

IBM's Strategic Approach to System-Centric MFT with Sterling Connect:Direct and WebSphere MQ Advanced

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



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**

IBM Managed File Transfer enables enterprises to reliably and securely govern all critical information flows across the business



Governance

Actionable visibility for business, operations and compliance

System-centric



Automated, reliable, secure transfers for system integration

Community-centric



Multi-protocol edge gateway for universal connectivity to the business community

Person-centric



File sync and share



Emerging use cases



Extreme Sync
Direct to Cloud
...



eXtreme

Large file/data set, long distance, speed is critical







Security

Common perimeter services, proxy and authentication



Data exchange and transfer is critical because it drives key processes and interactions

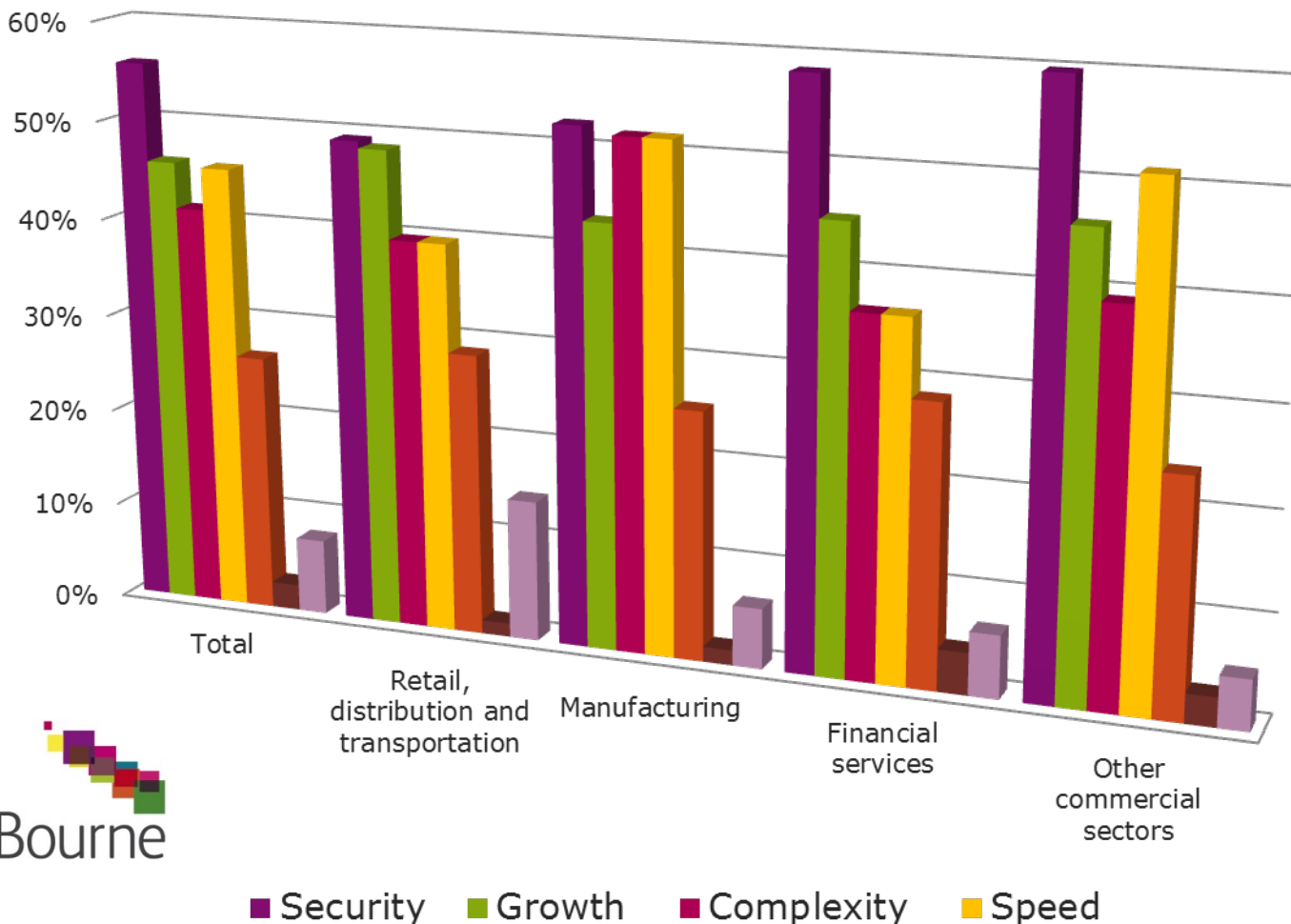
	Originator/Destination	Payload	Key drivers
 System centric	<ul style="list-style-type: none"> ▪ Retailer to third party processor ▪ Internal system to system 	<ul style="list-style-type: none"> ▪ Credit card transactions ▪ Batch integration data 	<ul style="list-style-type: none"> ▪ Volumes, security, reliability ▪ Reliability, security, platforms
 Community centric	<ul style="list-style-type: none"> ▪ Manufacturer to suppliers ▪ Corporates to banks 	<ul style="list-style-type: none"> ▪ Orders, forecast, design ▪ Payments, treasury 	<ul style="list-style-type: none"> ▪ Multi protocol, file processing ▪ Monitoring, security
 Person centric	<ul style="list-style-type: none"> ▪ Users sharing with other users inside/outside org 	<ul style="list-style-type: none"> ▪ Legal briefs, marketing proofs, customer lists, support logs 	<ul style="list-style-type: none"> ▪ Simplicity, security, interfaces, sync
 Emerging	<ul style="list-style-type: none"> ▪ Ingest and distribution of large digital assets ▪ Movement of Big Data to/from/through cloud 	<ul style="list-style-type: none"> ▪ Movies, eDiscovery, seismic data, back-up ▪ Research, genomes, Movies, social 	<ul style="list-style-type: none"> ▪ Speed, Large file/data set size, global WAN distances



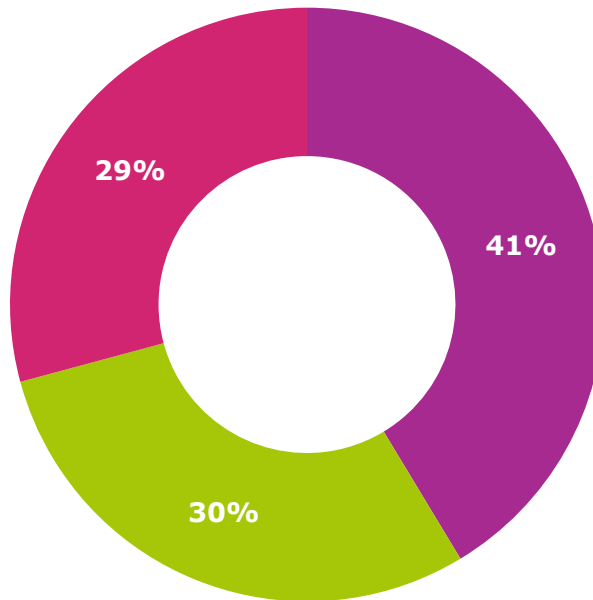
55% of system integrations (both internal & external) are accomplished via files

Top concerns around MFT across industry

Which of the following issues limits the effectiveness of your file transfer systems?



The change in file transfer workloads ...



- **System centric transfers:**
automated, secure transfers for system-to-system integration
- **Community centric transfers:**
transfers that link your business community to your organization
- **Person centric transfers:**
transfers between people inside and outside your company

Please give an estimation of the volume (number) of transfers in the following categories by allocating 100% between the following options:

2013 Vanson Bourne B2B Integration and MFT Global Study



Increased Focus on Governance, Risk & Compliance with MFT

Use cases and requirements guide the choice – not the technology



Redefining MFT

MFT has changed

- It is not about products, but business driven use cases
- Choices facing today's enterprises need not to be about the underlying technology
- The priority is to bring the benefits of governance, security and reliability to more of the data exchanges that power today's processes.
- The financial flexibility to leverage existing infrastructure or adapt flexibly over time is critical to any strategic decision.



