



# Michigan DB2 Users Group (MDUG) Quarterly Newsletter

*September 2007*

**Michigan DB2 Users Group**  
P.O. Box 2977  
Southfield, MI 48037-2977

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MDUG will be holding their third seminar of 2007 on Thursday, September 13<sup>th</sup> at the Baronette Hotel in Novi. Directions to the hotel are available on the MDUG web site; [www.mdug.org](http://www.mdug.org).

The meeting format will be the reverse of our usual schedule. Our keynote topic for the entire membership will take place at the end of the day. This will feature Dave Beulke speaking on "Developing High Performance SOA Java DB2 Applications". Don't miss it!

The day will start with two tracks – one on DB2 for z/OS and the other on DB2 for LUW. Paul Wirth will take us through DB2 V8 for Programmers and then lead us on a two-part discussion of connecting to DB2 for z/OS. Two speakers from the IBM Toronto Lab will focus on DB2 for LUW covering topics in data compression, concurrency, and reorganization.

See the topic abstracts and speakers bio's for details of this information-filled MDUG meeting.

If you plan to attend the seminar, please make sure to register early and ensure that your membership fee has been paid in advance or will be paid at the seminar. Details on registration are provided on page 6 of the newsletter and details on membership are provided under **News for Members** section of the newsletter.

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**Dave Beulke Training Day:** In addition to the seminar, MDUG is sponsoring a one day training event on Friday, September 14<sup>th</sup> at the Baronette Hotel featuring Dave Beulke. Details on the training are available in the Members section of the newsletter and on the MDUG web site: [www.mdug.org](http://www.mdug.org). This is one way you can keep current without having to spend time and money on travel.

**Group Support:** The Board is always looking for volunteers to assist in the operation of the User Group. The areas where support is needed are: Reservations, membership, web site support, speaker support, and onsite support. If you are interested, please send an email to MDUG at [admin@mdug.org](mailto:admin@mdug.org) or talk to one of the Board members at the seminar.

**Final 2007 Seminar:**

December 6 @ The Crowne Plaza (Novi)

MDUG is an affiliate of IDUG (the International DB2 User Group), and is chartered under the State of Michigan. It promotes the awareness of DB2 in solving business problems by providing a non-profit forum for presenting new functionality, features, ideas, and usage of DB2. This forum is used for communications among DB2 users in the Southeastern Michigan area, as well as bringing together others through out the state.

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## SEMINAR Details

### September 13, 2007 Presentation Abstracts

#### **DB2 V8 for Programmers**

DB2 Universal Database® (UDB) for z/OS® continues to deliver rich function for scalable and highly available data for your enterprise-scale e-business applications. Combine the power and capacity of IBM zSeries®, the high performance and high availability of the z/OS operating system, and this enriched version of DB2® to expand and extend your applications in the increasingly competitive e-business environment. DB2 UDB for z/OS, V8 is the most comprehensive and feature-rich version to date. With a major emphasis on 64-bit addressing, one of the keys to reengineering is breaking through the limits of the current architecture.

#### **Objective**

DB2 UDB for z/OS, V8 also includes dozens of changes in SQL, improving family consistency while pushing DB2 SQL beyond current boundaries for enhanced application portability. The purpose of this presentation review is to review changes and enhancements to: SQL, utilities, optimizer behavior, RUNSTATS and Visual Explain.

#### **Agenda**

Review new reserved words and functions  
What is Unicode  
Utilities changes  
Optimizer behavior changes  
RUNSTATS and additional statistics  
Visual Explain and Statistics Advisor

#### **Audience**

This presentation is targeted for Database Administrators, Application Developers and Application Development Managers.

#### **DB2 Connections to DB2 for z/OS – Parts 1 & 2**

The purpose of this presentation is to provide an “end-to-end” overview of distributed connections to DB2 z/OS. Given distributed transactions cross many different business organizations, gaining an understanding the “big picture” of a distributed transaction is difficult. The goal of this presentation is to provide a high level view of distributed transactions and to try and de-mystifying the behavior of DB2 z/OS distributed workloads.

