

27221 – Image Review integration into Payment Repair

Over the years, many features have been added to Payment Repair that were not added to Image Review. To solve this problem, Image Review and Payment Repair have been merged to give Image Review additional functionality.

Permissions

The Lock Management screen permissions for Payment Repair and Image Review will now be used on the generic Lock Management Screen. Note that to see the Remediation Lock Management screen, view permission must be given under the Transaction Server application as shown below.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Transaction Server

Categories: Remediation Lock Management

Available permissions

Permissions assigned to group

View the remediation lock management page

Apply Cancel

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Lock Management

Available permissions

Permissions assigned to group

View Review Lock Management

Unlock Review Lock Management

Apply

Cancel

Default group for image review users

Permission Assignments - Payment Repair Administrators

Payment Repair Administrators

Applications: Payment Repair

Categories: Manage Locks

Available permissions

Permissions assigned to group

Unlock items

Apply

Cancel

Image Review will now support hotkey mappings, which can be configured on the generic hotkey mappings screen. Note that to see the screen, view permission must be given under the Admin application.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Admin

Categories: Manage Hotkey Mapping

Available permissions

Permissions assigned to group

View the Hotkey Mapping

Apply

Cancel

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Hot Key Mappings

Available permissions

Permissions assigned to group

View hotkey mappings
Edit hotkey mappings
Create hotkey mappings
Delete hotkey mappings

Apply

Cancel

Image Review screen sizes will be configured under the generic screen. Note that to see the screen, the view permission must be given under the Admin application.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Admin

Categories: Screen Sizes

Available permissions

Permissions assigned to group

View the Screen Size screen

Apply

Cancel

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Screen Size

Available permissions

Permissions assigned to group

View Screen Size page
Edit Screen Size page

Apply

Cancel

Permission Assignments - Payment Repair Administrators

Payment Repair Administrators

Applications: Payment Repair

Categories: Screen Size

Available permissions

Permissions assigned to group

View Screen Size page
Edit Screen Size page

Apply

Cancel

Priority Management will now be handled under the generic Priority Control Configuration screen. Note that to see the Priority Control Configuration screen, the user must have the View permission under the Admin component shown below.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Admin

Categories: Manage Priority Control

Available permissions

Permissions assigned to group

View the Priority Control

Apply

Cancel

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Priority Management

Available permissions

Permissions assigned to group

View the Image Review Priority Control
Edit the Image Review Priority Control
Create the Image Review Priority Control
Delete the Image Review Priority Control

Apply

Cancel

Permission Assignments - Payment Repair Administrators

Payment Repair Administrators

Applications: Payment Repair

Categories: Manage Forward Payment Repair Priority Control

Available permissions

Permissions assigned to group

View the Forward Priority Control
Edit the Forward Priority Control
Create the Forward Priority Control
Delete the Forward Priority Control

Apply

Cancel

Permission Assignments - Payment Repair Administrators

Payment Repair Administrators

Applications: Payment Repair

Categories: Manage Return Payment Repair Priority Control

Available permissions

Permissions assigned to group

View the Return Priority Control
Edit the Return Priority Control
Create the Return Priority Control
Delete the Return Priority Control

Apply

Cancel

A permission has been added for the new Review UOW Status screen.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Review UOW Status

Available permissions

Permissions assigned to group

View Review UOW Status

Apply

Cancel

A permission has been added for the new Review Worklists screen.

Permission Assignments - Image Review Administrators

Image Review Administrators

Applications: Image Compliance

Categories: Review Worklists

Available permissions

Permissions assigned to group

View Review Worklists

Apply

Cancel

A new permission has been added for Image Review to control saving of rotated images on the Operator Review / Deferred Item Review screens.

Permission Assignments - Payment Repair Administrators

Payment Repair Administrators

Applications: Image Compliance

Categories: Permissions for Saving Rotated Image

Available permissions

Save Rotated Image

Permissions assigned to group

Apply

Cancel

Operator Review screen

Now located at Processing & Remediation -> Image Review -> Operator Review


The new Operator Review screen will look very similar to the existing Payment Repair screen. Operators will be able to accept, reject, defer, and skip reviewing images for each payment and call recall previously decisioned items by click Redo Pending Item in the bottom right. Error codes and a log will be displayed to give additional information. Images that need review will be displayed with an X above the name and will automatically be selected. Images that are accepted will change to a check mark. When all images have been reviewed, the next item will be displayed. Skipped items will not display for this user again for the given session.

Review Suspect Images Welcome, System Administrator

Payment ID: 13

FWW

RBW



Aux On Us	EPC	Routing Number	Field 4	Account	Process Control	Amount	Currency
		389000019		0203658	51998	0000098765	USD

Acceptable Image

Not Acceptable Image

Defer Decision

Skip Item

Error Codes and Descriptions

[ICM4178] RBW image is too light., 2.9925496E-4

Pending Items(Count = 3, Max = 5)

Redo Pending Item

Finalize All

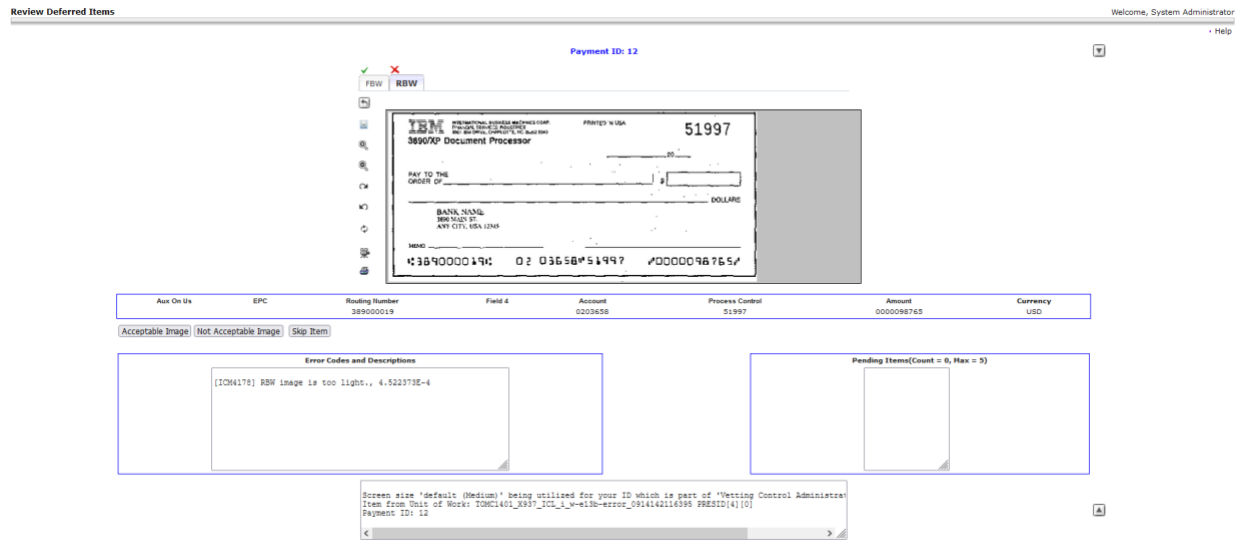
0000000012 DEF
0000000011 DEF
0000000006 DEF

Item from Unit of Work: TCM1401_X937_TCL_3_u-e138-error_0914142116395 PRESTD(4)[0]
Payment ID: 12
Deferring Payment ID: 13
Item from Unit of Work: TCM1401_X937_TCL_3_u-e138-error_0914142116395 PRESTD(4)[0]
Payment ID: 13

Deferred Item Review screen

Now located at Processing & Remediation -> Image Review -> Deferred Item Review

This screen functions identically to the Operator Review screen but displays items that have been deferred. Users will be unable to defer items on this screen.



Item Count screen

Now located at Processing & Remediation -> Monitoring -> Item Counts

The item counts screen has been combined into one. Payment Repair and Image Review item counts can be viewed on this screen. Payment Repair and Image Review have separate view permissions for this item counts screen, controlling what counts are visible.

Item Counts

Welcome, System Administrator

Help

Auto-refresh interval(seconds): 0 Refresh

Data as of 9/14/21, 7:44:24 PM GMT

Forward Repair

Business Day And Category	Repaired	Deferred	Rejected	Awaiting Repair
0, 2021-09-15, CHECK	0	0	0	1
0, 2021-09-14, CHECK	0	0	0	6
Total	0	0	0	7

Return Repair

Business Day And Category	Repaired	Deferred	Rejected	Awaiting Repair
Total	0	0	0	0

Image Review

Business Day And Category	Image Review	Deferred	Rejected	Awaiting Review
0, 2021-09-15, CHECK	1	1	1	21
0, 2021-09-14, CHECK	0	0	0	5
Total	1	1	1	26

Lock Management screen

Now located at Processing & Remediation -> Monitoring -> Lock Management

Image Review and Payment Repair items can be unlocked on the Lock Management screen. Payment Repair and Image Review have separate permissions to control viewing and unlocking of items.

Home [Lock Management](#) ×

Remediation Lock Management [Help](#)

🔍 [More](#) ▾

🔍 Total: 5 [Clear Filter](#)

Application	Work Type	Business Date	Category	Transaction Id	Message Standard	Message Type	Amount	Currency Code	System Amount (USD)	Transaction Type	User Id	Locked Time
Image Compliance	Review	Sep 14, 2021	CHECK	17	Check	X9	\$346.41	USD	\$346.41	Debit	fhadmin	Sep 14, 2021, 7:48:10 PM
Image Compliance	Review	Sep 14, 2021	CHECK	18	Check	X9	\$183.11	USD	\$183.11	Debit	fhadmin	Sep 14, 2021, 7:48:10 PM
Image Compliance	Review	Sep 14, 2021	CHECK	19	Check	X9	\$1,484,957.36	USD	\$1,484,957.36	Debit	fhadmin	Sep 14, 2021, 7:48:10 PM
Image Compliance	Review	Sep 14, 2021	CHECK	20	Check	X9	\$913,031.36	USD	\$913,031.36	Debit	fhadmin	Sep 14, 2021, 7:48:10 PM
Image Compliance	Review	Sep 14, 2021	CHECK	21	Check	X9	\$346.41	USD	\$346.41	Debit	fhadmin	Sep 14, 2021, 7:48:10 PM

Total: 5 Selected: 0

100 | 250 | 500 ▸

Forward UOW Status screen

Now located at Processing & Remediation -> Monitoring -> Forward UOW Status.