Customer Choice for MFT

Everything you need to align MFT with the ever-changing use cases of your business

Operational Visibility and Governance

- Sterling Control Center for monitoring, management, and audit of all file transfers (central services and endpoints)
- Improved exception handling and service-level management, regardless of the use case or technology chosen
- Built-in operational dashboards and customizable reports and analyses
- Easily extensible to provide in-depth business insight through IBM Business Monitor

Flexible Deployment

- Choice of MFT transports: Connect:Direct and MQ transports
- Mix-and-match services, mix-and-match endpoints within the licensed environment
- Change the mix as your business needs change
- Add additional capacity as your workloads expand without the need to declare in advance what services will be deployed

Exploring the various use cases for System-Centric file transfer

- Secure, auditable, and assured delivery (Internal Only, Internal and External)
- Secure data exchange with many customers and partners
- Migration from FTP to MFT (both MQ MFT and Sterling Connect:Direct can help with this)
- Process-driven, file-based integration
- File transmission service center
- File transfer management enabled by SOA and ESB

Leveraging the right system-centric MFT technology

- Architectural expertise and past implementation choices
 - What patterns of data movement are in use or required?
 - Which advantages are more important to you?
- Buyer / sponsor organization preferences
 - Are you already a WebSphere MQ shop?
 - Are you already a Sterling Connect:Direct shop?
 - Are you using or requiring multiple transport protocols?
- Community standards or preferences
 - By partner or business unit
 - Industry-specific

Two New Ways to Deliver IBM's System-Centric MFT



IBM Connect:Direct Advanced

The reliable solution for secure, point-to-point file transfers.

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 and overcome latency issues

What it allows customers to do

- Move files with confidence and upgrade unreliable, unsecured FTP
- Simplify coding and automation of new file transfer links
- Handle growth in data volume and size without increase in staff

What differentiates IBM Sterling

- Reliability – Eliminates file transfer disruptions from software failures
- Security – Protects privacy and integrity of data because the IBM Sterling protocol has never been breached



IBM WebSphere MQ Advanced

WebSphere MQ File Transfer Service delivers a complete solution for reliable file movement across the enterprise.

What it does

- Tracks the movement of files from source to target
- Automates transfers to avoid unnecessary delays and lower levels of staff productivity
- Helps insure the secured management and auditability of mission-critical files
- Consolidates files and messages into a single transport to eliminate disparate infrastructures and reduce integration costs

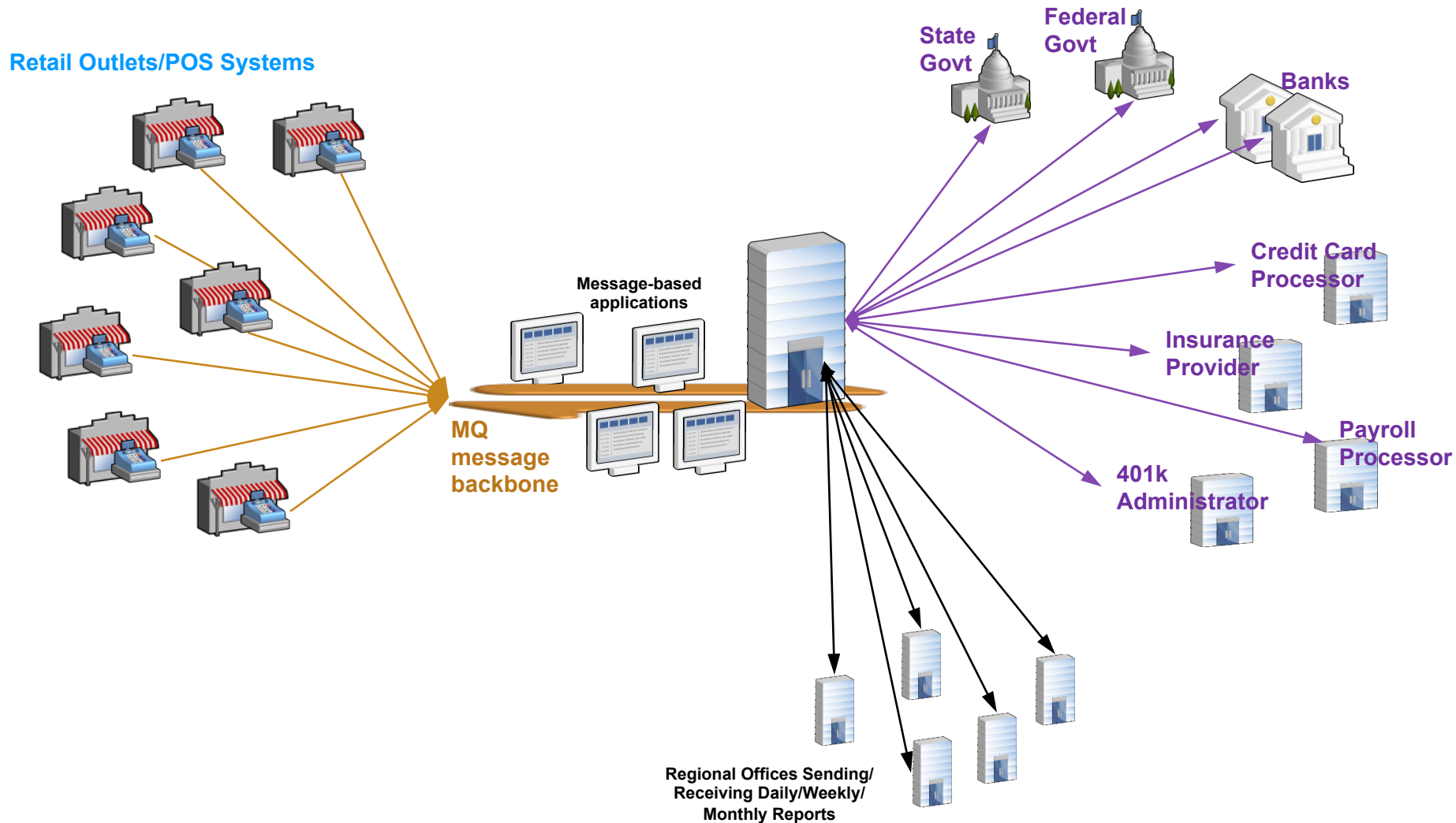
What it allows customers to do

- Leverage their WebSphere MQ infrastructure for Managed File Transfer
- Integrate internal file transfers with IBM's B2B Edge gateway
- Help insure the security, reliability and auditability of point-to-point files transfers

What differentiates IBM?

