# IUA/CA IDMS™ Technical Conference

# Pre-conference Education Offerings

#### Introduction to CA IDMS Database Structures

May 7<sup>th</sup> 1:00 – 5:30 PM

CA IDMS is a high performance DBMS that supports navigation and SQL access to data. As a DBA new to IDMS, it is important to understand the underlying structures of the database and how they work together. Attend this session to learn about records and data relationships, subschemas, schemas and DMCLs. The concepts you learn in this class will prepare you for the CA IDMS Database Maintenance class.

# **SQL** and Web Connectivity for CA IDMS

May 7<sup>th</sup> 1:00 – 5:30 PM

This introductory session covers the relational SQL language and how SQL enables connectivity to CA IDMS data from Web, Java and Windows environments. The session agenda covers SQL statements for retrieving and modifying data, CA IDMS SQL extensions, and enabling efficient data-driven web applications with this technology.

#### **CA IDMS Database Maintenance**

May  $8^{th}$  8:30 AM - 5:30 PM

This course is designed to introduce the new Database Administrator (DBA) to database maintenance using CA IDMS/DB. A DBA must be aware of the tasks they may be asked to perform against an existing CA IDMS database and be familiar with the tools available to perform these tasks.

#### **CA IDMS Performance and Tuning**

May 8th 8:30 AM - 12:30 PM

This course is designed to introduce the new Database Administrator (DBA) to how to analyze the performance of the CV and execute any necessary tuning so that they will be able to extract the best performance from their CV.

#### **CA IDMS Security**

May 8<sup>th</sup> 1:30 pm - 5:30 PM

You want to know more about CA IDMS Security? This is the class to come to! We will focus on the methodology, the tools and techniques used to secure access to the runtime system, the database and functional tools. More specifically, we will talk about the different levels and types of security within CA IDMS, how to activate CA IDMS Security, how to secure the different types of resources, how the signon process works, how to secure dictionaries and how to report on security.

## **Application Development Sessions**

#### CA IDMS 19.0 SQL Enhancements for Modernization

Customers need to leverage their investment in CA IDMS to create new applications based on services in the application economy, and they need to do this with current technologies and developer skill sets. This session shows how SQL enhancements in CA IDMS 19.0 improve standards compliance, developer productivity, and compatibility with third party tools and applications. The SQL virtual foreign key feature enables developers to use standard SQL to access and update network databases without the need to use network DML or table procedures. Enhancements to SQL DDL enable users to define databases using standard DDL compatible with other databases.

# Using Java to Access Your CA IDMS Databases and Applications

Many users are focused on developing new applications in Java, but still have a large investment in CA IDMS databases and applications. This session shows how you can use JDBC and SQL to leverage your CA IDMS databases and business logic from your Java applications. It includes an overview of Java programming concepts and JDBC for those new to Java, as well as more advanced topics for more experienced users.

#### Java and SQL Access to CA IDMS Data at BT

BT, one of the world's leading providers of communications solutions and services, has recently introduced direct access to its major CA-IDMS CSS (Customer Service System) databases using the CA-IDMS Server JDBC interface. This session explains why; how; lessons learned so far and progress that has been made in the project.

#### **CA IDMS 19.0 Web Services for Modernization**

The vision of CA IDMS 19.0 is to improve CA IDMS modernization capabilities through features that enable customers to expand investments in core CA IDMS applications and improve developer productivity using modern skills and industry-standard technology. This session discusses a CA IDMS 19.0 project to simplify integration of CA IDMS applications and Web services.

#### Web Services are the "Kiss of Life" For CA IDMS

Web Services have become the dominant standard that allow applications written by different organizations or entities to interact with one another. Web Services are heavily used for both intra and inter organizational communications. This session explores several approaches that can be used to extend IDMS applications, allowing them to consume and offer web services. We begin by defining what a Web Service is and the components within each service and operation. This leads us to understand the basic purpose of the Web Service Description Language (WSDL). Then we discuss the implementation of server and client interface stubs, what their purpose is, and how they are created. At this point, we can enumerate the challenges we face when attempting to develop or use web services in COBOL or ADSO on the mainframe. There are options. We list and analyze them. Finally, we define and demonstrate a process that works for CA IDMS. This process is like what Java and .NET software engineers use today. Create WSDL, generate the client or server stubs, and use them in code to offer or consume web services.

# **Leveraging CA IDMS Applications as Services**

Our site was tasked to accept XML transactions that mirrored our existing ADS transactions. We will discuss techniques on how to reuse existing ADS code as SQL Procedures. Some of the topics are: How to structure the ADS code to run as a procedure and as "normal" dialog, what commands are and are not allowed in the SQL Procedure, and techniques to know if the dialog is in 3270 mode or running as an SQL Procedure. The latest research shows, the same dialog load module can support 3270 transactions and SQL procedures.

#### Implementing SQL Security

Turning on SQL security is more than Granting and Revoking privileges on tables. (That's the easy part.) This session provides insight into the implementation steps used at our site. We will touch on: changes to the RHDCSRTT load module, the many database components that now have to be managed, using GROUPS, Granting privileges using wildcards, and the dictionary and catalogs where the privileges are held. There will also be a few tips on how IDMS internal security works.

#### **Database Administration Sessions**

### Tools for Monitoring and Tuning your CA IDMS/DC System

This high level overview focuses on tools that can be used to monitor and tune CA IDMS/DB and CA IDMS/DC systems to meet SLAs and other performance goals.

