ISO 20022:

CBPR+ Testing Guide

updated March 2025

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ISO 20022 represents the biggest change in the payments industry in a generation.

Testing is a significant component for a successful implementation. However, payments testing can be complex and given its systemic global importance, the need for a targeted and robust approach is paramount.

This testing guide aims to provide our clients with a useful reference point for their CBPR+ readiness, expanding on J.P. Morgan's lessons learned as an industry leader in ISO 20022 adoption.

Colin Williams

Global Lead - Clearing Transformation

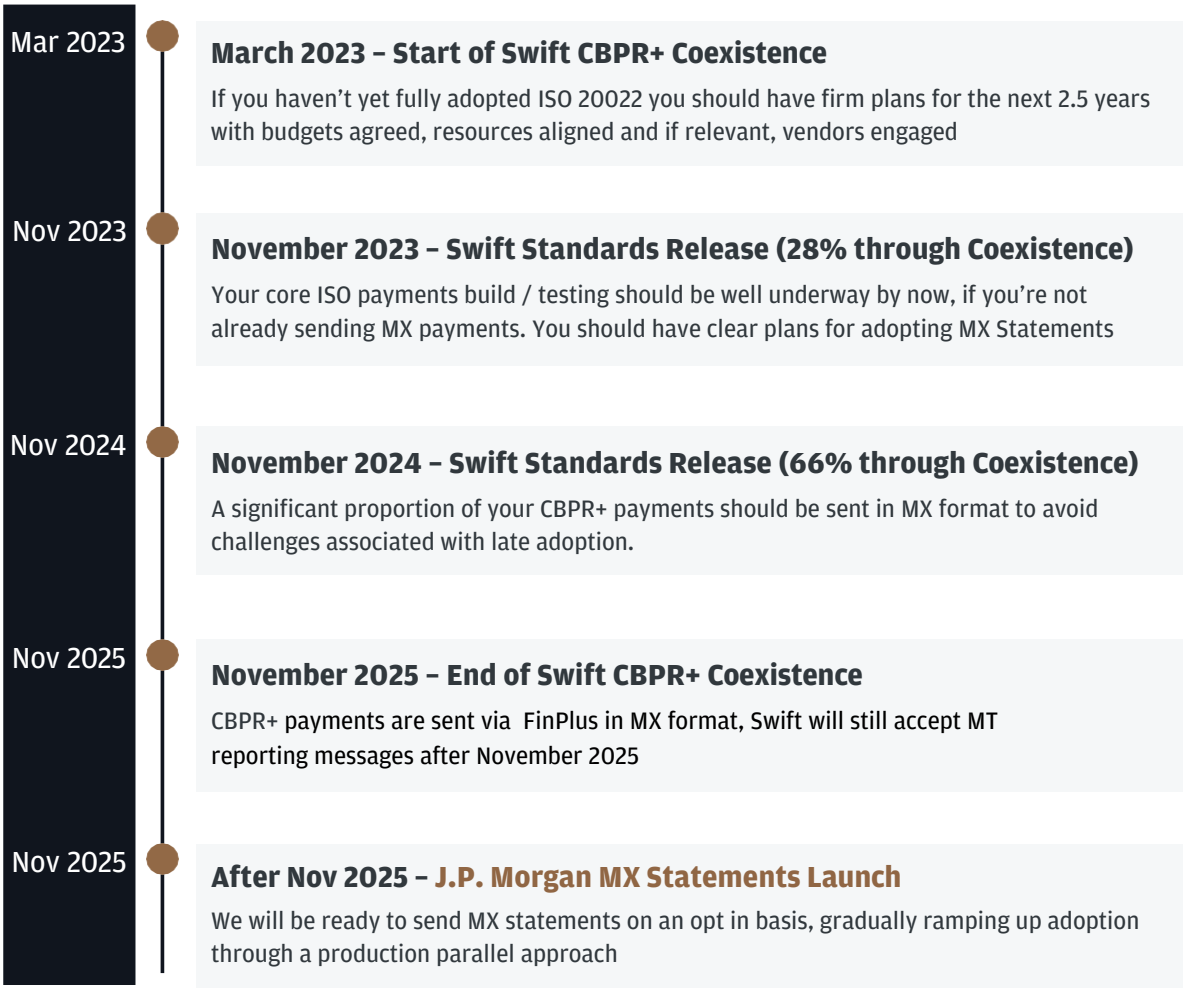
"J.P. Morgan remains a market leader in ISO20022 and adoption by our clients is key to the success of the new message types, which will allow a much richer and structured set of data to be exchanged.

