizing a native iSeries application, including update of the user interface, providing internet access, deploying the PC client software and maintaining the GUI rules on the PC. Key strategy/methodology decisions will be reviewed along with technical details subsequently required. This presentation will give you ideas you can use when taking on modernization initiatives at your company.

The presentation topics will include:

1. Providing a rule-based GUI presentation on client PCs; touching upon trade-offs involved with different types of newlook clients, typographical fonts, dynamic generic transformation versus specific, software changes on client side versus server side.
2. Providing fast, light-weight, secured access to iSeries server via internet with SSL, using Digital Certificate Manager, i5/OS and an example routing configuration (step by step pictures provided but time does not permit detailed review during presentation).
3. Using the browser to deploy the PC client software and separately, to provide GUI rules refresh, with considerations for controlled desktop environments

By the end of this session, attendees will be able to:

1. Build upon the examples shown for use at their company.
2. Better communicate with networking pros on SSL and PC Deployment topics.

F06 Miami Sessions: Thursday, 9/21/2006

Introduction to XML

23MP: Mon 11 - 12:15, B215, Miami Conv Ctr

ID:406056

Level:
Beginner

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

XML is becoming a core technology for representing and exchanging data in a wide variety of applications, including those targeting the Internet. This session provides a tutorial on what XML is and provides a foundation for the later sessions in the conference dealing with XML technologies.

In this session, learn:

1. XML concepts and terminology, including XML, DTD, Schema, XSL
2. Options for handling XML in iSeries based applications.
3. How XML is used in applications and potential future applications.

New Methods to Manage Compile-Time Options

23MM: Mon 11 - 12:15, B212, Miami Conv Ctr

ID:510109

Level:
Intermediate

Course:
Application
Development

Speaker:
Mark S.
Waterbury
Industrial Strength
Software

There are now very many languages and tools available to iSeries developers. Some run in PASE, some under Linux, and of course many native OS/400 compilers and languages to choose from.

When you have to work on a program developed by another developer (who may no longer even work at the same company), how can you tell which compiler options she/he used when they compiled that program? And, what about that program you developed two years ago? What compile options did you use? How can you ensure that the correct compile time options will always be used whenever your applications are recompiled and moved into production?

This session will describe specific tools and methods you can use to allow you to "embed" compile time options directly into the source code for each program, where they will never get "lost" and will always be available when needed (the next time you need to recompile that program). Best of all, this session describes how this approach can be implemented so that it will even work with WDSC!!

By the end of this session, attendees will be able to:

1. Understand compile time options.
2. Learn how and why to capture these options.
3. Learn how to automate processing the options.

F06 Miami Sessions: Thursday, 9/21/2006

Introduction to CL Programming

25MK: Mon 2 - 3:15, B210, Miami Conv Ctr

ID:250173

Level:
Beginner

Course:
Application
Development

Speaker:
Kevin
Forsythe
DMC Consulting,
Inc.

This session, which assumes no prior knowledge of CL, discusses the structure and syntax for CL commands and some of the basic uses of a CL program. This is a condensed version of the lectures contained in sessions 230219 and 230221.

ILE Introduction

25MP: Mon 2 - 3:15, B215, Miami Conv Ctr

 **BRONZE**
ID:400972

Level:
Beginner

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

This session introduces the basics of the Integrated Language Environment's static binding and Activation Group concepts. This information is fundamental to using ILE to develop modular applications. Using a simple application example, we will illustrate how and why to create modules, bound ILE programs and Service Programs. We'll see the advantages that Binding Directories offer in the process. We'll take a high level look at Activation Groups - what they are and how they can be used. This session forms the foundation for the more advanced ILE sessions offered at COMMON.

LAB: System i Graphical System Debugger

25LC: Mon 2 - 4:45, A202, Miami Conv Ctr

ID:440128

Level:
Intermediate

Course:
Application
Development

Speaker:
Cary Bates
IBM Corporation

The iSeries system debugger has a new graphical user interface as of V5R1. This new user interface supports features such as: local variables, monitors, callstack, threads, hex memory dump, service entry points, automated held job support, breakpoint groups, program environments, and much more. The iSeries Graphical System Debugger is designed specifically for debugging applications running on an iSeries system. It supports all start up scenarios and programming languages as the green screen system debugger: ILE C/C++, ILE RPG, ILE COBOL, ILE CL, Java, OPM RPG, OPM COBOL, OPM CL

By the end of this session, attendees will be able to:

1. Submit and debug programs.
2. Service and debug running jobs.
3. Initiate graphical debug via. the STRDBG command.

The Art of Debugging: Thinking Outside the Developer's ToolBox

25MJ: Mon 2 - 3:15, A208, Miami Conv Ctr

ID:500115

Level:
Beginner

Course:
Application
Development

Speaker:
Charles
Guarino
Central Park Data
Systems, Inc.

