Business Connect

IBMSoftwareUniverse2013

Meet Possible

19th March, Colombo

Title: Smarter Managed File Transfer

Speaker Name: Nagendra R
Designation: Client Technical Professional

Agenda

- Why Managed File Transfer (MFT) ?
- File Movement Patterns
- Common Methods Used
- Common Challenges Faced
- IBM MFT Suite – Overview
- IBM MFT Key Business & Operational Benefits

Why MFT?

Files still synchronize the majority of key process inside and outside your business …

Fulfillment application

Web store application

55% **45%**

Files **other**

55 percent of system to system integration is accomplished via files

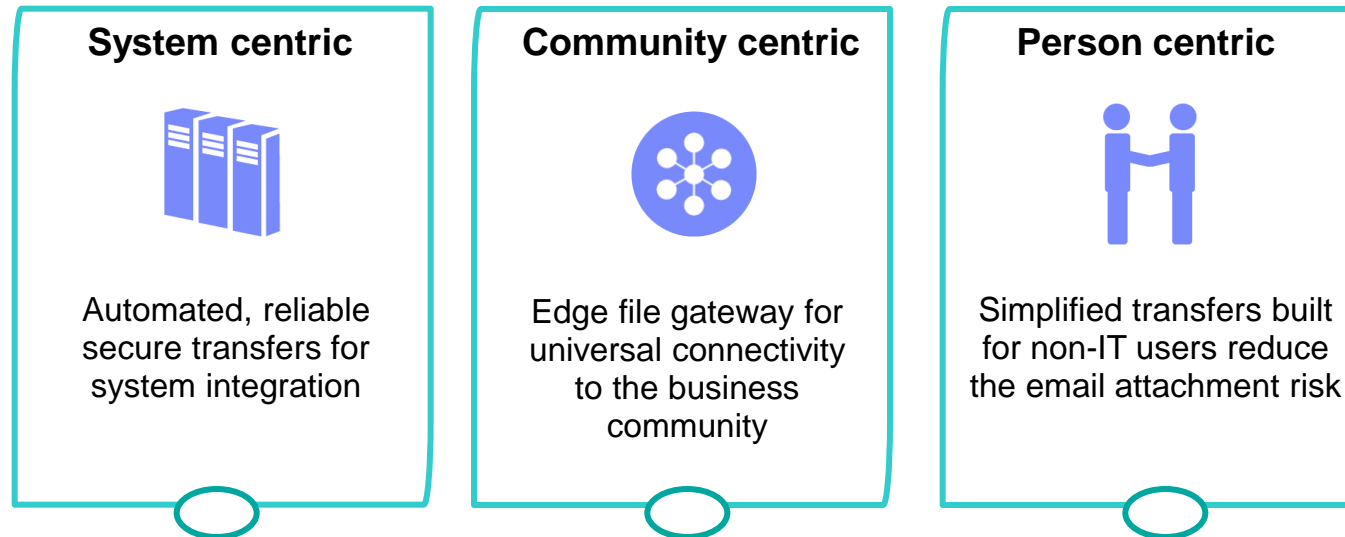If the transfer of that file **fails**, the process that depends on it **fails**

VansonBourne

Some examples when it doesn't work…

- **Banking** – When the file that connects the web based bill pay application to the accounting system doesn't get delivered every hour,
  - customers bills are not paid and large penalties result

- **Telecommunications** – When the customer data file is not synchronized every night between a carrier and Apple,
  - customer is denied upgrade request when they go into Apple store and switch carriers

- **Disaster recovery** – When the daily backup file fails to synchronize the data centers,
  - the company is not prepared when disaster strikes

- **Supply chain** – When the order is not acknowledged,
  - it is given to another provider and the sale is lost

File Movement Patterns

- System Centric – movement between disparate systems
- Community Centric – movement between enterprises and departments with in an enterprise
- Person Centric – movement between people both with in enterprise and across enterprises

System centric	**Community centric**	**Person centric**
Automated, reliable secure transfers for system integration	Edge file gateway for universal connectivity to the business community	Simplified transfers built for non-IT users reduce the email attachment risk

Common Methods For Data Movement

- FTP
- FTP (S)
- SFTP – SCP
- SMTP email attachments
- HTTP – File Uploads
- HTTP(S) – File Uploads
- Physical Media

Common Challenges Faced

- No well defined strategy for secure managed file transfer

- No visibility into what is being moved, when it's moved and by whom

- Customer SLAs being missed; no systemic way of managing SLAs

- Excessive file transfers failures and infrastructure outages

- Takes too long correct failed, incomplete or duplicate file delivery

- Too many calls to business and help desk asking "Where is my file?"

