

STERLING SECURE PROXY

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Terminology

- SSP – Sterling Secure Proxy
 - SSP Engine:
 - CM: Configuration Manager
 - CMS: Configuration Manager Store
 - Configuration Definitions
 - Configuration Session
- DMZ – Demilitarized Zone
- SSL – Secure Socket Layer
- Firewall
 - Internal
 - External
- Sessions
 - Internal(Trusted Zone)
 - External(Trading Partner)

What is Proxy

- Proxy server is an application that resides between a client application and a server application. It provides a high level of data protection between external connections and your internal network.
- Proxy Server applications help maintain security and anonymity of trusted applications at all times



Sterling Secure Proxy Overview

□ Architecture Components

□ SSP Engine

- Component resides in the DMZ and requires very minimum configuration to manage all the communication sessions.
- SSP Engine is configured using CM (Configuration Manager).
- Everything at the SSP Engine level is stored in an active memory and nothing is stored on physical disk or hard drive in the DMZ.
- SSP Engine property file is encrypted and contains
 - IP and Port information to listen on for connections from Configuration Manager
 - SSL key certificate, trusted certificate, and encryption cipher used for the connection from Configuration Manager

□ CM

- Configuration Manager is installed in the trusted zone
- CM is used to configure your environment and configuration definitions are stored in the Configuration Manager Store.
- Configuration Definitions are pushed to the Engine in the DMZ using SSL connection

□ CMS

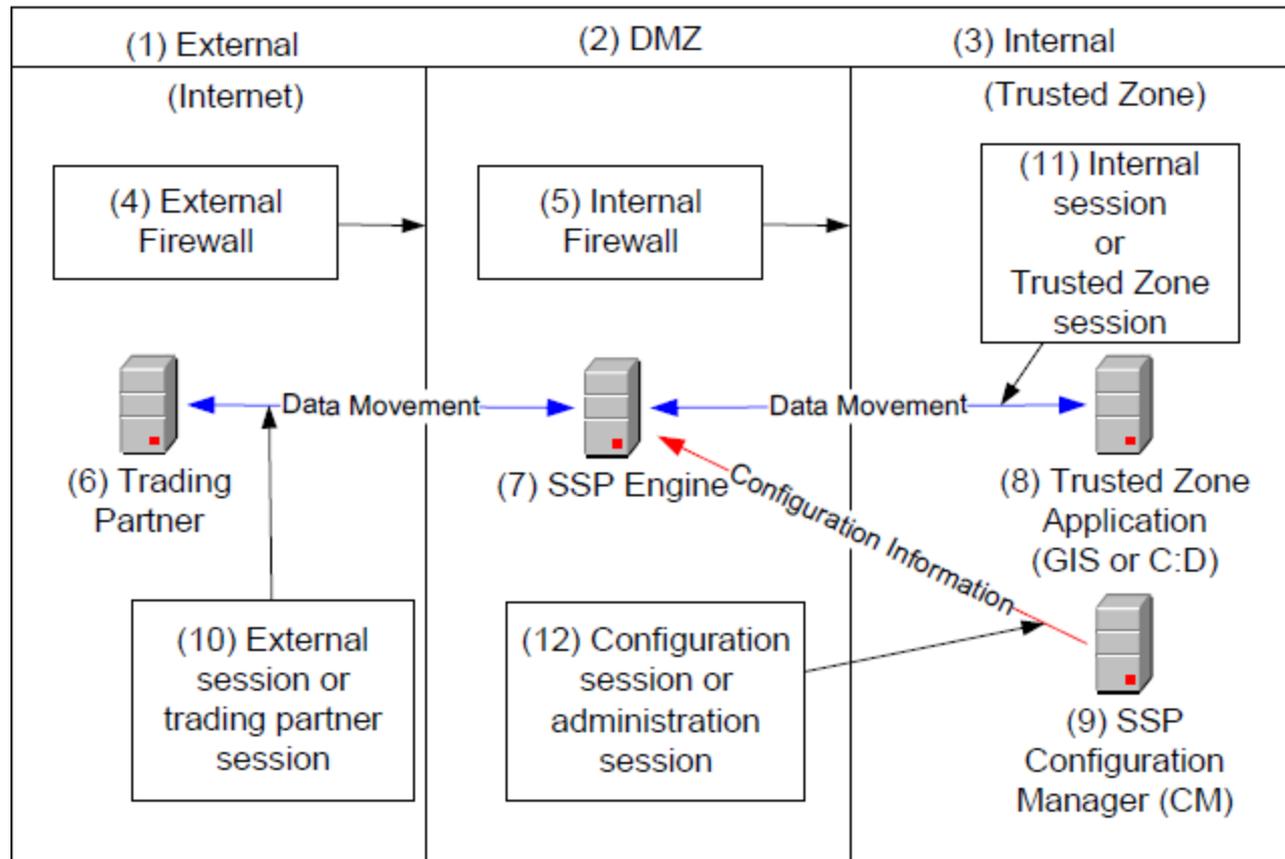
- Configuration Definitions are encrypted and stored on a disk

