ExpeTune is a comprehensive solution that isolates performance problems in both batch and online z Systems applications, identifying areas that would benefit from performance tuning.

Mainframe Application Performance

Improve the performance of your critical business applications and achieve higher levels of service

ExpeTune, designed to run standalone or alongside Macro 4’s leading application performance analysis solution, FreezeFrame, helps organizations improve the performance of their z Systems business applications. Through the use of ExpeTune, you can:

- Identify system and application areas that can benefit from tuning
- Expedite and simplify problem determination
- Monitor CICS transactions in real-time and automatically initiate a FreezeFrame performance observation if the transaction exceeds its threshold execution time
- Analyze your SMF data to generate reports of varying types to provide system performance and resource usage insight
- Produce and process data in the format used by SAS and MXG programs for precise accounting and cost recovery requirements
- Audit VSAM datasets and PL/I and COBOL libraries to identify additional opportunities for performance improvements

z/OS application performance management

For all organizations, finding and removing the performance bottlenecks that are hidden within thousands of batch jobs and online transactions is a vital task but one which presents an incredible challenge. ExpeTune addresses this challenge by answering the questions ‘Which jobs should I look more closely at?’ and ‘Having looked at them, what should I do to improve them?’

ExpeTune is a key component of Macro 4’s application performance management suite; it can operate standalone or in conjunction with the FreezeFrame solution.

In a combined implementation, ExpeTune and FreezeFrame provide the industry’s leading performance management solution for all aspects of mainframe usage. Organizations are freed from firefighting performance problems and can focus on strategic IT and business development.

ExpeTune possesses a range of reporting, analysis and management functions that provide a detailed insight into the performance of mainframe applications, infrastructure and systems.

ExpeTune can observe both batch and online environments to identify areas that would benefit from performance tuning.
Watchlist

To help you decide which jobs to observe, the ExpeTune Bulk feature will extract from SMF any jobs that exceed thresholds decided by you (for CPU, elapsed time or job names) and will create a watchlist. A list of the selected jobs is presented to users through the ISPF interface and JCL is created for submitting FreezeFrame measurement requests.

Observation session analysis

The most versatile of ExpeTune reports, the Observation Session Analysis, analyzes any FreezeFrame observation. It identifies extensive tuning opportunities to consider, prior to analyzing specific sub-system performance. The Observation Session Analysis will report on a wide range of potential issues, including:

- Excessive use of monitors and traces
- Use of expensive database services, DB2, IMS and inefficient CICS and system services
- Poor PL/I and COBOL run-time routines and compile options
- Resource-intensive third party package functions such as ACF2

The FreezeFrame observation report can be compared with ExpeTune’s knowledgebase to highlight tuning opportunities that can lead to considerable improvements in a program’s performance.

ExpeTune SMF

ExpeTune provides performance reports from raw SMF records; report types include:

- JOB/Step analysis
- CICS
- RMF CPU
- SMF summary
- VSAM
- LPAR CPU
- JOB CPU
- MIPS graphs by application grouping
- MQ buffer usage and inefficiencies

ExpeTune audit

The ExpeTune audit tool examines various sources of relevant statistical information (load modules, source code and VSAM catalogue data) to identify a broad range of tuning opportunities. It does not require sample data from a specific executing task, program or job. The ExpeTune Audit Tool provides program and non-program related tuning opportunities without the need to execute any target code.

The major functions of ExpeTune Audit are:

- COBOL Load Library Audit: the ExpeTune Load Library Audit analyzes a COBOL load library and reports on programs which have inappropriate compile options and/or utilize inefficient runtime subroutines
- Source Library Audit: the ExpeTune Source Library Audit analyzes PL/I source libraries and reports on programs that have inappropriate processes or runtime options
- VSAM Audit: the configuration of a VSAM dataset can significantly impact the performance of a batch or online program that accesses it

Graphical reporting

ExpeTune produces a wide range of reports in Microsoft Excel format. System CPU usage is categorized according to user classification and summarized by hour. MIPS usage charts can be produced; chart options allow users to view resource usage from the following perspectives:

- Sysplex
- System
- Date, day or hour
- Application category
- Doc format on PC (FreezeFrame report)