- Takes too long to on-board new customers

- Data security issues/Audit findings

- Operational & process issues due to siloed implementations & management

- Issues with cross platform file delivery/data conversions

IBM Managed File Transfer

IBM Managed File Transfer enables enterprises to reliably and securely govern the critical information flows that run their businesses

Governance   Actionable visibility for business, operations and compliance

System centric
Automated, reliable secure transfers for system integration

Community centric
Edge file gateway for universal connectivity to the business community

Person centric
Simplified transfers built for non-IT users reduce the email attachment risk
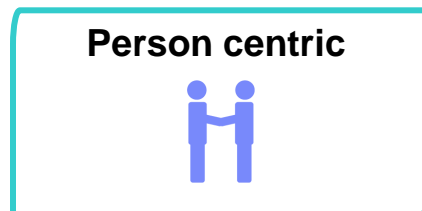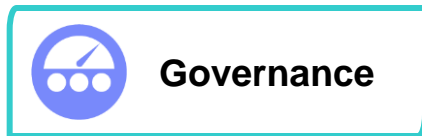
Emerging use cases
-
-
-

Security   Common proxy services

MFT suite products

Product

Deployment

Governance

System centric

Community centric

Person centric

Security

- IBM Sterling Control Center,

- IBM Sterling Connect:Direct

- IBM Sterling File Gateway
- IBM File Transfer Service

- IBM Sterling myFileGateway
- IBM QuickFile (public beta)

- IBM Sterling Secure Proxy

- On Premise with web and mobile access

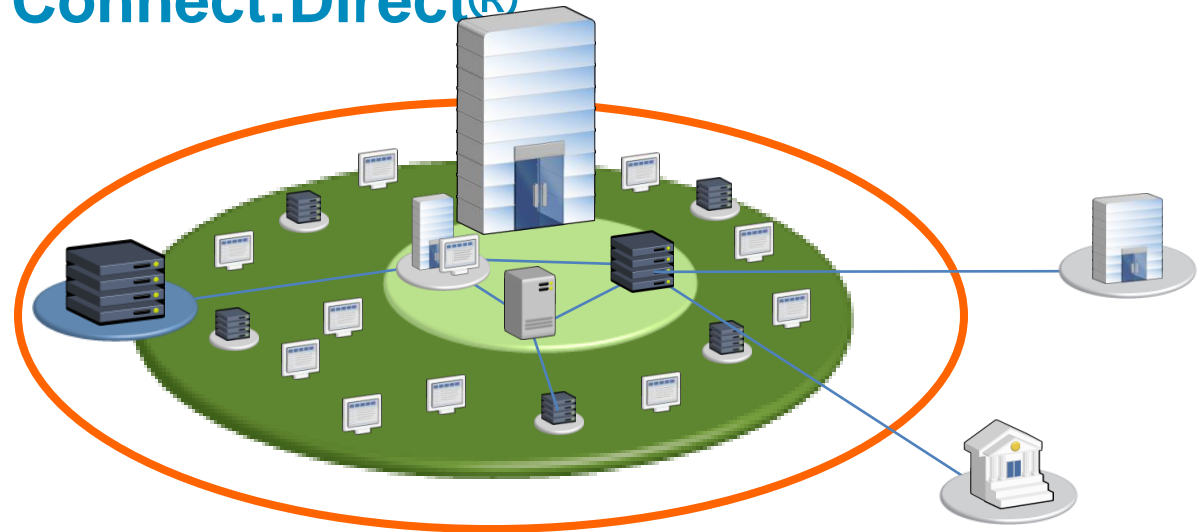- On Premise with broad platform support

- On Premise
- Cloud managed service

- On Premise
- Software appliance

- On Premise

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Emerging use cases

Security — Common proxy services

MFT suite products

	Product	Deployment
Governance	▪ IBM Sterling Control Center	▪ On Premise with web and mobile access
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Community centric	▪ IBM Sterling File Gateway ▪ IBM File Transfer Service	▪ On Premise ▪ Cloud managed service
Person centric	▪ IBM Sterling myFileGateway ▪ IBM Quick File	▪ On Premise ▪ Software appliance
Security	▪ IBM Sterling Secure Proxy	▪ On Premise