A program ends in error. The users and management are frustrated. Reports are printing incorrectly, or the database is out of sync. This session explores the many tricks and techniques available to the programmer to help improve the debugging cycle and problem resolution.

The iSeries provides the programmer a wealth of information in problem determination. Learn how to quickly identify this information and use it constructively and creatively to find the cause of everyday problems. Take a creative journey on seeing how to create a bullet proof test environment, make the best use of system job logs, identify shortcuts to creating test data from production data, give your applications command line functionality. The session also includes a review of some very helpful APIs.

By the end of this session you'll learn how to get around some of the "gotchas" you encounter day after day.

F06 Miami Sessions: Thursday, 9/21/2006

Intermediate CL Programming

26MJ: Mon 3:30 - 5:30, A208, Miami Conv Ctr

 **BRONZE**
ID:250082

Level:
Intermediate

Course:
Application
Development

Speaker:
Jim Sloan
Jim Sloan, Inc

This session is intended for intermediate CL programmers who can write simple CL programs and want to take the next step.

In this session, learn:

1. Various approaches to coding and debugging.
2. Tools from the TAA Productivity Tools product.

ILE: Static Binding Decisions

26MP: Mon 3:30 - 4:45, B215, Miami Conv Ctr

ID:404324

Level:
Intermediate

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

Now that you know how to do static binding and create service programs, you may have some questions, such as: How do I decide when to bind by copy vs. using a service program? How many Service Programs should I have, and why? What is the impact of static binding on application maintenance?

In this session, learn:

1. Some tools to make binding easier.
2. How to make decisions regarding the most effective use of ILE's static binding.

Prerequisite: 'ILE Introduction' or equivalent knowledge.

Where No CL Has Gone Before

26MA: Mon 3:30 - 4:45, B113, Miami Conv Ctr

ID:500032

Level:
Advanced

Course:
Application
Development

Speaker:
Guy Vig
IBM Corporation

The enhancements made to the i5/OS Control Language (CL) compiler in V5R3 and V5R4 have enabled CL application programs to call almost all of the program-level API's and procedure-level API's that IBM ships with i5/OS. This session will explore some of these API's, and walks through some examples of applications which were previously "uncharted territory" for CL application developers.

Attendees will:

1. Review the CL enhancements added in V5R3 and V5R4.
2. Understand the types of APIs that CL can now call that used to be unreachable from CL.
3. Be able to use the example programs as the basis for extending their own CL programs.

ILE: Binder Language and Service Programs

31MP: Tue 8 - 9:15, B215, Miami Conv Ctr

 **BRONZE**
ID:404309

Level:
Intermediate

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

ILE Service Programs contain signatures which are used to supply a 'level checking' mechanism between ILE programs and the Service Programs they reference. Using ILE Binder Language is the way to gain more control over these signature values to ensure programs continue to work, without rebinding after changing a service program.

In this session, learn:

1. How to create and compile this binder language.
2. How to use it effectively to control signatures.
3. How to 'hide' procedures and data in the service program.

Prerequisites: 'ILE Introduction' and 'ILE: Static Binding Decisions'

V5 Printing and E-Output Overview

31MD: Tue 8 - 9:15, B116, Miami Conv Ctr

ID:409061

Level:
All

Course:
Application
Development

Speaker:
Bill Shaffer
IBM Corporation

V5 has made greater changes in iSeries output capabilities than any previous version. Significant new functions for printing and e-output were delivered in i5/OS, Print Services Facility (PSF), Infoprint Server, and Infoprint Designer, among others. These functions include Unicode and TruType, full color, PDF support, Intelligent Routing of output, new document design options, spool archiving, and much more. This session is an overview of what's new and exciting in System i5 print and output management. This is the session to attend if you can only attend one print/output session, or as an introduction to the other more in-depth offerings.

