Software Product Description

PRODUCT NAME: VAXcluster Console System, Version 1.3 **SPD 27.46.03**

DESCRIPTION

The VAXcluster Console System (VCS) is a VMS V5.3 DECwindows layered software product which provides a central point for system console services and for logging console data received from the serviced nodes. From a single terminal or VAXstation display connected to the VCS host system, a system manager can perform all console functions for all serviced nodes. These functions include, but are not limited to:

- Shutting down or rebooting the serviced nodes
- Running standalone diagnostics
- Performing standalone backup operations
- Installing layered products
- Viewing console output
- Reviewing historical console data
- Retrieving historical console data for analysis or printing
- Searching for console data

VCS also performs the following functions:

- Logs all data and activities between VCS and the serviced nodes
- Scans incoming messages from the serviced nodes for specific text strings that may contain status or error information
- Notifies system managers of critical system messages via DECtalk, VAXmail, or by changing icon colors
- Enables users to assemble icons (not drawn to scale) into graphics displays on a VAXstation screen representing the aerial view of your data center and the logical grouping of your VAXcluster configurations
- Provides an optional security facility to control access to the serviced nodes

VCS can be accessed from locally connected terminals or remotely over the Ethernet.

The VAXcluster Console System allows a system manager or an operator to manage up to 32 devices which can be:

- VAXcluster systems
- Standalone VAX systems
- Any other device that

  Sends ASCII data over an RS232C line,
  Has an EIA console port,
  Supports XON/XOFF and I/O buffering

Hence, PDP-11s, line printer servers or controllers, LAN bridges, and other third-party devices that meet the above requirements can be monitored from one central location.

The VAXcluster Console System software can be installed on any VAX, MicroVAX or VAXstation platform identified in the System Software Addendum (SSA 27.46.03-x) The devices managed by VCS are connected to the VCS platform by:

- Direct connection, i.e. connecting to a port of a serial line interface device (DHV11, DHQ11, DZQ11, or CXY08) within the VCS host system cabinet
- Host-initiated connection, i.e., connecting to a port of a DECserver 200 or 300 which is accessible by the VCS host system over the Ethernet. The DECserver port must be mapped to an LTA terminal device defined in the VCS host system.

Software Components

The VCS V1.3 software includes the following components:

I/O Data Logger - Manages the console lines and logs all data received on these lines. In addition, it makes the received data available to other VCS components and transmits the data on the console lines to nodes designated by those components.

Data Scanner - Scans the console log data for predefined events. The information about detected events is relayed to other VCS components for logging and additional processing.

Event Logger - Records events detected by the Data Scanner. It logs all events from all currently configured systems to a disk log file.

Central Control Coordinator Interface - A DECwindows interface that provides an aerial view of a data center. From this interface, system managers can monitor all console activities and respond to events detected on the console connections. Console events are reflected by the node icons in the display and direct the system manager to systems needing attention. Other interactive interfaces can also be activated from the Central Control Coordinator Interface.

Monitor Interface - Enables system managers to monitor the serviced nodes. It monitors these systems by displaying multiple windows of information. System managers can connect the primary window to a single system or display log data in this window while monitoring other nodes.

Connect Interface - Enables system managers to connect to a serviced node, making their terminal the dedicated console (more than one system manager can connect to the same node). Once connected, all keystrokes, except for the defined "break" and "escape" characters, are transmitted directly to the console line of the node to which VCS is connected. While connected to that node, the system manager has normal console behavior. The only exception to normal behavior is that one control character is reserved to enable the operator to escape back to the VCS system from which the connection was made.

Record Interface - Enables operators to capture console line activity on a hardcopy device.

Review Interface - Enables system managers to retrieve console data and event information from the console and event log files. The retrieved information and data can be specified in terms of source node and time interval.

Access Interface - A programming interface that provides an alternate method for capturing events for additional processing. User-written applications can be used with the Access Interface. In addition, VCS provides a default application, complete with source codes, which sends scan and console events to a specified output device.

Even Notification System - A suite of Access Interface applications for interfacing with a wide-range of communication media for VCS event notification.

Configuration Editor - Helps operators create and maintain the configuration information that VCS requires.

Configuration File - Contains information about the nodes being serviced by VCS and the VCS environment itself. The Configuration Editor is provided to aid in the creation and modification of this data.

Log Files - VCS maintains the console and event log files as the permanent historical records of console data from the serviced nodes. VCS creates a new set of console and event log files every 24 hours, beginning at midnight.

When additional space is needed on the disk device, VCS displays a warning message before disk space shortage is critical. Then, as additional space is required, VCS deletes the oldest log files to make room for the new ones. The system manager can back up the log files before VCS deletes them.

The operational nature of the VAXcluster Console System makes it a requirement that the VAXcluster Console System host processor be a non-clustered VAXsystem. Thus, it is recommended that the VAXcluster Console System not be a member of a CI VAXcluster system or a satellite member of a Local Area or Mixed Interconnect VAXcluster system. However, the VAXcluster Console System can serve as the boot member of a Local Area VAXcluster System.

Features

- Support of up to 32 devices; either VAXcluster system nodes, stand-alone VAXsystems or any device that sends ASCII data over an RS232 line, has an EIA console port and supports XON/XOFF and I/O buffering. The maximum supported console terminal speed is 19.2K baud.
- All data received from connected devices are logged by VCS and identified by source node name and the time received by VCS.
- Operators can connect to the console port of any node serviced by VCS from any terminal connected to the VCS host.
- VCS can control remote devices via host-initiated connections over Ethernet using DECserver 200 or 300 terminal servers.
- Operators can remotely access the VCS host system via DECnet, LAT or dial-up ports to perform VCS functions.
- A security facility is provided to allow the system manager to restrict access to VCS-controlled devices.
- VCS detects console events by scanning console text messages and comparing them with predefined text strings contained in the configuration file.

- With VAXstation host systems, VCS provides the ability to build an icon-based view of all devices connected to it. This graphics layout uses color to indicate the severity of an event. It also allows the user to easily access a device's console by clicking with a mouse to activate a VCS interface.
- Users are alerted of critical system messages by changing icon colors via a DECtalk device or through VAXmail.

HARDWARE REQUIREMENTS

VAX, MicroVAX or VAXstation configuration as specified in the System Support Addendum (SSA 27.46.03-x).

Cables and adapters as specified in the System Support Addendum.

SOFTWARE REQUIREMENTS *

For VAX hosts:

VMS Operating System

For VAXstation hosts:

VMS Operating System

VMS DECwindows (included with VMS Operating System)

* Refer to the System Support Addendum (SSA 27.46.03-x) for availability and required versions of Prerequisite/Optional Software.

ORDERING INFORMATION

Software Licenses: QL-V01A*-**
Software Media: QA-V01A*-**
Software Documentation: QA-V01AA-GZ
Software Product Services: QT-V01A*-**

* Denotes variant fields. For additional information on available licenses, services and media, refer to the appropriate price book.

SOFTWARE LICENSING

The VCS license is user-based. The user is defined as a node or device managed by VCS. One license allows the VCS system to have up to four devices (serviced nodes) connected to it. Additional licenses may be purchased in increments of four to accomodate an expanding data center.

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