#### **Agenda:**

- DB2 Clients - Review of the DB2 Runtime Clients and Client Deployment tools
- DB2 Connect - Configuration Strategies, Connection Pooling/Concentrator and Java Type-4 Driver
- DB2 z/OS and Distributed Connections - Thread Pooling and Thread Parameters
- DB2 z/OS and Connection Resources - Capacity Planning for Threads on DB2 z/OS

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- z/OS Workload Manager - Workload Manager and DB2 Threads, also zIIP Processors and DDF
- DB2 Connect Considerations
- DB2 Connect Tips

## **Audience:**

This presentation is targeted for Database Administrators, Application Developers and Systems Programmers.

## **Deep Dive into Deep Compression – Best Practices in Viper, Viper II, and a Look Beyond!!**

DB2 9 (code named Viper) brought the initial functionality and capability of *Deep* Compression. Significant storage savings and in many cases, performance benefit, is possible. Viper II will bring additional enhancements to the compression story in DB2 including, autonomics. This session will provide an overview and roadmap of Deep Compression in DB2 as well as share best practices and insights into successfully deploying this functionality.

Objectives: The goals of this presentation are to provide an overview of the compression functionality and the new enhancements in Viper II, best practices and guidelines for deploying compression, discuss storage benefits and performance aspects associated with compression, and future compression features and strategic Data Management direction.

## **Don't Get Locked Out – Here's the Key to Concurrency**

This session will go over the details of locking, including a number of new features and capabilities introduced in V8.2, V8.2.2, and DB2 9. We will describe the different methods available which affect or control the locking behavior within DB2, including registry variables, configuration parameters, table attributes, special registers, and statement options. Information will be presented to describe how locks can be monitored and the impact of locking to the database system.

## **DB2 Real Estate – Buy, Invest, Sell, ... Reorg?!**

The cost of disk storage represents a significant portion of the overall expense associated with large database systems. Once purchased, managing that storage can significantly add to the total cost of ownership. Effective management and utilization of disk space is instrumental in keeping your database Real Estate costs in check. This presentation will provide insights into DB2 Data Management with a detailed focus on table and index reorganization. The role of Reorg in DB2 features such as Table Partitioning, Row Compression, Schema Changes and Large RIDs will be included. Best practices, monitoring, tuning, autonomics and troubleshooting will also be highlighted.

Objectives: The goals of this presentation are to

- provide an overview of Data Management in DB2
- provide intimate details into the reorg utility

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- highlight customer usage scenarios including best practices, monitoring, tuning, autonomies and troubleshooting
- illustrate the role of reorganization in new Viper features such as Table Partitioning, Data Row Compression, ALTER Schema changes, and Large RIDs.

## **Developing High Performance SOA Java DB2 Applications**

The application DBA and developer learn the common Java performance pitfalls and how to avoid them. This presentation will take the attendee through the application architecture and discusses the Java application pattern choices. The presentation highlights the common pitfalls and how to avoid performance problems related to Java sessions, messages and application persistence issues. The presentation also highlights the best practices for database connections, SQL access and error checking within a high performance environment. Discussing these areas along with common Java JSP and servlet programming traps and debugging can help your application developers improve your application scalability and overall performance significantly. We will discuss some of these issues as it relates to the upcoming JLinQ (code name) technology from IBM.

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## Seminar Agenda

- 8:15 am – 9:00 am      Registration / Continental Breakfast
- 9:00 am – 9:05 am      Welcome and Opening Remarks
- 'A' Track – DB2 for z/OS**
- 9:05 am – 10:20 am      "DB2 V8 for Programmers"  
Speaker: Paul Wirth (IBM Corporation)
- 10:20 am – 10:35 am      Break
- 10:35 am – 11:50 am      "DB2 Connections to DB2 for z/OS – Part 1"  
Speaker: Paul Wirth (IBM Corporation)
- 11:50 am – 12:45 pm      Lunch
- 12:45 pm – 2:00 pm      "DB2 Connections to DB2 for z/OS – Part 2"  
Speaker: Paul Wirth (IBM Corporation)

### **'B' Track – DB2 for LUW**

- 9:00 am – 9:05 am      Welcome and Opening Remarks
- 9:05 am – 10:20 am      "Deep Dive into *Deep* Compression – Best Practices in Viper, Viper II, and a look Beyond!"  
Speaker: Mike Winer (IBM Toronto Lab)
- 10:20 am – 10:35 am      Break
- 10:35 am – 11:50 am      "Don't get Locked Out – Here's the Key to Concurrency"  
Speaker: Bill Minor (IBM Toronto Lab)
- 11:50 am – 12:45 pm      Lunch
- 12:45 pm – 2:00 pm      "DB2 Real Estate – Buy, Invest, Sell, ... Reorg?!"  
Speaker: Bill Minor (IBM Toronto Lab)

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- 2:00 pm – 2:15 pm      Break

### **LAST PRESENTION OF THE DAY – SINGLE TRACK SESSION!!!**

- 2:15 pm – 3:30 pm      "Developing High Performance SOA Java DB2 Applications"  
Speaker: Dave Beulke (Pragmatic Solutions, Inc.)