Return UOW Status screen

Now located at Processing & Remediation -> Monitoring -> Return UOW Status.

Review UOW Status screen

Located at Processing & Remediation -> Monitoring -> Review UOW Status.

A new Image Review screen has been added to view the status of Image Review items.

Home [Review UOW Status](#) ×

Review UOW Status Welcome, System Administrator

Auto-refresh interval(seconds): 0 [Refresh](#) Help

Business Day: 0, 2021-09-14, CHECK (Active) [Filter](#) [-- No Filter --](#) [Go](#) Maximum Results: 50 ▾

Data as of 9/14/21, 7:52:18 PM GMT

Unit of Work Name	Business Day	Number of Unrepaired Items (Deferred)	Value of Unrepaired Items	Total rows: 2
trCodeBw_0914142127678 PRESID[6][0]	0, 2021-09-14, CHECK	2 (0)	\$529.52	
trCodeGs_0914142136529 PRESID[8][0]	0, 2021-09-14, CHECK	3 (0)	\$2,396,335.13	

Legend

* Unrepaired value is approximate due to invalid data in amount fields

Forward Worklist screen

Now located at Processing & Remediation -> Monitoring -> Forward Worklists.

Return Worklist screen

Now located at Processing & Remediation -> Monitoring -> Return Worklists.

Review Worklist screen

Now located at Processing & Remediation -> Monitoring -> Review Worklists.

A new Image Review screen has been added to see what items are in the worklist for a given priority control configuration.

Review Work List Monitor

Welcome, System Administrator

Auto-refresh interval(seconds): 0 Refresh

Maximum Results: 50

Review Priority Control Configurations: (*) marks the currently active review PCC

User Group Filter:

User Group Authorization:

Default Image Compliance Review PCC(*)

1 auth for (Image Review Administrators, Image Review Supervisors, Image Review Users)

Administrators
Amount Keying Administrators
Amount Keying Supervisors
Amount Keying Users
Approvals Administrators

Add Remove

Image Review Administrators
Image Review Supervisors
Image Review Users

Listing of the next items to be reviewed (generated 9/14/21, 7:56:42 PM GMT)

PCC Line	Payment ID	Holdover?	Batch / ICL Availability	Amount	RT Number
1	12	N	0	0000098765	389000019
1	29	N	0	0000098765	389000019
1	30	N	0	0000098765	389000019
1	31	N	0	0000098765	389000019
1	37	N	0	0000098765	389000019
1	38	N	0	0000098765	389000019
1	39	N	0	0000098765	389000019
1	40	N	0	0000098765	389000019
1	41	N	0	0000098765	389000019
1	47	N	0	0000098765	389000019
1	48	N	0	0888098765	389000019
1	49	N	0	0000098765	389000019
1	50	N	0	0000098765	389000019
1	51	N	0	0000098765	389000019
1	52	N	0	0000197228	021300420

Priority Control Configuration screen

Located at Configuration -> System -> Priority Control.

Payment Repair and Image Review have been added to the generic priority control configuration screen. The old Payment Repair and Image Review priority management screens have been removed.



Application Name : ImageCompliance
Type : Review
Name : Default Image Compliance Review PCC
Description : Default Image Compliance Review PCC to assign work to all Image Review groups

Filtering Criteria Set

auth for (Image Review Administrators, Image Review Supervisors, Image Review Users)

< >

OK

Legend

Change to edit mode



Application Name : PaymentRepair
Type : Forward
Name : Default Payment Repair Forward PCC
Description : Default Payment Repair Forward PCC to assign work to all Payment Repair groups

Filtering Criteria Set

auth for (Payment Repair Administrators, Payment Repair Supervisors, Payment Repair Users)

< >

OK

Legend

Change to edit mode

Hotkey Mapping screen

Located at Configuration -> System -> Hot Key Mapping

Payment Repair and Image Review have been added to the generic hotkey mapping screen.
The old Payment Repair hotkey mapping screen has been removed.

Create Keyboard Mapping

Application : Image Compliance *

Mapping Name : Example Key Mapping *

Target Page:

- Deferred Image Review
- Image Review**

Page Functions

- Defer
- Finalize All
- Flip 180
- Print Window
- Redo
- Reverse Video
- Rotate Counter-clockwise
- Rotate Clockwise
- Save Image
- Skip

Modifiers

Shift key : ☐

Control key : ☐

Alt key : ☐

Keys

a Add to mapped keys

Update selected mapped key
(Updates fill values only)

Remove from mapped keys

Mapped Keys

- Shift b : Skip
- Shift a : Redo

Save Cancel

Legend

* Required field

Create Keyboard Mapping

Welcome, System Administrator

[Help](#)

Application : Payment Repair *

Mapping Name : *

Target Page:

- Deferred Repair (Forward)
- Deferred (Forward)**
- Deferred Repair (Return)
- Repair (Return)

Page Functions

- Defer
- Finalize All
- Flip 180
- Page Bottom
- Page Top
- Print Window
- Fill Code Line Data
- Fill Focus Field Data
- Redo
- Reject

Modifiers

Shift key : ☐

Control key : ☐

Alt key : ☐

Keys

B Add to mapped keys

Update selected mapped key
(Updates fill values only)

Remove from mapped keys

Mapped Keys

- Shift a : Defer

Save Cancel

Legend

* Required field

Screen size screen

Located at Configuration -> System -> Screen Size.

Payment Repair and Image Review have been added to the generic screen size screen. The old Payment Repair screen sizes screen has been removed.

Screen SizeWelcome, System Administrator

Help

Application Name:Image Compliance

Screen Size Group Assignments:

Small

Medium

Large

Assigned User Groups:

Legend

Change to edit mode

Image Compliance Properties screen

The Image Compliance core properties screen has been updated to be more in line with Payment Repair so that it can support the new features.

Configure system propertiesWelcome, System Administrator

Hide DescriptionHelp

Property name	Description	Default	Custom
Fetch Payments in groups	Fetch Payments in groups (If Y, Preload Buffer Size must be set to 20 or above)	N	
Review Retry	Optional number of times that a review request will be resent	0	
Review Timeout	Optional time interval (milliseconds) image review waits before resending a review request	0	
Pending Buffer Size	Number of items in the pending buffer	5	
Shuffle Items	Shuffle Items	N	N
Task Time Interval	Review UI task time interval (Websphere Application Server restart required)	20	
Worklist Timeout	Optional time interval (milliseconds) image review waits before resending a worklist request	0	
Height of Large	Height of a check image when LARGE is preferred.	360	
Width of Large	Width of a check image when LARGE is preferred.	1000	
Maximum Lock Time	Review UI lock expiry time interval (Websphere Application Server restart required)	10	
Height of Medium	Height of a check image when MEDIUM is preferred.	280	
Width of Medium	Width of a check image when MEDIUM is preferred.	780	
Transaction Server Id	Preferred Transaction Server Id for RMI image access		
Buffer Size	Number of items preloaded to a browser	20	
Height of Small	Height of a check image when SMALL is preferred.	220	
Width of Small	Width of a check image when SMALL is preferred.	610	
Front Image Name	Name of the front payment view		
Rear Image Name	Name of the rear payment view		

Legend

Change to edit mode

Exposure Limit Monitoring screen

Now located at Processing & Remediation -> Monitoring -> Exposure Limit Monitoring.

Task Activity screen

Now located at Processing & Remediation -> Monitoring -> Task Activity.

Lock Expiration Task

Image Compliance will now have its own lock expiration task which will expire locks that have been held for too long without being worked. This helps prevent work from being stuck or held up. This task is automatically scheduled.

Transaction Server Scheduler Updates

With the integration of Image Review into the Payment Repair structure, some scheduler events needed modification.

For the Image Review Business Day close event (Image Compliance Review - Business Day Close) changed from BDAY_STATUS_CHANGE to CLOSE_BUSINESS_DAY_REQUEST

For the Image Review Business Day close event (Image Compliance Review - Business Day Reactivate) changed from BDAY_STATUS_CHANGE to REACTIVATE_BUSINESS_DAY_REQUEST

The Image Review Business Day purge event (Image Compliance Review - Business Day Purge) is no longer supported. Data purging for Image Review items is handled automatically.

123062 Improved efficiency and consistency with HTTP probes for JSE components

FTM comes with probes (readiness and liveness) and PreStop hooks for managing pod lifecycle events. In this release, the JSE probes are changed from scripted probes to HTTP probes.

The HTTP probes provide the huge performance improvements, future integrations with external monitoring tools, set the framework for removing RMI communication and so on.

123986 Allow customization of jvm.options in Liberty containers

Users can provide additional JVM options to the JEE components. The JVM options for every JEE component can be configured separately. It can be done by providing the customized jvm.options file.

Overriding the default JVM settings is useful at many situations, like during the troubleshooting sessions, enabling memory dumps, identifying performance issues, enable profiling and so on.

122332 DB2U: Incorporate the use of a standard DB2 container

The FTM offerings running on RedHat® OpenShift® can be combined with Db2 on Red Hat OpenShift to get the convenience of the operator capabilities. Db2® can be deployed in a RedHat OpenShift cluster as a containerized micro-service, or pod, managed by Kubernetes. This robust operator allows us to utilize the stateful behavior and provides features like HA to get maximum performance and reliability in production.