F06 Miami Sessions: Thursday, 9/21/2006

ILE: Activation Groups

32MP: Tue 9:30 - 10:45, B215, Miami Conv Ctr

 **BRONZE**
ID:404318

Level:
Advanced

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

ILE Activation Groups provide the ability to limit the scope of things like file overrides, shared open data paths and commitment control transactions to a specific subset of programs in a job.

In this session, learn:

1. How this scoping works.
2. The effect of using different types of activation groups.
3. Tips for using Activation Groups effectively.

Prerequisite: A complete understanding of the concepts covered in 'ILE Introduction'.

WDS: RPG and COBOL Tools in

WDSC: The Remote Systems Explorer

32MH: Tue 9:30 - 10:45, B122, Miami Conv Ctr

 **BRONZE**
ID:450152

Level:
Advanced

Course:
Application
Development

Speaker:
George Farr
IBM Corporation

The Remote Systems Explorer (RSE) is the development environment within WebSphere Development Studio client that allows you to develop RPG and COBOL applications. This development tool is the 21st century follow-on to the world of SEU, SDA, PDM, etc and even CODE/400. All the things that a developer might wish were possible with a green screen are in the RSE and some that you haven't even thought of yet!! Other benefits include improving programmer productivity and morale, off-loading host development workload and allowing existing applications to be maintained more effectively.

Infoprint Server for iSeries

32MJ: Tue 9:30 - 10:45, A208, Miami Conv Ctr

ID:410168

Level:
All

Course:
Application
Development

Speaker:
Glenn Rose
IBM Corporation

Infoprint Server is the platform of intelligent electronic output distribution on the System i5. It provides support for PDF, routing of documents and reports via e-mail, Web, and print, transforms for PCL, Postscript, PDF, and web image formats, support for document indexing and segmentation, and more.

Infoprint Server has recently been enhanced to support Intelligent Routing. This enables you to profile recipients of documents and report, and customized what delivery format they will be delivered in (e-mail, print, Web, fax). In addition, a new non-programming interface (PDF mapping objects) makes it easier than ever to deploy electronic output applications.

This session will introduce you to Infoprint Server and then use a series of application case studies, along with specific application development steps, to demonstrate how Infoprint Server could be put to work in your company.

MI Programming

33MD: Tue 11 - 12:15, B116, Miami Conv Ctr

ID:408250

Level:
Advanced

Course:
Application
Development

Speaker:
Mark S.
Waterbury
Industrial Strength
Software

Ever wonder about what MI is? Can I use it to my advantage? How do I program to the MI level? This session is designed to answer some of those questions. The speaker will share his tips and techniques for doing this right. Come and hear about the mysteries of MI programming.

ILE by Example

33MP: Tue 11 - 12:15, B215, Miami Conv Ctr

 **SILVER**
ID:440074

Level:
Advanced

Course:
Application
Development

Speaker:
Paul Tuohy
ComCon

This session takes a small sample RPG IV application and examines the issues involved in integrating it into an ILE application. This includes decisions on Dynamic Binding, Static Binding, Bind by Copy or Reference, structure of Service Programs, Binder Language, Binding Directories and Activation Groups.

By the end of this session, attendees will be able to:

1. Understand the benefits of ILE.
2. Understand the decision process in using the components of ILE.

Prerequisite: Attendees must have a basic understanding of the components of ILE.

F06 Miami Sessions: Thursday, 9/21/2006

LAB: Infoprint Designer & Infoprint Server

33LA: Tue 11 - 1:45, A205, Miami Conv Ctr

ID:470215

Level:
Advanced

Course:
Application
Development

Speakers:
Bill Shaffer
IBM Corporation
Glenn Rose
IBM Corporation

This combined lab session enables you to explore both Infoprint Designer and Infoprint Server. You are able to work on one or the other, or both, during the lab time.

Infoprint Designer for iSeries is the integrated, comprehensive document design system for iSeries. In this lab, you will use Infoprint Designer to design and produce business documents and reports with overlays, images, barcodes and complex formatting. Complete integration enables existing output applications to be reengineered into fully electronic pages without any change to the current application program. Students work at their own pace using the graphical the fully graphical Windows design interface. When each project is complete, the application uploaded and put into production, including printing on lab printers.

