

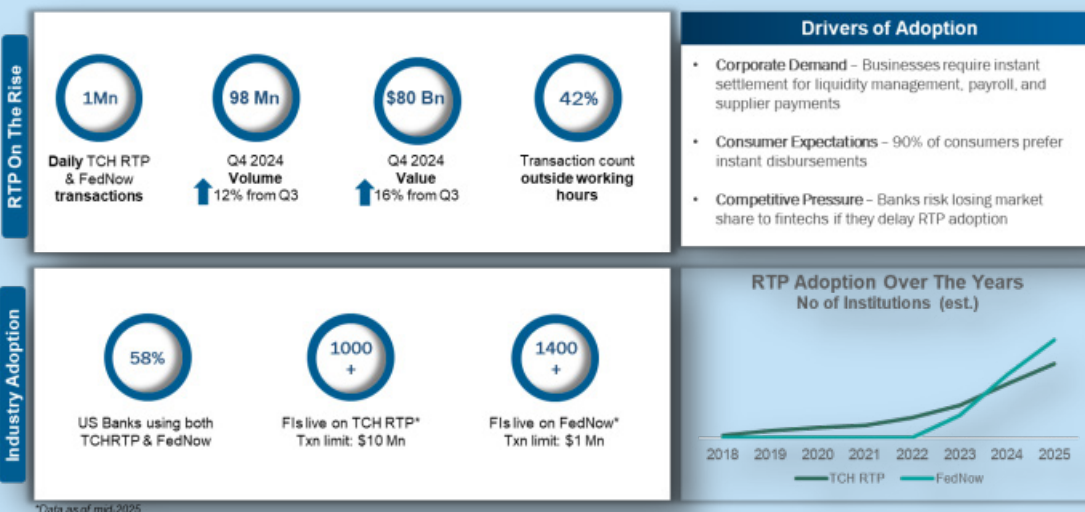


ACCELERATING REAL-TIME PAYMENTS IN CANADA: WHAT BANKS NEED TO DO NOW



Executive Summary

Real-Time Payments (RTP) are reshaping financial ecosystems globally, enabling instant fund transfers, improved liquidity, and enhanced customer experiences. Markets such as the United States have demonstrated how RTP rails accelerate innovation and adoption across consumer and corporate segments. Canada is preparing for this shift through the Real-Time Rail (RTR) initiative led by Payments Canada. RTR will enable 24x7x365 instant clearing and settlement, supported by ISO 20022 data standards. With Interac as the exchange provider, Canada is well positioned to transition from near-instant experiences to true Real-Time Payments (RTP). For Canadian financial institutions, this is a strategic opportunity to introduce new services and strengthen customer relationships. Early movers will be at an advantage. Drawing on global experience, Infosys offers a structured approach to help banks adopt RTP securely and at scale.



Canada's Starting Point: Strong Front-End, Missing National Real-Time Rail (RTR)

A real-time experience without Real-Time Rail (RTR)

Canada presents advanced credentials in Real-Time Payments (RTPs) due to the widespread use of Interac e-Transfer, a mature, at-scale product deeply embedded within all the major Canadian Banks. Large Banks such as TD, RBC, Scotiabank and CIBC provide Interac e-Transfer as well as some of the other products of Interac aimed at businesses and merchants through their digital banking channels. Adoption is already meaningful with Interac e-Transfer being used by ~50% of Canadians to make account-to-account payments using their phone numbers and email IDs as aliases, as per a Bank of Canada survey. However, beneath this success lies a structural gap: Canada does not yet have a fully modern, national, Real-Time Payments (RTP) ecosystem comparable to markets like the UK, Brazil, or India.

Where today's model falls short

Consumer Speed vs. Enterprise Capability Gap: Current products work extremely well for person-to-person payments and small business transfers but do not scale effectively for enterprise payments such as corporate treasury payments, payroll processing, supply chain payments and invoice-based payments.

Real-Time Speed without Rich Data: Modern real-time systems globally support rich remittance data, request-to-pay, settlement notifications, and reconciliation capabilities. Canada's ecosystem remains relatively data-light, limiting automation and enterprise usability.

Inconsistent Experience for Ecosystem Players: Businesses and consumers are subjected to varied limits, pricing and non-standardized APIs/workflows. While consumer expectations typically do not extend beyond instant funds availability, businesses and fintechs show reduced interest and innovation appetite.

