The SERT:
• A rating tool for measuring server efficiency
• Built on existing SPEC methods and expertise
• Developed for use by the US EPA’s ENERGY STAR for Server and other worldwide energy efficiency programs
• In collaboration with the EPA’s industry partners

Goals For and Design of the SERT:
• Flexible, adaptable and extensible to 32 and 64-bit server platform architectures and capabilities:
  • x64, POWER, SPARC, ARM
• Includes multiple workloads (CPU, random & sequential storage I/O, memory I/O, hybrid and idle), each of which comprises multiple independent worklets
• Targeting non-benchmarking specialists, via:
  • Graphical User Interface (GUI)
  • Imports XML describing approved JVM and client options from the SPEC Web site
• Automatically captures system hardware and software configurations

Implementation:
• Uses SPEC PTDaemon to coordinate the Controller, and System Under Test with the power analyzer and temperature sensor
• Measures AC power consumed by the entire server
• Supports single and multi-node server platforms
• Run time in around 4.5 hours
• Summary and Detailed Results Report provided
• Results directly submitted to the EPA

Scoring System: