EPV TECHNOLOGIES NEWSLETTER

September 2018

TECH PAPERS
Measuring Db2 Locks and Latches – Part 1

TECH NEWS
EPV User Group 2018 – Agenda, abstracts, event and dinner

TIP OF THE MONTH

The best I/O is no I/O; use memory instead

TECH PAPERS

Measuring Db2 Locks and Latches – Part 1

One of the most important goals of any DBMS is to provide data concurrency by enabling multiple users to access the same data without compromising data consistency and integrity.

To reach this goal Db2 combines many different serializing mechanisms such as :

- Db2 Latches;
- IRLM latches;
- Locks;
- Global Locks (L-Locks and P-Locks) in data sharing environments.

In this paper, we will discuss the most relevant metrics, provided in Db2 statistics and accounting traces, to be used to control and tune Db2 locks and latches.

We will also suggest how to build metrics and contention indexes to compare with best practices values in order to check if there is a performance problem due to excessive locking and latching.

Finally, we will try to indicate possible reasons of excessive values and the actions you could do to reduce them.

If you want to receive the paper you can reply to this e-mail writing "Tech Papers – Measuring Db2 Locks and Latches – Part 1" in the subject

TECH NEWS

EPV User Group 2018 – Agenda, abstracts, event and dinner

The XVI EPV User Group will be held in Rome on 11th October 2018 at Hotel Cicerone, Via Cicerone, 55/c, 00193 Roma.

The EPV User Group is a "not to miss" event for all Performance Analysts; it will give you the opportunity to share ideas with qualified experts and to listen to some of the EPV customers experiences.

The most interesting features provided by the latest versions of all EPV products will also be presented.

The EPV User Group is free of charge and reserved to EPV customers. If you are not a customer yet but you are interested in participating, please answer to this e-mail asking for an invitation.

Mark the date in your agenda to avoid missing this event.

Agenda

EPV User Group 2018 - Agenda 11 October 2018			
09:30 Introduction - products overview	Danilo Gipponi	EPV Technologies	
09:45 EPV for CICS preview	Fabio Massimo Ottaviani	EPV Technologies	PP
10:00 From TDS to EPV/Hadoop	José Ramon Megía	PRODUBAN	UE
10:15 Big data and machine learning for SMF data	Marco Pani	CEDACRI	UE
10:45 EPV for Big Data update	Matteo Bottazzi	EPV Technologies	PP
11:00 coffee break			
11:30 Advanced architecture for SMF data collection	Fabio Paparo	INTESA SANPAOLO	UE
11:45 Using the MyEPV GUI	Stefano Rotunno	EPV Technologies	PP
12:15 MyEPV Quickview: system and batch control	Daniel Cohen Austrowiek, Mark Cohen Austrowiek	EPV Technologies	PP
12:45 Lunch			
14:00 EPV Migration from SAS to WPS	Maria Paola Bramosi	V-TServices	UE
14:30 What's New in EPV for MQ V14	Giuseppe Giacomodonato	EPV Technologies	PP
15:00 Tuning Db2 in MPS	Roberto Gioi	CONSORZIO MPS	UE
15:30 Measuring Db2 locks and latches	Fabio Massimo Ottaviani	EPV Technologies	MT
16:30 End			

EPV for CICS preview (PP)
It is an overview of the new EPV for CICS product, currently under development. Product input, architecture and HTML pages design will be presented.

From TDS to EPV/Hadoop (UE)
In 2017 we started a project to migrate all the reporting (SLR and Cost/Accounting) from TDS to EPV.
Given the huge amount of data to be managed on a daily basis we selected Hadoop as our target environment.
The presentation will shortly describe the project, the problems and the solutions.

Big data and machine learning for SMF data (UE)
We will describe an integrated EPV Hadoop production environment with Spark reporting analysis focused on Cost/Accounting and usage of machine learning techniques.
The value of the presentation is in the fact that we describe a real case, a production environment, whereas on the web you find only theoretical approach descriptions.