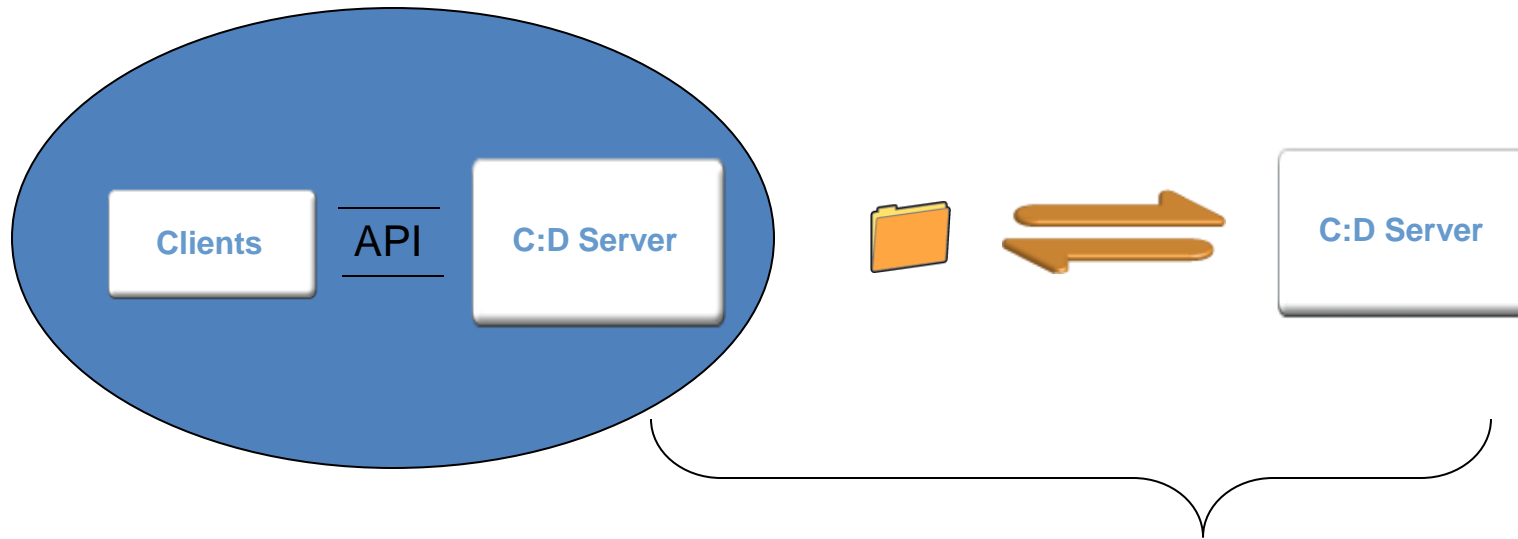# IBM® Sterling Connect:Direct®

Point-to-point file transfers
IBM® Sterling Connect:Direct®

What it does

- High volume, large size, high performance file transfers

- Automation, retry-restart, for unattended operations

-Certified security to provide sensitive data

-Increase transfer speed over high speed networks

How it is delivered

-Client-server application optimized for high volume, assured data delivery

-Well defined API that supports multiple clients and job scheduling

Connect:Direct: a client-server app

- Clients request services from a C:D Server
- Well-defined programmable API
- Variety of client interfaces
- Clients are human users and applications.

Connect:Direct: the file transfer protocol

- Sterling-invented file transfer protocol
- Server-to-server:
- Reliable and secure

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System centric	Community centric	Person centric	Emerging use cases
Automated, reliable secure transfers for system integration	Edge file gateway for universal connectivity to the business community	Simplified transfers built for non-IT users reduce the email attachment and Dropbox risk	• • •

Security   Common proxy services

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IBM® Sterling File Gateway

Manage "edge" based data exchange with an intelligent centralized gateway

B2B onboarding and data exchange
IBM® Sterling File Gateway

IBM® Sterling File Gateway

An "Edge" based application for exchanging data between partners, customers, suppliers and employees

- **What it does**
  - Provides a centralized file gateway for processing inbound and outbound files
  - Supports any format, any protocol, any size B2B file transfer
  - Enables the transformation of files to optimize data delivery processes
- **How it is delivered**
  - Application layer built on a B2B integration gateway
  - Mail box services and communication adapters
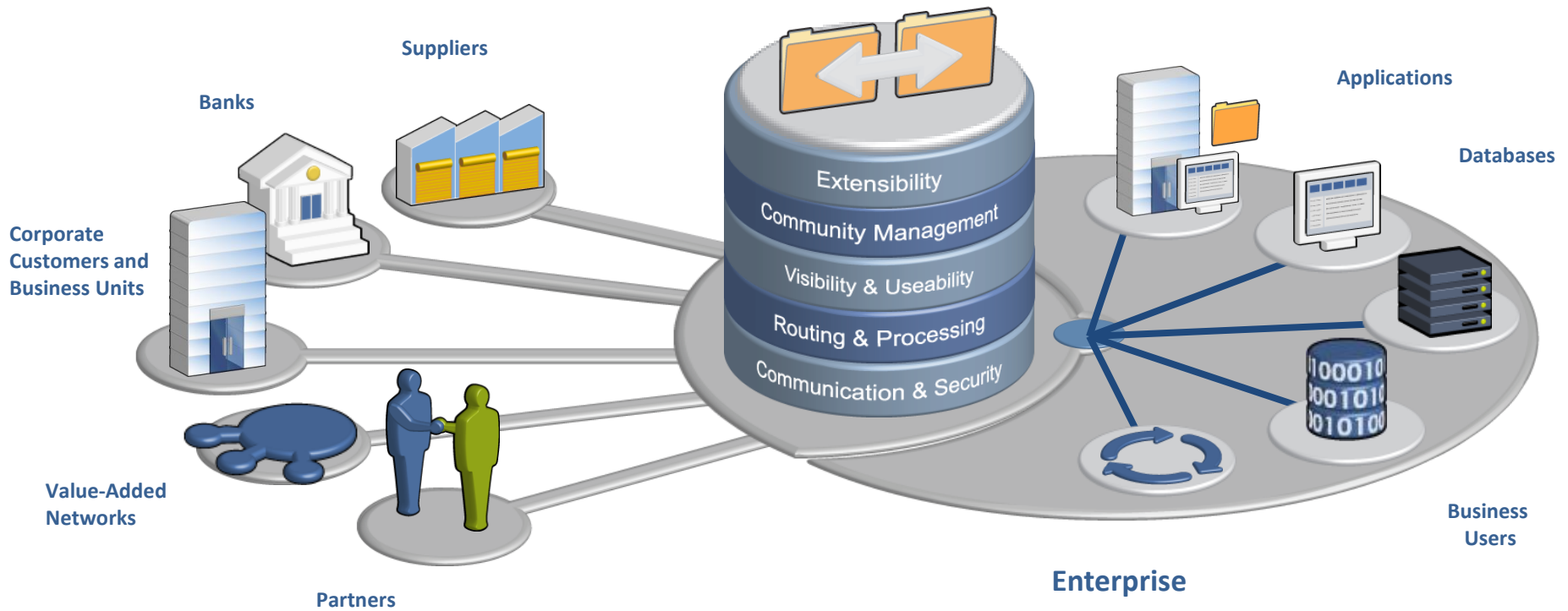 - Partner portal (myFileGateway) for self service

