SQL WorkloadExpert™ for Db2 z/OS
Captures SQL cost-efficiently 24x7 without a trace

SQL WorkloadExpert™ (WLX) is a highly efficient SQL workload capture and warehouse solution and was specifically designed to provide modern analytics as a basis for educated decisions. It collects both static and dynamic SQL workloads - including flushed statements – providing a variety of metrics.

WLX detects and pinpoints opportunities for performance tuning, workload optimization, bottleneck analysis, and for increasing application efficiency.

The collected information can be used for short, intermediate and long term analysis of the entire SQL workload. By offering comprehensive selection, filtering and sorting of the many collected data points, (by CPU Time, Elapsed Time, I/O, and more), WLX provides complete flexibility to the users.

WLX technology combines information from both SQL cache areas, the EDM Pool (for static) and the Dynamic Statement Cache (for dynamic), while limiting CPU impact. Unlike monitors – which can be extremely resource-intensive – WLX requires no costly traces.

WLX assists with the analysis of changes to SQL applications and their performance, to better determine the impact on the business. The correlated information can be used in reports, charts and graphs, and can easily be presented as meaningful information to personnel at different levels within the enterprise. Any workload analytics query is fully zIIP eligible.

WLX has three core components:

- The Started Task: 24x7 STC, written in assembler and using 64 Bit memory buffers to handle the data flow as quickly and efficiently as possible.
- The Workload Processing Engine: Iterative batch job to process data handed over from the STC, storing the results in Db2 tables.
- The GUI: Java plug-in for Eclipse, or Eclipse-based solutions, like IBM Data Studio, or IBM Rational, providing powerful reporting, graphics, and charts.

WLX – Architecture

Cost-effectively collects static and dynamic SQL, without a trace

All analytics fully zIIP eligible

Uses “snap” technology to collect everything in the EDM + DSC Pools including flushed stmts

Dynamically aggregates and EXPLAInS the data

Compared two or more points-in-time, for trending analysis (e.g. CPU-Time, Elapsed Time, I/O, etc.)

Increases insight into the whole Db2 Workload – or just a single application – for any date

The common data capturing (cdc) establishes an SQL Workload Warehouse for the mutual benefit of Audit, Performance Management and Accounting

Productive out-of-the-box through more than 20 pre-defined Use Cases

Leverages the open source Zowe virtual desktop
- zero client installation
- browser based graphical interface

Comes with *EasyInstall

No SMP/E required
BACKGROUND

To remain in sync with ever-changing business requirements, organizations need to focus on staying efficient, flexible and responsive.

SQL is typically created by application programmers and may be used across a variety of application packages. How the SQL behaves may, however, be drastically different across database releases and hardware configurations or infrastructures. These variables can require businesses to expend effort and resources in monitoring systems and manually remediating errant SQL.

WLX tracks all changes by capturing, measuring, and identifying the entire SQL workload. The captured metrics will assist with lowering processing costs and thus lowering the total cost of ownership.

Constant business changes, combined with the addition of new workloads (more dynamic SQL, increasing batch and transaction workloads, data warehouses, ERP systems, and the Web), challenge skills and budgets. WLX’s powerful capabilities help to manage SQL workloads, identify and analyze bottlenecks, and compare “before” and “after” scenarios to measure the results.

As cost centers, IT departments are tasked with delivering the “best level of service” at the most cost-effective price. WLX supplies qualified and quantified information to assist with examining business workload trends and technology requirements. WLX also features auditing for “who did what and when” to provide an added security level and to satisfy many compliancy tasks.

WLX is the right tool to provide the best service levels to IT departments, so they can provide the best level of service to their lines of business.

Radar chart showing how an application performs at three points in time