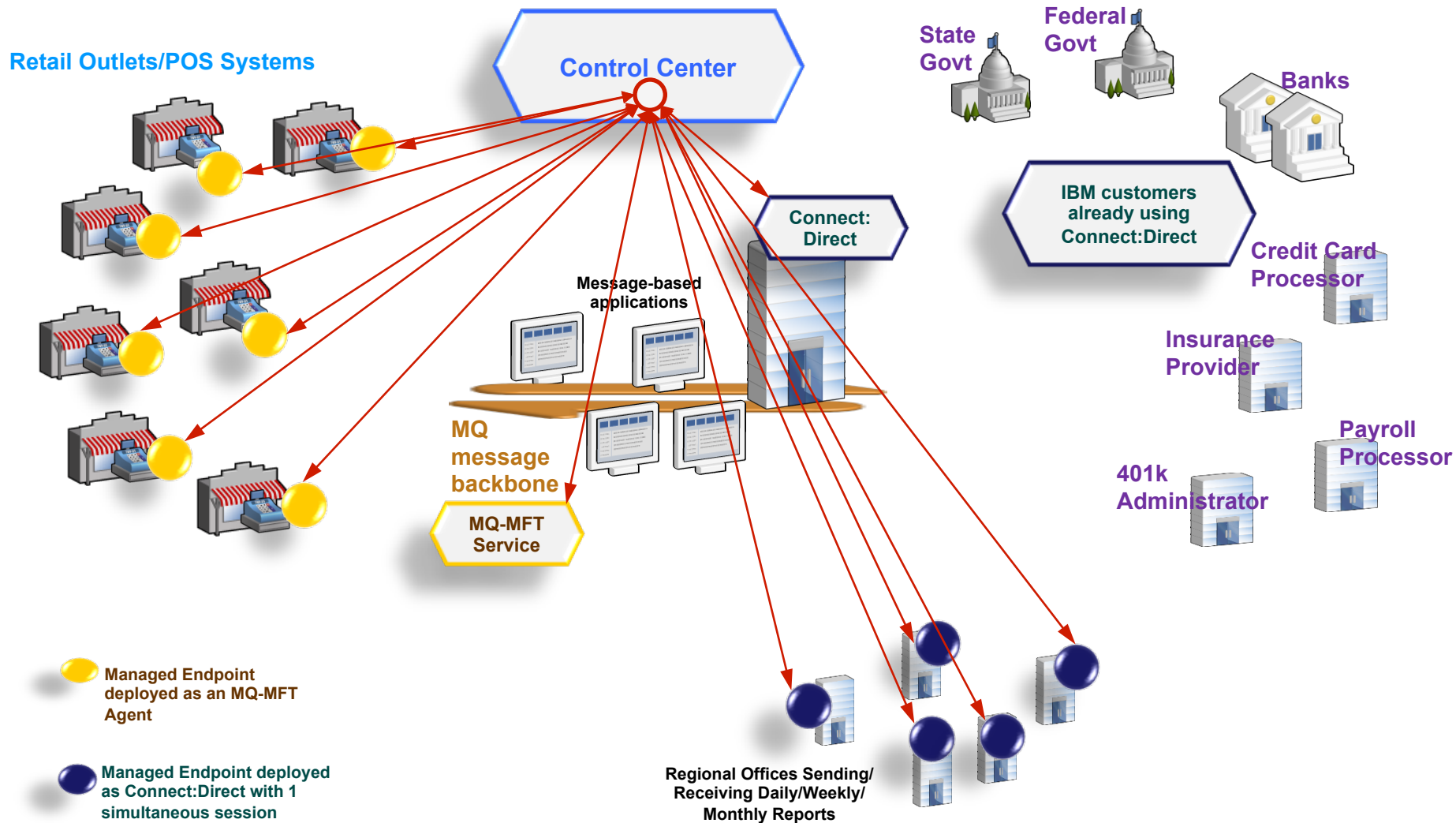
- Proven message-oriented middleware technology lets you capitalize upon your existing IT investment
- Leverages an Enterprise Service Bus infrastructure for universal file delivery including messages, files and events