EPV for Big Data update (PP)

Working with bigger and bigger customers, we've faced the limits of the standard SQL databases. That's the reason why we are creating the Big Data suite of products: with Hadoop/Impala compatibility, EPV will be able to perform super fast even with terabytes of data.

Advanced architecture for SMF data collection (UE)
Every day we send many SMF dumps from many different LPARs to the EPV Server. To record the success of every shipment,
avoid duplicates and holes, and to manage the complexity of the entire environment we have developed
an application that guarantees the integrity of the whole process.

Using the MyEPVGUI (PP)
MyEPVprovides an XML-like meta language allowing to easily create any kind of HTML navigable pages and graphs also putting together technical and business information. The MyEPVGUI makes the user transparent to the meta language allowing to create pages and graphs by exploiting a user friendly interface.

MyEPVQuickview: system and batch control (PP)
MyEPVQuick View is an EPV solution, including small packages, built by exploiting the MyEPVfunctionalities and designed to focus on specific z/OS performance areas.
In this presentation, we will discuss the SYSTEM and JOB DELAYS packages showing how to use them to control system and job performance at a glance.

EPV Migration from SAS to WPS (UE)
V-TServicesis an outsourcing Company.Thisyear a major customer of ours decided to drop The SAS System from the Mainframe, and replace it with WPS. EPV and all the Cost/management procedures were based on SAS/MXG/IT Service Vision.
The aim of the presentation is to describe the issues we faced and how we were able to migrate
EPV and all the related applications to the new architecture.

What's new in EPV for MQ V14 (PP)
The most important new features and functions provided in the last version of EPV for MQ will be presented.

Tuning Db2 in MPS (UE)
This presentation describes a systematic approach to keep DB2 subsystems healthy leveraging on EPV for DB2.
Often we tend to apply several changes or improvement to our systems in a single shot. In this case by executing tuning activities one at a time in a pre-ordered plan we have been able to measure the impact end effectiveness of the each implementation.

Measuring Db2 locks and latches (MT)
One of the most important goals of any DBMS is to provide data concurrency

by enabling multiple users to access the same data without compromising data consistency and integrity.

To reach this goal Db2 combines many different serializing mechanisms such as : Db2 Latches, IRLM latches, Locks, Global Locks (L-Locks and P-Locks) in data sharing environments.

In this presentation, we will discuss the most relevant metrics, provided in Db2 statistics and accounting traces, showing how to use them to control and tune Db2 locks and latches.

Event

All the customers participating to the User Group are invited to join us and visit Castel Sant'Angelo (formerly Mausoleum of Hadrian emperor) on 10th October evening.

We will discover the history of this ancient building from the Roman origins through the many changes in the last 2.000 years.
See: https://en.wikipedia.org/wiki/Castel_Sant%27Angelo

Dinner

All the customers participating to the EPV User Group are invited to join us to the EPV User Group Dinner.

You will enjoy the amazing Italian cuisine at Romolo alla Mole Adriana, a typical Roman restaurant in St Peter neighborhood.

RECIPES

Risotto con mele e gorgonzola

Ingredients

350 g Rise
2 Apples
100g Gorgonzola
Vegetable broth
White wine
1 Shallot
Salt
Extra Virgin oil
Butter

Method

Cut the apple in two parts

Peel a half and cut it into cubes

Cut the half with the peel into cubes and brown them with a lightly salted, slightly spongy butter.

Chop the shallot and let it dry with 3 tablespoons of oil; add the rice, toast it for 1 minute, wet with the wine, let it evaporate, then add 2 ladles of boiling broth and the diced peeled raw apples; continue cooking for 15 minutes, adding a little stock at a time, as it is absorbed

Stir the risotto, when cooked, with 20 g of butter and half of the diced gorgonzola. Serve with the rest of the gorgonzola, the apple sauteed in butter and the crumbled walnuts.

QUOTES

"The rest is silence"
William Shakespeare