For more information see [Financial Transaction Manager: Install, configure, and deploy Db2 on Red Hat OpenShift](#)

127271 Allow customization of JVM options for JSE applications in OCP

Users can provide additional JVM options to the JSE components. The JVM options for every JSE component (Gateway Server, Transaction Server, Business Rules Server, Business Rules Manager) can be configured independently. These can be provided from the instance yaml of your FTM offering.

Overriding the default JVM settings is useful at many situations, like during the troubleshooting sessions, enabling memory dumps, identifying performance issues, enable profiling and so on.

126196 FTM Logging

FTM applications running on OpenShift adhere to the basic principal of writing logs to the console (stdout and stderr) so that financial institutions can easily integrate these logs with the appropriate logging service supported by OpenShift.

122881 Upgrade Liberty to 21.0.0.6

The Liberty server has been upgraded to 21.0.0.6.

Following are the list of the server versions and jars upgrade as a result.

wlp-base-all-21.0.0.6.jar

wlp-base-embeddable-21.0.0.6.zip

com.ibm.websphere.appserver.api.basics_1.4.53.jar

com.ibm.websphere.appserver.api.kernel.service_1.0.53.jar

com.ibm.websphere.appserver.api.security_1.3.53.jar

com.ibm.websphere.appserver.api.ssl_1.4.53.jar

com.ibm.websphere.javaee.jsp.tld.2.2_1.2.53.jar

FTM Web Services

IBM provides a library of RESTful web services allowing financial institutions to easily integrate with the Financial Transaction Manager (FTM) solution to meet certain business or processing requirements. These web services are typically used for integrating the banks user interface or mobile applications for payment processing but can be used for other business usage.

The FTM web service interfaces are built on the Java EE platform using the Representational State Transfer (REST) architecture. This platform and architecture allow the FTM web services to take advantage of the industry standard specifications supported by Java EE and MicroProfile (an optimized set of features around microservices architecture) with ease of integration provided by the RESTful standards.

Since the FTM web services are built on the Java EE platform, these services are hosted using IBM's Liberty Application Server(s).

FTM uses the OpenAPI specification for API documentation. The OpenAPI specification is an industry standard API description format (available in YAML and JSON) providing the financial institution detailed information about our services, including:

- Available endpoints
- Available operations for each endpoint
- Operation parameters (inputs and outputs for each operation)
- Model Structures including
 - o Data Types
 - o Descriptions
 - o Constraints
 - o Examples

126724 Replace remaining RMI communication to ITS with direct database access

RMI communication between GW & ITS is no longer supported. Gateway will directly access the database.

Following configuration entries in Gateway properties file has been made obsolete:

```
# ITSEnable      = true
# ITSServer      =
# ITSPort        =
# ITSToken       =
# ITSTimeout     = 30000
# ITSServerListFile =
# ITSServersSelectionClass =
com.ibm.icpcs.utilities.samples.SampleTransactionServersSelection
```

125641 Removed Ecs support

The EcsEODScheduledTask is no longer provided.

124939 Removed the "ITS" migration option from 4.0.x Check

The ITS migration configuration, where a new Transaction Server could be configured to call an older Transaction Server is not supported in an OpenShift platform.

124872 CPCS online interface support has been removed

Online interfaces to CPCS have been removed. This includes the following...

Control Center

Administration > Components > Control

Option to "Verify host" has been removed from drop down menu for Transaction Server

The following diagnostic commands have been removed for Transaction Server:

- list syncqueue
- restart syncqueue

The 'vs' diagnostic command has been removed for Business Rules Server.

Administration > Component > Validation Rules > Properties

The Create CPCS property is not longer available to be managed.

Configuration > Validations Rules > Releases

- Activation and
- Reactivation

will no longer present the CreateCPCS Check box.

Gateway Server

Removed serializationPath gateway configuration property.

Gateway now uses database information instead of serialization data

- 1) Gets sent file information from file tracking database table.
- 2) Gets end of day business day information from business day database table.
- 3) Image sorter information from image sorter list database table.

124726 Remove CBIS and VLF support from Check 4.0.x code and documentation

Support for ingesting .bis and .vlf files has been removed

125305 Updated Control Center CPCS Entries page content

For CPCS Entries page (Origination & Receipt > CPCS Entries), these columns no longer appear:

Resolve Check Extract

Zelle Complete

Zelle Reconciliation

For CPCS Entries page (Origination & Receipt > CPCS Entries), these columns now appear as optional:

ACH Decision Requested (change Ach to ACH)

ACH Decision Response (change Ach to ACH)

Admin Returns Extract

Auxiliary Extract 1

Cross Reference Extract

Endorsement Extract

Pass

Pocket History

119738 Sample Reports: Cognos Reporting

Supported version of Cognos Analytics is v11.1.7.

The sample reports were developed using IBM® Cognos®. The Cognos sample report packages are .zip files that contain data sources and report definitions. To import and run the reports, a Cognos Analytics server must be installed and running. Installation and configuration of the Cognos Analytics server is the responsibility of the customer. Refer to [IBM Cognos Analytics documentation in IBM Documentation](#) for more information.

The reports support the following Cognos output formats:

- PDF
- XML
- CSV

The capabilities for each format may vary.

119738 Sample Reports: Crystal Reporting

Supported version of Crystal Server is SAP Crystal Server 2020.

Many FTM for Check sample reports were developed using Crystal Reports. To install and execute the reports, a Crystal Reports server must be installed and running. Installation and configuration of this server is the responsibility of the customer.

65272 Settlement Support for multi-threading

You are now able to run Settlement on multiple servers. Also, you are now able to specify multiple MDB threads on Settlement listener port.

64781 Create tagging for FTM Check V4 to support usage metering+

FTM Metering has been updated to store and report usage counts to the IBM License server for FTM Check installs on Open Shift. This will include 2 counts per each day, Base count & Check count. Both counts will be same and Only Master Transactions are counted.

Usage count metering differentiates between production and non-production environments

The FTM metering application, which is in the OAC pod, differentiates between production and non-production usage counts. The differentiation is made based on the "Environment type" variable under "License" category of IBM FTM Base operator.

- Customers should set this variable to "Production" or "NonProduction" based on the type of environment they are building during the operator installation.
- Regardless of "Environment type" value, all usage counts are calculated and stored in the database.
- Only production mode usage counts are reported to the IBM License Server, which is in the "ibm-common-services" namespace and is shared across all projects.

Participant Directory replaces Partner Profile

A participant is a financial institution or service provider that performs one or more roles as payments move through FTM. The various Payment Feature Services components use the attributes for a participant, which are defined in the configuration for the participant, to determine how payments are processed. Multiple versions of a participant may be defined, but only one version of the participant is effective at any given time.

The effective date for a participant version cannot be both a business date and a calendar date. Therefore, a participant version becomes effective at one of the following times.

- The start of the processing for a specific business day. It is a date without a specific time.
- An explicit calendar date and time. This is also referred to as a calendar date.

Additional information is available in the FTM IBM Documentation: [Participants](#)

82111 Reporting and Analytics database to use IBM InfoSphere Data Replication CDC

Instructions and configuration to create a replicated database for the tables used for reports and dashboards.

97349 Include Origin Name as part of Gateway Duplicate detection for file

Gateway File Duplicate detection has been enhanced to include Origin Name from the File Header Record as part of duplicate detection criteria.

99394 UI: Include System Overview Information

To provide a centralized location locating exception items, a new screen has been introduced to FTM. This screen, System Overview, includes links to various existing screens for viewing and correcting exception items. Graphs have also been included to provide a general overview of the health of the system. A link to this screen is located at System Management -> System Overview.

System Overview screen:



Three symbols will be displayed next to every link. A green check mark indicates that no exception items were found. A red exclamation mark indicates errors are found, while non-errors are indicated by a yellow exclamation mark.

Refreshing

The screen can be refreshed by clicking the refresh symbol on the title bar. This will reapply the currently selected filter and update the exception counts.

Auto-refresh functionality can be enabled at Administration -> Components -> Payment Feature Services -> Properties -> System overview refresh rate. Note that the value is specified in seconds, and defaults to disabled (empty).

Filtering

Both sections of the screen have separate filtering capability, configurable by clicking the pencil/edit icon on the title bar. Selecting this icon will display a dialog box that allows the configuration of the start and end dates for filtering. The default filter is 1 day.

Range filter with custom selected:

Edit Filter

Range ☒ Custom ☐ 1 hr ☐ 1 day ☐ 7 days ☐ 30 days

Start:

MM/DD/YYYY Example: 10:10 AM

End:

MM/DD/YYYY Example: 10:10 AM

If Custom is selected, date ranges may be specified. The filter range will not be updated on refresh.

Range filter with 1 day selected:

Edit Filter

Range ☐ Custom ☐ 1 hr ☒ 1 day ☐ 7 days ☐ 30 days

Start: May 17, 2020, 12:55 PM EDT

End: May 18, 2020, 12:55 PM EDT

If any value except custom is selected, a moving date range will be used. For example, if the above screenshot were the current date and time, pressing okay would filter from 12:55 PM yesterday to 12:55 PM today. If you were to refresh the screen in 5 minutes, the filter would update to be 1:00 PM yesterday to 1:00 PM today. This applies to 1 hr, 1 day, 7 days, and 30 days.

