Announcing VPAT (Vicom Infinity Performance Analysis Tool)

All mainframe shops today face the dual challenge of how to control costs while still providing acceptable performance. Since software costs make up the largest part of these costs and are often tied to resource consumption, systems programmers face a balancing act of trying to limit consumption without negatively impacting performance. This poses a major challenge for many shops who have lost experienced systems programmers. The result is a series of try one option and see what happens. But the resulting performance problems can have a major impact on a business, especially when those bet your business, critical applications are affected. These problems require a tool and methodology for quickly diagnosing performance problems and relating those problems to their root causes.

VPAT is an easy to use tool, designed to aid the z/OS systems programmer perform two critical functions. These are Performance Management and Capacity Planning. VPAT lets you look at current utilization and performance metrics to assess the health of your z/OS systems. An Artificial Intelligence (AI) function in VPAT can identify the root causes of poor performance and provide suggestions on ways to improve performance. Utilization data can be shown graphically in a number of ways such as utilization by LPAR (Figure 1).

*Figure 1. Weekly LPAR Report*
Utilization can also be shown at the workload level for a specific z/OS image (Figure 2).

Figure 2. Weekly Workload Report
VPAT can display performance metrics for individual workloads and show the reasons for Delays (Figure 3).

Figure 3. Workload Performance Metrics
VPAT can drill down to a specific interval and diagnose the root cause for poor performance during that interval (Figure 4).

![Performance Analysis for a specific interval](image-url)
VPAT includes a capacity planning function that makes it easy to model new processors against current utilization (Figure 5).

You can also model expected growth scenarios as:

- a total growth rate for all LPARs, or
- a separate growth rate for each LPAR, or
- a separate growth rate for each workload within an LPAR
VPAT also includes a function for storing utilization data into a historical database. This can be used for long term tracking of workload trends or MSU usage (Figure 6).

Figure 6. System Utilization Trend report
Integration for direct import from Zebra – open-source SW

Zebra is an incubation open-source SW project by Linux Foundation’s Open Mainframe Project Zowe. VPAT has an interface to import both RMF I and RMF III real-time data into VPAT. To learn more about Zebra and its code, visit www.github.com/zowe/zebra
VPAT also includes a Performance Modeling function (Simulator). The Simulator can be used to model the effects of change on workload performance. Changes can include workload volumes or multiple changes to the configuration. Configuration changes can include changes to the number and speed of CPs, LPAR definition changes, or even the priority of workloads.

To learn more or want to see a demo of VPAT, contact Marty Deitch (marty.deitch@convergetp.com) or Len Santalucia (Leonard.Santalucia@convergetp.com).

For a limited time, we are offering a free Capacity and Performance Health Check using VPAT. These studies are an excellent way to see what VPAT can do using your own SMF data.

To learn more about Vicom Infinity, please visit our web site at VicomInfinity.com.