Scenario 1: Retailer with multiple Use Cases

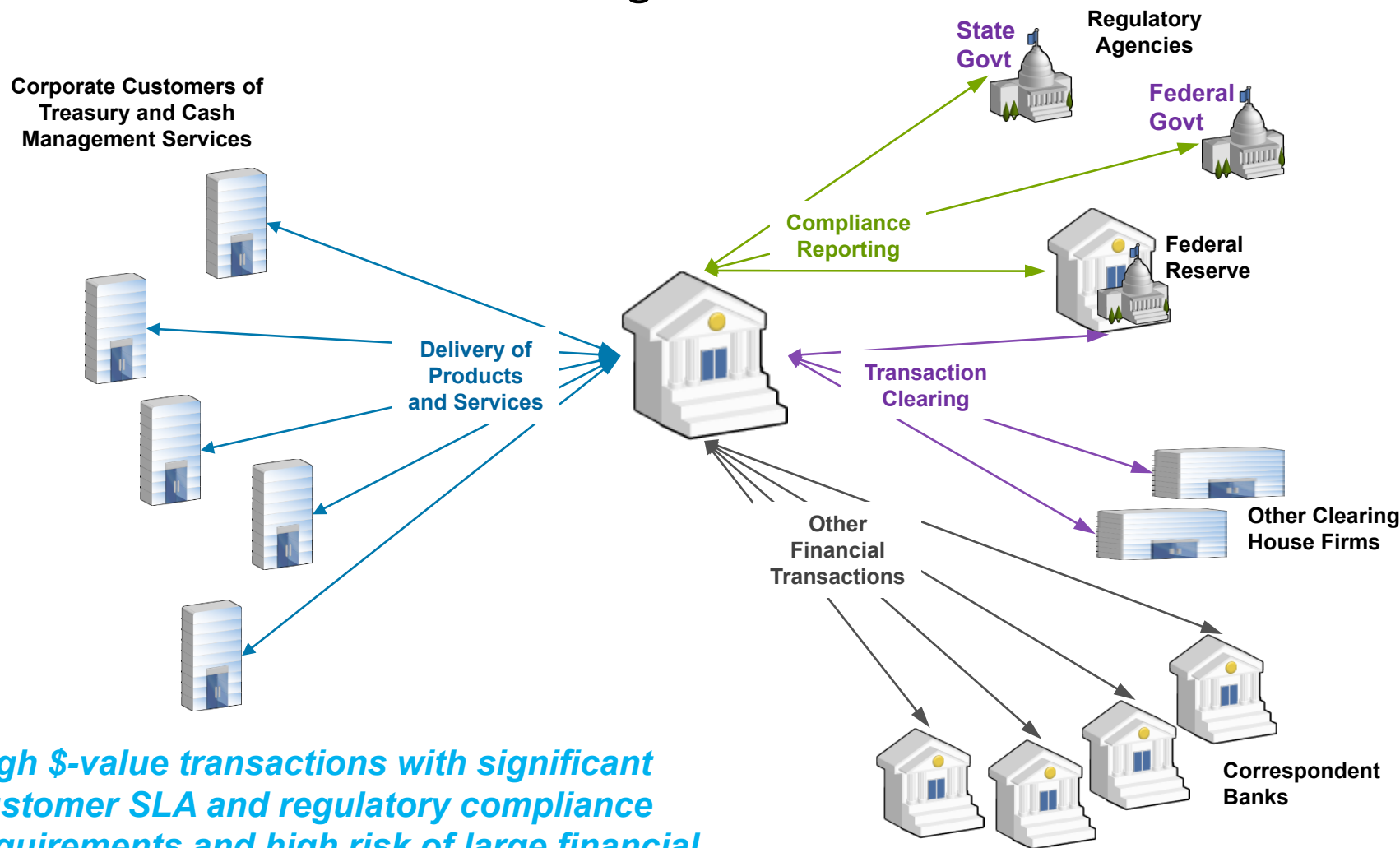


Scenario 1: Retailer with multiple Use Cases

How customer deploys IBM Connect:Direct Advanced to meet their needs



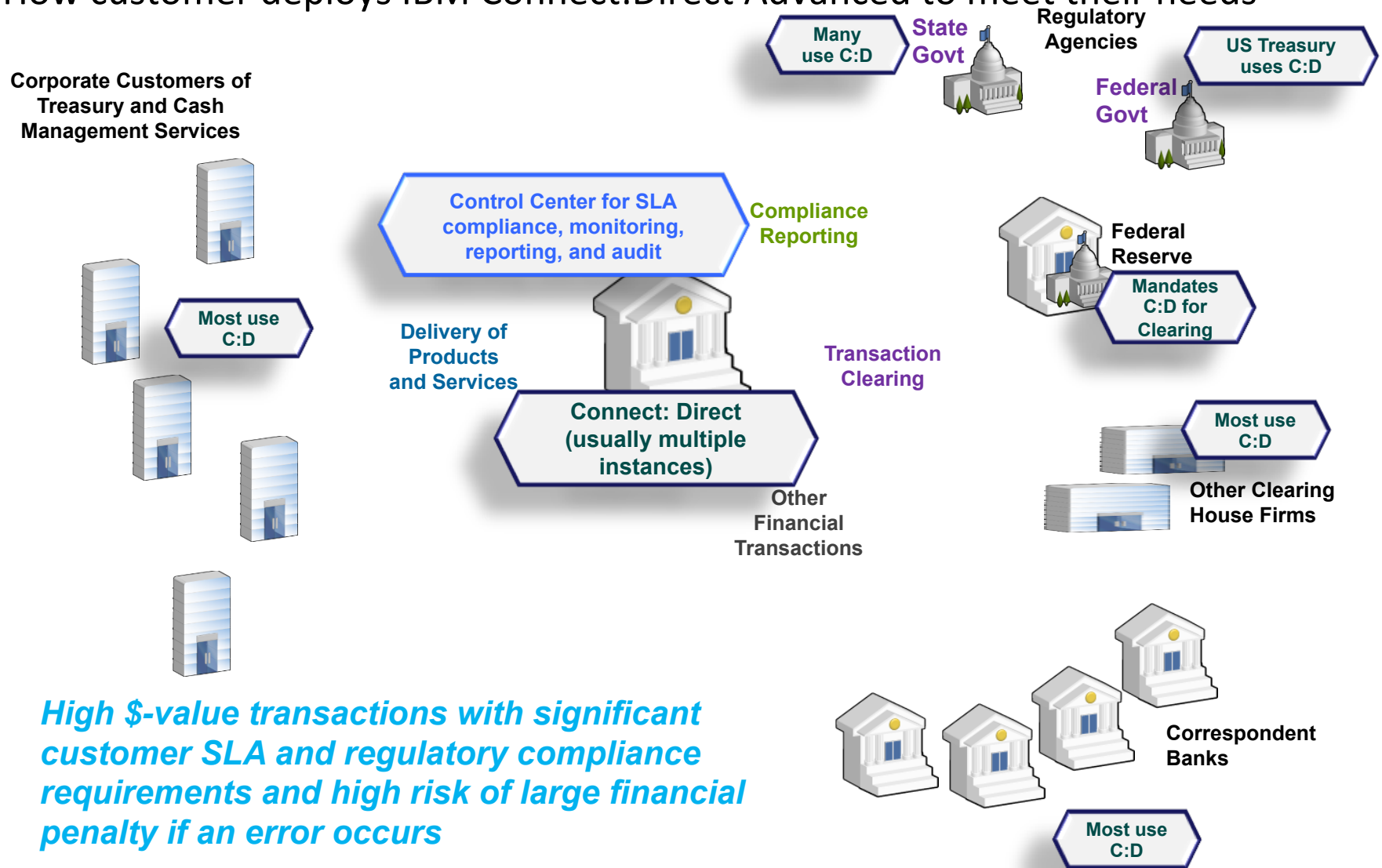
Scenario 2: Commercial banking



High \$-value transactions with significant customer SLA and regulatory compliance requirements and high risk of large financial penalty if an error occurs

Scenario 2: Commercial Banking

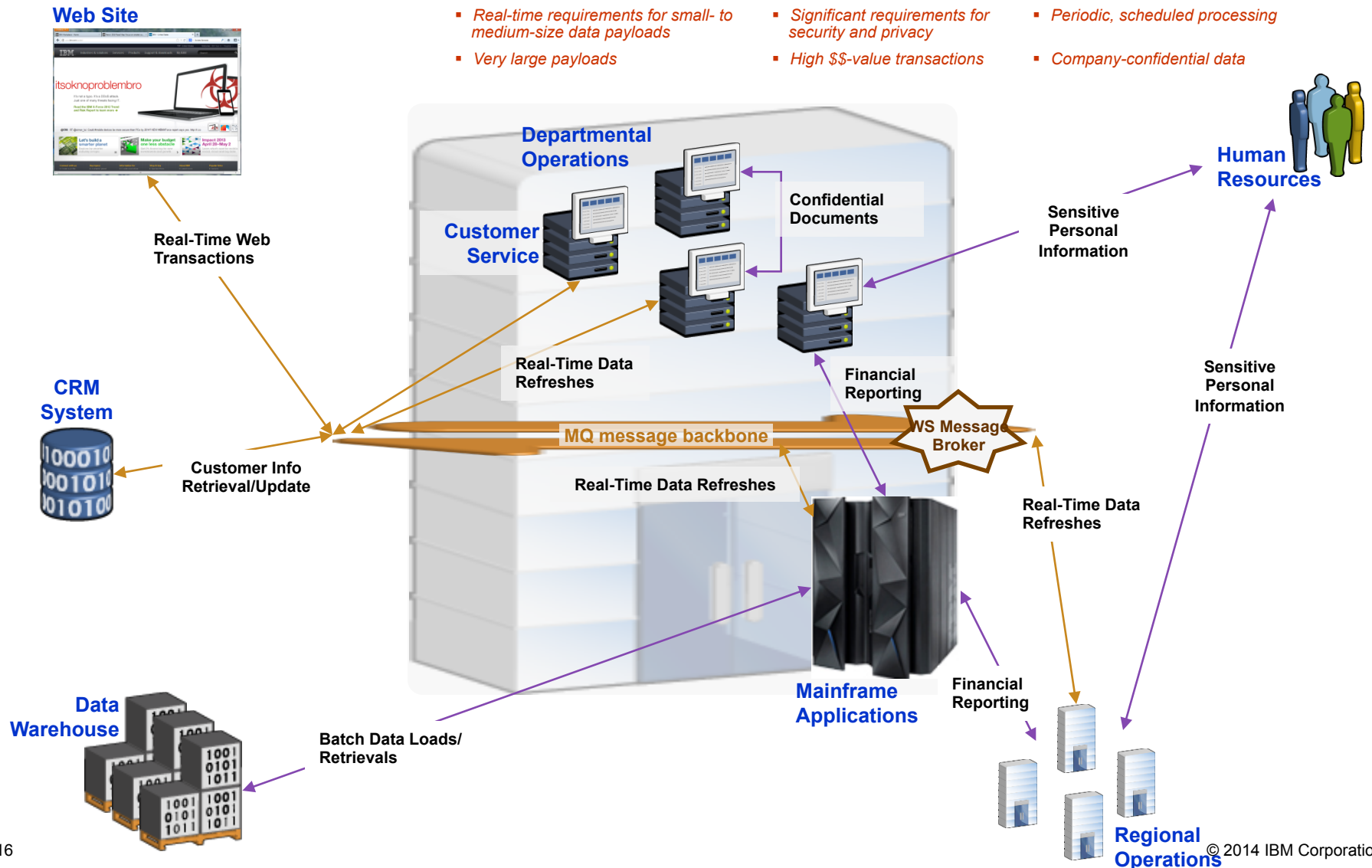
How customer deploys IBM Connect:Direct Advanced to meet their needs



