

Solutions for IBM DB2 and Informix Users

A One-Day User Group Technical Conference Wednesday, April 21, 2004

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### Wednesday, April 21, 2004 8:30 AM to 5:00 PM Northern Virginia Community College 8333 Little River Turnpike, Annandale, VA

The Washington DC Area IBM-Informix Users Group (WAIUG) proudly announces its 6<sup>th</sup> user group technical conference: **WAIUG Forum 2004**. Located on the beautiful campus of Northern Virginia Community College (NOVA), this is the largest convocation for IBM database users on the U.S. East Coast! This key event will feature multiple tracks concentrating on database engine performance tuning and management, SQL and effective product usage.

### <u>This event includes:</u>

- 14 Technical presentations by the top IBM DB2 and Informix Speakers (6 IBM Data Management Gold Consultants, 2 Speakers from IBM labs)
- Three tracks covering:
  - o DB2 Administration and Performance
  - o Tools and Applications for DB2 and Informix
  - Informix Administration and Performance
- CD with public domain software, and
- A chance to meet and network with database developers, programmers, DBAs, and users.

# **DB2** Administration and Performance Track

- DB2 V8 Data Warehouse Performance David Beulke, President International DB2 Users Group
- Powerful SQL: Past, Present & Future Sheryl M. Larsen, Sheryl M. Larsen, Inc.
- DBA Checklist Dwaine R. Snow, IBM Canada
- A Technical Comparison of DB2 and Informix Dwaine R. Snow, IBM Canada
- Informix to DB2 Migration: A DBA's Story (double session) J. Warren Donovan and Robert Carts, SAIC

### **Informix Administration and Performance Track**

- Monitoring and Tuning Your Informix Server Lester Knutsen, Advanced DataTools Corporation
- Database Design for Success (double session) Jack Parker, Database Consultant
- Performance Tuning Stories From the Road (double session) Mark Scranton, IBM

# Tools and Applications for DB2 and Informix Track

- Overview of Four J's Next Generation 4GL Product "Genero"
- 4GL Developers, Improve Productivity: FourGen CASE Tools and FourGen Accounting Software Syed Kamal, Gillani, Inc.
- Using Perl and DBI/DBD with Informix Databases (new tricks and tips) Darryl Priest, Piper Rudnick LLP
- Informix SQL Performance Tuning (double session) Mike Walker, UCI Consulting
- WebSphere / J2EE Implementation Made (Very) Easy Jean Georges Perrin, Awoma
- WebSphere for Informix DBAs Michael Chaney, ChainLink Networking Solutions, Inc.

### Forum 2004 is Sponsored by Advanced DataTools Corporation, Awoma, Four Js, Gillani, Inc. Premier Sponsor - IBM Data Management

Forum 2004 - Solutions For IBM DB2 and Informix Users - April 21, 2004 http://www.iiug.org/waiug

# Washington Area Informix User Group Forum 2004 Schedule

Time	<u>Track 1</u> Informix Administration and Performance	<u>Track 2</u> Tools and Applications for DB2 and Informix	<u>Track 3</u> DB2 Administration and Performance
7:00-8:30	Registration and Opening Break – Sponsored by Gillani, Inc.		
8:30-9:30	Session 1 Database Design for Success - Jack Parker, Database Consultant	Session 5 4GL Developers, Improve Productivity: FourGen CASE Tools and FourGen Accounting Software - Syed Kamal, Gillani, Inc.	Session 10 Informix to DB2 Migration: A DBA's Story - J. Warren Donovan and Robert Carts, SAIC
9:30-9:45	Break – Sponsored by 4Js		
9:45-10:45	Session 1 (continued) Database Design for Success - Jack Parker, Database Consultant	Session 6 Overview of Four J's Next Generation 4GL Product "Genero"	Session 10 (continued) Informix to DB2 Migration: A DBA's Story - J. Warren Donovan, SAIC
10:45-11:00	Break		
11:00-12:00	Session 2 WebSphere for Informix DBAs - Michael Chaney, ChainLink Networking Solutions, Inc.	Session 7 Informix SQL Performance Tuning - Mike Walker, UCI Consulting	Session 11 DB2 V8 Data Warehouse Performance - David Beulke, President - International DB2 Users Group
12:00-1:00	Lunch – Sponsored by IBM		
1:00-2:00	Session 3 Monitoring and Tuning Your Informix Server - Lester Knutsen, Advanced DataTools Corporation	Session 7 (continued) Informix SQL Performance Tuning - Mike Walker, UCI Consulting	Session 12 Powerful SQL: Past, Present & Future - Sheryl M. Larsen, Sheryl M. Larsen, Inc.
2:00-2:15	Break – Sponsored by Advanced DataTools Corporation		
2:15-3:15	Session 4 Performance Tuning Stories From the Road - Mark Scranton, IBM	Session 8 Using Perl and DBI/DBD with Informix Databases (new tricks and tips) - Darryl Priest, Piper Rudnick LLP	Session 13 DBA Checklist - Dwaine R. Snow, IBM Canada
3:15-3:30	Break		
3:30-4:30	Session 4 (continued) Performance Tuning Stories From the Road - Mark Scranton, IBM	Session 9 WebSphere / J2EE Implementation Made (Very) Easy - Jean Georges Perrin, Awoma	Session 14 A Technical Comparison of DB2 and Informix - Dwaine R. Snow, IBM Canada
4:30-5:00	Closing Break – Sponsored by Awoma		