Absence of Always-On Payment Infrastructure: Heavy reliance on batch-based ACH, file-based processing, and business-day settlement and cut-off times which create operational friction in the form of delayed liquidity and treasury inefficiencies.

RTR: The missing piece in Canada's payments puzzle

Real-Time Rail (RTR), developed by Payments Canada will introduce a fundamental shift in how money moves. A 24x7x365 infrastructure designed to exchange, clear, and settle payments within seconds, it will be supported by ISO 20022 structured data and a centralized fraud utility. RTR is not just a faster version of existing systems, but an architectural reinvention of Canada's payment ecosystem.¹

¹<https://www.payments.ca/real-time-rail-payment-system-0>

RTR is on track for a public launch anticipated in Q3 2026. System integration testing is complete and user acceptance and industry testing is underway. A defining feature of Canada's approach is the continued role of Interac, which will be the exchange provider for RTR. The familiar Interac e-Transfer experience Canadians already trust for peer-to-peer and small-business payments, will be upgraded from fast front-end notification to true real-time clearing and settlement.² Banks and payment service providers (PSPs) will be able to deliver complete real-time financial experiences across consumer and business payments.

Regulatory modernization is accelerating readiness too. Updates to the Canadian Payments Act and implementation of the Retail Payments Activities Act (RPAA) will allow broader participation from regulated PSPs, expanding innovation and competition across the market.³

Industry-wide testing is already underway with broad market readiness expected ahead of launch.

From capability to value: the business case for RTP

For Canadian banks, RTR is not just a compliance milestone. It is a value unlock that typically plays out in sequence: first create new customer value, then remove operating friction, then strengthen control in an always-on world, and finally defend (or expand) market position as new regulated PSPs enter.

Step 1 - Create new customer value (revenue and growth)

- **New products and use cases**

RTP enables services such as earned wage access, instant merchant settlement, insurance claims and refunds, account-to-account payments, request-to-pay, and weekend or after-hours cash concentration. These services create new revenue streams while improving customer experience

- **SME and corporate acquisition**

Corporate treasury teams value instant receivables and 24/7 liquidity visibility. Banks that integrate RTP into APIs and digital portals can attract and retain business customers more effectively

Step 2 - Remove operating friction (cost and efficiency)

- **Straight-through reconciliation**

ISO 20022 structured data enables automated reconciliation, significantly reducing manual exceptions and costs

- **Operational simplification**

RTP reduces reliance on batch processing cycles and cut-off times. As transaction volumes migrate to RTR, banks can reduce operational complexity and processing backlogs

²<https://www.interac.ca/en/content/business/real-time-rail/>

³<https://www.bankofcanada.ca/core-functions/financial-system/retail-payments-supervision/>

Step 3 - Operate safely in an always-on world (risk and control)

RTR combines **settlement finality** with **centralized fraud monitoring**, strengthening ecosystem risk controls. For banks, it also enables improved **real-time liquidity management** (continuous monitoring, prefunding discipline, and faster intraday actions).

Step 4 - Compete on orchestration (competitive positioning)

As PSPs and fintechs on-ramp under the RPAA framework, orchestration becomes a core bank capability - curating experiences, policy, and data while defending deposits and fee pools. Early adopters can shape customer expectations, partner ecosystems, and operating norms.^[4]

Are banks ready? A practical RTP readiness checklist

1. Strategy and participation choices

- **Participation & connectivity model:** decide on direct vs. indirect connectivity, and direct vs. indirect settlement.
- **Use-case strategy:** prioritize the first wave of use cases with the highest benefit potential (revenue uplift, deposit retention, operational savings).

2. Technology and 24x7 operating model

- **Payments infrastructure:** choose between end-to-end ISO 20022-native processing vs. specialized messaging gateways (or a phased hybrid).
- **Real-time liquidity management:** build capabilities for prefunding, continuous monitoring, and intraday decisioning.
- **24x7 operations:** define incident management, investigations, and liquidity operations for an always-on rail.