Sterling File Gateway

The next generation B2B-enabled managed file transfer solution:

Advancement of capabilities that combine

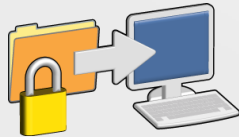Sterling's leading B2B integration gateway and file transfer solutions

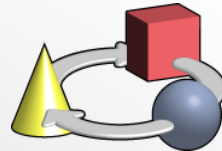# Sterling File Gateway Solution Footprint

Sterling File Gateway Process Flow
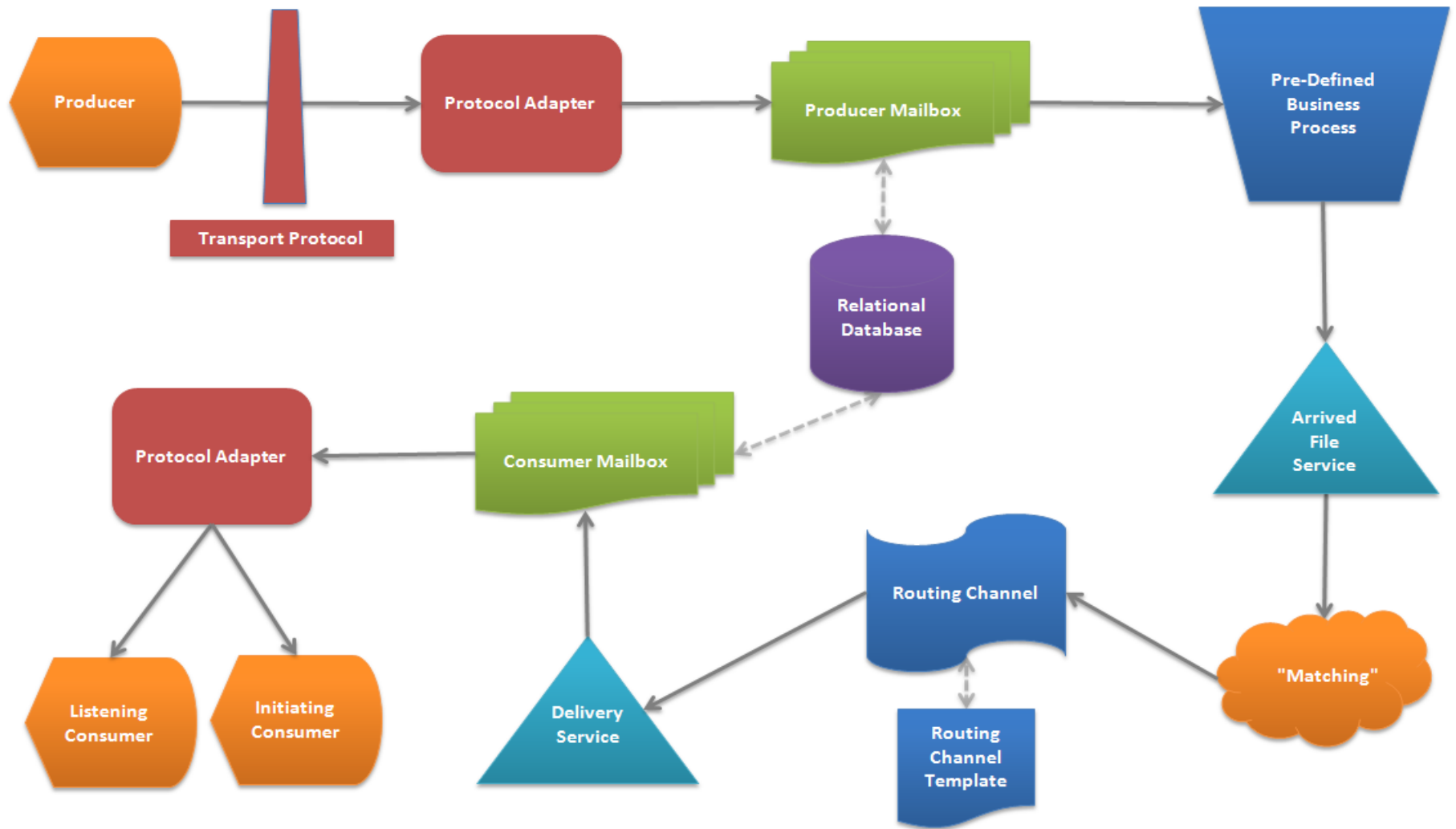
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System centric	**Community centric**	**Person centric**	**Emerging use cases**
Automated, reliable secure transfers for system integration	Edge file gateway for universal connectivity to the business community	Simplified transfers built for non-IT users to reduce the 'personal' transfer risk	•Extreme file transfer

Security — Common proxy services

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Introducing IBM QuickFile™ for person centric transfers

Simple

Empowers business users to quickly be productive

Reliable

Built to handle large files with verification of receipt

Secure

Enables corporate security policies to be applied to reduce risk

Enterprise ready

Built with enterprise integration, performance, and scale by the leader in Managed File Transfer

IBM® QuickFile™

> **Quick to deploy. Quick to learn. Quick to deliver files between people**

▪ What it does

- Offers business users a browser based interface to transfer large files to another user without IT involvement
- Applies Managed File Transfer visibility and reliability to person-to-person file transfers
- Helps ensure the security of data in-motion or at-rest
- Removes software limitations to the size of files that can be transferred (through a applet)