# Forum 2004 Premier Sponsor



# **IBM Data Management**

IBM Corporation 1133 Westchester Avenue White Plains, New York 10604 United States Phone: 1-800-IBM-4YOU

Web: http://www.ibm.com/software/data/

IBM's database software is the worldwide market share leader in the industry. The combined integrated strength of IBM's data management products powers the industry's most demanding solutions. IBM is the only data management software vendor to provide customers with integrated solutions for database management, tools, content management, and business intelligence.

# Forum 2004 Sponsors

### Advanced DataTools Corporation

4216 Evergreen Lane, Suite 136

Annandale, VA, 22003

Web page: http://www.advancedatatools.com

Phone: 703-256-0267 x101

Contact Name: Linda Knutsen, Email: linda@advancedatatools.com

Alternate Contact: Lester Knutsen, Email: lester@advancedatatools.com

Advanced DataTools is an IBM Advanced Partner and has provided Informix consulting and training for over 10 years. Our Informix training courses were developed and are taught by Lester Knutsen, a member of the IBM Gold Consultant Program, and an Informix Certified Professional. We are performance tuning experts, whether it is optimizing the design of any database, improving the throughput of your IBM Informix Database Server, or streamlining and enhancing your application.

Awoma

260 Northland Blvd, Suite 329

OH, 45246

Web Page: http://www.awoma.com

Phone: 866-532-3426

Contact: Nicolas Taureau, Phone: 513-772-9555, Fax: 513-772-9011

Email: n.taureau@us.awoma.com

Awoma provides a suite of tools intended to simplify and speed-up the development of business applications: ThinStructure, DevWorkshop, SysTools and DataTools. With ThinStructure, you graphically build powerful applications in today's new technology. Its syntax, architecture and pre-built components make it the simplest development tool available today. Awoma is an IBM Business Partner.

4Js

251, O'Connor Ridge Blvd, Suite 245 Irving,TX 75038

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As an IBM strategic partner for the 4GL market, Four J's Development Tools has been providing Informix solutions for several years and is GSA certified. With 2 million plus licenses sold, Four J's provides tools for rapidly developing high-performance, transaction-oriented applications for small, medium and large companies worldwide. Genero, Four J's next generation product is a total graphical replacement for your Informix 4GL based applications. Four J's mission is to deliver a development environment that excels in its openness, flexibility, performance and provide the quickest and most cost-effective means of evolving internal business processes, be they front or back-office.

Gillani, Inc. 833 East Arapaho, Suite 102 Richardson TX 75081

Web Page: http://www.gillani.com

Phone: 972.918.0400

Contact: Syed Kamal, Phone: 972.918.0400, Email: kamal@gillani.com

Contact: Scott Nieters, Phone: 972.918.0400, Email: snieters@gillani.com

Gillani offers FourGen® CASE Tools, bundled with Informix-4GL as I-4GL Forms and Menu's in the past. It provides a Code Generator and GUI front-end for Informix-GL. Gillani also provides an Informix-4GL based Accounting & Distribution Management solution previously known as FourGen Accounting.