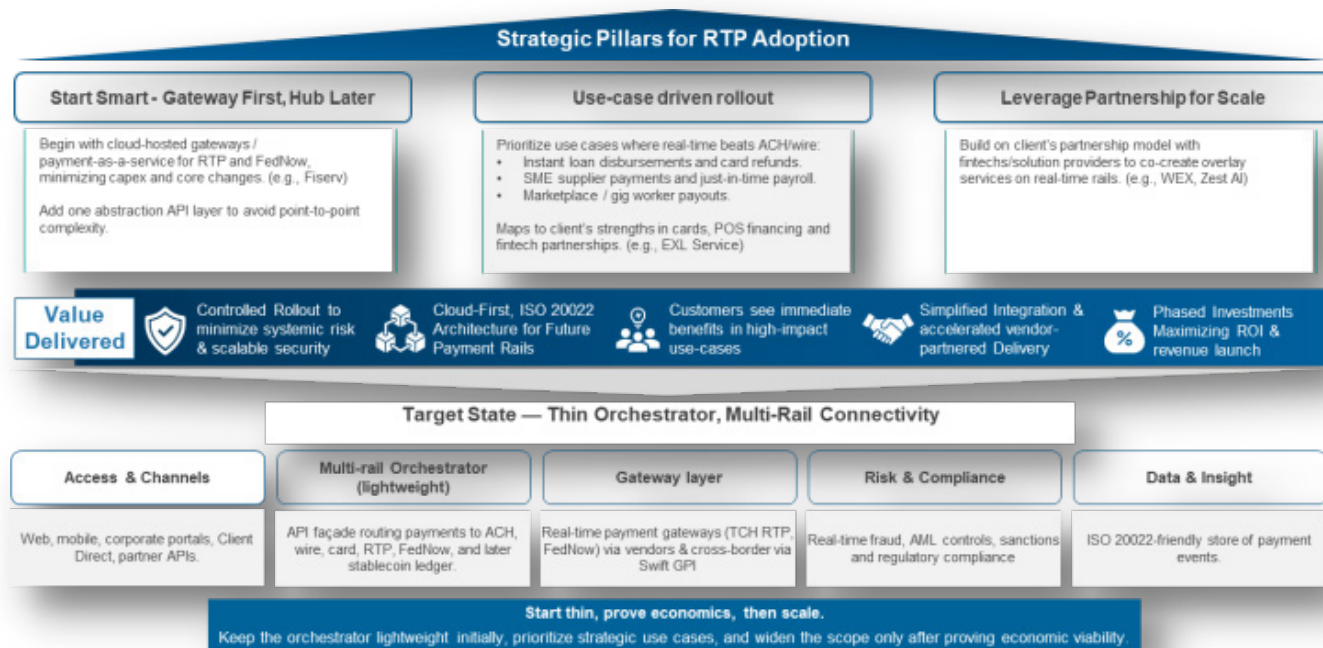
3. Risk, Fraud, and Compliance Controls

- **Fraud & Risk Decisioning:** implement real-time controls aligned to instant SLAs and payment irrevocability (monitoring, scoring, limits, and exception workflows).



Infosys' approach to help banks accelerate and de-risk their RTP journey

Many financial institutions struggle to right-size the scope of transformation when they begin their RTP adoption journey. Infosys helps banks adopt RTP safely, incrementally, and profitably, while building toward a modern target state that supports multi-rail orchestration and ISO 20022-native data. In Canada, this approach supports near-term readiness for RTR without locking institutions into a single-rail architecture.



RTP Launchpad Framework

Pillar 1 - Start smart: gateway first, hub later

Objective: Establish RTP connectivity quickly with minimal disruption to core systems.

Approach:

Infosys enables a “start smart” path by using cloud-hosted / payments-as-a-service gateways to connect to RTP rails. This provides a low-capex, rapid time-to-market option that is minimally invasive to existing cores and channel platforms—ideal for institutions wanting to prove value early before committing to deeper modernization.

What this enables now

- Fast onboarding to RTP rails while preserving existing core posting patterns
- Controlled exposure to new operating models (24/7, fraud, exception handling)
- Rapid enablement using proven vendor ecosystems (e.g., RTP gateways and integration partners)

With connectivity established, the next step is to focus investment on the specific RTP use cases that will drive adoption and demonstrate clear unit economics.

Pillar 2 - Use-case-driven rollout: prioritize value, prove economics

Objective: Build adoption through a focused set of high-impact use cases that clearly outperform legacy rails.

Approach:

Infosys works with business and product teams to identify and sequence RTP use cases that maximize customer value and measurable ROI—then aligns architecture and controls to those use cases first.