□ Configuration Definition

- User information
- System certificate information
- SSH Keys

Sterling Secure Proxy Overview

Architecture Diagram



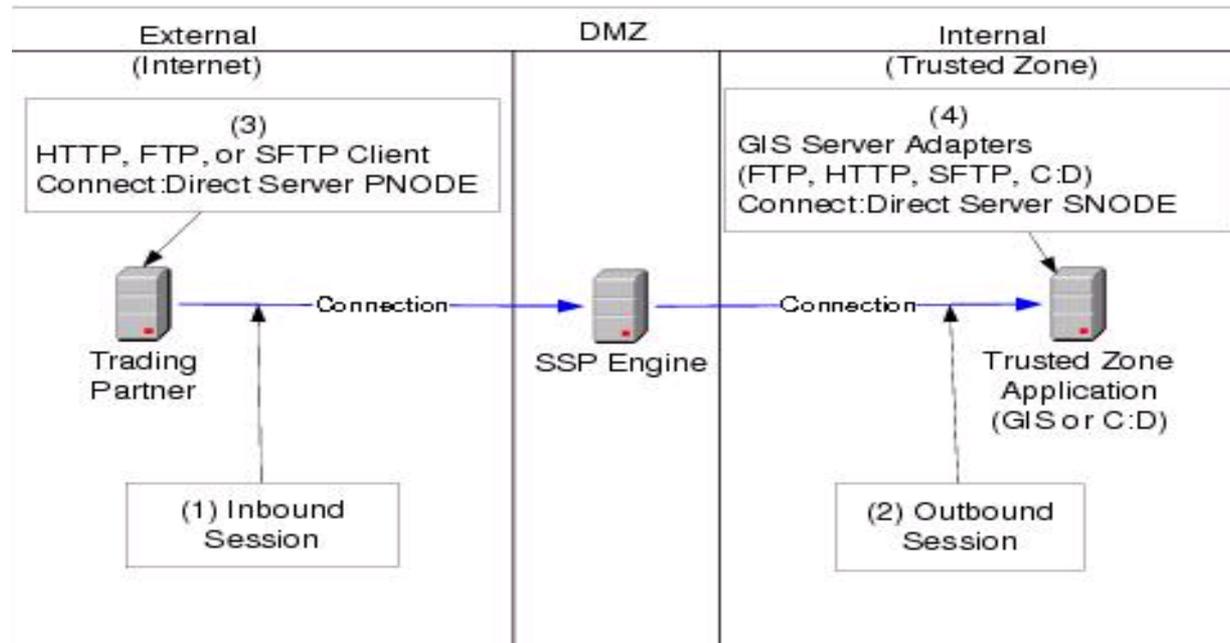
Sterling Secure Proxy Overview

- Secure Authentication – SSP and trusted applications can maintain security standards by using one of the following methods
 - SSL Client Authentication (**Recommended**)
 - Sterling Secure Proxy initiates SSL client level authentication with the trusted applications. During this connection SSP will present certificate and trusted application will have to authenticate the validity of the certificate before the connection can be granted.
 - Secure connection between SSP and trusted applications
 - Ability to implement multiple factors of authentication. For example: SSL and user authentication
 - User Authentication
 - Sterling Secure Proxy initiates connection using user credentials.
 - Pass – through (**Recommended**) - this option sends the user credentials presented by the trading partner to the application in the trusted zone for authentication. This mechanism allows the user identity to be maintained at the trusted zone application.