# **Track 1- Informix Administration and Performance**

#### Session 1: Database Design for Success (double session)

Speaker: Jack Parker Company: Database Consultant Address: 9 Winthrop St., Danvers, MA, 01923 Phone: 603-929-6980

Come learn or review the basics of setting up and maintaining an Informix database. Have a look at some of the things that catch us all from time to time. Good for a refresher, or just a chance to discuss your issues with other attendees. A highly interactive session.

Mr. Parker is a Systems Architect who has been building and running Informix-based solutions for the past sixteen years. For the past seven years he has been involved in the data warehousing industry. He is an occasional writer, speaker, and contributor to comp.databases.informix. He is a long time Informix user and database consultant. Jack is an IBM Gold Consultant.

#### Session 2: WebSphere for Informix DBAs

Speaker: Michael Chaney Company: ChainLink Networking Solutions, Inc. Address: 11012 Burywood Lane, Reston, VA, 20194 Phone: 703-430-5752, Fax: (501) 641-4607

This session will introduce you to the fundamentals of WebSphere development from an Informix database administrator's perspective. It will provide a high level overview of the fundamentals of WebSphere capabilities and demonstrate how you can take advantage of those capabilities to access and manage your Informix database.

Michael Chaney is co-founder and Chief Technical Officer of ChainLink Networking Solutions, Inc. Since the founding of ChainLink in 1995, he has been instrumental in the design, development, and optimization of data-riven web applications for numerous high profile clients. Mr. Chaney is currently an IBM Gold Consultant and has spoken regularly at conferences on various Informix and web development topics.

### Session 3: Monitoring and Tuning Your Informix Server

Speaker: Lester Knutsen Company: Advanced DataTools Corporation Address: 4216 Evergreen Lane, Suite 136, Annandale, VA, 22003 Phone: 703-256-0267 x102 Email: lester@advancedatatools.com, http://www.advancedatatools.com

This session will focus on what to monitor and how to use and collect data to tune your Informix database server. We will look at UNIX utilities (SAR, vmstat, iostat), onstat commands, and sysmaster queries to identify bottlenecks and areas were you could improve the performance of the database server.

Lester Knutsen has been developing applications with Informix software since 1983. He is president of Advanced DataTools Corporation, an IBM-Informix Consulting, Training, and Tools Partner specializing in data warehouse development, database design, performance tuning, and Informix training and support. Currently, Lester specializes in developing web-enabled data warehouse systems. He provides training and consulting in database design and performance tuning, and is widely known in the Informix community for his extensive experience and teaching skill. Lester is also president of the Washington D.C. Area Informix User Group, one of the largest and most active Informix user groups, and is one of the founding members of the International Informix Users Group. Lester is an IBM Gold Consultant.

### Session 4: Performance Tuning Stories From the Road (double session)

Speaker: Mark Scranton Company: IBM, Denver, CO Phone: 303-929-0914, Email: mail@markscranton.com

This session describes real life Performance Tuning Stories from the Road. It includes client success stories and detailed analysis of performance issues, as well as steps taken to resolve performance problems. Also included will be a number of tuning foundations from an "internals point of view" – extent sizing/disk overhead, btree cleaner issues and 9.4 fixes for these issues, checkpoint realities, real-time expensive queries capturing, and many more. Plenty of time will be allowed for questions and discussion. Mark will also be willing to discuss any 9.4 questions if time allows.

Mark Scranton is a Principal Consultant/Trainer with IBM in Denver, and is also the Advocacy Director for the International Informix User Group (IIUG). Mark joined Informix in 1995, and has focused exclusively on IDS, XPS, and DB2 engines, including internals, performance tuning, and configuration. Mark is a contributing author to "The Informix Handbook", IDS CBT's, and Informix Developer Zone White Papers. He was also the recipient of the 2003 IIUG Directors Award. Mark can be contacted at his website at <a href="https://www.iiug.org/markscranton/">www.iiug.org/markscranton/</a>.