▪ How it is delivered

- As a hardened software appliance that prevents access to data or the underlying code
- Shipped as a software image that is run in a VMware ESXi environment
- With a Choice of browsers including Internet Explorer/Safari/Firefox/Chrome

IBM QuickFile – System Requirements

- QuickFile is delivered as Open Virtual Appliance (OVF) software deployed using VMware ESXi 5.0 or later
  - Hardware platforms restricted to those supported by VMware
  - 2 CPUs, 8GB RAM – recommended
  - Up to 2TB of virtualized file storage (plus option for network attached storage)
- QuickFile is accessed using familiar web browsers:
  - Internet Explorer
  - Mozilla Firefox
  - Apple Safari
  - Google Chrome Web
- QuickFile optionally integrates with:
  - IBM Sterling Secure Proxy for perimeter security using a DMZ proxy
  - IBM FileNet for content management processes such as file archiving
  - IBM Sterling Control Center for centralized monitoring and reporting
  - Enterprise services, including SMTP, LDAP/Active Directory, external database (HA deployment) and network attached file system (HA deployment)

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IBM® Sterling Control Center

Gain control and insight of the movement of critical corporate data

Manage and monitor file transfer activity
IBM® Sterling Control Center

Deliver higher levels of service

Visibility

- To all business process and file transfer activity
- To environment health
- Through rule-driven service level mgmt
- As proactive alerts
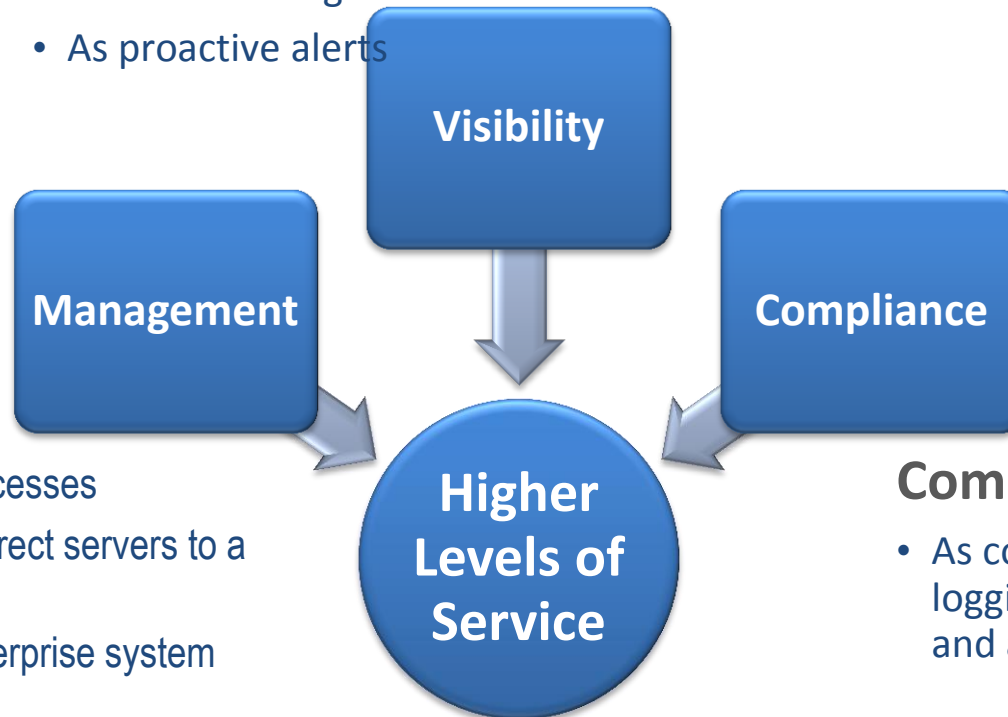
Management

- Of exceptions before they impact SLAs
- By centrally restarting processes
- By configuring Connect:Direct servers to a common policy
- Through interfacing to enterprise system management tools

Compliance

- As consolidated logging, reporting, and analytics

Visibility

Management

Compliance

Higher Levels of Service

Visibility, Management and Compliance

Service Level Management

Where is my file? Where are my business processes?

Asset Management

Where is my software installed and running?

Configuration Management

Are my servers configured correctly? Do they comply with policy?
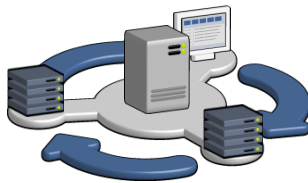
Connect:Enterprise   **Connect:Direct**   **B2B Integrator**   **Sterling File Gateway**   **FTP Servers**

Secure connections and easy integration

Sterling Control Center (SCC)

- SCC Console
- SCC Web Console
- SCC Mobile

Email Server

Enterprise Mgt or Other System

SMTP

SNMP

HTTP or HTTPS

SCC Engine

Database

Reports

HTTP or HTTS

C:D Browser

SI Browser

SFG myFileGateway

Reports

3rd Party Reporting

SNMP

SSL or TLS

SOAP over HTTP or HTTPS

Connect:Enterprise

Connect:Direct

Sterling Integrator

Sterling File Gateway

FTP Servers

Server Status

Server Status Monitor provides drill-down data such as
- Server type and version
- Number of alerts
- Maximum concurrent processes

