



Licensed Program Specifications

IPv6/VSE

Version 1 Release 1

Program Number 5686-BS1

IPv6/VSE is a native implementation of Transmission Control Protocol/Internet Protocol (TCP/IP) for z/VSE™.

IPv6/VSE Version 1 Release 1 provides an IPv6 solution for z/VSE. IPv6/VSE is a registered trademark of Barnard Software, Inc.

IPv6/VSE provides an IPv6 TCP/IP stack, IPv6 application programming interfaces (APIs), and IPv6-enabled applications.

IPv6/VSE V1R1 supports the IPv6 protocol only. The IPv6 TCP/IP stack of IPv6/VSE can be run concurrently with an IPv4 TCP/IP stack within one z/VSE system.

IPv6 TCP/IP Stack

IPv6/VSE provides an IPv6 TCP/IP stack. The IPv6 stack of IPv6/VSE runs in a separate partition using its own stack ID. This allows both an IPv4 and IPv6 stack to run concurrently within one z/VSE system. Running separate IPv4 and IPv6 stacks concurrently within one z/VSE system addresses both performance and reliability aspects. Existing IPv4 applications continue to run unchanged using the IPv4 TCP/IP stack, thus protecting and leveraging existing client investments. New IPv6-enabled applications can gradually be introduced using the IPv6 stack of IPv6/VSE.

Dual Stack Support

IPv6/VSE provides dual stack support. Dual stack support allows an application to connect to both the IPv4 and IPv6 network simultaneously. With the implementation of dual stack support, a single IPv6-enabled CICS transaction or batch application can communicate with partners via either the IPv4 or IPv6 network. Enhanced socket APIs are provided that may be used to introduce IPv6-enabled applications.

IPv6-Enabled Utility Applications

Utility applications like FTP, TN3270E, and so on, provided with the IPv6/VSE product run outside the IPv6/VSE stack partition. Running applications external to the IPv6/VSE stack partition may provide greater stability and better performance.

FTP server: The IPv6/VSE FTP server supports access to z/VSE resources (POWER queues, VSAM catalogs, SAM file, z/VSE libraries, and so on) by remote host FTP clients.

Batch FTP client: The IPv6/VSE batch FTP client runs as a z/VSE batch job providing access to remote host FTP servers. Data can be sent to or received from these remote FTP servers.

TN3270E server: The IPv6/VSE TN3270E server supports TN3270/TN3270E terminal sessions and TN3270E printer sessions. In addition, DIRECT, LPR, and FTP printer sessions are supported.

NTP server: The IPv6/VSE NTP server is a Network Time Protocol server that allows remote hosts to query the time of day (TOD) clock of z/VSE to synchronize their clocks with the z/VSE clock.

NTP client: The IPv6/VSE NTP client allows z/VSE to set its TOD clock to an external source.

System Logger client: This application is used to log selected z/VSE console messages to a remote Linux® syslog-ng daemon. Once a message is sent to the syslog-ng daemon, Linux automation processing can be used to trigger events.

Batch Email client: The IPv6/VSE Batch Email Client is used to send an e-mail to an SMTP server. In turn, the SMTP server will send the e-mail to a destination user. Any number of recipients are permitted and files can be attached to an outgoing e-mail message.

Batch LPR: The IPv6/VSE Batch LPR application extracts data from the POWER queues and transfers it to a remote host LPD. The LPD can be in a printer or running as a server on a remote host.

Batch Remote Execution Client: The IPv6/VSE Remote EXEC Client allows a job running in a z/VSE partition to trigger a script to run on a remote host. Any output from the script is returned to the client and scanned for completion information.

Batch PING: The IPv6/VSE Batch PING application is used to ping a remote host.

GZIP data compression: IPv6/VSE provides a simple gzip data compression application. Data can be read, compressed, and written to a SAM file or library member. The compressed data can then be transferred to a remote host for processing. The reverse of this process can also be performed.

REXX automation: IPv6/VSE uses z/VSE REXX EXECs for automation. Automatic FTP of data is handled using a provided sample REXX EXEC. Automatic LPR or automatic e-mail of data is handled in the same way. Invoking IPv6/VSE applications from within a REXX EXEC allows dynamic creation of commands and parameters (for example file names and dates).

The IPv6/VSE utility applications FTP server, FTP client, LPR, Batch Email client, and GZIP support Double Byte Character Set (DBCS).

Specified Operating Environment

Machine Requirements

IPv6/VSE runs on any hardware configuration supported by z/VSE 4.2 or later.

Programming Requirements

IPv6/VSE runs under the control of, or in conjunction with, the following IBM® licensed programs and their subsequent releases unless otherwise announced by IBM.

Required Licensed Programs

The following licensed programs are required for IPv6/VSE:

z/VSE Version 4 Release 2 (5609-ZV4) or subsequent releases

For certain functions of IPv6/VSE, for example, Telnet, ACF/VTAM for VSE/ESA (5686-065) is required.

Licensed Program Materials Availability

Restricted Materials - No.

This licensed program is available in object code without source licensed program materials.

Supplemental Terms

Designated Machine Identification

Designated Machine Identification Required : Yes

Installation/Location License

Not applicable. A separate license is required for each designated machine on which the licensed program material will be used.

Usage Restriction

IPv6/VSE is key enabled. User access keys must be used during the startup to use the product in production.

Refer to the Program Directory (GI11-9702-00) for details about how to obtain the access key.

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