White Paper:

Common FTP server problems and how they are addressed when using the StingRay file transfer server

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Hermstedt StingRay
The multi protocol File Transfer Server

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Abstract

FTP (File Transfer Protocol) is a standard protocol used to transfer data over networks such as the Internet, or simply between two computers within the same local network (Local Area Network). Although still extensively used by organisations worldwide, is traditional FTP really adequate or capable of handling the substantial quantities of data exchanged on a daily basis? More to the point, does it offer businesses the value added features so desperately needed in todays busy corporate environments?

In this paper we will discuss the limitations of traditional FTP and highlight how Hermstedt's StingRay FTP functionality has been enhanced to meet the requirements of modern business, where FTP is the preferred delivery protocol.

Common shortcomings of a traditional FTP server

FTP, just as any other file transfer protocol is a set of rules developed for sending data over IP networks. FTP was developed using a server-client model. The client (FTP Client) sends the appropriate commands to the server (FTP server) to establish a TCP connection. This connection contains two channels, one to transmit the FTP commands, the other for sending data. The reason for having these separate channels is that it provides flexibility in how the protocol is used; however this does add complexity to FTP.

The key shortcomings associated with FTP are:

Usability	FTP server and client interfaces tend to be quite complicated and do not lend themselves to the less technically knowledgeable user.
Security	Commonly FTP servers are deployed in the LAN, which can compromise the security of your company data. When an FTP server is installed on a standard operating system e.g. Windows Vista, malicious files or viruses can be uploaded to the server, causing severe network and business continuity issues.
Compatibility	Traditional FTP server/clients have difficulty handling certain data formats, including Apple Mac files/MacBinary files, which are regularly corrupted, as FTP doesn't support the Resource Fork.
Reporting and Tracking	FTP does not provide any status information about files sent or received. Neither does it provide notification upon the receipt or transmission of data.
Automation	Standard FTP servers do not provide automation, therefore valuable time is wasted manually sending files or copying files across your network into an internal production workflow.

How StingRay addresses the issues associated with traditional FTP servers

Hermstedt StingRay is an in-house file transfer server that is dedicated to sending and receiving large files. It is a multi-protocol appliance and FTP is one of the protocols available to users.

StingRay's FTP functionality was developed to eliminate the major downfalls associated with traditional FTP. Although StingRay uses the same underlying protocol and set of rules, it has enhanced features that make the protocol more usable in the corporate marketplace. These include:

Usability	In addition to network wide access via a web browser, StingRay has a simple client application for Internal users. StingRay Client provides a centralised address book and Job List to view files sent and received making the file sending process very quick and easy. Drag and drop sending is supported too.
Security	StingRay's FTP server provides greater security than a normal FTP server. This is due to the physical design of the appliance. Providing two network cards, one for the internal network and a second for external data communication. Routing tables have been removed meaning that no traffic can be routed between the internal and external network, StingRay therefore acts as a physical barrier for hackers. The StingRay is also unable to execute/open any files, which removes the possibility of a virus or Trojan horse attack emanating from StingRay
Compatibility	StingRay manages to overcome the incompatibility of files created by Mac OS and Windows. Data and resource fork problems do not occur with the extensive file-type creator options.
Reporting and Tracking	Traditional FTP servers do not provide notification to users upon the sending or receiving of data. StingRay automatically checks and logs the date and time that a file is sent or received. It then sends an automatic notification to the user and customer, making them aware that the transmission has taken place. There is a comprehensive set of notification options within StingRay.
Automation	StingRay's extensive feature list includes the ability to automatically forward files into internal workflows, send files to external customers when delivered into watched-folders on the StingRay and group sending of files to multiple locations in one job, independent of delivery protocol.

Conclusion

Whilst FTP is still a widely used within businesses for simple file transfer, it should not be relied upon by organisations with a requirement to send large quantities of data regularly, especially if that data is of a sensitive nature.

FTP lacks the essential security, administration, management and automation features necessary to create a secure, automated and therefore streamlined workflow. Without these features, businesses processes remain inefficient and cumbersome.

Managed file transfer solutions such as Hermstedt StingRay offer users an efficient, cost-effective solution to large file transfer.

About StingRay

StingRay is a dedicated file transfer server built with the creative industries in mind. Providing a wide range of delivery options including FTP, HTTP, HTTPS, SMTP, POP3, ISDN and process automation features, it simplifies file transfer for your business while giving you more ways to share files with your customers.

StingRay is an enterprise file transfer appliance at a price you can afford.

Hermstedt StingRay is a Pro2col product (www.pro2col.com) and further information can be found at the StingRay web site (www.hermstedtstingray.com).