Infoprint Server is the System i5 program product for PDF services and electronic output distribution. Infoprint Server can dramatically change how you communicate with your users and customers. In this lab, you will be able to run through Infoprint Server set-up, document segmentation and indexing, the iSeries Access interface, and PDF mapping objects. Then, you can put this all together and deploy electronic distribution of output.

Join us and put Infoprint through the paces. Note a good companion to this lab is the application development session on Infoprint Server (410168).

An Introduction to the Unified Modeling Language

33MK: Tue 11 - 12:15, B210, Miami Conv Ctr

ID:500038

Level:
All

Course:
Application
Development

Speaker:
Vanessa
Grose
IBM Corporation

Building robust, secure, maintainable software requires a solid design. The Unified Modeling Language (UML) is a collection of simple, elegant diagrams that allow you to express software design in a standardized format.

By the end of this session, you will:

1. Recognize the value of abstraction in software design.
2. Identify different types of UML diagrams, including activity diagrams, use case diagrams, collaboration diagrams, and class diagrams.
3. Understand the purpose of different UML diagrams, motivated by a Java web application.
4. See a variety of development tools that incorporate the UML, including WebSphere and Rational.

Come catch a glimpse of the power of abstraction and standardization in software design!

F06 Miami Sessions: Thursday, 9/21/2006

iSeries Network Printing

35MC: Tue 2 - 3:15, B115, Miami Conv Ctr

ID:403767

Level:
Intermediate

Course:
Application
Development

Speaker:
Glenn Rose
IBM Corporation

Network (TCP/IP) attachment of printers to the iSeries has been a significant step forward in connectivity and flexibility that may be accompanied by a large step backward in printing functionality and control. Placing a printer on the network where the iSeries can share it with clients, other hosts, and LAN applications is a big plus. Choosing the best iSeries configuration option for your printer will determine the level of satisfaction your users have with their iSeries printing. Your understanding of the System i options along with new printer capabilities will be key to providing the desired level of print functionality and printing control. Improving print functionality and reliability results in happy end user.

In this session, you will learn:

1. The architecture and flow within OS/400 that supports TCP/IP-connected printers.
2. How the various print managers -- LPR, PJI, SNMP, IPP, Client Access, and AFP/IPDS -- work and how they differ.
3. How to configure printers for each of the print manager connections -- LPR, PJI, SNMP, AFP/IPDS.
4. V5 enhancements and tools.

OPEN LAB: ILE

35LA: Tue 2 - 3:15, A205, Miami Conv Ctr

36LA: Tue 3:30 - 4:45, A205, Miami Conv Ctr

ID:450117

Level:
All

Course:
Application
Development

Speakers:
Susan
Gantner
Partner400
Jon Paris
Partner400

This open lab allows you the choice of the following individual labs. Each lab is intended as a follow-on to a lecture session, as listed below.

1. 400969-Static Binding, which is intended as a follow-on to session 400972 ILE Introduction.
2. 410225-Activation Groups, which is intended as a follow-on to lecture session 404318 ILE: Activation Groups.
3. 403730-Binder Language, which is intended as a follow-on to lecture session 404309 ILE: Binder Language and Service Programs.

CL Enhancements - Past, Present and Future

36MA: Tue 3:30 - 4:45, B113, Miami Conv Ctr

ID:500033

Level:
Advanced

Course:
Application
Development

Speaker:
Guy Vig
IBM Corporation

In V5R3 and V5R4, IBM delivered many often-requested and long-awaited enhancements to the i5/OS Control Language (CL). This session will give you a sneak peek at a large number of additional CL enhancements being considered for releases of i5/OS beyond V5R4. Session attendees will be given a survey to let them rate each of these enhancements. This feedback will be used by i5/OS development to help prioritize new CL enhancements.

By the end of this session, attendees will:

1. Understand future enhancements being considered for the CL compiler.
2. Understand future enhancements being considered for CL command objects.
3. Vote on what priority they feel should be given to these CL enhancements.

BOF: MI Programming - Part 2

38HD: Tue 7 - 8, Cowrie 2, Loews Miami Beach

ID:408251

Level:
Advanced

Course:
Application
Development

Speaker:
Mark S.
Waterbury
Industrial Strength
Software

This session is a continuation of MI Programming Part 1. Part 1 is not a prerequisite for attending this session. The speaker will share more tips and techniques for MI Programming. In this session, there will be an opportunity for attendees to comment and share their own experiences and techniques.

