Virtual Db2 User Group Presentation

GAINING INSIGHTS FROM DB2 STATISTICS AND ACCOUNTING DATA

In a recent session, Todd Havekost, a Senior z/OS Performance Consultant at IntelliMagic, shared his expertise on utilizing Db2 Statistics and Accounting Data for performance improvement in z/OS infrastructures.

Todd emphasized the vast potential of Db2 and z/OS metrics to provide operational insights but also acknowledged the challenges often faced, such as reactive use of SMF data, siloed tooling, handling massive data volumes, and the scarcity of specialized skills due to retirements.

The session delved into Db2 statistics data, exploring key metrics and automated assessments for proactive monitoring. Todd highlighted buffer pool metrics, a critical component for Db2 performance and efficiency, and demonstrated how to analyze and optimize buffer pools using IntelliMagic Vision. He also discussed integrating Db2 IFCID 199 data with SMF 42 IO performance data for deeper insights.

Todd then transitioned to Db2 accounting data, captured in SMF 101 records, which provides detailed transaction-level data. He outlined strategies to navigate this extensive data, focusing on connection types, correlation IDs, authorization IDs, and plan or package names. This detailed analysis allows pinpointing issues and optimizing performance across various Db2 components.

When analyzing Db2 accounting data by connection type, Todd compared the volume of SQL statements and logging activity across different connection types, highlighting distinct time-of-day profiles for each. He notes significant differences in elapsed time per commit for work coming from various Db2 callers.
Virtual User Group

Virtual User Group for Db2

NEXT VIRTUAL DB2 MEETING — January 16, 2024, 10:30 AM CDT

Driving Down Database Development Dollars

Application developers and database administrators alike are under constant pressure to drive down costs and reduce CPU cycles. This talk suggests some technical tips and cultural changes to Developers, DBAs, and Operations, to address this ubiquitous challenge facing mainframe enterprises world-wide.

GAINING INSIGHTS FROM DB2 STATISTICS AND ACCOUNTING DATA

Continued

The session concluded with a discussion on overcoming the common challenges in data analysis, emphasizing proactive approaches, collaborative tools, focused data analysis strategies, and intuitive reporting for less experienced personnel. Todd demonstrated how combining data from both sources can provide a more comprehensive view of activities within specific Db2 members over time.

In summary, the session provided valuable insights into leveraging Db2 statistics and accounting data to enhance system performance, addressing both technical and operational challenges in the process.

He then focused on the analysis of prefetch activity in Db2, observing that dynamic prefetches dominate most caller types, with sequential prefetch being significant for DDF work.

The discussion then moved to exploring data using correlation IDs, which vary based on the connection type. This analysis includes looking at CPU consumption and identifying specific jobs or transactions responsible for spikes in resource usage or particular patterns.

Access the Recording
NEWS AND ANNOUNCEMENTS

• Sponsorship opportunity—We are looking for additional co-sponsors for the Virtual Db2 user group. The user group has been in existence since 2022 and is gaining respect among users of Db2. The user group gives its sponsors an opportunity to show that they are working with, and helping to build, the Db2 user community. Contact virtualusergroups@gmail.com for more information.

• After you register for our next event on January 16, save the date for our March 19th session.

ABOUT THE VIRTUAL DB2 USER GROUP

The Virtual Db2 user group is an independently-operated vendor-neutral site run by and for the mainframe Db2 user community. This is a mainframe Db2 information website, not in any way related to, sponsored, or approved by IBM, which is the legitimate owner of the trademark, and any use of the mark in the URL or the body of the site is for information, education, and opinion expression purposes. The Virtual Db2 user group was established as a way for individuals using IBM’s Db2 for z/OS database to exchange information, learn new techniques, and advance their skills with the product. Anyone with an interest in Db2 for z/OS is welcome to join the Virtual Db2 user group and share in the knowledge exchange.