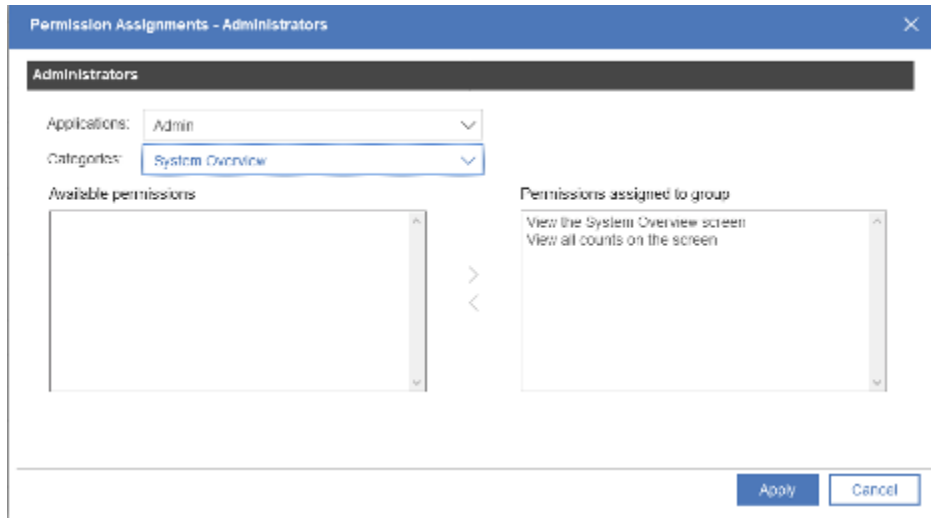
System Overview graphs

The bar graphs display the monetary value and item count for both inbound and outbound batches. The pie charts display the complete and incomplete counts for the inbound transmissions and batches.

Permissions

New permissions have been added for viewing the system overview screen, and for overriding the hiding of counts when the user does not have view permission to an exception item's screen.

Permission screen:



Links

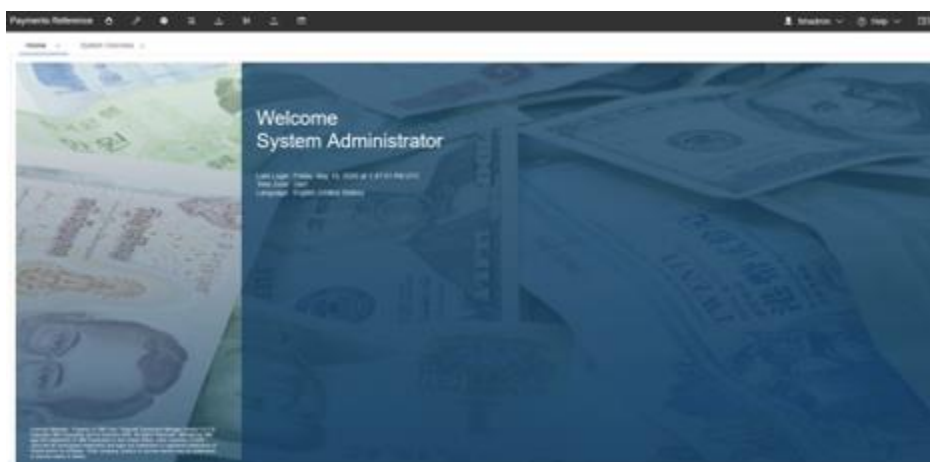
Selecting a link will open the screen for viewing or correcting the exception items.

- System Alerts -> System Alerts
- Approvals -> Approvals
- Expected Event Issues -> Expected Events
- Transmissions in Error -> Inbound Transmissions
- Pending Transmissions -> Inbound Transmissions
- Suspended Transmissions -> Risk Review UI
- Batches in Error -> Inbound Batches
- Pending Batches -> Inbound Batches
- Suspended Batches -> Risk Review UI
- Transactions in Error -> Inbound Transactions
- Suspended Transactions -> Risk Review UI
- Unmatched Returns -> Inbound Transactions
- Network Timeouts -> Inbound Transactions
- Fraudulent Transactions -> Inbound Transactions
- Unmatched Control Totals -> Control Totals

- Contested Dishonored Returns -> Inbound Transactions
- Transmissions in Error -> Outbound Transmissions
- Batches in Error -> Outbound Batches
- Segments in Error -> Outbound Segments

Homepage

With the addition of the system overview screen, the graphs that previously existed on the home page were no longer needed. It has been simplified and modelled after the login screen.



Outbound Transmissions screen

A new business day range has been added to support filtering screens after clicking the link on the System Overview screen. If no end business date is specified, only a single business day will be displayed. If an end business date is specified, all business days between the start date and the end date will be displayed.

Outbound Transmissions

Business day: Start End

Filter: Operator: Search term:

☐ Expand extended filter

<input type="checkbox"/>	Business Day	Status	Bank	Transmission Definition	Payment Scheme	Receiver	Message Standard	Cutoff
--------------------------	--------------	--------	------	-------------------------	----------------	----------	------------------	--------

Expected Events screen

A new business day range has been added to support filtering screens after clicking the link on

the System Overview screen. If no end business date is specified, only a single business day will be displayed. If an end business date is specified, all business days between the start date and the end date will be displayed.

Home × System Overview × **Expected Events** ×

Expected Events

Business day
Start All Business Days ▾
End -- Single Day -- ▾

Filter Status ▾ Operator equal to ▾ Search term Overdue ▾ Go

<input type="checkbox"/>	Direction	Source	Target	Expected By
--------------------------	-----------	--------	--------	-------------

Inbound Physical Transmission screen

A new business day range has been added to support filtering screens after clicking the link on the System Overview screen. If no end business date is specified, only a single business day will be displayed. If an end business date is specified, all business days between the start date and the end date will be displayed.

Home × System Overview × **Inbound Physical Transmissions** ×

Inbound Physical Transmission

Business day
Start 0, 2020-05-14, NACHA (Active) ▾
End -- Single Day -- ▾

Filter -- No Filter -- ▾ Go Column Totals

Page 1 of 1

Suspended Work screen

A new business day range has been added to support filtering screens after clicking the link on the System Overview screen. If no end business date is specified, only a single business day will be displayed. If an end business date is specified, all business days between the start date and the end date will be displayed.

Home × System Overview × **Suspended** ×

Suspended Work

Business day
 Start: 0, 2020-05-14, NACHA (Active) ▾
 End: -- Single Day -- ▾

Filter: Level ▾ Search term: equal to ▾ Transmission ▾ Go

<input type="checkbox"/> Business Day	Monitor Date	Level	Identifier	Originator	Company Name
Risk Suspended work s					

Outbound Segments screen

A new business day range has been added to support filtering screens after clicking the link on the System Overview screen. If no end business date is specified, only a single business day will be displayed. If an end business date is specified, all business days between the start date and the end date will be displayed.

Outbound Segments

Business day
 Start: 0, 2020-05-14, NACHA (Active) ▾
 End: -- Single Day -- ▾

Filter: Status ▾ Operator: = ▾ Search term: Any Error ▾ Go

<input type="checkbox"/> Business Day	Identifier	Bank	Endpoint / Sidepoint	Distribution Type	Payment Scheme
---------------------------------------	------------	------	----------------------	-------------------	----------------

Inbound Transaction screen

A new column has been added to the inbound transaction screen. This was required to filter the transactions by the Transmission's received time. This field is filterable and sortable. The forward / return field is also now filterable.

nding tion	Transmission Received	Forward / Return
	May 14, 2020, 3:13:04 PM	Forward
	May 14, 2020, 3:13:04 PM	Forward
	May 14, 2020, 3:13:04 PM	Forward

103552 Payment Scheme

To clearly identify, sort, filter, etc. transactions based upon the payment scheme that the transaction is participating in, payment scheme has been introduced to FTM. The payment scheme will affect multiple components through configuration updates. Payment schemes will define if Saturdays and Sundays are considered workdays as well as allowing holidays to be defined by payment scheme. Holidays can be configured globally for the system or holidays can now be associated to specific payment schemes. Inbound payment schemes will be defined by the payment scheme associated with the inbound Transmission Type. Outbound payment schemes will be defined by the payment scheme associated with the outbound Transmission Definition.

Any module that performs business day “math” to determine next or previous business days will be affected and will use the assigned payment scheme when performing these calculations. Before the use of payment schemes were introduced, business day calculations were always done using the defined holidays as well as treating Saturday and Sunday as non-workdays. These calculations will now use the supplied payment scheme to determine what holidays to use and if Saturdays and Sundays are workdays.

Product configuration

The Payment Scheme values that are defined for the system are defined in the ProductConfiguration DSU spreadsheet and are defined as

Payment Scheme:

Payment Scheme Id	Name	Description
0	Default	Default scheme
1	Check	Check X9 Files
2	NACHA	NACHA
3	EDI	EDI
4	Fedwire	Fedwire
5	SWIFT	SWIFT
6	CPA AFT	Payments Canada - Automated Funds Transfer
7	TCH RTP	TCH Real Time Payment
8	ZELLE	Zelle Network
9	Interac e-Transfer	Interac e-Transfer
20	Posting File	Posting File
30	Target2	Real Time Gross Settlement System for the Eurozone

Calendar Group:

Identification	Name	Description	Time Zone	Modifier	Last Modified
0	Default	Calendar group for Default scheme	EST	DSU	2020-01-01
1	Check	Calendar group for Check X9 Files	EST	DSU	2020-01-01
2	NACHA	Calendar group for NACHA	EST	DSU	2020-01-01
3	EDI	Calendar group for EDI	EST	DSU	2020-01-01
4	Fedwire	Calendar group for Fedwire	EST	DSU	2020-01-01
5	SWIFT	Calendar group for SWIFT	EST	DSU	2020-01-01
6	CPA/M I	Calendar group for Payments Canada Automated Funds Transfer	EST	DSU	2020-01-01
7	TCH RTP	Calendar group for TCH Real Time Payment	EST	DSU	2020-01-01
8	Zelle F	Calendar group for Zelle Network	EST	DSU	2020-01-01
9	Interac e-Transfer	Calendar group for Interac e-Transfer	EST	DSU	2020-01-01
20	Posting File	Calendar group for Posting File	EST	DSU	2020-01-01
32	Target2	Calendar group for Real Time Gross Settlement System for the Eurozone	EST	DSU	2020-01-01

Schedule Entry:

Identification	Calendar Group Id	Open Time	Close Time	Monday Flag	Tuesday Flag	Wednesday Flag	Thursday Flag	Friday Flag	Saturday Flag	Sunday Flag	Type Code	Modifier	Last Modified
0	0	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
1	1	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
2	2	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
3	3	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
4	4	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
5	5	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
6	6	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
7	7	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
8	8	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
9	9	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
20	20	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01
32	32	00:00	23:59	N	N	N	N	N	N	N	SCHEDULE	DSU	2020-01-01

Configuration screens

There are multiple configuration screens that have changed to allow for payment scheme integration into Calendars, Payment Message Types, Transmission Types and Transmission Definitions.