**Presentations:**

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Presently soft copy of the seminar presentations is not available. If softcopy of the presentations is made available it will be posted on the MDUG web site [www.mdug.org](http://www.mdug.org) prior to the seminar. Please check the web site for presentations prior to the seminar so that you can download and bring copies to the seminar. When speakers provide their presentations in soft copy, they normally do not bring hard copy to the seminar.

## Check In:

Seminar onsite check in begins at 8:15 am and the seminar will begin at 9:00am. The cost of the seminar is covered by the yearly membership fee, if you are a member, or attending under a Corporate/Vendor membership. Membership includes a continental breakfast and lunch at the seminar. The cost for non-members is \$80 and covers the continental breakfast and lunch. Annual membership forms are available at the seminar, or you can download a copy from the MDUG website, [www.mdug.org](http://www.mdug.org).

## Registering for the seminar:

You can register yourself and/or your site/Company attendees by sending an email to [reservations@mdug.org](mailto:reservations@mdug.org). Please include the name of all attendees in the email message, along with the type of membership under which you are registering, and the associated company name. Types of membership are: Corporate, Vendor, Individual and Shared.

Example: Bob Smith, Bike Shop, Corporate Membership.

If you are not yet a member, or your company is not a member, please indicate this in the email and if you will be opening & paying for a membership at the seminar and the type of membership.

Confirmation is available upon request only. Reservations for the seminar will close as of the end of day on **September 7th** (Friday before the seminar). Seating may be limited, so please respond early to guarantee a spot.

## Speaker Backgrounds

### **Paul Wirth (IBM Corporation)**

Paul Wirth is a Senior Data Management Technical Sales Specialist with IBM Corporation located in Grand Rapids, Michigan. Paul has been involved in database administration and storage management for the past twenty years. Over the years Paul has worked in database administration with IMS, DB2 and Oracle. Paul has also worked extensively with enterprise storage subsystems for both Open Systems and zOS.

### **Bill Minor (IBM Toronto Lab)**

Bill has a BSc degree from the University of Waterloo as well as MSc and Ph.D. degrees from McMaster University (Theoretical Physics). Bill began his IBM career with the DB2 LUW Customer Advanced Support group. Since 2000, his DB2 development career has been based in data management. Some of the features he

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has contributed to include: object reorganization, locking and concurrency controls, larger RIDs, partitioned tables and compression.

## **Mike Winer (IBM Toronto Lab)**

Mike Winer has an Honors degree in Computer Science from the University of Western Ontario, and has worked on DB2 for LUW at the IBM Toronto Software Lab since 1992. Working in and owning various components, along with managing a development team, he has contributed towards numerous features and capabilities over the years, including table spaces, sequences and identity columns, table reorg, Append - MDC - partitioned tables, single database page size, large RIDs, compression, and many others. Mike has experience in performance and development, along with a deep understanding of locking, logging, concurrency, and recovery, which has propelled him into his current role as one of the lead architects within the database kernel group.

## **Dave Beulke (Pragmatic Solutions, Inc.)**

David Beulke is an internationally recognized DB2 consultant, author and lecturer. He is known for his extensive expertise in database performance, data warehouse designs and internet java applications. He is currently a member of the IBM DB2 Gold Consultant program, co-author of the IBM V8 and V7 z/OS DB2 Certification exams, co-author of the Business Intelligence Certification exam, past president of the International DB2 Users Group (IDUG), columnist for DB2 Magazine, and former instructor for The Data Warehouse Institute (TDWI). Dave has 22+ years of experience tuning mainframe and UNIX systems, restructuring database designs, improving applications and providing more efficient SQL to solve business problems. He specializes in performance reviews and tuning of large complex operational and data warehousing systems saving his clients millions of dollars in CPU charges, hardware upgrades and software licensing costs. He can be reached at DaveBeulke@cs.com for any help, questions or comments.

