

WAVV Requirement Form

Date: 08/09/2007

Requirement #: WAVV2007

Product Name: **VM TCP/IP** Product Release# (or state "current"): **current**
Vendor Name: **IBM**

Title: (Paraphrase problem in a single statement) **Update VM TCPIP stack to accept SIGNAL SHUTDOWN signal to initiate stack shutdown**

Detailed Problem Description: (Description of what you want changed - **400 character entry limit**)

The VM TCP/IP stack has no clearly architected shutdown command to cleanly terminate the operation of the stack and exit. A historically-based method using the CP external interrupt facility exists to generate a signal to the TCP/IP stack to halt acceptance of new connections and terminate after all existing connections exit, but the use of #CP EXT to terminate the stack is unnecessarily arcane and not well understood for new VM admins. The addition of the SIGNAL SHUTDOWN facility in recent VM releases provides a clear and unambiguous way to indicate that a shutdown of a virtual machine should be initiated, and has become the clear de-facto method for indicating such. The VM TCP/IP stack should register to receive this signal and initiate stack shutdown on receipt, in a manner similar to the method performed by #CP EXT today.

Priority: (**Select one:** Urgent - High - Medium - Low) **Medium**

Requested Completion Date: (When? Examples: 3 months, 1 year, Next Release) **Next Release**

Requirement Type: (**Select one:** Acceptability - Compatibility/Migration - Ease of Use - Feature/Function - Performance - Reliability/Availability/Serviceability - Packaging - Interoperability) **Ease of Use**

Business Justification: (**Why? Non-technical business case description. Do not reword Detailed Problem Description from above.** What are the benefits to be gained by your company, and the vendor and others? Quantify: run time, dollars, manpower, etc. Why should the vendor do this for the customer?)

Providing this capability will remedy a long-standing inconsistency in the VM TCP stack, simplifying operations management by making startup and shutdown of all critical VM servers operate in a regular and consistent manner. We will be able to remove some special-case handling in our startup and shutdown automation, and simplify the management of our network stacks significantly (we estimate about 10 hour per stack per year). It also addresses a concern that many VM services are inconsistent in their management interfaces and behavior, leading to additional training time and "you have to know" requirements for system management.

Solution: (**Optional**)(Desired/undesired elements **Note:** Making a suggestion may limit a vendors ability to deliver a solution)

Simple implementation would implement the existing #CP EXT processing on receipt of SIGNAL SHUTDOWN. A desirable feature would be the same type of differentiation available that the VTAM Z NET and Z NET, QUICK functions provide -- receipt of the signal alone would implement a controlled shutdown after all existing sessions terminated, and perhaps a way to indicate that an immediate termination was requested, and to abort all connections regardless of state.

Impact: (**Optional**) (How will your company's business be affected if a solution is **not** delivered?)

We will continue to implement automation to supply #CP EXT and trap responses.

Voting: ()+3 ()+2 ()-1 ()0 ()-1 ()-2 ()-3
Total: () Average:()

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Voting: ()+3 ()+2 ()-1 () 0 ()-1 ()-2 ()-3
Total: () Average:()