Attend this session to learn more about the benefits of CA IDMS Performance Monitor, CA Mainframe Application Tuner, and CA SYSVIEW and the value they provide in your environment.

#### **Understanding the Dictionaries that Drive Your CA IDMS Applications**

A primer on the evolution of the dictionary (including catalogs), its functions, benefits of cross referencing, multiple dictionaries as well as maintaining, reporting and locking down the dictionary resource.

#### **Recovery Techniques for the New DBA**

This session focuses on the procedures and utilities that a CA IDMS Database Administrator can use to identify and correct a database integrity problem. Attendees learn the recovery methods available and when they are appropriate to use. Also covered are techniques for preventing integrity problems. Attend this session if you are responsible for the integrity of your shop's database.

#### **CA IDMS Index Tuning**

Attendees will learn the physical characteristics that can be assigned to CA IDMS indexes and how they impact processing efficiency. They will also become familiar with the CA IDMS utilities that can be used to monitor the health of indexes and those that can be used to tune existing index structures.

#### CA IDMS and Exploitation of the zIIP

CA IDMS has the capability to exploit the IBM zIIP specialty engine on the System Z. Attend this session to learn how this feature can be used to offload CA IDMS computing cycles to zIIPs enabling increased workloads on your existing CP.

#### CA IDMS Deadlock Analysis (Parts 1 & 2)

This session provides an explanation of the locking process and the potential deadlock situations that may happen. The material presents the messages generated when a deadlock occurs and their use in identifying the underlying cause of the deadlock scenario. Finally, some general application design recommendations are discussed to minimize the occurrences of deadlocks.

#### **CA IDMS Buffer Tuning**

This session gives you an overview of database and journal buffers and how they work, as well as how to tune your buffers for performance. You will learn how to size your database and journal buffer pools for performance and how to tune buffers to improve zIIP usage.

### **Restructuring a CA IDMS Database**

You need to change a CA IDMS record? This session will present considerations for restructuring a CA IDMS database record. It focuses on the RESTRUCTURE and RESTRUCTURE CONNECT utility statements, and the schema compare utility IDMSRSTC. We will see when and how to use these utilities and we will go thru an example.

## **CA IDMS REORG Utility**

The CA IDMS REORG utility is designed to unload and reload a user's database. This presentation describes the concept employed to reduce the length of time required to accomplish this type of operation and identifies the phases, tasks, and dataset usage employed by REORG.

# Resolving Emerging Security Directives With High-Performance Cryptography for CA IDMS Databases

Managing cryptography for applications using CA IDMS becomes especially challenging in consideration of the expanding scope of cryptography and key management policies along with auditing mandates. Fortunately, there is a solution designed to resolve these challenges and help lower the security risks for users and applications. Attend this session and discover how the use of high-performance, hardware-accelerated cryptography with intuitive role-based separation of duties for cryptography and key management can be safely managed with ASPG MegaCryption for CA IDMS.

#### **CA Product Demonstrations – Show and Tell**

Along with developing new features for CA IDMS itself, the CA IDMS team has been busy integrating CA IDMS with other CA and vendor products to help you get the most value from CA IDMS. Come to this session to see how you can use CA Data Content Discovery to identify Personally Identifiable Data in your CA IDMS databases to improve security and privacy compliance and how your developers can use CA Developer for Z Systems to develop and maintain CA IDMS applications in an Eclipse based IDE optimized for z/OS. We will also show a sneak peak of the new CA IDMS MQ Adapter feature that is being developed.

#### **General Interest Sessions**

#### **CA IDMS Strategy and Roadmap**

Come to this session to learn the strategy and vision for CA IDMS, including our continuous delivery and portfolio simplification programs that are providing easier deployment of enhancements and additional value to CA IDMS users. You will learn how customer-driven agile development enhancements are being prioritized for future releases and get a closer look at the new functionality, content and integrations under consideration. This session also covers release status and a review of features you can use today in your environment.

#### What's New with CA IDMS since 19.0 GA?

The incremental releases for CA IDMS 19.0 were completed and delivered as a single installation in August 2016, but the CA IDMS team has been busy since then. The team has continued to deliver fully tested enhancements based on user requests that can be deployed immediately without the need to install a new release. Come to this session for a deep dive on these enhancements and see how you can use them in your environment.

#### What's up, Doc?

Those rascally rabbits in CA Information Engineering are at it again! What's up doc(ops), you ask? DocOps is changing, and changing fast. Why? Because you asked for it! Join Casie Oxford, Manager of Info Engineering in Plano, and John Baker, Media Developer to talk about what's new, what's coming, and to share your feedback and ideas for making your documentation help you.

Casie will talk about recent changes, DocOps futures, and gather your feedback on the platform, the product doc, and your pet subject areas for improvements.

John will talk about CA's overall moves toward including more rich media in its documentation, the new Media Development Team within Info Engineering, demo some new videos, and he'll poll you for future topics.

#### CA IDMS Birds of a Feather (BOF)

Come participate in an open discussion of CA IDMS topics with CA technical staff, product management and CA IDMS customers. This is a great opportunity to talk directly with the staff that develops and supports CA IDMS as well as to network with other CA IDMS users and benefit from their experiences.

# **IUA Business Meeting**

The IUA will be conducting its annual business meeting.	Come join us to participate our IUA
Board election and find out who will be inducted into the	IUA Hall of Fame.