 - Sterling External Authentication Server Mapped User Credentials—Sterling Secure Proxy uses Sterling External Authentication Server for user authentication, it receives the user credentials from the trading partner and sends them to Sterling External Authentication Server for validation. If configured, Sterling External Authentication Server returns the mapped user credentials, and Sterling Secure Proxy uses them to log on to the application in the trusted zone.
 - Netmap (**NOT Recommended**) —the user credentials are defined in the outbound node of the netmap that is used by Sterling Secure Proxy to establish a session with the application, in the trusted zone. Sterling Secure Proxy logs in to the trusted zone application as the same user for all sessions.

Proxy Implementation

□ Reverse

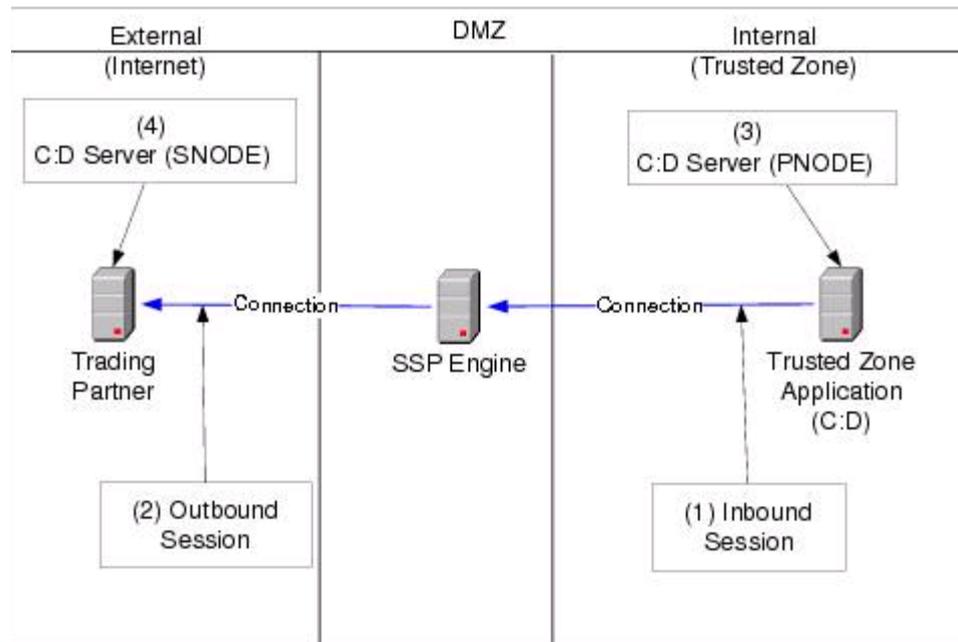
- SSP provides reverse proxy services for Sterling Integrator when the trading partners initiate FTP, HTTP, SFTP, and Connect: Direct sessions to the Sterling Integrator server in the trusted zone.