## **News for Members:**

### **1. Seminar Feedback from June 2007 (From Evaluations Forms):**

Thank you for your valuable suggestions for Future Topics:  
MDUG will use this information as we search for future speakers and topics.

#### **# Responses/Topic**

<b>15</b>	<b>DRDA and DB2 Connect</b>
<b>13</b>	<b>Advanced SQL</b>
<b>13</b>	<b>Stored Procedures</b>
<b>12</b>	<b>Data Warehouse using DB2</b>
<b>10</b>	<b>DB2 for Application Programmers</b>
<b>10</b>	<b>DB2 Disaster Recovery</b>
<b>9</b>	<b>DB2 for System Programmers</b>
<b>7</b>	<b>Analytical Processing with DB2</b>
<b>6</b>	<b>DB2 Web Connectivity</b>
<b>5</b>	<b>DB2 UDB for non-OS/390 Platform</b>

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4	Performance Tips for DB2 w/CICS
3	DB2 Page Internals
3	Informix and DB2
3	Using DB2 with PeopleSoft & SAP
2	Integrating Informix into DB2

## 2. Seminar (June 2007) Feedback Summary

- The lowest overall MDUG evaluation in the past two years was recorded. Low evaluations for the room and lunch were indicated.
- The three most requested topics for future seminars were "Advanced SQL", "DRDA and DB2 Connect", "Stored Procedures".
- The usual comments were indicated about the rooms being too cold.
- Very low attendance was observed in the afternoon.

## 3. June 2007 Seminar Speakers Feedback

Rating based on a scale of 1 – 5 with 5 as the highest rating.

### James Teng – What's New in DB2 for z/OS Locking and Concurrency Control

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
4.06	3.97	3.68	3.90	3.58	3.83

### James Teng – What's New in DB2 for z/OS Buffer Pool Management

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
4.17	4.00	3.67	3.96	3.59	3.81

### Lock Lyon – Case Studies in DB2 for z/OS Performance Tuning – Part 1

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
4.17	3.87	4.35	4.04	3.71	3.39

### Lock Lyon – Case Studies in DB2 for z/OS Performance Tuning – Part 2

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
4.35	4.29	4.53	4.29	3.85	3.59

### Rich Schechinger – Controlling Data Growth thru Database Archiving

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
3.67	3.22	3.56	3.13	3.33	3.63

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## Rich Schechinger – Managing Test Data Effectively and Data Privacy

Topic Value	Session Content	Speaker	Material Covered	Handouts	Visuals
4.20	3.80	3.80	3.60	3.25	4.00

### 4. MDUG Membership

Information on membership is available on the MDUG web site [www.mdug.org](http://www.mdug.org) by clicking on the [Membership and Fees](#) click on the left side of the [Home Page](#).

Inquiries on corporate/company memberships should be sent to the MDUG email box at [admin@mdug.org](mailto:admin@mdug.org).

### 5. Visit our Website

Please take a few minutes to visit our website ([www.mdug.org](http://www.mdug.org)) and give us your feedback. Email your comments to [admin@mdug.org](mailto:admin@mdug.org). We are trying to make the website more useful to MDUG members.

### 6. **Dave Beulke Training Day: Educational Seminar on Friday, September 14, 2007**

Presentation Title: **How to do a DB2 zOS Performance Review Seminar**

Course Description: This class will discuss the research, process and impact of doing a performance review of your DB2 environments, systems, and applications. An overall system, architectural, database and performance tuning review can dramatically reduce costs and improve system and application performance, availability and scalability. By analyzing many processing performance conditions and detailing various recommendations you can quickly improve database application performance, throughput and response time. This class will also detail activities to evaluate production DB2 z/OS environments. This class will detail problem areas and the improvements that can be made in system configurations, database designs and batch, online and Websphere applications. These techniques at many consulting clients have dramatically reduced daily CPU consumption and saved clients millions of dollars in CPU costs.

Additional details available at [www.datasharing.com](http://www.datasharing.com).

Location: Crowne Plaza - Novi  
I-96 at Novi Rd.

Registration fee: \$499 or \$399 if you register by September 7, 2007

Register at [www.datasharing.com](http://www.datasharing.com).