F06 Miami Sessions: Thursday, 9/21/2006

CODE or RSE: Which is Right For Me?

41MQ: Wed 8 - 9:15, B216, Miami Conv Ctr

 **BRONZE**
ID:404228

Level:
Beginner

Course:
Application
Development

Speaker:
Susan
Gantner
Partner400

Are you among the many developers still using the same old toolset: SEU, PDM, SDA, RLU, etc? If so, this session is custom-made for you. If you have been wondering about any of the following questions, come to this session for guidance from someone who's been there.

- Should I consider using a Windows-based toolset to replace SEU, SDA, etc.?
- Why should I change? After all, I know SEU and SDA really well after all this time.
- How would such a change affect my productivity - both long and short-term?
- Which toolset should I use: The older CODE toolset or the new Eclipse-based WDSC and RSE?
- What old habits should I be looking to break when I move to one of the new toolsets?

In this session, we will demonstrate CODE and point you to other COMMON sessions on WDSC and RSE. See what you've been missing all these years. You may find out just how much more productive and fun your programming job can be. You have nothing to lose but your application backlog!

OPEN LAB: Application Development with WDSC

41LC: Wed 8 - 9:15, A202, Miami Conv Ctr

42LC: Wed 9:30 - 10:45, A202, Miami Conv Ctr

43LC: Wed 11 - 12:15, A202, Miami Conv Ctr

44LC: Wed 12:30 - 1:45, A202, Miami Conv Ctr

45LC: Wed 2 - 3:15, A202, Miami Conv Ctr

46LC: Wed 3:30 - 4:45, A202, Miami Conv Ctr

ID:430247

Level:
All

Course:
RPG IV

Speakers:
Claus Weiss
IBM Corporation
George Farr
IBM Corporation
George
Voutsinas
IBM Corporation
Roy S.
Goldstein
Capricorn
Information
Systems
Abe Battish
IBM Corporation
Nazmin Haji
IBM Corporation

The following labs are offered during this Open Lab:

1. Using the Remote System Explorer and iSeries Projects (450153)
2. VisualAge RPG - Fundamentals (401205)
3. VisualAge RPG - GUI Subfile Programming (407145)
4. The IBM WebFacing Tool (408166)
5. Introduction to Web Tools (430277)
6. WDSC: Working Off-line With iSeries Projects (480156)
7. Lab WDSC: Working with RPG and Web Services (500106)

Application Recovery and Other Tricks: Thinking Outside the Developer'sToolBox

41MF: Wed 8 - 9:15, B118, Miami Conv Ctr

ID:510026

Level:
Intermediate

Course:
Focus: Disaster
Recovery

Speaker:
Charles
Guarino
Central Park Data
Systems, Inc.

A well rounded programmer not only knows how to code efficiently, but also how to research and resolve the errors that are bound to occur. Attend this session to learn many field tested techniques that are essential for application recovery and problem solving.

Some topics discussed are how to debug someone else's running job, a review of lesser know powerful debugging commands, predetermining record format level check, building a free program cross reference, and quick methods of fixing invalid decimal data in database records. Lots of easy to understand slides are used in this fast paced entertaining session.

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F06 Miami Sessions: Thursday, 9/21/2006

Application Performance Analysis Using the IBM Performance Explorer on System i

42MM: Wed 9:30 - 10:45, B212, Miami Conv Ctr

ID:500100

Level:
Intermediate

Course:
Application Development

Speaker:
Gottfried Schimunek
IBM Corporation

Application performance analysis requires sometimes to drill down into the inside of application programs and investigate what parts of the program is causing a CPU or I/O load. The performance explorer function of the IBM performance tools allow to collect and analyze application performance data in a tabular or graphical form. This presentation will show examples of how to use these tools to do a more detailed analysis of application performance parameters in terms of CPU, memory and I/O use as well as analysis of causes for wait situations.

By the end of this session, attendees will be able to:

1. Collect application performance data.
2. Analyze application performance with IBM Performance Explorer.

What's With These ASCII, EBCDIC, Unicode CCSIDs?