# Track 2 - Tools and Applications for DB2 and Informix

# Session 5: 4GL Developers, Improve Productivity: FourGen CASE Tools and FourGen Accounting Software

Speaker: Syed Kamal Company: Gillani, Inc. Address: 833 East Arapaho Road, Suite 102, Richardson, TX 75081 Phone: 972.918.0400, Fax: 972.918.0659

Today, Informix-4GL developers can use FourGen CASE Tools V8.1 (Formerly I-4GL FORMS) as a RAD environment to create Informix/DB2 applications. With these tools, you can boost productivity, cut development time, and also convert Informix-4GL applications to windows-based GUI front-end. Gillani has provided Informix4GL-based ERP and Accounting solutions since mid 1980's.

### Session 6: Overview of Four J's Next Generation 4GL Product "Genero"

Speaker: Four Js Technical staff

Genero and Genero Studio, Four J's next generation 4GL development tools, provide a development and deployment environment that resolves presentation dependencies by employing a revolutionary architecture built upon XML and offering a total separation of user interface and business logic. Genero enables ongoing development of high volume, mission critical business applications, providing a rapid, intuitive and predictable development and deployment of business logic across a variety of servers, databases and platforms. Genero allows developers to unlock their 4GL applications as well as building new functionality when freeing developers from client, database and operating system dependencies. Genero allows new 4GL applications to be created with support for ecommerce, m-commerce and front and back office built in. It also provides native driver support for simultaneous access of multiple databases.

#### Session 7: Informix SQL Performance Tuning (double session) - Mike Walker

Speaker: Mike Walker Company: UCI Consulting Email: mwalker@uci-consulting.com Phone: 1-888-UCI-FOR-U

In this session we will discuss various performance-tuning topics such as indexing strategies, schema, query and application optimization, correlated sub-query processing, and optimizer directives. This session is based on Kevin Fennimore's most popular session from prior Forums and user group training days.

Mike Walker has been working with Informix for 11 years, as a DBA and Application Developer. For the last 6 years Mike has worked for UCI Consulting, specializing in performance tuning, especially with large PeopleSoft implementations. Mike can be contacted by phone at 1-888-UCI-FOR-U or by email at mwalker@uci-consulting.com.

#### Session 8: Using Perl and DBI/DBD with Informix Databases (new tricks and tips)

Speaker: Darryl Priest Company: Piper Rudnick LLP Address: 6225 Smith Avenue, Baltimore, MD 21209 Phone: (410) 580-4737, Fax: (410) 580-3212

Darryl Priest has worked with Informix as a programmer and/or DBA for 10 years. He discovered the pleasure of programming connecting Perl and Informix on Unix about 4 years ago and hesitates to work in any other environment. He currently supports both an Elite accounting system and a PeopleSoft system for a large law firm.

#### Session 9: WebSphere / J2EE Implementation Made (Very) Easy

Speaker: Jean Georges Perrin Company: Awoma Address: 260 Northland Blvd, #329, Cincinnati, OH, 45246 Phone: 1-513-772-9555, Fax: 1-513-772-9590

This session will demonstrate to current IBM Informix users (and specifically I-4GL users) that it is easier than they think to adopt a WebSphere / J2EE architecture for their applications. We also show the participants how they can easily migrate their legacy applications to J2EE without having to learn Java!!

# Track 3 - DB2 Administration and Performance

Session 10: Informix to DB2 Migration: A DBA's Story (double session) Speaker: J. Warren Donovan and Robert Carts Company: SAIC Address: 5597 Seminary Rd Apt 16-11S, Falls Church, VA, 22041 Phone: 703 575-7225

This is the story about the migration of a small Data Warehouse from Informix XPS to a DB2 EEE database engine from a DBA's perspective. Emphasis will be placed on differences in planning, physical design, monitoring tools, some new features and SQL. Please come and ask the questions we wish we had!

Warren Donovan is the Vice-President of the WAIUG. He is a certified Informix System Administrator and DB2 Certified Database Associate currently working mostly with Informix 8.31 XPS and DB2 8.1 EEE data warehouses. He has presented technical sessions on Informix Parallel Data Query optimization, SQL Tips and Tricks (with Bob Carts), and PL/SQL Tips and Tricks (with Bob Carts and Peter Wages) for the WAIUG.