Understanding the CBPR+ migration

March 20th was a significant day in payments. It marked the launch of Swift's 2.5 year CBPR+ coexistence period for all impacted FIs and NBFIs. J.P. Morgan have fully embraced the new standard as we see significant long term benefits for the industry and our clients in adopting ISO early.

By October 2023, we will be a quarter of the way through the coexistence period so it's essential to plan early and leave enough time for migration activities and testing.

As a recap, here are the key J.P. Morgan and CBPR+ dates and milestones for impacted clients:



Useful References:

- J.P. Morgan ISO 20022 Client Resource Center
- ISO 20022 Guide and Mapping Guide
- First 120 days live ISO 20022 E-book

Test Strategy

Where to start

A successful Test Strategy is underpinned by a good understanding of the way change is delivered in an organization and the nature of the project / system under test. This ensures the Test Strategy is not just a theoretical best practice approach but rather a pragmatic and focused enabler for achieving successful change and transformation outcomes.

Figure 1: Test Strategy Approach

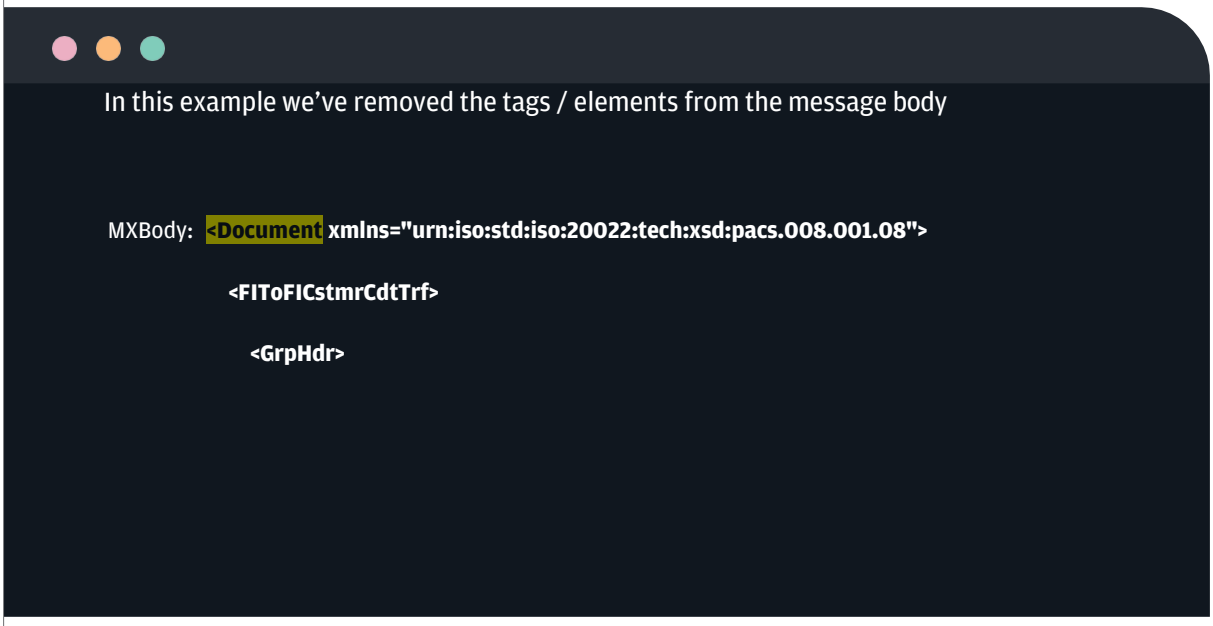
Simulating production-like flows in test

Swift's CBPR+ ISO implementation in its simplest form is a message format change and whilst many organizations will use ISO 20022 as an opportunity to modernize their platforms, the core business and payment flows are not changing. This means there's tremendous value in your production data.

At the point of Swift's March go-live, J.P. Morgan has been sending MX payments by default. Many of our clients will be leveraging Swift's Inflow Translation service; receiving a multiformat message with the original MX from J.P Morgan and an embedded MT (translated by Swift).

The multiformat message received in production can be a powerful asset for testing.