42MP: Wed 9:30 - 10:45, B215, Miami Conv Ctr

ID:510061

Level:
Intermediate

Course:
Application Development

Speakers:
Bruce Vining
IBM Corporation
Pat Glenski
IBM Corporation

In today's business world there is a growing need to exchange data with other users that might be working in different languages and environments. This might involve using Unicode to accept and display Russian and Japanese data from a 5250 RPG application, or general data that needs to be received or sent in batch to an AIX application. This session covers how to use builtin facilities of i5/OS to work with other systems using encodings such as ASCII, EBCDIC, and Unicode. Samples are provided in RPG, COBOL, C and CL.

By the end of this session, attendees will be able to:

1. Convert data using the iconv API.
2. Support Unicode in a 5250 environment.
3. Support Unicode in a DB2 environment.

Externally Described Printer Files

43MM: Wed 11 - 12:15, B212, Miami Conv Ctr

ID:470027

Level:
Beginner

Course:
Application Development

Speaker:
Dori Allen
Allen Diversified,
Inc.

Externally described printer files (PRTF) offer many advantages to both RPG and COBOL programmers. The advantages include decreased processing time, ability to utilize existing data base file definitions and DDS--the file definitions used by other file types.

By the end of this session, attendees will understand:

1. Specific advantages of PRTF.
2. Coding PRTF top/down, left/right.
3. Major keywords for PRTF.

ILE Change Management and Version Control

44MP: Wed 12:30 - 1:45, B215, Miami Conv Ctr

ID:480091

Level:
Intermediate

Course:
Application Development

Speaker:
Mark S.
Waterbury
Industrial Strength
Software

This session will discuss the issues surrounding change management and version control as it pertains to the IBM OS/400 Integrated Language Environment (ILE)

Many iSeries shops have started to really dive into ILE development, but are finding that their traditional change management tools for their "native" OS/400 objects and source code do not always work very well with the ILE program model, where *PGMs and *SRVPGMs are composed of multiple *MODULEs, and you also have to consider binding, and binding directories, etc. Come and learn about change management and version control as it pertains to ILE, and learn some techniques and APIs you can use to help smooth the way to integrating your ILE development projects with your current change management and version control tools.

By the end of this session, attendees will:

1. Understand change management for ILE.
2. Understand version control for ILE.
3. Learn techniques you can apply in your shop.

F06 Miami Sessions: Thursday, 9/21/2006

Line Up For Data Queues

45MP: Wed 2 - 3:15, B215, Miami Conv Ctr

ID:440093

Level:
Beginner

Course:
Application
Development

Speaker:
Dori Allen
Allen Diversified,
Inc.

Data Queues are an important technique on the iSeries. Yet, for people new to the system, they can be very frustrating.

This session will discuss:

1. What is a data queue.
2. What is an API.
3. How to create a data queue.
4. How to send to a data queue.
5. How to read from one.

Some theory will be covered, including why use a data queue and performance issues.

OPEN LAB: Want Help with Your Commands?

45LA: Wed 2 - 3:15, A205, Miami Conv Ctr

46LA: Wed 3:30 - 4:45, A205, Miami Conv Ctr

ID:500067

Level:
All

Course:
Application
Development

Speaker:
Guy Vig
IBM Corporation

IBM Control Language (CL) commands all have online help, and its possible for YOUR commands to have online help too. In fact, support is included in the i5/ OS operating system, starting in V5R3, that makes adding help to your own CL commands downright EASY.

Bring along a save file with your own CL commands or text files with your command definition source and you can "test drive" this new support for yourself. Sample command source will be available as well.

By the end of this session, attendees will be able to:

1. Use i5/ OS support to easily create online command help.
2. Understand how the drudge work of adding online help to their own CL commands has been eliminated.
3. Use i5/ OS support to generate web (HTML) documentation from their online command help.

Object-Oriented Program Design/ Coding Techniques for 3GLs (RPG)

46MH: Wed 3:30 - 4:45, B122, Miami Conv Ctr

ID:406084

Level:
Intermediate

Course:
Application
Development

Speaker:
Mark S.
Waterbury
Industrial Strength
Software

While the world is beginning to use object-oriented languages (C++, Java, Smalltalk), there are millions of lines of 'legacy' code that must be maintained and enhanced, for the foreseeable future.

In this session, learn:

1. How to apply 'object-oriented' programming design and coding techniques to help improve the design and simplify coding of existing 3GL programs.
2. How to make existing 3GL applications software more robust, adaptable and reliable.
3. Concepts and techniques to take home and apply right away.