Bob Carts is a Certified Informix System Administrator and DB2 DBA. He has been on the Washington Area Informix Users Group Board of Directors for many years. He presented many technical sessions for the Users Group and presented at the International Informix Conference. He is currently supporting 3 projects using Informix, DB2 and Oracle 9i.

#### Session 11: DB2 V8 Data Warehouse Performance

Speaker: David Beulke, IBM Gold Consultant and President - International DB2 Users Group Company: Pragmatic Solutions, Inc. Email: DBeulke@compuserve.com Phone - Cell: 703 798-3283, Office: 703 751-4348

There are many data warehouse performance design alternatives and knowing all your options is very important. In DB2 V8 on the z/OS and the Linux, UNIX and Windows platforms there are many new unique data warehouse design features and alternatives that should be leveraged for performance. These unique features missing from other DBMSs can make a huge difference in overall performance. This presentation will highlight the many DB2 V8 performance advantages and help you address various design issues and considerations experienced while building a typical large high performance data warehouse.

You will learn about building a high performance data warehouse that maximizes ETL and SQL access performance while maintaining the key dimensions for partitioning and parallelism considerations. Through this presentation you will learn the new V8 design options that will maximize your system's performance.

David Beulke is an internationally recognized DB2 consultant, author and lecturer. He is known for his extensive expertise in database performance, data warehouses and internet applications. He is currently President of the International DB2 Users Group (IDUG), a member of IBM DB2 Gold Consultant program, co-author of the IBM V7 and V8 z/OS DB2 Administration Certification exams, co-author of the Business Intelligence Certification exam, former instructor for The Data Warehouse Institute (TDWI), and former editor of the IDUG Solutions Journal. He has helped clients be successful on the mainframe, Linux, UNIX and Windows platforms and has over 18 years of performance tuning experience in systems, applications and programming areas.

#### Session 12: Powerful SQL: Past, Present & Future

Speaker: Sheryl M. Larsen, President Company: Sheryl M. Larsen, Inc. Address: 409 Hawthorne Avenue, Elmhurst, IL, 60126 Phone: (630) 399-3330, Fax: (630) 834-0069 Email: SherylMLarsen@cs.com, http://www.smlsql.com

Numerous query examples will be presented to show how to create high performance applications on any platform highlighting past SQL techniques such as joins, table expressions and case expressions, current SQL enhancements such as limited fetch, UNION everywhere, and many future SQL enhancements such, multi-row FETCH, and many more!

Platform: OS/390 and z/OS but all examples are cross platform

Sheryl M. Larsen is an internationally recognized researcher, consultant, and lecturer, specializing in DB2, and is known for her extensive expertise in SQL. Sheryl has over 19 years of experience in DB2, has published many articles, several popular DB2 posters, and co-authored a book, "DB2 Answers", Osborne-McGraw-Hill, 1999. Sheryl is also an IBM Gold Consultant.

#### Session 13: DBA Checklist

Speaker: Dwaine R Snow Company: IBM Canada Address: 8200 Warden Ave, Markham, ON, Canada, L6G 1C7 Phone: 905 413 2140, Fax: 905 413 4928

This presentation will examine why you should monitor your databases and servers to ensure optimal performance. It will discuss the monitoring tools available, at the operating system and DB2 level. The database and server monitoring contains tasks that should be done at different times. The presentation will discuss the activities that should be performed on a daily, weekly, and monthly basis and why they are important for DBAs.

Dwaine is the Senior Product Manager for DB2 Partitioned databases, Query Patroller, as well as Informix Dynamic Server (IDS). He has worked with DB2 for over 12 years and has written numerous books and articles about DB2 and has presented at conferences around the world.

#### Session 14: A Technical Comparison of DB2 and Informix

Speaker: Dwaine R Snow Company: IBM Canada Address: 8200 Warden Ave, Markham, ON, Canada, L6G 1C7 Phone: 905 413 2140, Fax: 905 413 4928

This presentation will explain the concepts of DB2 and relate then to IDS and XPS. It will examine the various database objects, DBA tools, etc available in IDS and XPS and explain the equivalent concepts in DB2.

Dwaine is the Senior Product Manager for DB2 Partitioned databases, Query Patroller as well as Informix Dynamic Server (IDS). He has worked with DB2 for over 12 years and has written numerous books and articles about DB2 and has presented at conferences around the world