Use-case prioritization lens

- **Value uplift vs. existing rails** (speed, certainty, reconciliation, customer experience)
- **Revenue potential** (premium disbursements, embedded payments, new deposit flows)
- **Operational feasibility** (risk profile, fraud exposure, STP readiness)
- **Ecosystem leverage** (partners, billers, marketplaces, fintechs)

What this enables now

- A sequenced release plan that concentrates change on the highest-value journeys first
- Clear ROI hypotheses and success metrics to guide funding and scale decisions

High-impact use cases (commonly prioritized)

- Instant loan disbursements and refunds/claims payouts
- Vendor payouts, SME supplier payments, and just-in-time payroll/off-cycle payroll
- Wallet funding/defunding, account-to-account transfers, and marketplace payouts

Once priority use cases are live, scale comes from extending reach—embedding RTP into business workflows and partner ecosystems rather than relying on bank-only distribution.

Pillar 3 - Leverage partnerships for scale: co-create value-added services

Objective: Scale RTP value by building an ecosystem around Real-Time Rail (RTR).

Approach:

Infosys helps institutions leverage existing partnerships (core providers, gateways, fintechs, ERPs, billers, treasury platforms) to launch differentiated services faster—without building everything in-house.

Partnership-led expansion examples

- B2B receivables automation using structured remittance and request-for-payment
- Embedded payouts for marketplaces/platforms
- Treasury liquidity services (real-time cash positioning, sweep triggers, intraday funding)

Across these pillars, the architecture evolves deliberately—starting with connectivity and controlled use cases, then progressing to a thin orchestrator that supports multiple rails and data-rich services.

Envisioned target state: thin orchestrator with multi-rail connectivity

Infosys' north star architecture is a thin payments orchestrator that enables multi-rail routing while keeping early rollout lightweight and economically provable.

Target-state capabilities

- 1. Access & Channels**
Web, mobile, corporate portals, and partner APIs
- 2. Multi-Rail Orchestrator (lightweight)**
A thin API façade to route payments across RTP, ACH, wires, card rails and future schemes - using policy-based routing (value, speed, risk, cost, eligibility)
- 3. Gateway Layer**
Real-time gateways and rail adapters (domestic RTP, cross-border extensions such as SWIFT-based connectivity depending on the FI strategy)
- 4. Risk & Compliance**
Real-time fraud controls, AML, sanctions screening, velocity limits, strong customer authentication patterns, and 24/7 operational monitoring
- 5. Data & Insights (ISO 20022-friendly event store)**
A structured store of payment events and message payloads - supporting analytics, investigations, reconciliation, and reporting.

Design philosophy

Start thin, prove economics, then scale.

Keep orchestration lightweight at first, prioritize strategic use cases, and broaden scope only after measurable adoption and operational stability are demonstrated.

Across global real-time payments programs, Infosys has developed practical accelerators to help Canadian clients assess RTR readiness, define the target operating model, and execute delivery—such as Payments Shopfloor Evaluation, Payments Process Flow, and Capability Heat Map.

What Infosys delivers: outcomes that matter for RTR readiness

- 1. Controlled rollout that minimizes systemic and operational risk**
RTR shifts operational cadence to 24x7x365 and raises customer expectations; a phased rollout reduces risk by constraining early scope while hardening controls, exception handling, and 24x7 operations.
- 2. Cloud-first, ISO 20022-native foundation for RTR and future rails**
With ISO 20022 central to interoperability and data-rich services, investing early in structured data models and event capture reduces rework and accelerates expansion beyond RTR.
- 3. Faster time-to-value through high-impact RTR use cases**
Prioritize use cases that benefit most from real-time clearing and ISO 20022 data - such as instant payroll (off-cycle), wallet movements, bill payments, and loan disbursements to drive early adoption and measurable benefits.
- 4. Simplified integration and accelerated delivery**
A gateway-first onboarding model and thin-orchestrator pattern reduce dependency on core transformation while enabling staged modernization for RTR.
- 5. Phased investments that maximize ROI and speed to market**
Prove unit economics with an initial release, then expand into multi-rail orchestration, partner services, and data-driven products as adoption and operational stability mature.

Lessons from global real-time payments implementations

While Canada's RTR has market-specific design choices, the transformation pattern is consistent globally: Real-Time Payments (RTP) require modernization across the lifecycle—from channels and fraud controls to liquidity, settlement operations, and analytics. Infosys brings experience delivering large-scale Real-Time Payments (RTP) programs across markets.