Scenario 3: Multiple Internal Use Cases

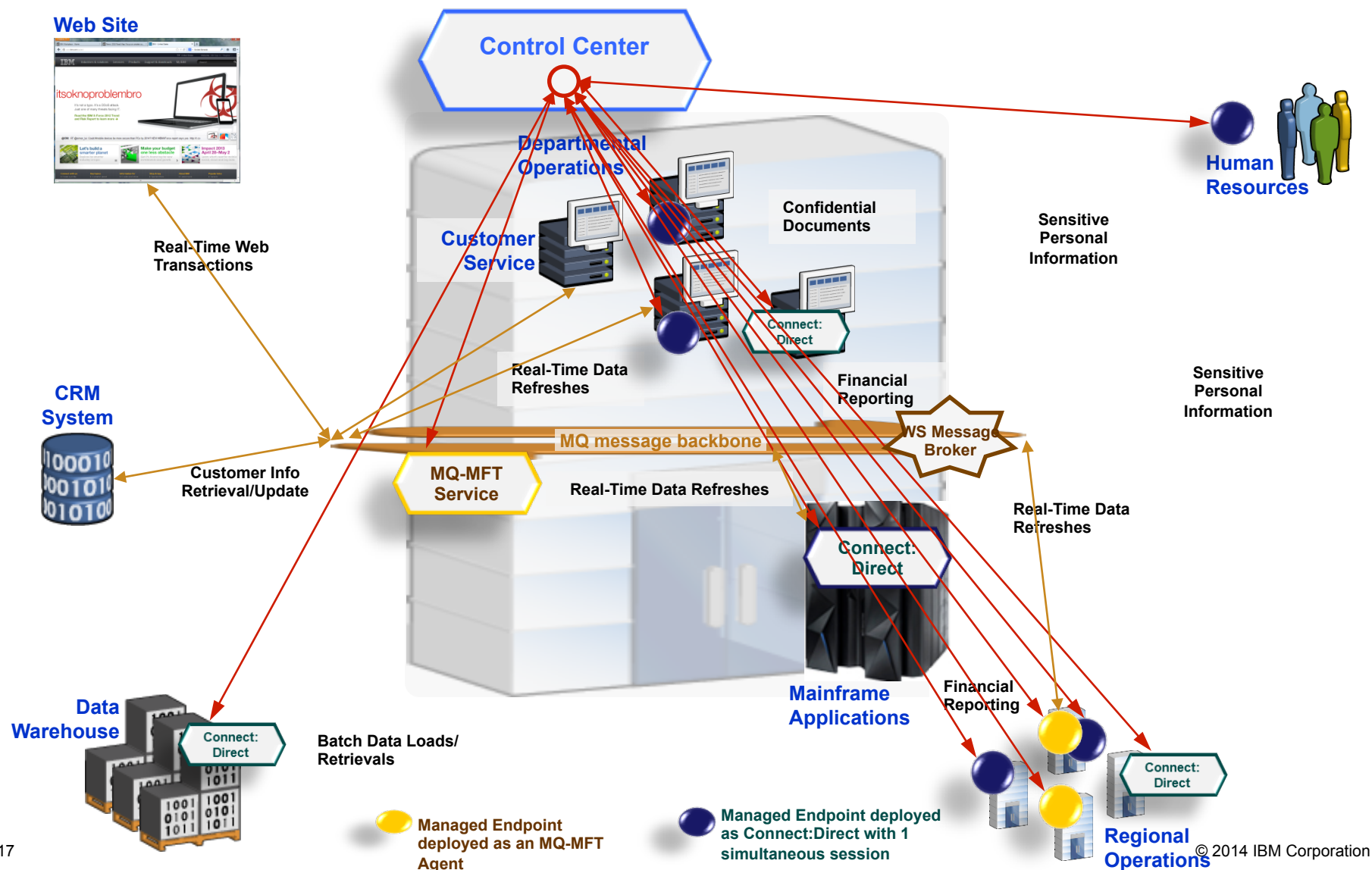
Not intended to be a precise representation of all the use cases, but illustrative of the fact that there may be many different types of use cases within an organization, including

- Real-time requirements for small- to medium-size data payloads
- Significant requirements for security and privacy
- Periodic, scheduled processing
- Very large payloads
- High \$\$-value transactions
- Company-confidential data

