

NETWORK SUPPORT: THE MULTIVENDOR SERVICE DILEMMA

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SUMMARY

When a network is malfunctioning, efficient problem diagnosis and resolution is the immediate goal. However, since most networks are a combination of computer and communication vendors' equipment, problem escalation procedures become unclear. Fingerpointing among vendors is counterproductive to restoring the network to normal operation. Service vendors need to recognize that to provide comprehensive support, they must integrate cooperative problem resolution into their escalation process. However, putting in place daily operating procedures between worldwide service organizations is nontrivial. The user organization also has a responsibility to provide an internal operating structure which will accomplish efficient problem resolution. A united effort of vendor and user organizations is the key to effective network support.

INTRODUCTION

The multivendor environment is a fact of life in data communications. The multitude of computation and communication products and technologies, specialized applications, and the linking of departmental automation points have contributed to this situation. As networks become more and more predominant, and therefore critical to business applications, achieving efficient problem resolution within the multivendor environment becomes imperative.

Providing effective service in this context produces a challenge for both vendor and user organizations. Just as there are standards for communication between vendors providing a common methodology for transferring information, a standard mode of operation should be established for problem resolution among vendors.

To successfully support networking customers through a multivendor service methodology, each vendor must examine their own service structure and define internal service requirements. In addition, each customer needs to understand their role and responsibilities in successful ongoing network operations and support.

SITUATION ANALYSIS

Many vendor support strategies are oriented to a homogeneous environment, which is defined as one where they provide most, if not all, of the products, and therefore service. For the customer it is difficult to find the best communications solution if a company is restrained to one vendor as one vendor will not usually provide all possible data

communication and computation products. So instead, an applicable communications solution is designed and implemented with the ongoing support tackled on a per incident basis.

The vendors, being responsible solely on a product by product basis under traditional service contracts, leave a large part of the initial problem diagnosis on the customer's shoulders. The customer calls in the service personnel from each vendor separately to work on the problem. If a solution is not forthcoming, the customer may ask all vendors involved to work together on the problem, and then has the challenge of attempting to schedule a mutual time. Once assembled, this situation can result in the customer refereeing the vendors' service efforts with each vendor proclaiming innocence and the problem still existing. Service vendors must begin to take a broader view of service and incorporate dealing with other service organizations into their normal escalation procedures.

CERTIFICATION

As a basis for a successful working relationship between vendors, the performance of the vendor interconnection should be characterized. Both customers and vendors should understand which vendor products work together within a specified environment. In addition to providing a basis for mutual support, this would provide customers with increased latitude in designing communication solutions to fit their application.

One way to achieve this is a program of cooperative testing between two or more vendors to provide compatibility assurance to their customers. As vendors cannot test each of the multitude of hardware and software configurations, a subset must be defined for the testing. This subset should be as representative as possible of the most likely application environments.

Often termed **certification testing**, this process confirms that within a defined environment the tested products operate in their specified manner. For customers, this provides confidence in the proper operation of the certified products when used within the specifications. In addition, during the problem diagnosis stages, the interconnection of these products could be supported by both vendors. Thus certification sets the stage for successful support of the network.

Products could be chosen for the certification based on demand from mutual customers and fit within each vendors offering. For example, a computer vendor may wish to certify several modem models from different vendors in order to be able to support their customers in the widest range of communication solutions. In summary, the certification process offers customers a very flexible and robust range of communications solutions, plus the added assurance that the configurations have been tested and are supported by both vendors.

JOINT MAINTENANCE

The next step in providing a multivendor service methodology is to set up a formal relationship between vendor service organizations. Under this arrangement, the vendors will not physically service each other's equipment, but will integrate the other vendor(s) into their escalation procedure. To be successful this relationship must be an explicit process, clearly understood, and a part of each organization's daily operating process.

A successful service relationship can be built between vendors with similar organizational structures. For example, both vendors can have a centralized support facility as the initial customer contact. This would allow customers a choice of initiating contact with either service organization and provide a centralized contact between organizations. While keeping the customer informed of the progress, the vendors could exchange information regarding a problem on a timely basis. The methodology and type of information exchanged would be described in a joint support operating plan which is created by and shared between both organizations.

A centralized vendor contact is only part of the picture. Local cooperation between vendors is also critical to a customer's success. Once a problem has been escalated to onsite assistance, it may be necessary to have intervender relations to either work jointly at the customer site, or to initiate a service call and communicate problem status. The local joint support effort will be based on a preestablished protocol and commitment between vendors. As a result of the direct vendor interaction, the customer experiences a more efficient and less frustrating problem resolution process.

VENDOR RESPONSIBILITIES

The service vendor's responsibility is two-fold: to deliver effective network problem resolution and to keep the customer informed and involved in the problem resolution process. To accomplish this, the vendor first must implement joint operating agreements with representative vendors. In implementing this, the vendor must realize that the certified configurations will most likely vary from country to country, dependent on local communications restrictions and popularity. The local vendor representatives should be included in the initial support planning process before network installation, if the customer wishes to take advantage of the cooperative vendor relations.

Another way to help ensure a customer's success, is to hold regular reviews to clarify vendor and customer expectations, performance requirements, and outline expansion plans. At this time, the customer can bring the vendor up to date on related network activities and the vendor can work with the customer to plan for changes to the network, such as major software revisions. This will give the customer added control of his own network environment. The vendor can also help the customer identify internal operating procedures to facilitate timely problem resolution.

CUSTOMER RESPONSIBILITY

Customers have the responsibility to structure his internal operating procedures to accomplish effective problem resolution in partnership with the various service organizations and to facilitate communication among network service vendors.

The structure of an internal operations staff will have an obvious effect on timely problem resolution. Even under a program of cooperative vendor relationships, the customer organization must do the best job possible of initial problem description and diagnosis. If the symptoms are described correctly up front, this will hasten any problem resolution process. The customer organization should have an identified person to "own" the problem, thus avoiding additional time delays and internal confusion. Good network documentation can preclude frustration in the event of a knowledgeable staff member's absence.

A critical factor in managing a network is the coordination of changes and expansion. The customer, as the focal point for all vendor activities, must ensure that the vendors are aware of simultaneous or related activities, such as node or product additions.

And finally, active participation in periodic reviews with all service vendors provides a formal process for the clarification of expectations, review of past performance, and an arena to discuss future changes.

CONCLUSION

As the number and size of networks increase, accomplishing effective problem resolution within the multivendor environment becomes critical. Vendors must expand their traditional view of service to include cooperative vendor relationships. The success of these relationships is based on the development of an explicit problem escalation process integrated into each organization's daily operating procedures. A program of certification testing can provide the foundation for joint maintenance. Certification will also provide compatibility assurance to customers and broaden the available range of supported communication solutions. In addition, the customer's internal operations must be structured to facilitate the communication and problem resolution process. The mutual efforts of vendor and customer organizations can effectively put an end to the multivendor service dilemma of network support.

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