- **What is a multiformat message:** Put simply, it's a file that starts with the MX message body, enclosed in **<Document** **</Document>** tags which represents the original MX payment. The translated MT is embedded at the end (in green)



- **How can our clients leverage this:** By "copying and pasting" the MX body (from the highlighted start/end points) into a new txt file our clients can create representative and production-like payments which can be used for injecting into test environments (keeping in mind the need to update any required reference/static data). By working with testing and technology teams, this process can easily be automated, resulting in live-like ISO 20022 messages.

Industry Testing Tools

Recognized industry testing tools should be leveraged as much as possible to support your readiness. This includes but is not limited to:

- **Swift MyStandards:** By logging in with your registered Swift account, you can access CBPR+ message schemas, a translation library and portals specific to J.P. Morgan schemas:
  - J.P. Morgan Schemas: We have published our guidance on pacs.008, pacs.009, camt.053 and camt.054 message types. Here you can find specific guidance on how we will use these message types, in accordance with CBPR+ schemas / rules: J.P. Morgan MyStandards
  - J.P. Morgan Readiness Portal: By requesting access through your normal J.P. Morgan representative, you can get access to a portal where you can upload and test the pacs.008 and pacs.009 messages you would send to us to validate their format and alignment to any specific J.P. Morgan guidelines (See Appendix for more details)
  - CBPR+ sample library: Useful samples of various message types provided by Swift: CBPR+ Sample Library
- **Swift Sparring Partner**: An integrated testing platform that helps financial institutions test Swift transactional flows independently under real-life conditions. It simulates a fictitious counterparty in the payments flow sending pre-defined sets of test messages as well as receiving and validating messages.
- A free universal version is available to all Swift registered members. A paid for premium version offers customizable test cases and reference data for added depth / coverage. Please speak to your Swift representative for more information.

End to End testing

End to end testing should be conducted on representative test environments with the right level of controls and support processes for each test phase/type. Take time to assess if your existing environments are sufficient for ISO or whether dedicated environments will better support your project objectives.