GUI Tips - Challenges of Application Modernization

46MG: Wed 3:30 - 4:45, B119, Miami Conv Ctr

 **BRONZE**
ID:410063

Level:
All

Course:
Application
Development

Speaker:
Trevor Perry
Clear Technologies

GUI-enabling a legacy application requires planning and forethought, along with an appropriate methodology, a deployment strategy, and effective user training. This session will outline the challenges and potential pitfalls of a GUI project.

This session will cover:

1. GUI and its impact on your organization.
2. Methodology and deployment strategies.
3. Required user training and reduced resistance to change.

F06 Miami Sessions: Thursday, 9/21/2006

Introduction to Subfiles

47ME: Wed 5 - 6:15, B117, Miami Conv Ctr

ID:430094

Level:
Beginner

Course:
RPG IV

Speaker:
Dori Allen
Allen Diversified,
Inc.

Subfiles are an iSeries basic. They are used to display lists of information via a screen. Usually this is static data, ie; lists of accounts, payment history, invoice line items, etc. Subfiles involve the use of a HLL such as RPG, traditional files such as PF or LF, and display file DDS to define the data and its visual presentation. A basic subfile inquiry program will be reviewed along with its display file DDS. Using the Dori Allen Cookbook Guide to Subfile Coding, I will discuss and explain each piece. This presentation can also be presented with COBOL code for the COBOL audience.

By the end of this session, attendees will be able to:

1. Understand the basic 8 DDS subfile keywords.
2. Understand the difference between a subfile control format and a subfile data format.
3. Be able to write a simple subfile program.

What's New in System APIs

51MG: Thu 8 - 9:15, B119, Miami Conv Ctr

ID:500174

Level:
All

Course:
Application
Development

Speaker:
Bruce Vining
IBM Corporation

A review of the new and changed APIs that can be found in i5/OS. This is not an introduction to how to use System APIs, rather it provides an overview of what new functions are provided to you with the latest release of i5/OS. Examples will be provided in RPG, COBOL, C, and CL for some of the more interesting new APIs.

APIs (Application Program Interfaces)

52MK: Thu 9:30 - 10:45, B210, Miami Conv Ctr

ID:410051

Level:
Beginner

Course:
Application
Development

Speaker:
Jim Sloan
Jim Sloan, Inc

APIs provide a different solution to interfacing to system functions. Instead of the traditional command interface, APIs use a call level interface. This session is designed for those beginning and intermediate level users who are interested in learning what APIs are all about, how to find the one you want, and how to code a basic API. CL and RPG solutions will be shown to perform typical functions. A few tools from the TAA Productivity Tools product will be shown which assist or perform API function.

By the end of this session, attendees will be able to:

1. Understand what APIs are.
2. Locate a specific API.
3. Do some basic coding.

WDS: The iSeries Integrated Debugger

51MD: Thu 8 - 9:15, B116, Miami Conv Ctr

ID:404596

Level:
All

Course:
Application
Development

Speakers:
Nazmin Haji
IBM Corporation
George
Voutsinas
IBM Corporation

Any development environment is incomplete if it does not feature a good source-level debugger. WebSphere Development Studio Client includes the Integrated iSeries debugger. It provides the full power of the green-screen system debugger, while offering the simplicity and convenience of the Eclipse workbench.

In this session, learn:

1. How the debugger integrates with the RSE.
2. How to use many of the debugger's features.

F06 Miami Sessions: Thursday, 9/21/2006

Integrating Serviceability Into Your ILE Applications

52MG: Thu 9:30 - 10:45, B119, Miami Conv Ctr

ID:480172

Level:
All

Course:
Application
Development

Speaker:
Bruce Vining
IBM Corporation

A significant cost for many applications is the ongoing servicing (reporting and isolation) of problems within the application. This session, which is intended for application programmers, covers tools that are available in i5/OS to help reduce these costs. The tools include:

1. Sending of meaningful messages using Message Handling APIs.
2. Monitoring for error situations using the Monitoring APIs.
3. Gathering of error related data using the Problem Log APIs.
4. Gathering of performance data using Performance Explorer APIs.
5. Gathering of trace data using User Trace APIs.

Examples will be provided using many of these APIs from ILE RPG, ILE COBOL, ILE C, and ILE CL. Knowledge of one or more of these languages is assumed.