Calendar

The payment scheme value for the holidays will be displayed in on the calendar grid by default.

Calendar grid:

Date	Description	Working Day	Location	Region	Main Product	Participant ID	Participant Name	Payment scheme
Jan 1, 2020	New Years Day	No						TARGET
Jan 2, 2020	New Years Day	No						TARGET
Jan 3, 2020	Wednesday King Day	No						TARGET
Jan 4, 2020	Wednesday King Day	No						TARGET
Jan 5, 2020	Thursday	No						TARGET
Jan 6, 2020	Friday	No						TARGET
Jan 7, 2020	Saturday	No						TARGET
Jan 8, 2020	Sunday	No						TARGET
Jan 9, 2020	Monday	No						TARGET
Jan 10, 2020	Tuesday	No						TARGET
Jan 11, 2020	Wednesday	No						TARGET
Jan 12, 2020	Thursday	No						TARGET
Jan 13, 2020	Friday	No						TARGET
Jan 14, 2020	Saturday	No						TARGET
Jan 15, 2020	Sunday	No						TARGET
Jan 16, 2020	Monday	No						TARGET
Jan 17, 2020	Tuesday	No						TARGET
Jan 18, 2020	Wednesday	No						TARGET
Jan 19, 2020	Thursday	No						TARGET
Jan 20, 2020	Friday	No						TARGET
Jan 21, 2020	Saturday	No						TARGET
Jan 22, 2020	Sunday	No						TARGET
Jan 23, 2020	Monday	No						TARGET
Jan 24, 2020	Tuesday	No						TARGET
Jan 25, 2020	Wednesday	No						TARGET
Jan 26, 2020	Thursday	No						TARGET
Jan 27, 2020	Friday	No						TARGET
Jan 28, 2020	Saturday	No						TARGET
Jan 29, 2020	Sunday	No						TARGET
Jan 30, 2020	Monday	No						TARGET
Jan 31, 2020	Tuesday	No						TARGET

The payment scheme value for the holidays will be configurable for the Participant, Location data, and Payment scheme scopes. The drop down will list all available payment schemes.

Calendar Details:

Calendar - New Years Day

A calendar that will be used by participants that match the configuration. [Learn more](#)

* Date:  Working Day: ☐ 

MM/DD/YYYY

* Description: 

* Scope

Scope: ☐ Global ☒ Participant ☐ Location data ☐ Scheme

* Participant: 

Payment scheme: 

Save

Cancel

Calendar - New Years Day

A calendar that will be used by participants that match the configuration. [Learn more](#)

* Date:  Working Day: ☐ 

MM/DD/YYYY

* Description: 

* Scope

Scope: ☐ Global ☐ Participant ☒ Location data ☐ Scheme

Country: 

Region: 

State/Province: 

Payment scheme: 

Save

Cancel

Calendar - New Years Day

A calendar that will be used by participants that match the configuration [Learn more](#)

* Date: Working Day: ☐

* Description:

* Scope

Scope: ☐ Global ☐ Participant ☐ Location data ☒ Scheme

* Payment scheme:

- Check
- NACHA
- EDI
- Fedwire
- SWIFT
- CRA AFT
- TCH RTP
- ZELLE
- Interac e-Transfer
- Posting File

Message Types

Payment message types has been expanded to include details by payment scheme. In order to provide these optional detail fields, a payment scheme must be supplied.

The payment scheme value for the message types will be displayed on all the message type screens. The grid screen will display the Payment Scheme by default. A new Add Details action has been added. This action will be used when new payment scheme details need to be added to a payment message type.

Message types grid:

Home > Message Types >

Manage Message Types Add Message Type Add Payment Scheme Help

Message Type Name	Message Type ID	Payment Scheme	Return Message Type ID	Reversal Message Type ID	Description	Subtype
AT	1	ATM			AT	OUT_TRANS_ATM
POST	2	POST			POST	OUT_TRANS_POST
SWIFT	3	SWIFT			SWIFT	
SWIFT_P2P	4	SWIFT			SWIFT_P2P	
SWIFT_P2P2	5	SWIFT			SWIFT_P2P2	
SWIFT_P2P3	6	SWIFT			SWIFT_P2P3	
SWIFT_P2P4	7	SWIFT			SWIFT_P2P4	
SWIFT_P2P5	8	SWIFT			SWIFT_P2P5	
SWIFT_P2P6	9	SWIFT			SWIFT_P2P6	
SWIFT_P2P7	10	SWIFT			SWIFT_P2P7	
SWIFT_P2P8	11	SWIFT			SWIFT_P2P8	
SWIFT_P2P9	12	SWIFT			SWIFT_P2P9	
SWIFT_P2P10	13	SWIFT			SWIFT_P2P10	
SWIFT_P2P11	14	SWIFT			SWIFT_P2P11	
SWIFT_P2P12	15	SWIFT			SWIFT_P2P12	
SWIFT_P2P13	16	SWIFT			SWIFT_P2P13	
SWIFT_P2P14	17	SWIFT			SWIFT_P2P14	
SWIFT_P2P15	18	SWIFT			SWIFT_P2P15	
SWIFT_P2P16	19	SWIFT			SWIFT_P2P16	
SWIFT_P2P17	20	SWIFT			SWIFT_P2P17	
SWIFT_P2P18	21	SWIFT			SWIFT_P2P18	
SWIFT_P2P19	22	SWIFT			SWIFT_P2P19	
SWIFT_P2P20	23	SWIFT			SWIFT_P2P20	
SWIFT_P2P21	24	SWIFT			SWIFT_P2P21	
SWIFT_P2P22	25	SWIFT			SWIFT_P2P22	
SWIFT_P2P23	26	SWIFT			SWIFT_P2P23	
SWIFT_P2P24	27	SWIFT			SWIFT_P2P24	
SWIFT_P2P25	28	SWIFT			SWIFT_P2P25	
SWIFT_P2P26	29	SWIFT			SWIFT_P2P26	
SWIFT_P2P27	30	SWIFT			SWIFT_P2P27	
SWIFT_P2P28	31	SWIFT			SWIFT_P2P28	
SWIFT_P2P29	32	SWIFT			SWIFT_P2P29	
SWIFT_P2P30	33	SWIFT			SWIFT_P2P30	
SWIFT_P2P31	34	SWIFT			SWIFT_P2P31	
SWIFT_P2P32	35	SWIFT			SWIFT_P2P32	
SWIFT_P2P33	36	SWIFT			SWIFT_P2P33	
SWIFT_P2P34	37	SWIFT			SWIFT_P2P34	
SWIFT_P2P35	38	SWIFT			SWIFT_P2P35	
SWIFT_P2P36	39	SWIFT			SWIFT_P2P36	
SWIFT_P2P37	40	SWIFT			SWIFT_P2P37	
SWIFT_P2P38	41	SWIFT			SWIFT_P2P38	
SWIFT_P2P39	42	SWIFT			SWIFT_P2P39	
SWIFT_P2P40	43	SWIFT			SWIFT_P2P40	
SWIFT_P2P41	44	SWIFT			SWIFT_P2P41	
SWIFT_P2P42	45	SWIFT			SWIFT_P2P42	
SWIFT_P2P43	46	SWIFT			SWIFT_P2P43	
SWIFT_P2P44	47	SWIFT			SWIFT_P2P44	
SWIFT_P2P45	48	SWIFT			SWIFT_P2P45	
SWIFT_P2P46	49	SWIFT			SWIFT_P2P46	
SWIFT_P2P47	50	SWIFT			SWIFT_P2P47	
SWIFT_P2P48	51	SWIFT			SWIFT_P2P48	
SWIFT_P2P49	52	SWIFT			SWIFT_P2P49	
SWIFT_P2P50	53	SWIFT			SWIFT_P2P50	
SWIFT_P2P51	54	SWIFT			SWIFT_P2P51	
SWIFT_P2P52	55	SWIFT			SWIFT_P2P52	
SWIFT_P2P53	56	SWIFT			SWIFT_P2P53	
SWIFT_P2P54	57	SWIFT			SWIFT_P2P54	
SWIFT_P2P55	58	SWIFT			SWIFT_P2P55	
SWIFT_P2P56	59	SWIFT			SWIFT_P2P56	
SWIFT_P2P57	60	SWIFT			SWIFT_P2P57	
SWIFT_P2P58	61	SWIFT			SWIFT_P2P58	
SWIFT_P2P59	62	SWIFT			SWIFT_P2P59	
SWIFT_P2P60	63	SWIFT			SWIFT_P2P60	
SWIFT_P2P61	64	SWIFT			SWIFT_P2P61	
SWIFT_P2P62	65	SWIFT			SWIFT_P2P62	
SWIFT_P2P63	66	SWIFT			SWIFT_P2P63	
SWIFT_P2P64	67	SWIFT			SWIFT_P2P64	
SWIFT_P2P65	68	SWIFT			SWIFT_P2P65	
SWIFT_P2P66	69	SWIFT			SWIFT_P2P66	
SWIFT_P2P67	70	SWIFT			SWIFT_P2P67	
SWIFT_P2P68	71	SWIFT			SWIFT_P2P68	
SWIFT_P2P69	72	SWIFT			SWIFT_P2P69	
SWIFT_P2P70	73	SWIFT			SWIFT_P2P70	
SWIFT_P2P71	74	SWIFT			SWIFT_P2P71	
SWIFT_P2P72	75	SWIFT			SWIFT_P2P72	
SWIFT_P2P73	76	SWIFT			SWIFT_P2P73	
SWIFT_P2P74	77	SWIFT			SWIFT_P2P74	
SWIFT_P2P75	78	SWIFT			SWIFT_P2P75	
SWIFT_P2P76	79	SWIFT			SWIFT_P2P76	
SWIFT_P2P77	80	SWIFT			SWIFT_P2P77	
SWIFT_P2P78	81	SWIFT			SWIFT_P2P78	
SWIFT_P2P79	82	SWIFT			SWIFT_P2P79	
SWIFT_P2P80	83	SWIFT			SWIFT_P2P80	
SWIFT_P2P81	84	SWIFT			SWIFT_P2P81	
SWIFT_P2P82	85	SWIFT			SWIFT_P2P82	
SWIFT_P2P83	86	SWIFT			SWIFT_P2P83	
SWIFT_P2P84	87	SWIFT			SWIFT_P2P84	
SWIFT_P2P85	88	SWIFT			SWIFT_P2P85	
SWIFT_P2P86	89	SWIFT			SWIFT_P2P86	
SWIFT_P2P87	90	SWIFT			SWIFT_P2P87	
SWIFT_P2P88	91	SWIFT			SWIFT_P2P88	
SWIFT_P2P89	92	SWIFT			SWIFT_P2P89	
SWIFT_P2P90	93	SWIFT			SWIFT_P2P90	
SWIFT_P2P91	94	SWIFT			SWIFT_P2P91	
SWIFT_P2P92	95	SWIFT			SWIFT_P2P92	
SWIFT_P2P93	96	SWIFT			SWIFT_P2P93	
SWIFT_P2P94	97	SWIFT			SWIFT_P2P94	
SWIFT_P2P95	98	SWIFT			SWIFT_P2P95	
SWIFT_P2P96	99	SWIFT			SWIFT_P2P96	
SWIFT_P2P97	100	SWIFT			SWIFT_P2P97	
SWIFT_P2P98	101	SWIFT			SWIFT_P2P98	
SWIFT_P2P99	102	SWIFT			SWIFT_P2P99	
SWIFT_P2P100	103	SWIFT			SWIFT_P2P100	