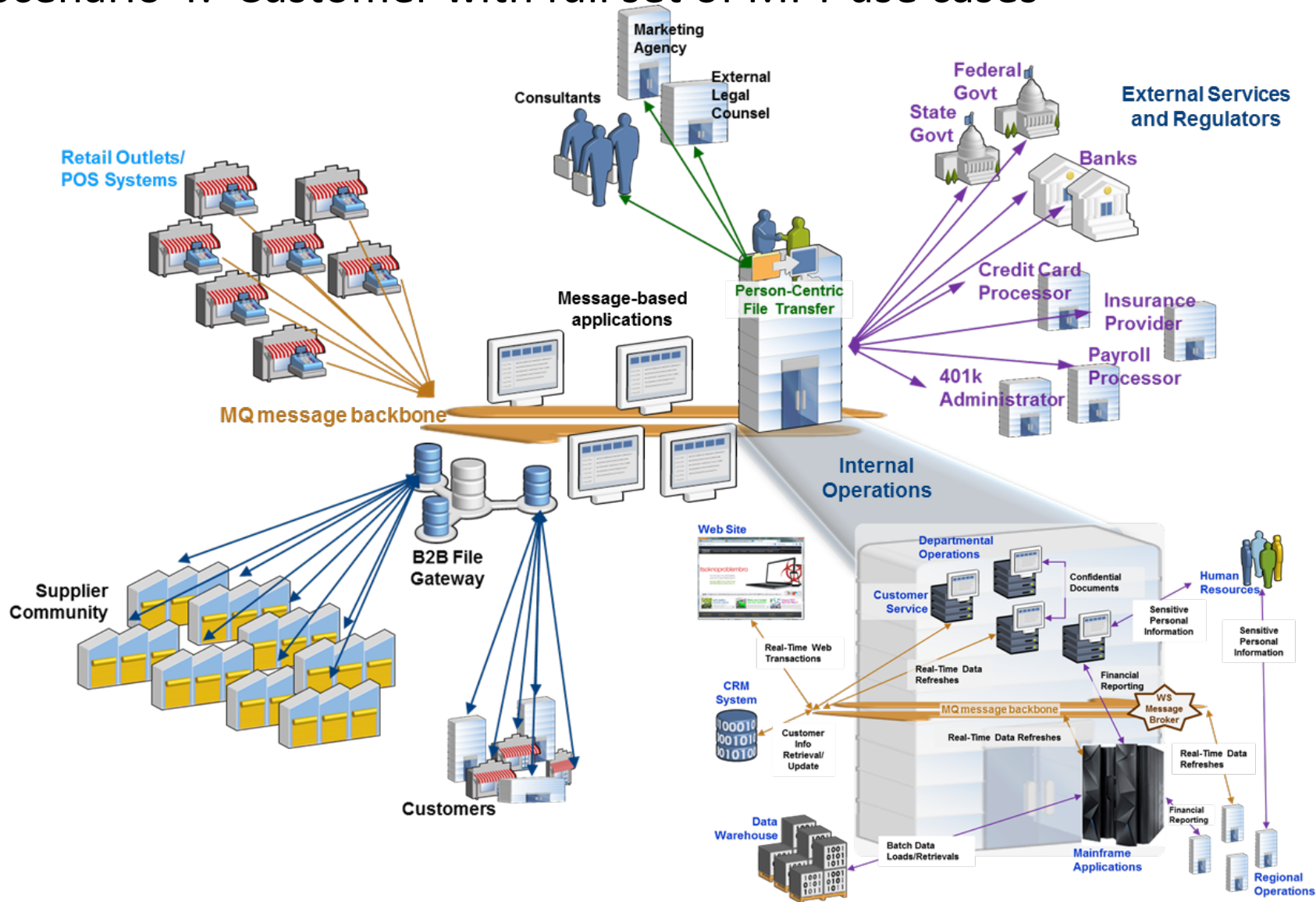


Scenario 3: Multiple Internal Use Cases

How customer deploys IBM Connect:Direct Advanced to meet their needs

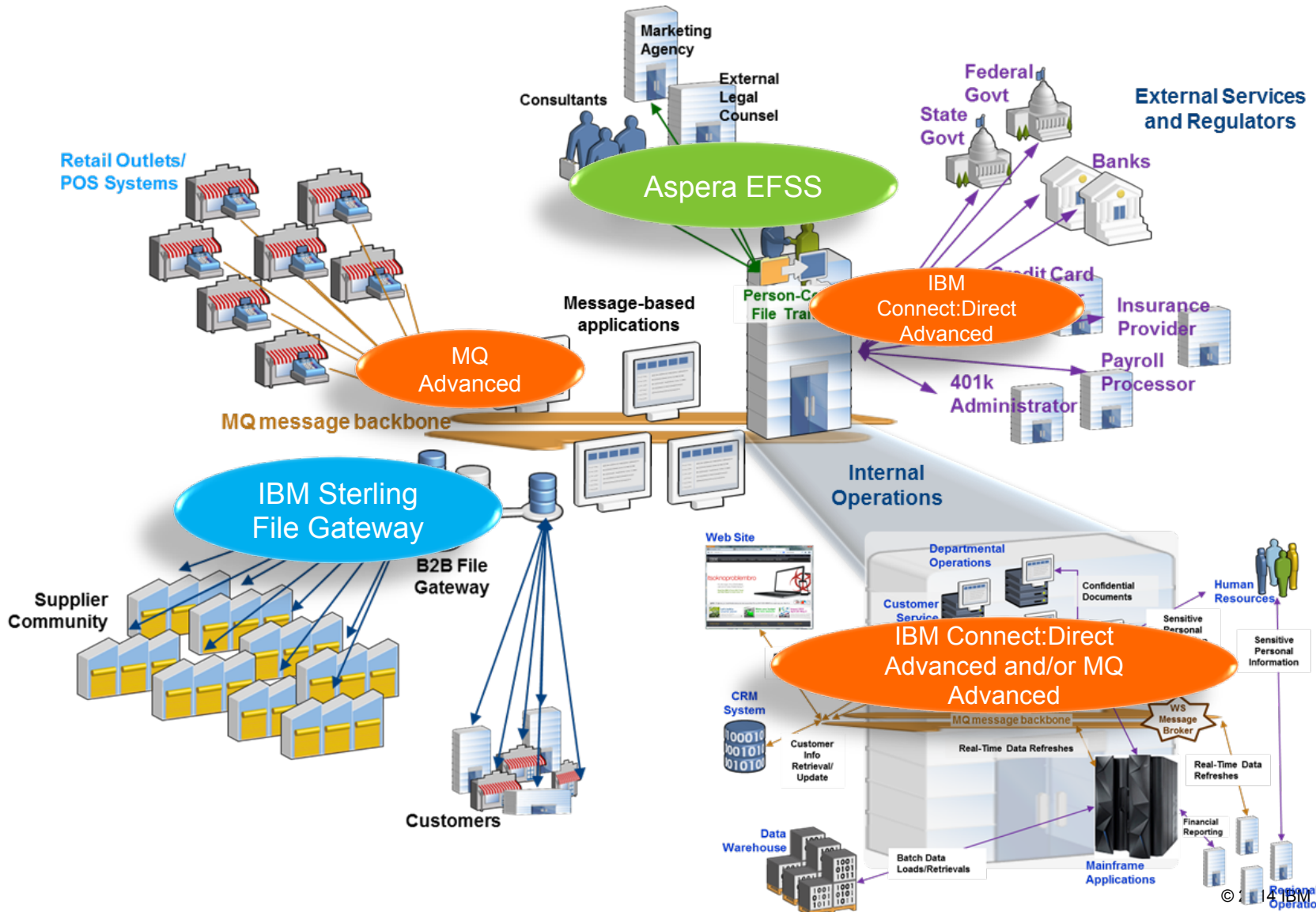


Scenario 4: Customer with full set of MFT use cases



Scenario 4: Customer with full set of MFT use cases

How customer deploys IBM MFT solutions to meet their needs

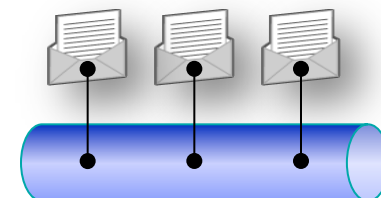


Considerations for leveraging Connect:Direct technology



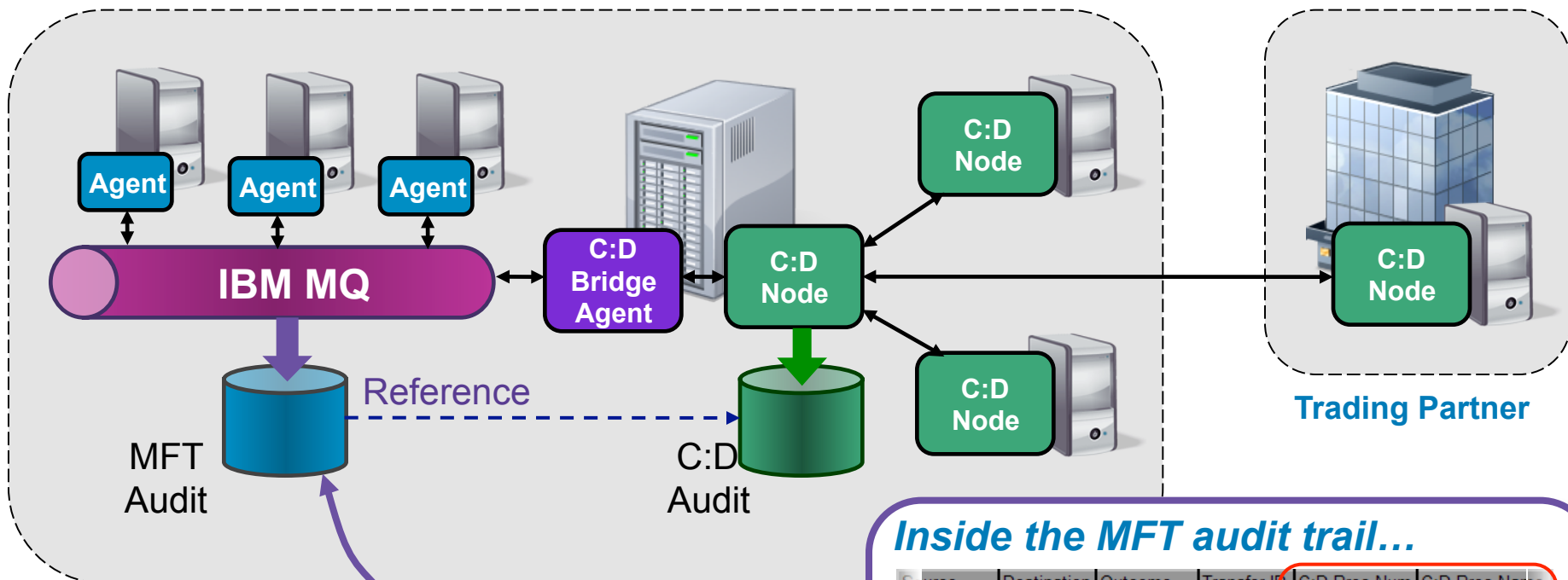
- Connect:Direct is already deployed widely internally or trading partners have a preference for the Connect:Direct protocol
- File based file transfer for batch data movement with a small footprint, integration with 3rd party schedulers, and rapid deployment
- A single solution for peer-to-peer file transfer spanning internal and external
- File movement for payment processing internally and externally typically within the financial services industry
- Failed audit and adding security, monitoring, and reliability without re-writing FTP scripts
- Data movement across a broad range of platforms, including mainframe, midrange and distributed
- Desire to leverage System z specific capabilities, including high speed file movement with IBM storage (zFBA) and file compression offload with IBM zEnterprise Data Compression (zEDC)

Considerations for leveraging WebSphere MQ technology



- MQ is already deployed widely internally
- Extends the customers SOA skill investment to MFT
- Secure file exchange between locations, stores, offices, etc
- Modernizing legacy infrastructure for integration with File to Message and Message to File
- Eliminate FTP complexities, Coles 167,000 FTP scripts reduced to 30 transfer patterns
- FTP migration but need coexistence with existing FTP servers and drop-boxes
- Broad range of platforms including distributed & mainframe
- Partner prefers MQ for B2B, i.e. US Postal, National Association of Railroads, et al.

Integrating IBM Sterling Connect:Direct and IBM MQ MFT



Inside the MFT audit trail...

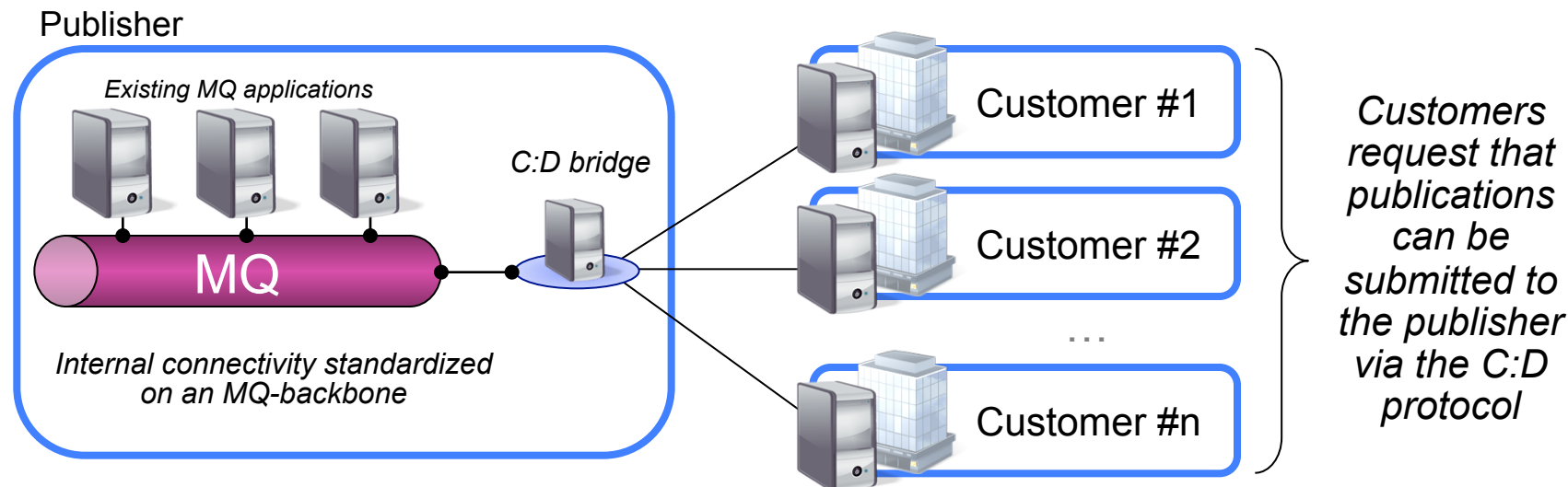
Source	Destination	Outcome	Transfer ID	C:D Proc Num	C:D Proc Name
FTEAgent1	CDNode6	Success	0A9B43F...	34	FTE0934
FTEAgent1	CDNode6	Success	1CF3B73...	39	FTE92B6
CDNode2	FTEAgent4	Success	D1839F2...	42	FTE13C9
CDNode4	FTEAgent2	In Progress			

