Web-based system to help diagnose and resolve problems in a z/OS TCP/IP network

Performance Problem Determination Assistance (PPDA)

To help you to diagnose and resolve problems, we have gathered case studies from systems programmers and provided a structured set of diagnostic knowledge. The PPDA (Performance Problem Determination Assistance) feature will guide you through resolving performance problems which often happen on TCP/IP networks.

Listener Performance Profile

The LPP (Listener Performance Profile) describes the parameters which should be measured for listener ports (socket applications). This function will activate intensive mode diagnostics and is for use when performance problems are suspected. LPP reports on workload, service time, errors, capacity, and queues.

Access z/OS Private SNMP MIB

With the introduction of the z/OS systems, a new data source, the SNMP private MIB for z/OS, now contains hundreds of new variables to allow visibility into system and stack operation. Inside the Stack exploits MIB variables from z/OS private SNMP MIB as well as the rich data source found in the SNMP public MIBs (IP, UDP, TCP, and ICMP).
The SNMP MIBs are a rich source of data -- but there are hundreds of MIB variables. One way to simplify the process of finding problems on a particular host is the Trouble Spots selection. The Trouble Spots report will automatically examine those hundreds of variables and display only the errors. The z/OS and public MIBs are examined for errors in the TCP, UDP, IP, interfaces, OSA Ethernet and ICMP variables. Historical as well as current information will be presented.

**Historical Trends for z/OS TCP/IP**

Historical graphs and reports are available for any z/OS MIB variable as well as any found in the public MIBs (IP, UDP, TCP, and ICMP). You may wish to view the Performance Problem Diagnostic Assistance (PPDA) to see how these new MIB variables can help you solve problems. Historical trends allow you to baseline traffic or errors for z/OS TCP/IP. You may wish to trend Enterprise Extender usage, OSA Express usage or any one of the hundreds of variables available.

**Alerts for z/OS TCP/IP Problems**

You may choose to set alerts for any z/OS MIB variable as well as any found in the public MIBs (IP, UDP, TCP, and ICMP). Alerts may be viewed by host, by network (group of hosts) or for all monitored hosts. You may wish to view the Performance Problem Diagnostic Assistance (PPDA) for suggestions on what alerts may be useful to set.

**Automatic Assessment of Trouble Spots**

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Performance Dashboard / Overview

The Performance Dashboard will allow the user to see at a glance the trouble spots in a particular system. Many variables which contribute to problems with the TCP/IP system will be available on one screen: response time, protocol errors, FTP failures, or interface problems. All data will be saved to history for later analysis. The Performance Dashboard will update in real time. You may see all systems on one screen with the Overview feature.

System Usage

Historical and real time reporting of FTP and TCP system usage will be provided. Its SMF exits trap the record type x'119 and x'118 records which contain data on all TCP and FTP activity and errors. These will supplement the existing real time and historical data from SNMP.
Report types produced include:

- Bytes / connections per application (includes all connections, even those lasting fractions of a second)
- FTP failures
- TCP retransmissions per connections

Automatic Network Health Recommendations

Inside the Stack provides expert recommendations on TCP, UDP, and IP errors. When you press the Health Check button, it automatically correlates data with its database of expertise to let you know what you should do next.