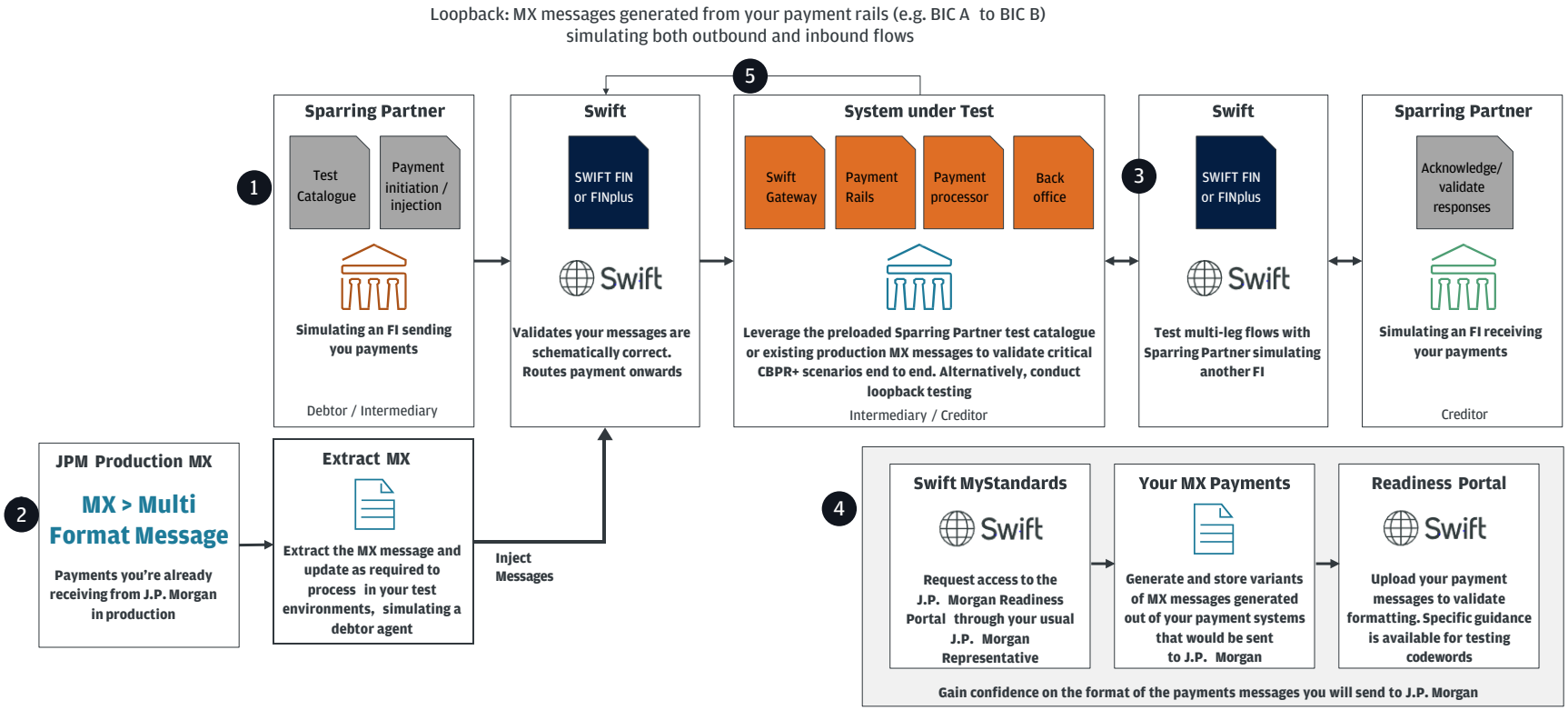


Figure 2: Example E2E Test Approach: 1. Leveraging Swift Sparring Partner, 2. Leveraging existing Prod MX messages J.P. Morgan is already sending. 3. Multi-leg end to end testing leveraging Swift Sparring Partner, 4. A method to validate your MX payment message formats against J.P. Morgan usage guidelines and 5. Loopback testing (Payments sent out to FINplus addressed to your internal BICs – Swift test environments will route this back to your gateway, simulating an inbound payment)

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Hints and tips when testing end to end:

- UAT BICs are no longer used for ISO / FINplus. Instead, it's the Swift service name that determines which Swift environment to route payments to:
  - **swift.finplus!pf** is the pilot futures test environment – it's the environment to use when testing any upcoming Swift changes.
  - **swift.finplus!pc** is the pilot current test env which represents current Swift production.
  - **swift.finplus** = production service (cannot be used in UAT/SIT – messages would NAK if you try to use it)
- MT or Fin testing will remain as is – this means messages will use a BIC ending in 0 (UAT BIC). For most of the industry this includes how MT9x statement regression testing would be conducted
- RMAs are not required for CBPR+ test environments
- Swift's test environments are mainly for functional or business testing. They are not typically used for non-functional or load testing. Please reach out to your Swift representative if more information is required

Statements and advices

The migration from the current MT9x statements and advices to camt can provide immense value to our clients, particularly for liquidity and treasury management. Statements testing is potentially as complex if not more than payments given the need for a fully end to set of environments, connected to a broader ecosystem.

The message types in scopes include:

Current	Target	Desc	Timing	Comments
MT 941	camt.052	• Intra-day balances	Intra-day	• Provides the balance at a point in time
MT 942	camt.052	• Interim account statement	Intra-day	• Provides intra-day detailed transactions and unstructured balance info. Can be sent in 5 minute time intervals.
MT 940	camt.053	• EOD detailed account statement	EOD	• EOD final statement that provides detailed transactions and EOD balance.
MT 940i	camt.052	• Intra-day detailed account statement	Intra-day	• Intra-day statement that provides detailed EOD transactions and balance info. Can be sent in 5 minute time intervals.
MT 950	camt.053	• EOD summary account statement	EOD	• EOD final statement that provides summary transactions and EOD balance.

MT 950i	camt.052	• Intra-day summary account statement	Intra-day	• Intra-day statement that provides summary EOD transactions and balance info. Can be sent in 5 minute time intervals.
MT 900	camt.054	• Confirmation of Debit Advice	Real Time	• Debit advice
MT 910	camt.054	• Confirmation of Credit Advice	Real Time	• Credit advice

In order to support a smooth transition, J.P. Morgan will send camt statements in production as part of a parallel run on an opt-in basis. This approach eliminates the need for complex end to end test coordination and leverages production payments data. By generating the equivalent camt statements this gives sufficient time, and most importantly, data to prepare for adoption and testing at your own pace.