The audit information for each MFT transfer references related C:D audit information

- The Connect:Direct Bridge capability supports managed file transfers that span MFT and C:D with a joined up audit trail

Bridging MQ and C:D networks at a large publisher

Solution architecture for a large publisher using the C:D bridge as a way to consolidate its IT infrastructure while still retaining the communication protocols used to communicate with partners



Pain Points

- Existing solution is a hodgepodge of different data transports from different vendors
- Difficult to integrate existing applications, built on MQ messaging, with file data arriving from business partners

IBM's MFT suite helps

- Bridge the MQ and C:D environments
- Leverage existing MQ skills and investment
- Message-to-file and file-to-message
- End-to-end visibility of files and messages
- Modernize batch applications
- Modernize MFT with RESTful Web 2.0 interfaces

Sterling Control Center provides visibility and management for the B2B and MFT portfolios



Governance

Actionable visibility for business, operations and compliance
IBM Sterling Control Center (on prem) and InFlight (cloud)

IBM Sterling Control Center (SCC)

Service Level Management

Where is my file?
Where are my business processes?
Do I have any critical alerts?

Asset Management

Where is my software installed?
Is it the right version?
Is it up and and running?

Configuration Management (C:D)

Are my Connect:Direct nodes configured correctly?
Are they current?
Do they comply with policy?

Managed file transfer



Security-enhanced, reliable data transfers connecting systems, communities and people

System-centric MFT

- IBM Connect:Direct
- IBM MQ MFT
- IBM Connect:Express

Community Centric MFT

- IBM Sterling File Gateway
- IBM File Transfer Service

Person Centric

Integration services



Flexible cloud technologies and expert services host business communities

- IBM B2B Collaboration Network
- IBM B2B Sterling Integration Services

Integration gateways



Orchestration and automation for key partner processes

- IBM B2B Integrator

Transformation engines



Single, universal engine for internal and external file and message transformation needs

- IBM WebSphere Transformation Extender
- IBM Standards Processing Engine

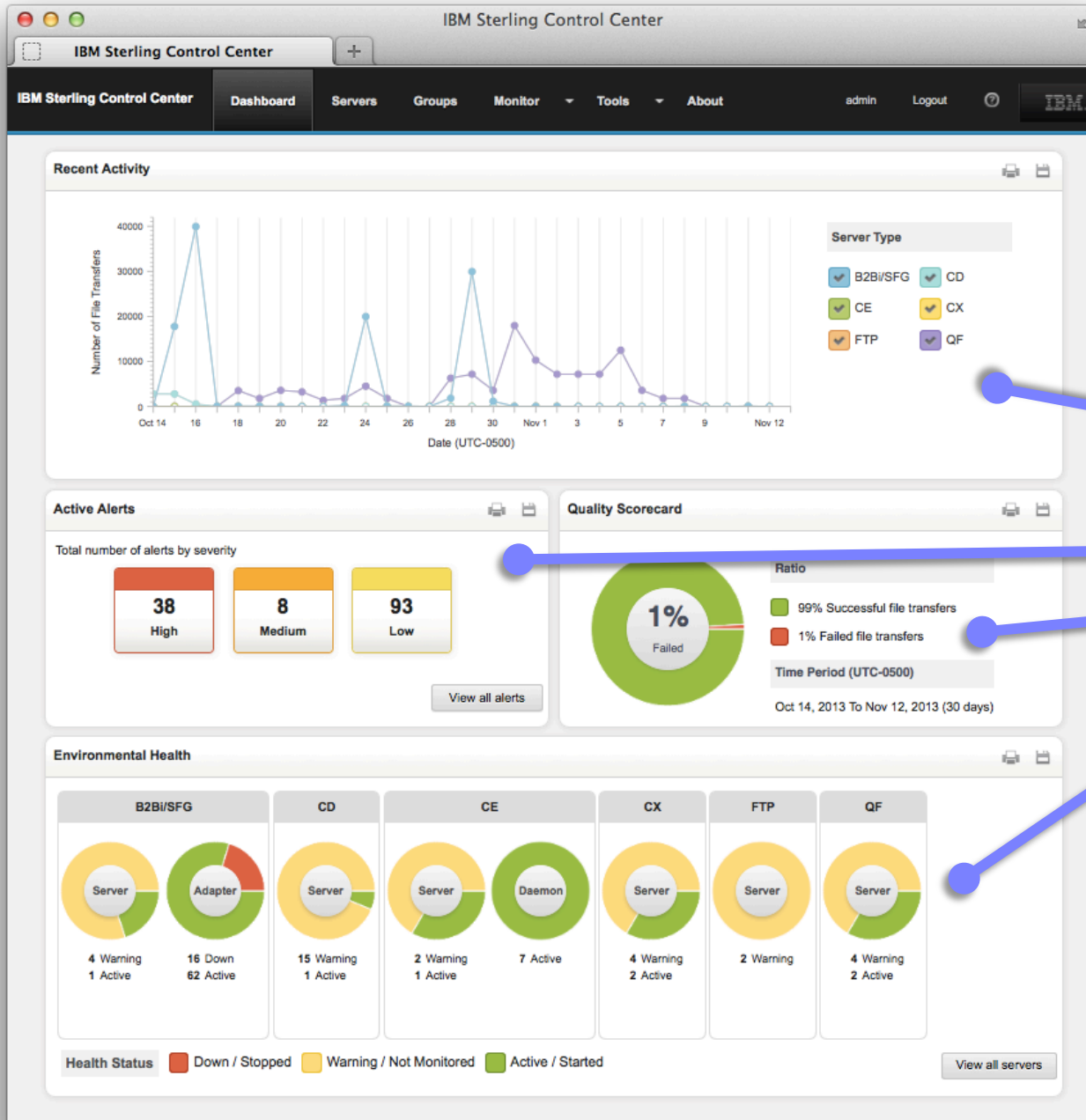


Security

Common perimeter services, proxy and authentication
IBM Sterling Secure Proxy



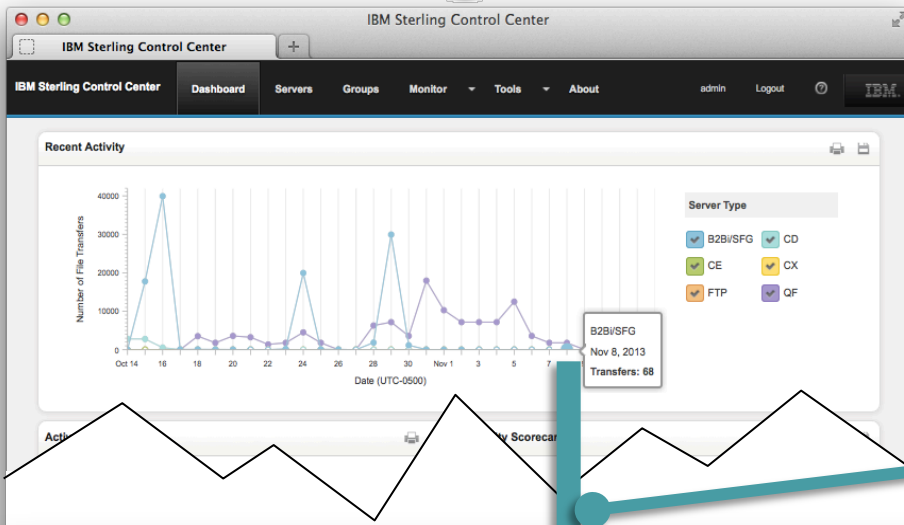
Greater insight, right up front



- For file-based scenarios
(in all products)
- Key indicators, right at
your fingertips
- File transfer volume
 - Active alerts
 - Quality of file transfers
 - Environment health



More quickly answer, "Where's My File?"



