

## **Digital TCP/IP Services for OpenVMS**

Your on-ramp to the information superhighway and the world beyond

ALPHA M

If a company is to succeed today, it has to work with the outside world on a daily basis. How do you bring the information resources throughout the world to your users' computer screens? Digital Equipment Corporation, your TCP/IP vendor, suggests Digital TCP/IP Services for OpenVMS. This standards-based software product lets your diverse systems communicate and exchange information—across the office or around the globe. It links your users to the Internet, while maximizing your investments in computer systems, software, and networking products.

TCP/IP is becoming the international protocol of choice for computer-to-computer communication. Digital TCP/IP Services for OpenVMS—Digital's implementation of TCP/IP—is powerful software that connects your OpenVMS VAX™ and OpenVMS Alpha systems to TCP/IP networks.

Digital TCP/IP Services for OpenVMS delivers file access, file transfer, remote terminal access, mail, remote command execution, remote printing, DNS name server, and application development between OpenVMS and UNIX®—as well as other operating systems that support TCP/IP. And with DECnet/OSI, you can also run DECnet™ and OSI applications over TCP/IP networks.

In short, Digital TCP/IP Services for OpenVMS keeps you in the fast lane of information exchange.



#### **Benefits**

.

Provides global information access via industry-standard TCP/IP protocols

.

Gives you access to your choice of applications, regardless of the transport for which they were written— DECnet, OSI, or TCP/IP

.

Gives you the confidence of knowing that your missioncritical networking is backed by Digital's worldwide service capabilities

## Powerful TCP/IP services for OpenVMS

Digital continues its commitment to TCP/IP and OpenVMS customers by delivering a complete set of TCP/IP services and applications. For example, Digital software engineers have teamed up with Process Software Corporation to create leading-edge products; some of their technologies have been incorporated into Digital products.

## Digital—your TCP/IP vendor

Unlike niche vendors that supply only TCP/IP software, Digital offers you a comprehensive portfolio of products that provides everything you need to build an enterprise-wide TCP/IP network infrastructure. Choose from networking software, management tools, switches, routers, bridges, hubs, and terminal servers—all from a single vendor with worldwide service and support.

## Digital is a multiprotocol network vendor

Digital offers you a choice of—and integration with—the industry's most popular protocols—IPX, NetBEUI, AppleShare® TCP/IP, OSI, DECnet, and IBM SNA.
Multiprotocol networks let users on these diverse networks share data and resources—regardless of their platform or location.

## Full interoperability testing

Digital has one of the largest test beds in the world for networking products. Before a Digital TCP/IP product is shipped, it is extensively tested to ensure that it will interoperate in the real world—saving you time and headaches.

## A 20-year track record

Digital has provided peer-topeer networking for more than 20 years. Today, we have the largest privately owned, multivendor network in the worldwith over 80,000 nodescomposed of DECnet, TCP/IP, AppleTalk®, Novell® IPX, and more. With this seamless network, Digital has created a virtual office for our worldwide workforce, customers, suppliers, distributors, and business partners—all of whom have instant, around-the-clock access to the resources and services on our corporate network.

### **Exciting new features**

IP/Multicasting

Now users can participate
in multicast messaging—
including the use of the multicast backbone of the Internet.
IP/Multicasting saves bandwidth by limiting the number
of messages that must be sent.

Dynamic load balancing (DNS based)

This feature ensures that the workload is evenly distributed across all hosts in a cluster, delivering optimum response times for users.

## Rlogin PROXY

This enhancement provides proxy access to systems, so that a host\_name:user\_name combination can attach directly to a target system—without going through user\_name, password interaction when the connection is established.

RCP (Remote Copy Procedure)
Now users can remotely copy
files from any system to any
other system on the network as
though the files were local files.

#### Outbound Telnet

This feature lets system managers permanently create TN devices.

OpenVMS integration
This provides easier access to
IP functions using OpenVMS
DCL commands.

RPC/RPCGEN (Remote Procedure Call Generator) RPC lets you run procedures on remote systems using the latest Sun RPC libraries. RPC-GEN lets you automatically generate RPC calls.

OpenVMS 64-bit support This provides users with the ability to run on 64-bit OpenVMS V7.0.

## Digital TCP/IP Services for OpenVMS builds on these existing features

NFS Client and PC NFS printing
Network File System (NFS) is
the standard file system in use
in TCP/IP networks today.
The NFS Client allows
OpenVMS systems running
TCP/IP for OpenVMS to
mount files residing on any
TCP/IP host system, including
UNIX, OpenVMS, and PCs.