Message Type Details:

Message Type Details

Message Type Name: *
 Message Type ID: *
 Description: *
 Payment Scheme: *
 Associated Message Standard: *
 Return Message Type ID: *
 Return Address Type: *
 Return Message Type ID: *
 Return Detail Type: *

Legend
 * Required field

The add message type screen now contains a payment scheme drop down which will contain all available payment schemes. Payment scheme is required when filling in any non-required/detail fields.

Add Message Type:

Add Message Type

Message Type Name: *
 Message Type ID: *
 Description: *
 Payment Scheme: *
 Associated Message Standard: *
 Return Message Type ID: *
 Return Address Type: *
 Return Message Type ID: *
 Return Detail Type: *

Legend
 * Required field

The add details screen is nearly identical to the Add Message Type screen, with the exception that you can add a new payment scheme to an already existing message type. The Message types dropdown will contain all available message types.

Add Details by Payment Scheme:

Add Message Type

Message Type Name: *
 Message Type ID: *
 Description: *
 Payment Scheme: *
 Associated Message Standard: *
 Return Message Type ID: *
 Return Address Type: *
 Return Message Type ID: *
 Return Detail Type: *

Legend
 * Required field

Transmission Types

The payment scheme value for the transmission types will be displayed on the transmission types screen accessible through Configuration -> Inbound -> Transmission Types menu. The grid screen will display the Payment Scheme by default.

Transmission Types grid:

Home x Inbound Transmissions x Transmission Types x

Manage Transmission Types

+ Add Transmission Type + Help

Total Rows: 13

Name	Payment Scheme	Business Rule Workflow Name	Transmission Validation Rule	Batch / ICL Rule Set	Provider		
FTP_LDP	---	TchWorkflow	TCH IP Trans	TCH IP Batch	Customer		
TCH	TCH RTP	TchWorkflow	TCH IP Trans	TCH IP Batch	Customer		
PAC500B	TCH RTP	TchWorkflow	TCH IP Trans	TCH IP Batch	Customer		
ZELLE	ZELLE	ZelleWorkflow	ZELLE	ZELLE Batch	Product		
NACHA MANUAL RETURN	NACHA	AchWorkflow	NACHA Int Trans	NACHA Int Batch	Product		
NACHA NOC	NACHA	AchWorkflow	NACHA Int Trans	NACHA Int Batch	Product		
NACHA RETURN	NACHA	AchWorkflow	NACHA Int Trans	NACHA Int Batch	Product		
NACHA FAILED BANK REVERSAL	NACHA	AchWorkflow	NACHA	NACHA Batch	Product		
NACHA REVERSAL	NACHA	AchWorkflow	NACHA	NACHA Batch	Product		
Visa Direct	ZELLE	ZelleWorkflow	ZELLE	ZELLE Batch	Product		
Mastercard Direct	ZELLE	ZelleWorkflow	ZELLE	ZELLE Batch	Product		
BSA	ZELLE	ZelleWorkflow	ZELLE	ZELLE Batch	Product		
NACHA	NACHA	AchWorkflow	NACHA	NACHA Batch	Product		

Legend

- Where Used
- View details
- Duplicate Transmission Type

Related details screen in view and edit modes (note the dropdown payment scheme selection list in edit mode).

Details:

Transmission Type Details

Name: NACHA

Transmission Type ID: 10

Provider: Product

Payment Scheme: NACHA

Transmission Validation Rule: NACHA

Batch / ICL Rule Set: NACHA Batch

Business Rule Workflow Name: AchWorkflow

Send Acknowledgment: Yes

Acknowledgment Type: Transmission Acknowledgment

Ingest then Pend Options

Ingest then Pend: No


OK

Legend

Change to edit mode


Edit Mode:

Edit Transmission Type

 **Name:** NACHA

Transmission Type ID: 10

Provider: Product

Payment Scheme: NACHA 

Transmission Validation Rule: Default

Batch / ICL Rule Set: Check

Business Rule Workflow Name: NACHA

Send Acknowledgment: EDI

Acknowledgment Type: Fedwire

Ingest then Pend Options

Ingest then Pend: SWIFT


CPA AFT

TCH RTP



ZELLE

Interac e-Transfer

Posting File






Legend

-  Required field
-  Cancel edit mode

Transmission Definitions

The payment scheme value for the transmission definitions will be displayed on the transmission definition screen. The grid screen will display the Payment Scheme by default.





















Transmission definitions grid:

Home  Inbound Transmissions  Transmission Definitions 



Manage Transmission definitions [Add Transmission definition](#) [Help](#)

Filter:

Page 1 of 4 Total Rows: 32

	Beginning	Back 10 Pages	Back 1 Page	[1] 2 3 4	Forward 1 Page	Forward 10 Pages	End
Name	Encoding	Channel	Payment Scheme	Endpoints			
 BA12 Extract	ASCII	Extract	NACHA	0			
 Control Total Email Notification	ASCII	Control.Total.Email.Notification	NACHA	0			
 DFT Distribution	ASCII	ACHSameDay	NACHA	2			
 DFT Origination	ASCII	EDI Clearing	NACHA	1			
 DFT Returns from FGB	ASCII	SOB>Returns	NACHA	1			
 DFT Returns from SNS	ASCII	FGB>Returns	NACHA	1			
 E-Mail	ASCII	E-Mail	NACHA	0			
 Electronic Payments Network	ASCII	NACHA.EPN	NACHA	1			
 Email Transmission Ack	ASCII	Email.Transmission.Acknowledgment	NACHA	0			
 Email Transmission Processed	ASCII	Email.Transmission.Processed.Notification	NACHA	0			


Legend

-  View details
-  Delete Transmission Definition

Associated details screen in view and edit mode (note the drop-down selection list for the payment scheme in edit mode):

Transmission Definition Details

Step 1 of 2 (Transmission Definition information)


	Name:	DFI Distribution
	Channel:	ACHSameDay
	Encoding:	ASCII
	Max Size(bytes):	unlimited
	Max Debit Currency Value:	unlimited
	Max Credit Currency Value:	unlimited
	Max Batch Count:	unlimited
	Max Number Of Transactions:	unlimited
	Payment Scheme:	NACHA
	Transmission Format:	NACHA
	Assembly Option:	Commingled
	Missing Image Percent:	0
	Test File Indicator:	T
	File Name Pattern:	FedACH_ToDFI.%PT%.R%PID1-4%.NN.PID5-8%.D%DTyyMMdd%.T%DT
	Data File Extension:	
	Route File Formatter Class:	
	Route File Schema Name:	
	Time Zone:	America/New_York
	Sender Routing Transit:	
	Sender Name:	
	Custom Descriptor:	DFI Distrib Desc
	File to File:	No
	Sequence Number Required:	No
	Use Original Data:	Yes
	Sub Type:	
	Single Transaction:	No
	Companion Document Indicator:	No
	Message Type Configurations:	?