Proxy Implementation

□ Forward

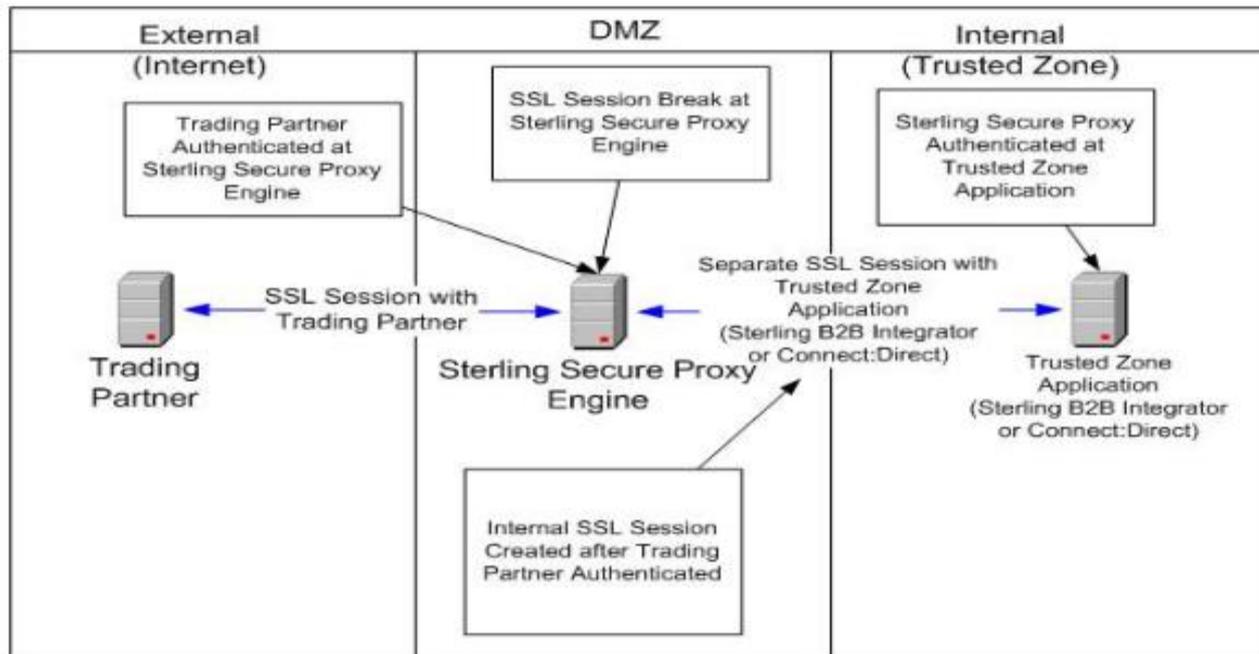
- The client in the trusted zone connects to the forward proxy in the DMZ and the forward proxy sends connection information to the destination application at the remote trading partner