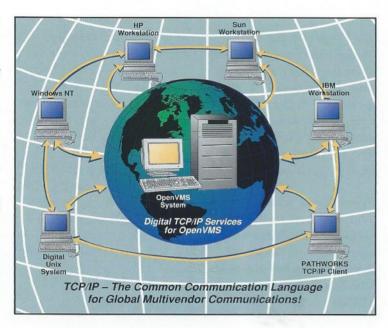
Users can execute typical file actions such as create/delete, read/write, and so forth. In addition, PCs running NFS can print files via the NFS mechanism. And PCNFSd support enables file sharing with PCs via the NFS protocol.

### Anonymous FTP

With Anonymous File Transfer Protocol (FTP), remote users can log in as "guests" on a remote system to access information that is intended to be publicly available.

DECnet and OSI over TCP/IP
When used in conjunction
with DECnet/OSI, any combination of DECnet,OSI, and
TCP/IP network applications
can be run over TCP/IP.

Sun RPC technology with Portmapper Services Digital TCP/IP includes full Sun programming technology to build client/server applications in UNIX and OpenVMS environments.



Alpha support

Digital TCP/IP offers increased performance by taking advantage of the 64-bit Alpha OpenVMS RISC architecture.

BIND server

A full Berkeley Internet Name Domain (BIND) Service on the OpenVMS platform complements the BIND client.

Telnet functionality
TN3270—provides remote terminal access to IBM 3270 environments.

Telnet printing—provides remote Telnet printing capabilities.

Remote hoot via BOOTP

This remote boot function lets TCP/IP users, system managers, and applications bring up TCP/IP systems remotely.

Electronic mail

The Simple Mail Transfer Protocol (SMTP) lets OpenVMS users easily exchange standard electronic mail with other TCP/IP users—locally and remotely.

#### SNMP

The Simple Network
Management Protocol (SNMP)
agent simplifies the job of network management in TCP/IP
networks with OpenVMS systems. TCP/IP-based network
management stations can access
TCP/IP client information from
OpenVMS systems.

Remote TCP/IP printing
With remote TCP/IP printing
via Line Printer Daemon (LPD),
OpenVMS hosts can send files
to printers attached to remote
UNIX or OpenVMS hosts via
TCP/IP.

# Digital and IPv6 – the next generation

Digital, the industry's first vendor to publicly demonstrate IPv6 prototypes is leading the industry in moving forward to the next-generation IP protocol.

The Internet is rapidly growing out of unique address space. IPv6 will allow the Internet to move into the millennium.

Digital is on the cutting edge of developing the IPv6 standard, the next generation of Internet Protocol (IP), which provides extended addressing (to 128 bits), enhanced security, and encapsulation of IPv6 addresses in IPv4 addresses (for a smooth transition to IPv6 addressing).

## Low cost-of-entry via client/server licensing

Digital TCP/IP Services for OpenVMS provides flexible client/server licensing—including a lower cost of entry for participating in a TCP/IP and NFS environment. The client license provides the base set of TCP/IP capabilities and NFS Client to support TCP/IP end systems. The server license provides the base set of capabilities as well as an NFS server, BIND server, and remote boot server.

## Worldwide service and support

Digital has an extensive portfolio of service offerings. For more detailed information, please contact your local customer service organization.

Ordering information	
Digital TCP/IP Services for OpenVMS Alpha	QL-0LXA*-AA
Digital TCP/IP Client for OpenVMS Alpha	QL-0M2A*-AA
Digital TCP/IP Client Upgrade for OpenVMS Alpha	QL-0PH*A-AA
Digital TCP/IP Services for OpenVMS VAX	QL-VHRA9-J*
Digital TCP/IP Client for OpenVMS VAX	QL-GL7A9-J*
Digital TCP/IP Client Upgrade for OpenVMS VAX	QL-0PJA0-J*

#### Call us

To learn more about Digital TCP/IP Services for OpenVMS or any of Digital's products or services, please contact your local Digital Sales office or an Authorized Digital Business partner.

Digital believes the information in this publication is accurate as of its publication date, such information is subject to change without notice. Digital is not responsible for any inadvertent

Digital conducts its business in a manner that conserves the environment and protects the safety and health of its employees, customers, and the community.

Digital, the DIGITAL logo, AlphaGeneration design, DEC, DECner, OpenVMS, and VAX are trademarks of Digital Equipment Corporation.

AppleShare and AppleTalk are registered trademarks of Apple Computer, Inc. HP is a registered trademark of Hewlett-Packard Company. IBM and AIX are registered trademarks of International Business Machines Corporation. Novell is a registered trademark of Novell, Inc. Sun and NFS are registered trademarks of Sun Microsystems Inc. UNIX is a registered trademark licensed exclusively through X Open Company Ltd.