Next OK

Edit Mode:

Edit Transmission definition

Step 1 of 2 (Transmission Definition information)

	Name:	DFI Distribution	*
	Channel:	ACHSameDay	*
	Encoding:	ASCII	*
	Max Size(bytes):	-1	
	Max Debit Currency Value:	-1	
	Max Credit Currency Value:	-1	
	Max Batch Count:	-1	
	Max Number Of Transactions:	-1	
	Payment Scheme:	NACHA	*
	Transmission Format:	Default	*
	Assembly Option:	Check	
	Missing Image Percent:	NACHA	
	Test File Indicator:	EDI	
	File Name Pattern:	Fedwire	%PID5-8%.D%DTyyMMdd%.T%DT
	Data File Extension:	SWIFT	
	Route File Formatter Class:	CPA AFT	
	Route File Schema Name:	TCH RTP	
	Time Zone:	ZELLE	MT -5:00 DST)
	Sender Routing Transit:	Interac e-Transfer	
	Sender Name:	Posting File	
	Custom Descriptor:	UPI USIND UESC	
	File to File:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
	Sequence Number Required:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
	Use Original Data:	<input checked="" type="radio"/> Yes <input type="radio"/> No	
	Sub Type:		
	Single Transaction:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
	Companion Document Indicator:	No	

Next Cancel

The payment scheme value for each transmission, batch, segment (when applicable), and transaction will be displayed in the various grid and transmission hierarchy UI screens. Each of the grid screens will display the Payment Scheme by default.

Inbound Transmissions												
Inbound Transmissions												
No filter applied												
	Transmission ID	Received	FTW Transmission ID	Sender	Message Standard	Payment Scheme	Processor	Inbound Batch(es) / ICLA	Processing Batch(es) / ICLA	Condition	Overridable	Pending
<input type="checkbox"/>	25	Mar 6, 2020 1:41:14 PM	14001	Financial Institution 2	RACHA	RACHA	First Global Bank (FGB)	0	0	Accepted	No	No

[illegible]

Inbound Segments													Help	
More ▾														
Total: 2 Clear filter														
<input type="checkbox"/>	Segment ID	Inbound Batch / ICL Id	Processing Batch / ICL Id	Business Date	Category	Payment Scheme	Originator	Originator Id	Inbound Currency	Calculate Credit Amount	Calculate Debit Amount	Transactions	Loaded	Repaired
<input checked="" type="checkbox"/>	1			Mar 25, 2020	NACHA	NACHA	ABC Company	CORP1000		0	0	0		

Total: 2 Selected: 0

100 / 250 / 500

Transaction Grid:

Inbound Transactions

Filter | Clear Filter

Transaction ID	Trace Number	Business Date	Category	Status	Inbound Transaction ID	Inbound Batch ID	Processing Date	On Demand	Transaction Type	FTS Transaction ID	Company	Sender	Message Header	Message Type	Payment Scheme	Inbound Currency	Inbound Amount	Processor
165	0000100000	Mar 4, 2025	NACHA	Accepted	24	901	162	On Line	Credit	16584	COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$1.00	First Global Bank (FGB)
166	0000100000	Mar 4, 2025	NACHA	Accepted	25	901	162	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$10.00	First Global Bank (FGB)
167	0000100000	Mar 4, 2025	NACHA	Accepted	26	901	162	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$100.00	First Global Bank (FGB)
168	0000100000	Mar 4, 2025	NACHA	Accepted	27	901	162	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$1,000.00	First Global Bank (FGB)
169	0000100000	Mar 4, 2025	NACHA	Accepted	28	901	162	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$10,000.00	First Global Bank (FGB)
170	0000100000	Mar 4, 2025	NACHA	Accepted	29	901	164	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$2,000.00	First Global Bank (FGB)
171	0000100000	Mar 4, 2025	NACHA	Accepted	30	901	166	Traded	Credit		COOPERBANK	Financial Institution 3	NACHA	PPS	NACHA	USD	\$1,000,000.00	First Global Bank (FGB)

Total: 30 Inbound | 1

165 | 250 | 500

The Payment Scheme will be sortable and filterable on each of these screens. The payment scheme filter will provide the user with a dropdown of available payment schemes to choose.

Payment Scheme Filter:

Build Filter

Match: All rules ☒ Match case

Rules

Payment Scheme equals Check +

- Check
- NACHA
- EDI
- Fedwire
- SWIFT
- CPA AFT
- TCH RTP
- ZELLE
- Interac e-Transfer
- Posting File

Filter Close

Each level of the Transmission Hierarchy details UI will also display the Payment Scheme assigned to that transmission, batch, segment (when applicable), and transaction.

Transmission details:

Inbound Transmission Hierarchy

Transmission Hierarchy

Transmission

Batch / JCL

Calculated Credits: 7
Calculated Credit Amount: \$3,013,111.00
Calculated Debits: 7
Calculated Debit Amount: \$744.49

Transmission Details

Received: Mar 6, 2020, 1:41:14 PM

General Parties Status History Revalidation

Financial Information

Control Credit Amount: \$3,013,111.00
Control Debit Amount: \$744.49
Control Credit Count: 7
Control Debit Count: 7
System Credit Amount: \$3,013,111.00
System Debit Amount: \$744.49
Inbound Currency: USD

Attributes

Identifier: 25
Created: 1/1/20
FTM Transmission ID: 14001
Condition: Accepted
Name: ACH_Flow02_0300004114012
Original Name: ACH_Flow02
Business Date: 2020-03-06
Source: ACH
Payment Scheme: NACHA
Message Reference: 0000001
Customer Reference: 0000001
ISM From Origin: No
Connection Owner: --
Connection: --
Custom Description: --
Test Indicator: --

File ID: 25
Overridable: No
Overridden by: --
Pending: No
Released by: --
Archivable: No
Rejects and Warnings: 1
Total Validation Count: 14
Addenda Count: 1
Transmission Type: NACHA
Channel Name: FILE
Locked By: --
Channel Type: FILE
Customer Unique ID: --
File ID Modifier: A
Priority: 40

Batch details:

Inbound Transmission Hierarchy

Transmission Hierarchy

Transmission

Batch

Calculated Credits: 7
Calculated Credit Amount: \$3,013,111.00
Calculated Debits: 7
Calculated Debit Amount: \$744.49

Batch Details

Business Date: 2020-03-06
Category: NACHA
Rate: Active

General Parties Status History Accumulation

Financial Information

Calculated Credit Amount: \$11,111.00
Calculated Debit Amount: \$0.00
Calculated Credit Count: 5
Calculated Debit Count: 0
Control Credit Amount: \$11,111.00
Control Debit Amount: \$0.00
Control Credit Count: 5
Control Debit Count: 0
Adjusted Credit Amount: \$0.00
Adjusted Debit Amount: \$0.00
Adjusted Credit Count: 0
Adjusted Debit Count: 0
System Credit Amount: \$11,111.00
System Debit Amount: \$0.00
Inbound Currency: USD

Attributes

Identifier: 151
FTM Batch ID: 14002
Type: ACH Batch
Message Type: P20
Payment Scheme: NACHA
Message Reference: NACHA
Forward / Return: Forward
Entry Date: Oct 6, 2015
Approval Date: Mar 6, 2020, 1:41:14 PM
Requested Settlement Date: Received
Batch: 1
Ready For Distribution: Complete
Total Item Addenda Count: 6

Batch Number: 0000001
Business Rule Workflow: Acknowledged
Fixed Billing: 0
Variable Billing: 0
Product Code: ACH
Condition: Accepted
Status: Complete
Pending: No
Overridable: No
Rejects and Warnings: 0
Total Validation Count: 0
Rejected Items: 0
Channel Type: FILE

Transaction details:

Inbound Transmission Hierarchy

Transmission Hierarchy

Transmission

Calculated Credits: 2 Calculated Debits: 5 Calculated Credits: 5 Calculated Debits: 5
 Calculated Credit Amount: \$3,913,111.00 Calculated Debit Amount: \$744.40 Calculated Credit Amount: \$11,111.00 Calculated Debit Amount: \$0.00
 Total Credit Difference: \$3,913,111.00 Total Debit Difference: \$0.00

Credit Details

General Parties Addenda Versions Rate Data History Accumulations

Inbound

Payment Scheme: NACHA
 Message Header: NACHA
 Message Type: PPD
 Transaction Type: Credit
 Amount: \$10.00
 Sender ID: 01000000
 Sender: Financial Institution 2
 Originator ID: CORP000001
 Originator: ABC Company
 Identification Account Number: EGA
 Identification Number: 1
 Batch / RCL ID: 102
 Transmission ID: 25
 Originator Settlement Date: Mar 6, 2020
 Originator Account Number: --

Outbound

Payment Scheme: NACHA
 Message Header: NACHA
 Message Type: PPD
 Transaction Type: Credit
 Exchange: USD - USD
 Rate: 1.00000
 Amount: \$10.00
 Financial Institution: 987654321
 Recipient: Tammy's Toys
 Identification Number: 1
 On / Off Transfer: Transfer
 Recipient Account: 001495700
 Batch / RCL ID: 04
 Transmission ID: 25
 Subsequent Transmittal(s): View All
 Distribution Settlement Date: Mar 6, 2020

Outbound processing screens

The payment scheme value for each outbound transmission, batch, segment (when applicable) will be displayed in the various outbound grid and detail screens. Each of the grid screens will display the Payment Scheme by default.