Sterling Control Center Console - ccbuild2

Control Center | Manage | Monitor | Configure Servers | Tools | Window | Help

Servers | Groups

- Control Center
  - CD Connect:Direct (5 / 9)
    - A2B.ZOS.AT46
    - ccdev02_44_0
    - elpaso
    - **PGOUNDER**
    - Q1A47M1
    - u_phoenix
    - w-group-auth
    - w_winbody44
    - z_tps...
  - CE Connect:Ent...
    - QAAIX1
    - qasles
    - qasles
  - GIS Gentran Integ...
    - phoenix-node-1
  - FTP File Transfer Protocol (0 / 1)
    - Ftp-pgounder

Find:

Memory Monitor Console:

Treeview provides instant access to server status—servers and clusters up and running, monitoring paused, or error conditions

Server Status Monitor - Control Center

	Server	Alerts			Server Version	License			Max Co	
		H	M	L		Expiration	Notification	Sessions/Accts	High	#
	A2B.ZOS.AT...	0	0	0	Unknown		30 days			
	ccdev02_44...	0	0	0	WINDOWS 4451	01-01-2010	30 days			
	elpaso	0	0	0	UNIX 3601	01-01-2010	30 days			
	Ftp-pgounder	0	0	0	Unknown Unknown		30 days			
	PGOUNDER	1	0	0	WINDOWS 4460	01-01-2010	30 days			
	phoenix-nod...	0	0	0	SunOS-sparc-5.10 ...	Fri, 23 Jan ...	30 days		2	3
	Q1A47...									

Find:

Adapter Status Monitor - gis-4321

Filter: None (full listing shown)

Adapter Status Monitor provides drill-down to:
- Service Properties
- Perimeter Service Properties
- Service Configuration

#	On/Off	State	Display Name	Service Name	Environ
1	✔	Running	ACH Test File System Adapter		all
2	✔	Running	AFT Routing Test FTP Server Aga...		all
3	✔	Running	AS2Extract		all
4	✔	Running	AS3 FileSystem Adapter		all
5	✔	Running	B2B FTP Client Adapter		all
6	✔	Running	B2B HTTP Client Adapter		all
7	✔	Running	B2B HTTP Communications Adap...		all
8	✔	Running	B2B_HTTP_SERVER_SERVICE		all
9	✔	Running	B2B Sterling Information Broker...		all
10	✔	Running	B2B SMTP Client Adapter	B2B_SMTP_CLIENT_ADAPTER	all
11		Stopped	CEU Server Adapter BP	BP	all
12	✔	Running	BPFAULT File System Adapter	BPFAULTFileSystem	all
13	✔	Running	BackupService	BackupService	all
14	✔	Running	BaseHTTPService	BaseHTTPService	all
15	✔	Running	BasicCustomerImport_FSA	BasicCustomerImport_FSA	all
16		Stopped	CCCSFTP Server Adapter	CCCSFTPServerAdapter	all
17	✔	Running	CDInteropTestFSA	CDInteropTestFSA	all
18	✔	Running	CDSERVER1	CDSERVER1	node1

Find:

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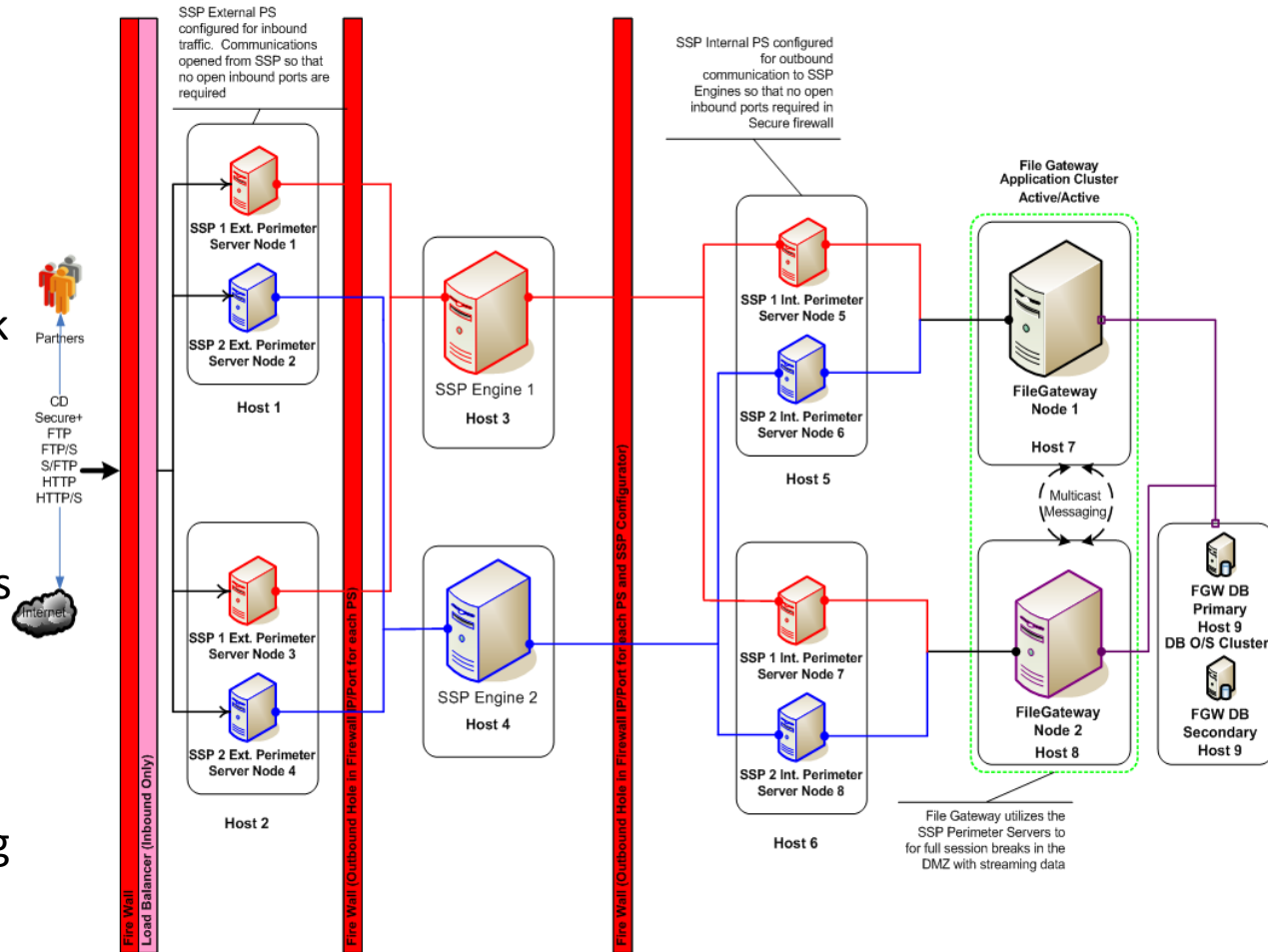# Market needs for Perimeter Security

