FTP Software's IPv6

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FTP Software's IPv6
Our History

- First vendor to ship Windows-based IPv6 implementation

- Started shipping IPv6 Code in August 1996
  - First implementation:
    - OnNet32 - TCP/IP Suite - 8/96
    - Support in stack, limited applications

Secure Client v 3.0

- Released 12/96
- Evolved stack support
- Application support for Ping, IPTrace, Statistics
- Added additional code to support OnNet32 v2.0 Telnet application to work over FTP's IPv6

Network Access Suite v3.0 Beta

- Released 2/97

- Telnet, FTP Client, FTP Server
  - runs over:
    - » Secure Client's IPv6 implementation
    - » any Winsock2 IPv6 implementation

Application Changes

- FTPSock.DLL, our C++ interface to Winsock, was changed to handle IPv6 addresses when connecting, accepting, etc.

- FTP protocol changes and extensions were made/added in order to handle IPv6 addresses being sent in the PORT and PASV commands.

FTP Server

- FTP Server supports the following:
  - LPRT and LPSV as defined in RFC 1639
  - EPRT and EPSV as defined in ("draft-allman-ftp-variable-02.txt")
  - It's up to the client to determine which command it wants to use

FTP Client

- FTP Client first tries LPRT or LPSV.

- If the server doesn't support that, it tries EPRT or EPSV.

- The order of this may get changed in the future as EPRT and EPSV may become the accepted method.

IPv6 Base Functionality

- ICMP
  - IPv6 Neighbor/Router Discovery
  - IPv6 Stateless Address Autoconfiguration
- Fragmentation & Reassembly
- Routing Headers
- Destination Options
- No Next Header

Development in Progress

- Tunnelling
- IPSec
- NFS Client
- Query

FTP Software IPv6
Rollout at FTP

- Beta tested BayNetwork Router in U.S. and a Telebit Router in Paris

- Rolling out a beta Bay router with native IPv6 along with Solaris IPv6 tunnels to created a IPv6 backbone within FTP

- Working with DEC Alpha Servers and Routers within test environment

FTP Software IPv6
Other activities

- Sponsor of NetworkWorld IPv6 seminar
- Second round of an FTP Software IPv6 seminar series in Europe
- Holding a continuous IPv6 testing program for both TCP/IP stack technology and applications
- Promoting Software evalutations with various Hardware vendors IPv6 testing