Outbound transmission grid:

Outbound Transmissions

Business day: 3, 2020-03-26, NACHA, NACHA (NACHA) * Filter: -- No Filter -- 100

Export: Download

Page 1 of 1

Business Day	Batch	Batch	Transmission	Payment Scheme	Service	Message Standard	Count	Baseline	Outbound Currency	Control Credit Amount	Control Debit Amount
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	Electronic Payments Network	NACHA	Federal Reserve Bank	NACHA	00700: 2 18:00	✓ 3/27/20: 3:30 AM	USD	\$1,000.00	\$0.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	DFI Origination	NACHA	Federal Reserve Bank	NACHA	00800: 11 45:00	✓ 3/27/20: 12:30 AM	USD	\$3,889,400.00	\$0.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	Money Post for FGB	Routing Slip	First Global Bank (FGB)	Routing Slip	-- End of Day --	-- End of Day --	USD	\$1.00	\$0.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	Hard Play for FGB	Routing Slip	First Global Bank (FGB)	Routing Slip	-- End of Day --	-- End of Day --	USD	\$1.00	\$0.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	PayACH	NACHA	Federal Reserve Bank	NACHA	00900: 11 45:00	✓ 3/27/20: 12:30 AM	USD	\$12,510.00	\$44.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	PayACH	NACHA	Internal System A	NACHA	-- unscheduled --	-- unscheduled --	USD	\$12,510.00	\$44.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	PayACH	NACHA	Internal System C	NACHA	-- unscheduled --	-- unscheduled --	USD	\$11,110.00	\$44.00
3, 2020-03-26, NACHA, NACHA (NACHA)	Open	First Global Bank (FGB)	PayACH	NACHA	Internal System B	NACHA	-- unscheduled --	-- unscheduled --	USD	\$1,000.00	\$0.00

Outbound transmission details:

[illegible]

Outbound batch details:

Outbound batch / ICL - 1

Identifier: 1
Category: NACHA
Transmission ID: 2
Remarks:
Unmapped Batch / ICL ID: 0

Business date: Mar 19, 2020
Status: Released

Receiver
Batch / ICL
Financial
Transmission
States
Remapped

Transmission definition: FedACH
Payment scheme: NACHA
Transmission name: FedACH.TR0410.N0001.D200319.T105816339.ach
Distribution window:

Message type: CCD
Format: NACHA

Services Framework task updates

There are a few Services Framework tasks that have been updated to allow for an optional payment scheme value. Here are the tasks that were updated:

Business Day Open and Activate Task

Parameter: Payment Scheme

Description: Payment scheme to use during open and/or activation process. If the payment scheme parameter is left blank, default payment scheme will be used for business days to open and/or activate. Valid value for payment scheme should already be defined in the system.

Example: Check, NACHA, TCH RTP, etc.

Business Day Close And End Task

Parameter: Payment Scheme

Description: An optional payment scheme used to filter the possible business days the action is executed against. If the payment scheme parameter is left blank, all business days that match the time interval will be acted upon.

Example: Check, NACHA, TCH RTP, etc.

Performance Monitor Purge Task

Parameter: Payment Scheme

Description: An optional payment scheme used during the process. If the payment scheme parameter is left blank during the process, the default payment scheme, defined in the Payment Feature Services component property called System Payment Scheme will be used. If payment scheme parameter is specified, it should already be defined in the system.

Example: Check, NACHA, TCH RTP, etc.

File Tracking Purge Task

Parameter: Payment Scheme

Description: An optional payment scheme used during the process. If the payment scheme parameter is left blank during the process, the default payment scheme, defined in the Payment Feature Services component property called System Payment Scheme will be used. If payment scheme parameter is specified, it should already be defined in the system.

Example: Check, NACHA, TCH RTP, etc.

107035

Dynamically generate Action Menu for the Inbound Transaction UI Grid

The inbound transactions screens will now have a dynamic action menus based on the inbound and outbound schemes. If the inbound and outbound schemes are different, then the action menus are union of both.

76892 Inbound and Outbound Raw Data Views

Enhanced the inbound and outbound raw data views so that the current inbound and outbound views are more legible.

99381 Gateway Duplicate Checking by Transmission/File Type

Configuration > Inbound > Transmission Types UI

The Gateway Duplicate File Table field has been added to the Transmission Type details screen. This will allow for payment schemes or Transmission/File Types to use a separate gateway duplicate file table with a custom unique constraint in addition to the default gateway duplicate file table. If a transmission type is to use a secondary gateway duplicate file table, the table name will be added to the field. A blank field value will default to the product gateway duplicate file table. Note that after any changes to the Gateway Duplicate File Table field of a transmission type are made, gateway server must be restarted if it's running. The secondary gateway duplicate file table must be built and present in the database before adding it to the Transmission Type in the UI.

119046 UTF-8 Support for all Emoji characters in Business Rules ISF Parsing

Implemented UTF-8 character support for DSU, Business Rules Manager and Business Rules Server.

- DSU allows to import/export configuration with UTF-8 characters.
- Operator is be able to activate release (build and validate TBL file)
- Business Rules server successfully receives the activated descriptors/file and process the activated releases.
- Business rules server is able to process transmission/transaction which includes UTF-8 characters.

50268 Support SSL RMI communication.

Resolution:

Added SSL RMI communication for Distribution Manager, Gateway Server, Transaction Server RMI interfaces.

Setting up SSL connection for RMI between these applications and WebSphere Application Server:

The following new properties were added to Distribution Manager, Gateway Server, and Transaction Server.

- | | |
|------------------------|--|
| remoteSSLEnabled | - true/false, whether to enable SSL for RMI or not |
| remoteKeyStore | - location of a keystore for the application |
| remoteKeyStorePassword | - password for the keystore |
| remoteKeyStoreFormat | - JKS, which is a keystore format |

remoteTrustStore - location of a truststore for the application

remoteTrustStorePassword - password for the truststore

remoteTrustStoreFormat - JKS, which is a truststore format

Example:

remoteSSLEnabled = true

remoteKeyStore = c:/IBM/Key/server/keyStore.jks

remoteKeyStorePassword = server

remoteKeyStoreFormat = JKS

remoteTrustStore = c:/IBM/Key/server/trustStore.jks

remoteTrustStorePassword = server

remoteTrustStoreFormat = JKS

Note: If you prefer to use different keystore and truststore files for the individual applications, make sure to add all extracted certificates to the WebSphere truststore.

For more information, refer to the Financial Transaction Manager documentation.

Support Db2 11.5.5

Before Db2 version 11.5, the Db2 installation installed the db2jcc.jar and db2jcc4.jar driver files. Starting with Db2 11.5, the Db2 installation no longer installs the db2jcc.jar. However, a slight behavior change between these two drivers affects FTM. The columnName and columnLabel values retrieved from database queries are equivalent when the db2jcc driver is used. When the db2jcc4 driver is used, these two values might be different.

For example, consider this query: SELECT COLUMN1 AS MY_VALUE FROM XYZ

When the db2jcc.jar is used, the getColumnName and getColumnLabel APIs return the same

value ("MY_VALUE").

When the db2jcc4.jar is used, the getColumnName API returns "COLUMN1" and the getColumnLabel API returns "MY_VALUE".

FTM was updated to ensure that existing queries are processed correctly, regardless of which database driver is used.

To use the db2jcc4 driver, the configuration and installation of the WebSphere FTM JDBC providers were updated to be "DB2 Using IBM JCC Driver" (uses "{DB2_JCC_DRIVER_PATH}" class path variable) instead of "DB2 Universal JDBC Driver Provider" (uses "{DB2UNIVERSAL_JDBC_DRIVER_PATH}" class path variable)
All of the J2SE applications class paths were updated to use db2jcc4.jar.

121399 Inbound Transaction page: Added received time to its default filter

To provide performance improvements on the Inbound Transactions page, the following changes were made. The FTM user interface Inbound Transactions page now includes two criteria in its default filter:

- 'Business Date' equal to current business day
- 'Transmission Received' in the 'past five minutes'

This filter returns transactions that were received within the past five minutes of loading the page. The following screen capture shows how the new default filter appears in the user interface.

Build Filter

Match

All rules

☒ Match case

Rules

Business Date

equals

6/4/2021

-

+

Transmission Received

past

5

minutes

-

+

Filter

Restore

Clear

Close

Before this change, the Inbound Transactions default filter contained only business date and looked like the following screen capture.

Build Filter

Match

All rules

☒ Match case

Rules

Business Date

equals

6/4/2021

-

+

Filter

Restore

Clear

Close

Improved reliability of the Business Rules Server rules activation

The Business Rules Server uses a database polling mechanism to load business rules upon activation by utilizing the ENVIRONMENT database table settings.

Improved security of communication between FTM components

FTM communication between components is now more secure with TLS encryption.

IBM MQ and Db2 communications are running over TLS.

The J2EE, J2SE, and IBM App Connect Enterprise client applications connect over a TLS protocol.

The procedure to generate (if self-signed certificates) and configure TLS certificates used by all the FTM components is documented by FTM. The default CipherSuite/CipherSpec used by IBM MQ and all the clients is

SSL_RSA_WITH_AES_128_CBC_SHA256/TLS_RSA_WITH_AES_128_CBC_SHA256. This default can be customized during deployment with the Operator Instance YAML.

LPTA Keys by default

No customization is required. LPTA keys are managed by the individual J2EE Liberty server instances. The default configuration is used and LPTA keys are created when the application pod starts.

Readiness and Liveness health check probes and prestop pod lifecycle event

FTM comes with health check probes (readiness and liveness) and prestop pod lifecycle events implemented.

Readiness and liveness probes: During the rolling upgrades, the new version Pod gets created and when it becomes ready, then OpenShift deletes the old pod. OpenShift runs the Readiness probe to decide whether the pod is Ready or not. Unless the probe returns success, it does not mark the new Pod in ready state.

Liveness probes are run periodically, like the readiness probe. If liveness probe fails, OpenShift restarts the container.

Prestop pod lifecycle event: OpenShift allows adding the PreStop hook to be run inside the container before OpenShift deletes the container. This script is called by OpenShift before it deletes the container.

Allow customization of config files and server.xml files by using configMap

FTM operator supports a ConfigMap-based approach to let user provide custom server.xml or other configuration files in addition to the persistent volume-based approach. Separate ConfigMaps are created for each FTM component, and the customer can place all the

customized files in those ConfigMaps. This method is useful for the customers who do not use persistent volumes (PV) or do not have easy access to the PVs from outside. This method is supported for JSE and Java EE components.