- Perimeter security is vital for selling B2B and MFT server solutions and provides:

- Denial of service

- Multi-factor Authentication

- Trading Partner Authorization

- Session break

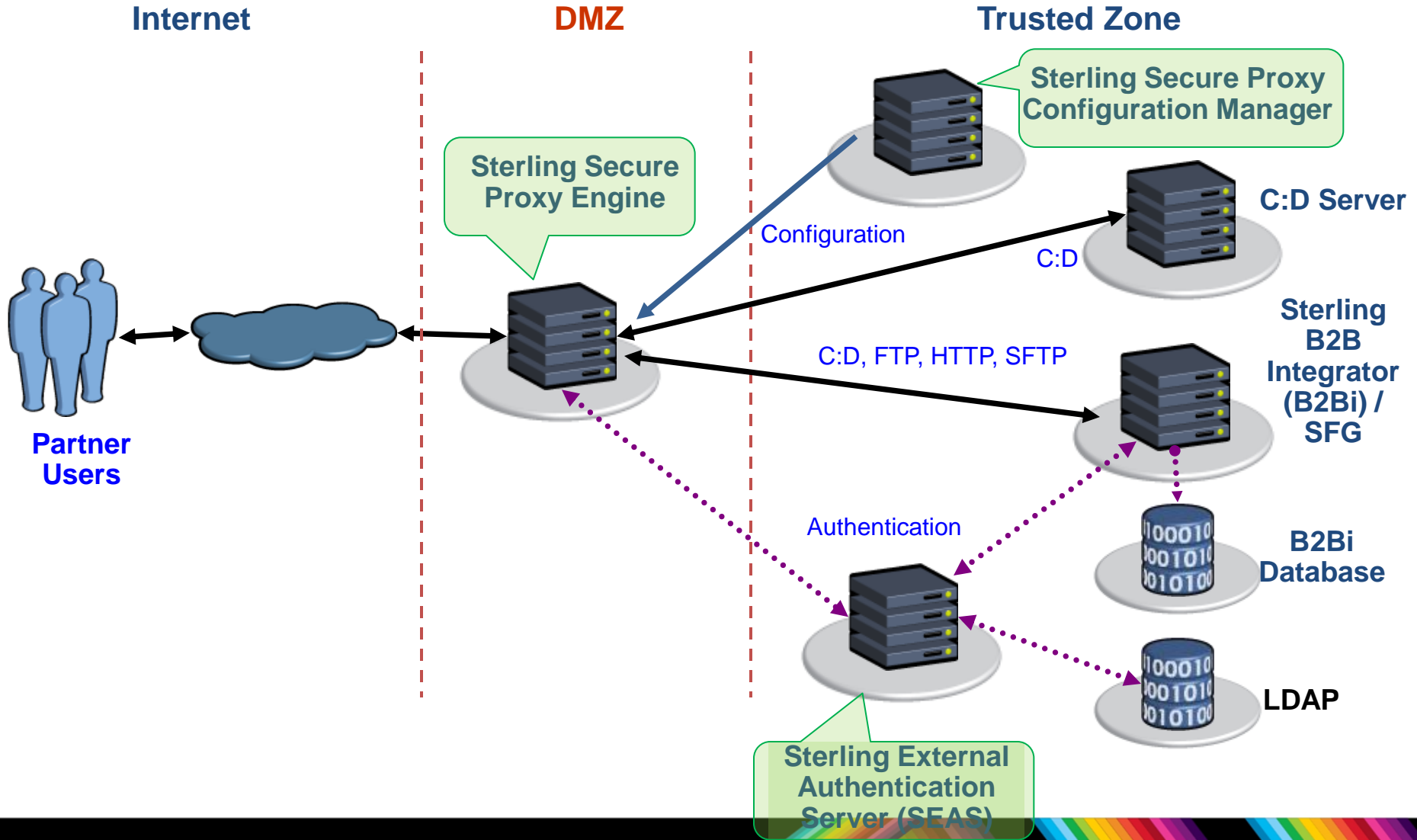- Minimize holes in firewalls

- No rich content in DMZ
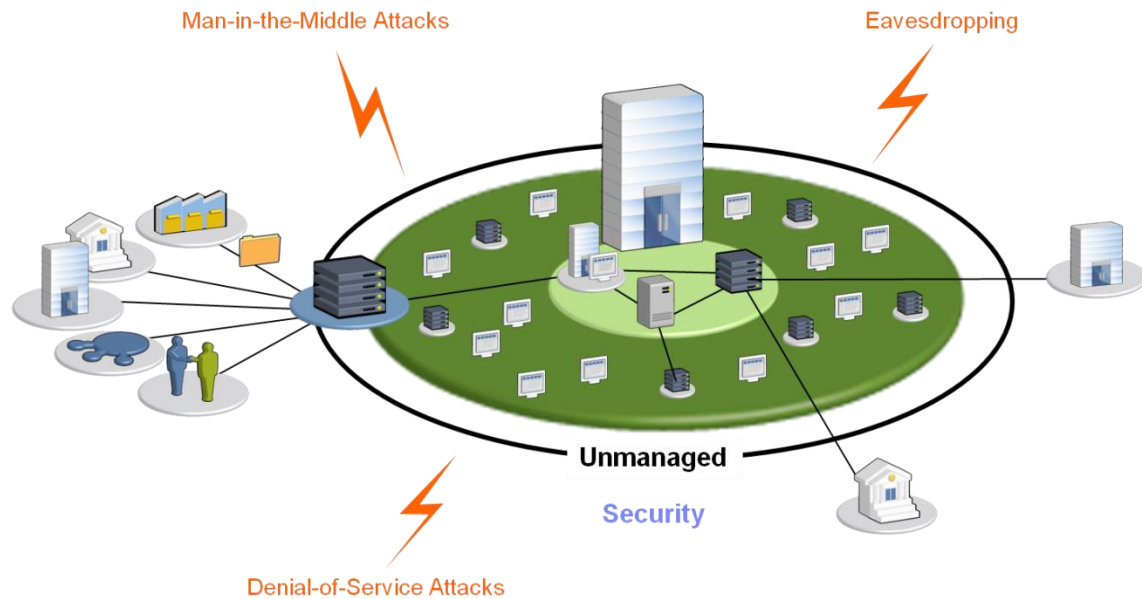
Perimeter security protects your data movement infrastructure

Security features provided by SSP:

- Leverages Perimeter Servers

- Provides full session break in DMZ

- Supports multiple HSMs

- Provides authentication as well as validation of all customer sessions

- Provides multi-factor authentication for incoming sessions

- Provides protocol

Architecture

Internet

DMZ

Trusted Zone

Sterling Secure Proxy
Configuration Manager

Sterling Secure
Proxy Engine

Configuration

C:D Server

C:D

Sterling
B2B
Integrator
(B2Bi) /
SFG

C:D, FTP, HTTP, SFTP

Partner
Users

Authentication

B2Bi
Database

LDAP

Sterling External
Authentication
Server (SEAS)

Security - Overview

- Authentication & Authorization
  - Two factor authentication, Userid/Password & RSA Token usage with SFG and SSP
  - LDAP Authentication
  - CRL check
  - Additional certificate checks (i.e. Subject Name lookup via LDAP)
  - Single Sign on to Trusted side application through SAML 2.0 tokens
  - Role-based security provides users access to files, business processes etc
  - Custom Password Policies (length, pattern, expiry etc)
- Encryption
  - Support for x.509 certificates for encryption, signing
  - Secure Socket Layering (SSL) and Transport Layer Security (TLS) with Client Auth, Server Auth & Common Name authentication