Proxy Implementation

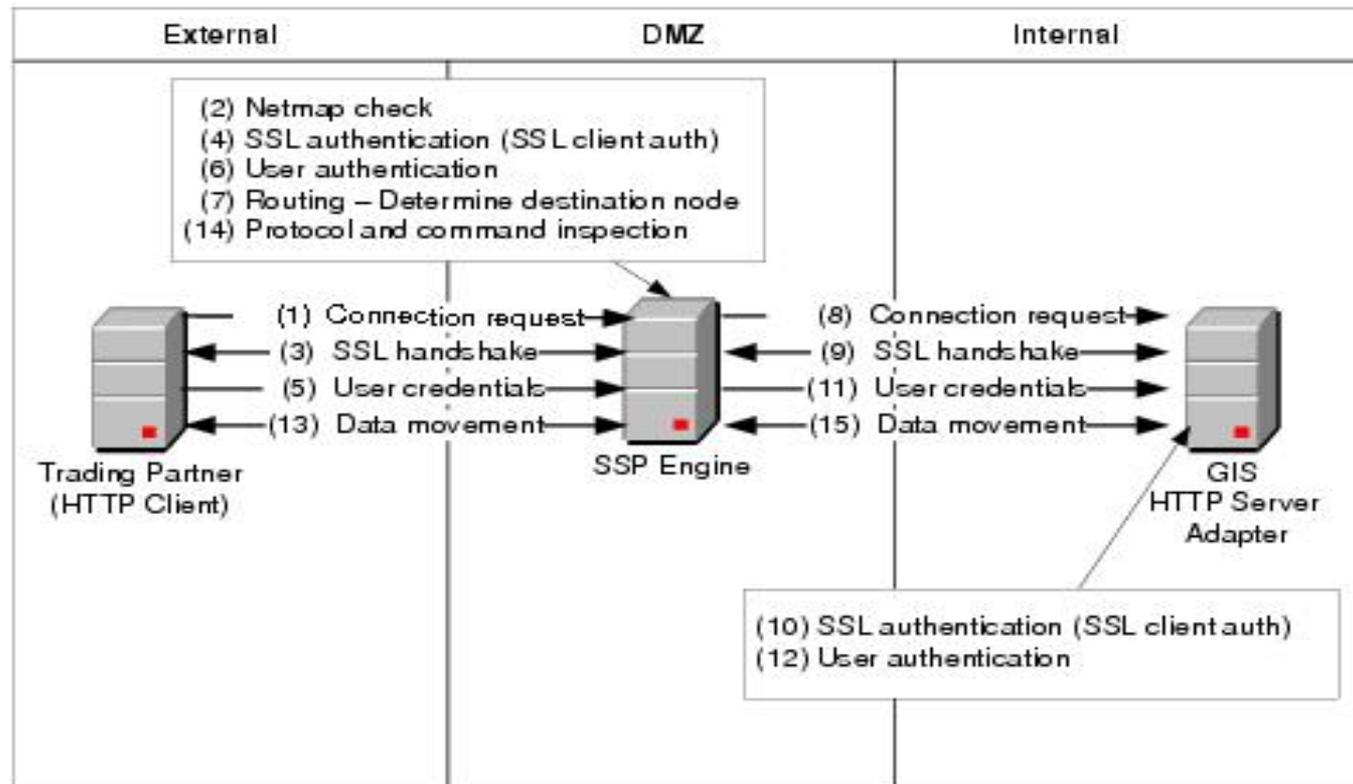
□ SSL Break Session

- The SSL session break is a primary Sterling Secure Proxy security feature. SSL Break session is created when client is using HTTP(s), FTP(s) and C:D protocols