How To Use the Most Common APIs

53MK: Thu 11 - 12:15, B210, Miami Conv Ctr

ID:510097

Level:
Intermediate

Course:
Application
Development

Speaker:
Bruce Vining
IBM Corporation

System APIs can appear daunting at first, but when you dig a bit deeper you realize that there are really just a few API concepts that once learned allow you to easily access hundreds of APIs. This session will go through the pros and cons, dos and don'ts of Retrieve, List, Open List, and Unix-type APIs. Examples used in the session will be based on RPG with the session handout providing the same examples in CL, COBOL, and C. By the end of this session, attendees will be able to use the vast majority of i5/OS APIs.

WDS: RPG and COBOL Tools in WDS: RSE Advanced

54MC: Thu 12:30 - 1:45, B115, Miami Conv Ctr

 **BRONZE**
ID:450155

Level:
Advanced

Course:
Application
Development

Speaker:
Claus Weiss
IBM Corporation

The Remote System Explorer of WDS provides rich functions for creating and maintaining of RPG, COBOL, DDS, and CL code. If you understand the basics, then come to this session to learn how to customize the environment. Learn also about iSeries Projects. There are many additional functions and features that can make your day to day development work even more effective and more fun.

OPEN LAB: Linux on System i

55LA: Thu 2 - 3:15, A205, Miami Conv Ctr

56LA: Thu 3:30 - 4:45, A205, Miami Conv Ctr

ID:420087

Level:
Advanced

Course:
Linux

Speakers:
Erwin L.
Earley
IBM Corporation
Dave
Boutcher
IBM Corporation

Linux on iSeries and eServer i5 provides a flexible/vibrant platform for the implementation of cutting-edge infrastructure and e-business solutions including file serving, network infrastructure (DNS, DHCP, Firewall), database connectivity and web front ending existing DB2/400 data sources. This lab provides the opportunity to become more familiar with general Linux features as well as configuration of the eServer i5 system for implementation of Linux-based solutions.

Exercises that will be available include:

1. Use of the Hardware Management Console (HMC) for definition of Logical Partitions for Linux.
2. Use of Virtual Partition Manager (VPM) for definition and management of Linux environments
3. System Administration
4. Familiarization with Linux concepts (shell, file system, user commands)
5. Exploring network concepts and solutions
6. Kernel Building
7. File Server exploration

F06 Miami Sessions: Thursday, 9/21/2006

The Road to Reuse - VicRoads

55MK: Thu 2 - 3:15, B210, Miami Conv Ctr

ID:510074

Level:

All

Course:

Application
Development

Speaker:

Marcus Dee
looksoftware

This presentation describes VicRoads experiences utilizing smart clients and web services to deliver more from their existing IT assets. VicRoads is a good example of how new composite solutions can be delivered that leverage existing iSeries and zSeries application functionality.

By creating service modules that access their existing applications, VicRoads have been able to deliver 'new' solutions for their call centre that reduced average call duration by 40%. The next step was to integrate the same service modules with Interactive Voice Response (IVR) to extend direct access to consumers. A third initiative is aimed at improving trading partner collaboration.

The same web services created from iSeries applications have been reused and delivered through different channels, satisfying requirements for new and enhanced applications without having to develop significant new functionality.

By the end of this session, attendees will understand:

1. Smart clients and web services.
2. How to deliver new solutions through multiple channels by reusing existing applications.
3. How to modernize applications to support web services.

iSeries Application Modernization and Migration with X-Analysis Tool Suite

56MH: Thu 3:30 - 4:45, B122, Miami Conv Ctr

ID:500136

Level:

All

Course:

Application
Development

Speaker:

Stuart Milligan
Daborough

See how the X-Analysis Tool Suite can help your development staff become more productive than ever before. By reverse engineering your database into a complete Entity Relationship Diagram and interactive model, and by creating a complete interactive graphical model of your applications, and then linking these together is a single easy to use application we can have your programmers doing complex impact analysis and coding faster than ever. Tasks that use to take several days to investigate and document can now be done in minutes.

Also see the complete power of the X-Analysis tool suite and how it can assist you in the total migration of your existing RPG and COBOL applications to a Services Oriented Architecture using a Model-View-Controller deployment. Deploy in any of 5 different user interfaces while keeping a single instance of your business logic.