  - Document Encryption of files on DB and/or file system
  - Support to OCSP (Online Certificate Status Protocol)
  - Federal Information Processing Standards (FIPS) 140-2 compliant
- Extended Security
  - Ability to configure HTTP Proxy Server, Sterling Secure Proxy Server, SSP with SSL
  - HSM "*ProtectServer Gold PCI devices*" & "*SafeNet Eracom ProtectServer Orange External*" are supported

IBM MFT Key Business & Operational Benefits

- Improve the Customer Experience – Reduce Time to Market
  - Reduce time to on-board. Recognize Revenue quicker
  - Extend Visibility and Self Service to the Customer
  - Quicker response to File Transfer Issues

- Improve Operational Efficiency – Reduce Business Impact
  - Improve File Transfer Visibility
  - Improve File Transfer Reliability
  - Remediate Issues Quicker
  - Reduce number of errors
  - Reduce Call volume with self service
  - Enable Straight Through Processing

- Protect the Brand – Reduce compliance risk and security
  - Meet Industry and Regulatory Compliance (e.g. PCI, etc.)

Three questions to determine if you need MFT

- Are your customers (internal and external) demanding **greater levels of service or less**?
  - SLAs, processing windows, visibility into your internal processes

- Are your business models requiring **more information or less information** to be exchanged with your value chain?
  - Cloud, resellers, suppliers, acquisitions, outsourcing

- Are **regulatory and compliance requirements increasing or decreasing** for your business?
  - Fraud detection, security audits, government reporting

Thank You!

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