Proxy Implementation

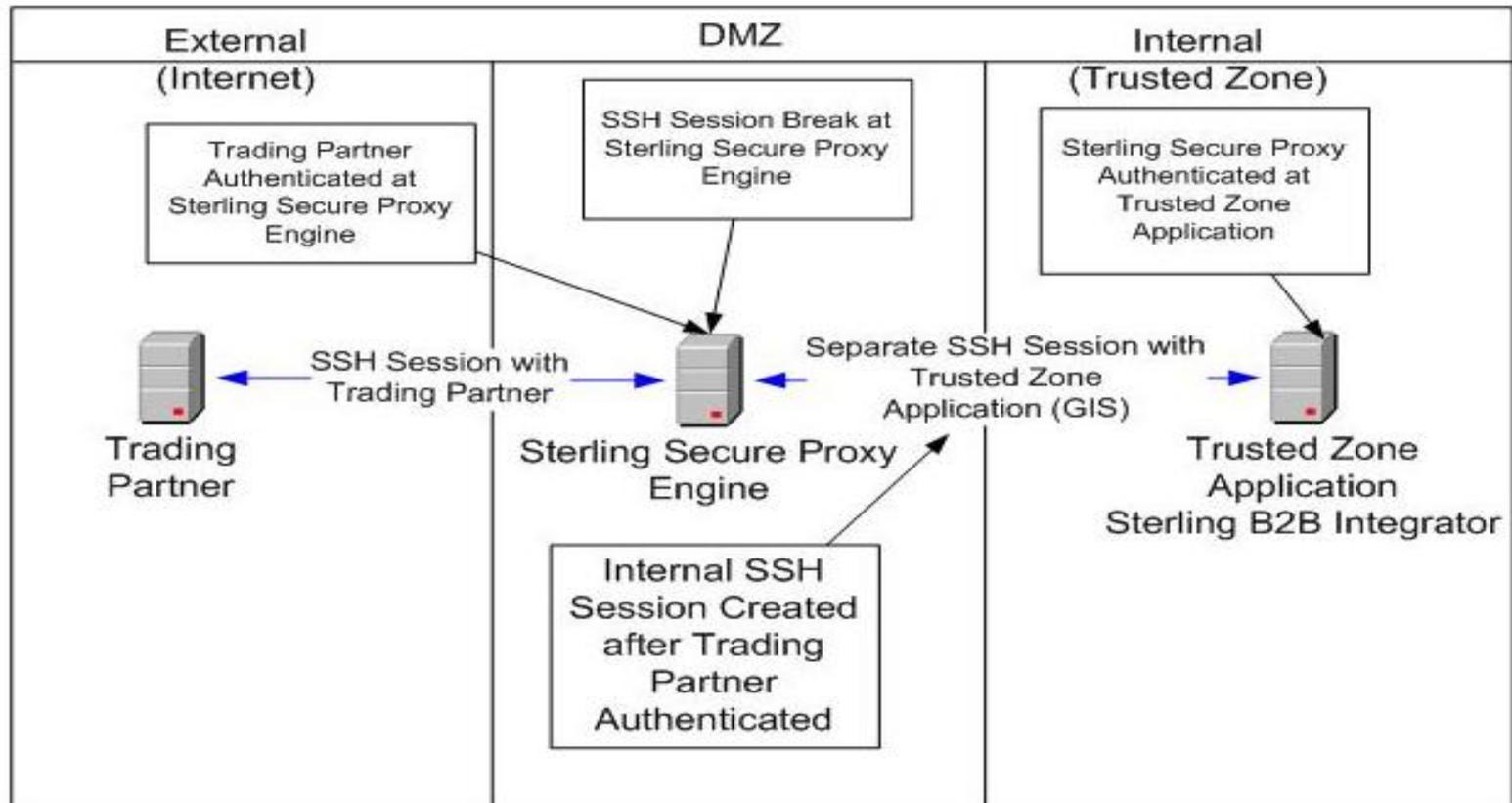
□ SSL Reverse Proxy - Detailed



Proxy Implementation

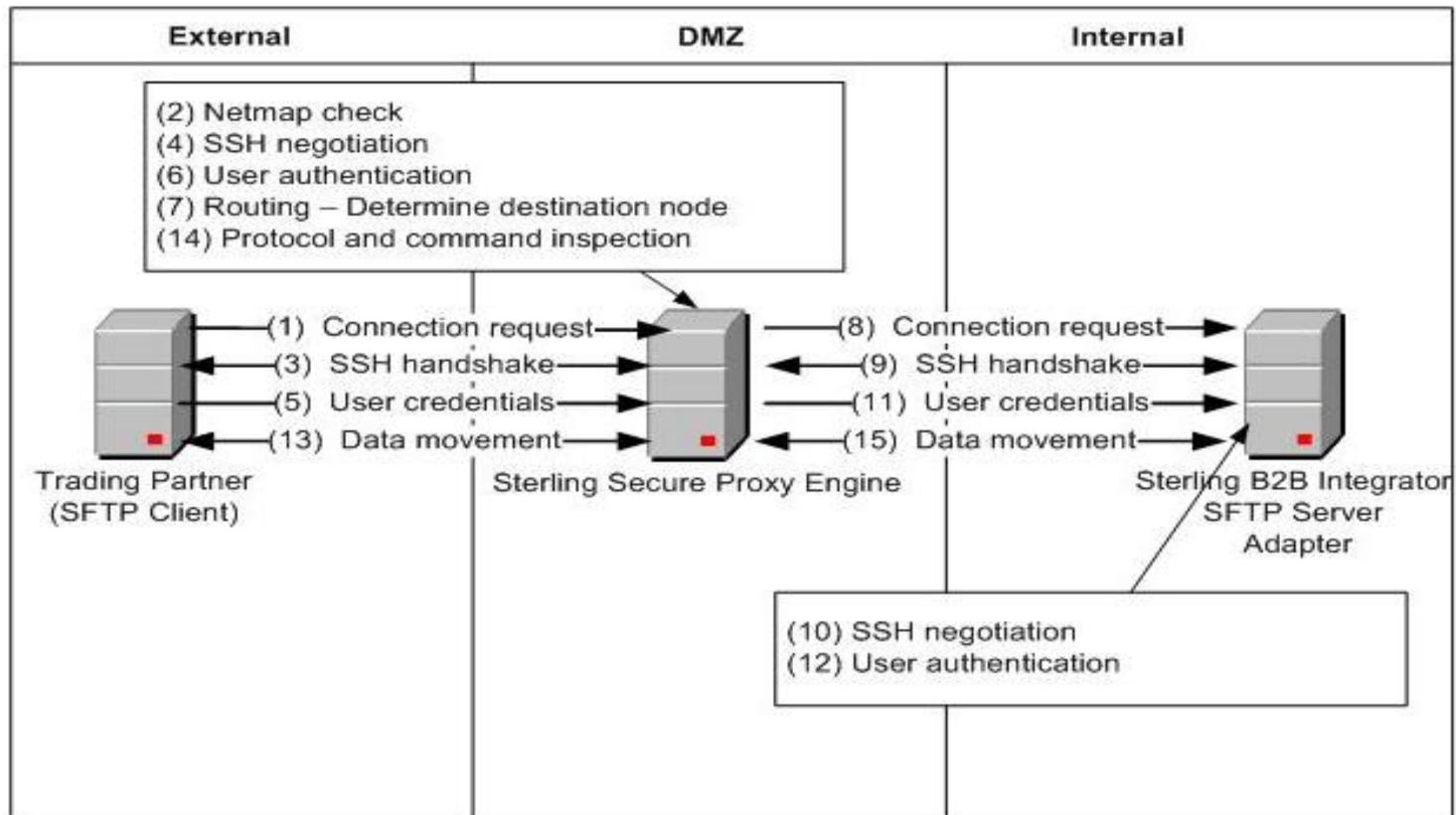
SSH Break Session

- SSH Break session is created when client is using SFTP and/or SSH protocols



Proxy Implementation

SSH Reverse Proxy - Detailed



Planning and Implementation

□ Supported Systems

□ Windows

- Windows Server 2003 Enterprise Edition Service Pack 1 (32-bit)
- Windows Server 2008 R2 (64-bit). SSP supports 64-bit JRE with this operating system.
- VMware ESX and VMware vSphere with any Windows operating system supported by SSP.

□ Unix /Linux

- HP-UX, version 11.23 . SSP supports 64-bit JRE with this operating system.
- AIX 5L, version 5.3. . SSP supports 64-bit JRE with this operating system.

□ Upgrade Vs Fresh Install

- Keep in mind that the underline SSP Architecture has changed from version 2.x to 3.x.