Easily accessible list of files

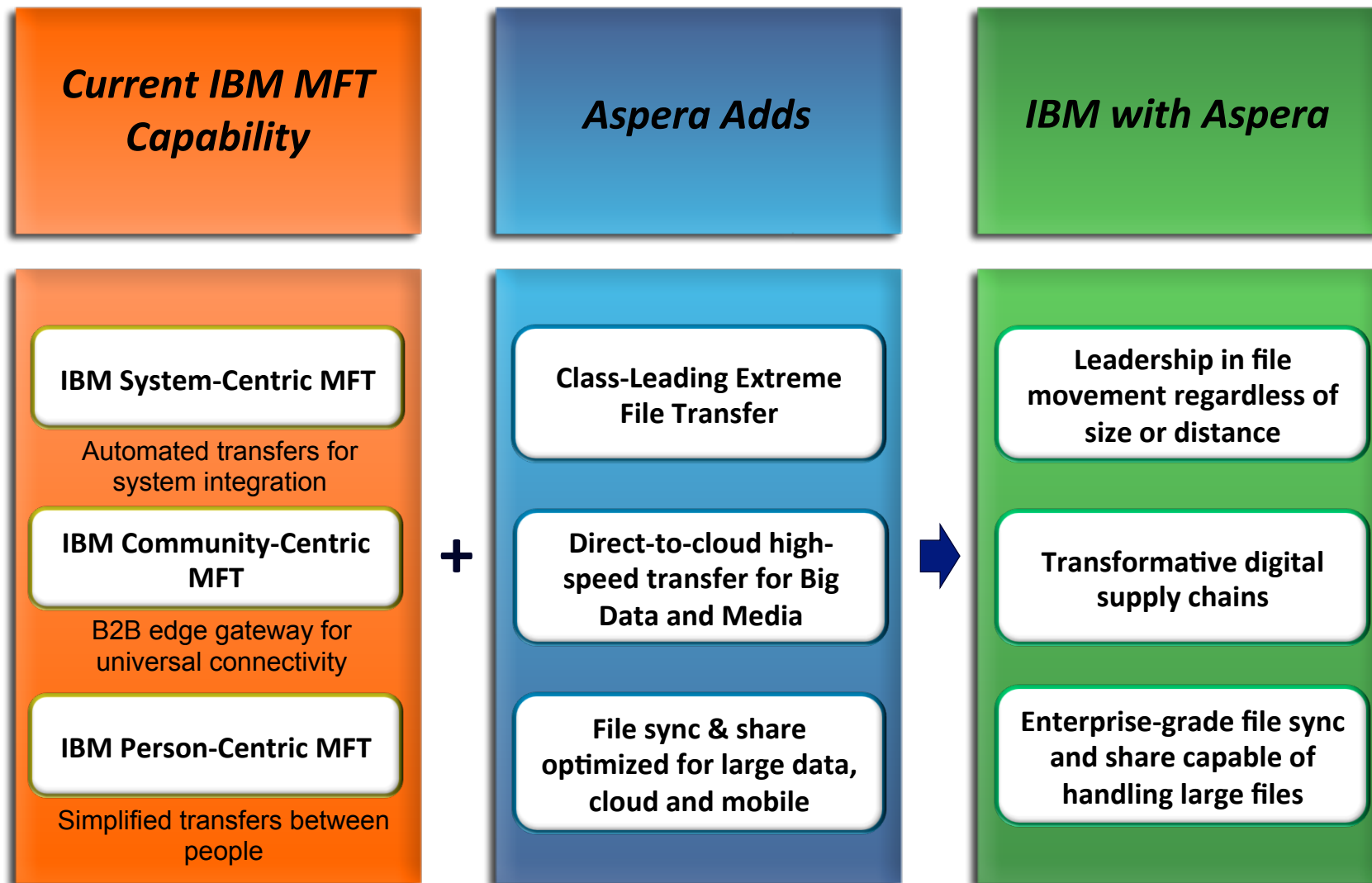
- Drill-down from the dashboard or menus
- Status
- Quick search

The Monitor page displays a "File List" with search filters and a table of file transfer records.

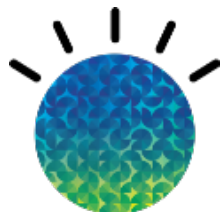
Search filters: Start Date (11/8/2013), End Date (11/8/2013), Server Type (B2B/SFG), Server (Show All), File Name, Status (Show All), and a Search button.

		Source File Name	Destination File Name	Server Name	Success/Failure	Submitter	Date (UTC-0500)	Time (UTC-0500)	File Size	Message Id
No filter applied										
1	[SF]	CONSUMER_000083_MBOX_22_10_6202_8_12.52.25.039	CONSUMER_000083_MBOX_22_10_6202_8_12.52.25.039	tsornin	Success	PRODUCER_00040_MBOX	11/08/2013	12:52:33.000	202	937195
2	[SF]	CONSUMER_000083_MBOX_21_10_6102_8_12.52.24.039	CONSUMER_000083_MBOX_21_10_6102_8_12.52.24.039	tsornin	Success	PRODUCER_00040_MBOX	11/08/2013	12:52:32.000	202	937194
3	[SF]	CONSUMER_000083_MBOX_20_10_6002_8_12.52.23.039	CONSUMER_000083_MBOX_20_10_6002_8_12.52.23.039	tsornin	Success	PRODUCER_00040_MBOX	11/08/2013	12:52:31.000	202	937193
4	[SF]	CONSUMER_000083_MBOX_19_10_5902_8_12.52.22.039	CONSUMER_000083_MBOX_19_10_5902_8_12.52.22.039	tsornin	Success	PRODUCER_00040_MBOX	11/08/2013	12:52:30.000	202	937192
5	[SF]	CONSUMER_000083_MBOX_24_9_58028_12.52.21.039	CONSUMER_000083_MBOX_24_9_58028_12.52.21.039	tsornin	Success	PRODUCER_00040_MBOX	11/08/2013	12:52:29.000	202	937185

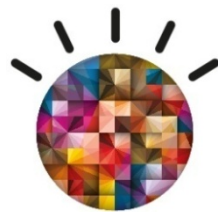
Aspera furthers IBM's Managed File Transfer Leadership



Together we will solve data movement challenges across several initiatives



Smarter Commerce



Big Data & Analytics



Cloud Computing

Challenges involving:

- **Size:** large files, data sets, structured and unstructured
- **Distances:** delays with network distance
- **Storage:** Cloud, On-premise and hybrid
- **End-points:** apps, mobile, browser
- **Sync:** massive file systems that change often
- **Efficiency:** poor bandwidth utilization
- **Predictability:** variable transfer performance

Summary

- Explosion of digital data is accelerating need to simplify satisfy a broad range of use cases and requirements with the *right* technology
- IBM's is making it easier for you to leverage the right system-centric file transfer technology with IBM Connect:Direct Advanced and IBM MQ Advanced
- Consistent services for system-centric file transfers improves reliability, reduces complexity, and provides the Governance, Risk Management, and Compliance that your business requires
- Extending your investments in system-centric file transfer with IBM Sterling Connect:Direct and Aspera FASP integration