To leverage this approach our clients will need to:

- Inform us of your ISO adoption plans / timelines. Please coordinate with your usual J.P. Morgan representative
- For a statements parallel run, RMAs will need to be updated to accept receiving camts as well as MT9x statements in production
- Your Swift gateways will need to be configured with routing rules to appropriately handle the camt messages. These can either be stored for injection into test environments or dual processed, providing sufficient environments are in place in your back office

Conclusion and next steps

As more of the industry adopts Swift ISO 20022 standards, there are likely to be compatibility challenges with coexistence of old (MT) and new (MX). This is particularly the case for late adopters and increases the level of testing required. More changes are on the horizon as clearers start to mandate LEIs, structured address/remittance and purpose codes.

Our recommendation is to build robust ISO 20022 plans and invest in suitable testing infrastructure in order to capitalize on the opportunity ISO 20022 will bring.

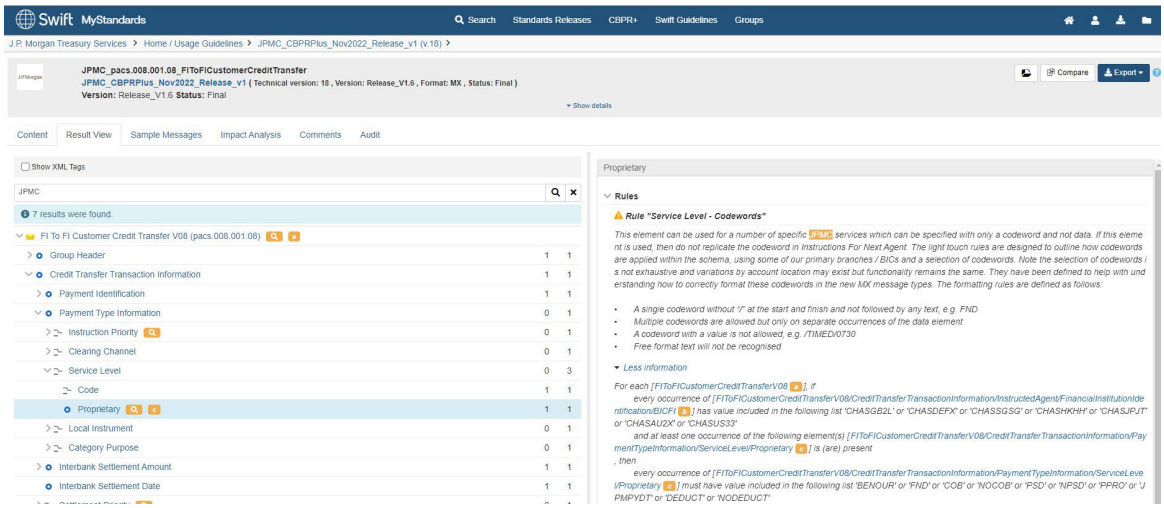
We hope this guide provides a useful reference point for testing. Please reach out to your J. P. Morgan representative for any support.

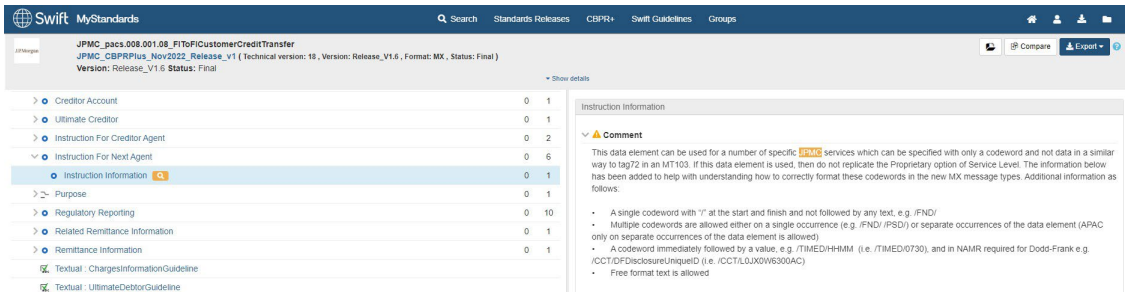
Appendix

Swift MyStandards

The usage guidelines J.P. Morgan has published for pacs.008, pacs.009, camt.053 and camt.054 can all be accessed through MyStandards. Searching for “JPMC” will highlight any elements with specific rules/guidance.

In the example below, we describe how Codewords will be used as well as references to the specific BICS and codewords that can be tested in the readiness portal (Note this is not an exhaustive list).





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