□ Determine Level of security

- SSL
- User Authentication
- SSL & User Authentication

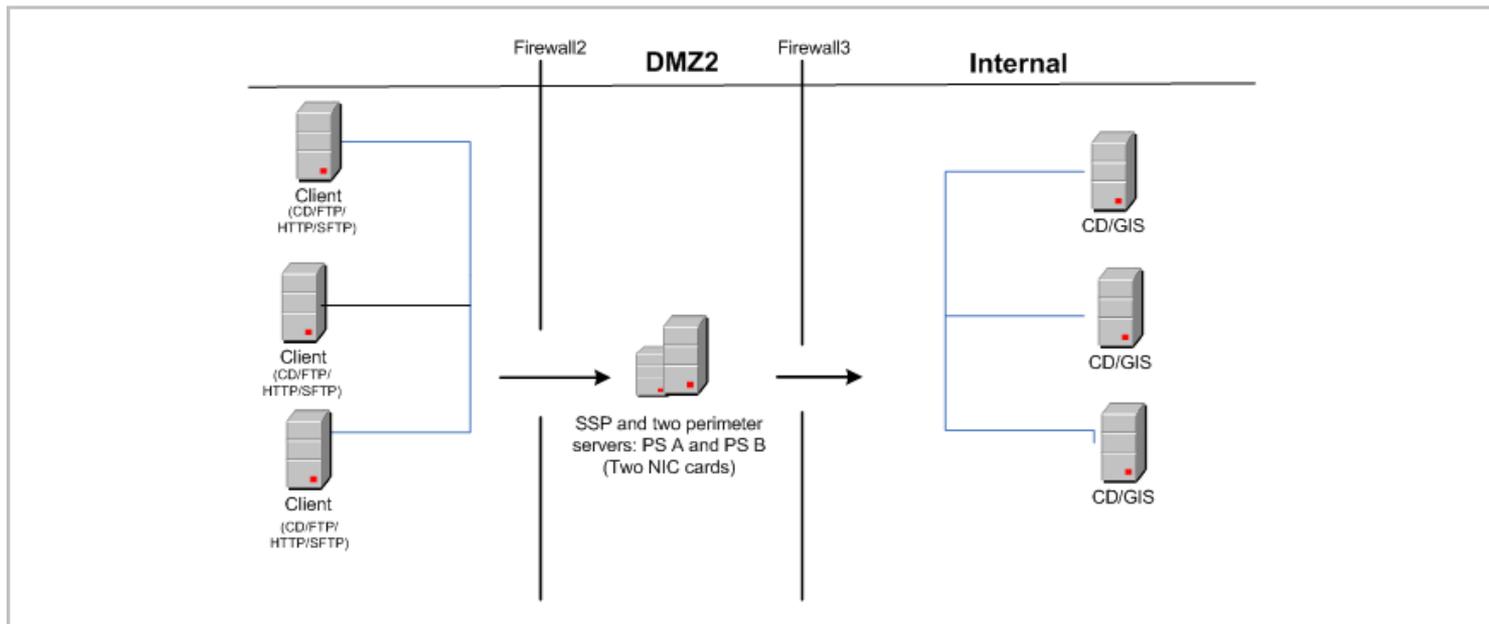
□ Determine Communication Protocols

□ Validation Requirements for Inbound Outbound connections

□ Setup a password policy

Planning and Implementation

□ SSP with Perimeter Server



What other SSP users are reporting?

- Add the functionality to age and expire passwords
 - Enhancement under review
- The Sterling Secure Proxy sftp adapter takes 30 minutes to get up and running(version 3.1)
 - Currently this issue does not have a resolution; it is being worked on by Sterling Commerce Support. If you believe you are experiencing this issue and would like to be notified when a resolution is reached, please open a case through Customer Center and ask that it be associated with number 83055
- Where can I find the ps_200x.jar for the Sterling Secure proxy 3.0.0.1 as mentioned in the documentation?
 - When SSP 3.0.0.1 is downloaded from ESD Portal it will be in a zip file called SSP.V3001.Windows.zip in this zip file you will find the perimeter jar file called ps_200x.jar.
- How to configure Sterling Secure Proxy Version 3 FTP Adapter with SSL for interoperability between Lftp and ProFTP
- How do I change the Web Service port for the Sterling Secure Proxy (SSP) Configuration Manager (CM)?
 - Use the command '`<SSPCM_installation_dir>\bin\configureCmSsl.bat -u <port>`'
 - If you run configureCmSsl.bat without any arguments it will list your available options.
- **The passphrase which was used to originally set up Sterling Secure Proxy has been mislaid. How can I reset it?**
 - Do not ever forget or lose this passphrase. If you do you will be unable to apply patches, and you will need to reinstall completely.
 - There is NO way of circumventing this passphrase



Questions/Comments?

Thank You!