Selected examples illustrate how institutions have delivered real-time capabilities while maintaining operational stability, governance, security, and compliance.

Case study 1: Faster payments platform for a large Australian bank


A major Australian bank required a partner to design, build, and operate its faster payments platform.

Challenge: Build a compliant, scalable, high-availability platform.

Infosys approach: End-to-end solution integration, full tech stack design, vendor coordination, and innovation enablement.

Outcome: High-performance, compliant platform with strong availability and future-ready capabilities.

Complete Operating Model and End-to-End Solution Design for Large Australian Bank on New Payments Platform

Problem statement / Challenges / Objectives Large Australian Bank was in search of a partner who could design build and operate its faster payments scheme on new payments platform. There was an expectation of highly innovative roadmap that could help monetize this huge investment. The objective was to deliver a customized, compliant, and high-performance payment platform that meets regulatory, availability, and performance benchmarks.		Summary of Solution <ul style="list-style-type: none"> Infosys positioned through Solution Integrator, Design, Build, Test, Deploy and Run stages Delivered an end-to-end, compliant, and future-ready payments solution for Bank by integrating the NPP platform within existing systems, enabling high availability, rapid scalability, and continuous innovation through automation and co-creation 	Key outcomes <ul style="list-style-type: none"> Achieved high availability and performance benchmarks. Reduced operational risk and ensured compliance with CSLs. Enabled client to meet regulatory timelines with a future-ready payments ecosystem. Robust and high security network solution that offered tokenization solution moving the bank to attain PCI-DSS compliance
Details on the Operating Model & Solution Delivered			
Strategy <ul style="list-style-type: none"> NPP platform-as-a-service with vendor management abstracted from the bank Infosys acted as single point of contact for PE & AG platform of NPP Maintained strong relationships with third-party vendors under stringent UCs & OLAs 	Plan & Design <ul style="list-style-type: none"> Aligned with client's operating model: clear roles and responsibilities Embedded NPP platform support team within client's Asset team Established robust governance framework for compliance and performance Designed complete tech stack: core servers, network, highly available BCP/DR performance compute, storage, virtualization, security, and integration 	Build and Launch <ul style="list-style-type: none"> Set up a dedicated Payments Innovation Centre for co-creation and technical roadmap Effective Management of Code drops Infosys TSO collaborated with Client TSO to define and maintain platform roadmap Enabled continuous integration and automation for rapid change delivery Committed investment for innovation and scalability 	

Case study 2: RTP enablement for a global bank in the US

A global financial institution in the US needed RTP capabilities integrated with existing systems under tight timelines.

Challenge: Meet RTP standards and integrate with core systems.

Infosys approach: Conducted detailed business analysis, designed secure APIs and integration interfaces, ensured ISO 20022 compliance, and managed program governance.

Outcome: Successful RTP launch with improved speed, transparency, customer satisfaction, and bank's competitiveness.

Real-Time Payments (RTP) Enablement for a Leading Global Bank

Problem statement / Challenges / Objectives A leading global bank, needed to implement Real-Time Payments (RTP) in the U.S. market to:		Summary of Solution <ul style="list-style-type: none"> Infosys partnered with the client to: <ul style="list-style-type: none"> Design and deliver RTP interfaces and ensure seamless integration with core systems. Conduct business analysis, API development, and end-to-end testing for RTP enablement. Implement ISO messaging compliance and provide go-live support. Drive program governance and manage scope changes to meet revised timelines. 	Key outcomes <ul style="list-style-type: none"> Enabled real-time payment processing capability for the bank. Improved speed, transparency, and customer satisfaction. Strengthened market competitiveness and ensured compliance with emerging payment standards.
Details on the Operating Model & Solution Offered			
Business Analysis <ul style="list-style-type: none"> Conducted detailed analysis of RTP requirements and mapped them to existing banking processes. Ensured compliance with ISO 20022 messaging standards for payment initiation, advising, and reporting. Collaborated with client stakeholders to recast program timelines and manage scope changes effectively. 	Design & Development <ul style="list-style-type: none"> Designed and developed secure APIs for real-time payment processing using Mule soft as the integration platform. Delivered high-level and low-level designs (HLD/LLD) for interfaces and ensured seamless integration with core banking systems. Implement ISO messaging compliance and provide go-live support. 	Program Governance & Delivery Management <ul style="list-style-type: none"> Managed multi-track delivery (Business Analysis, API Development, Testing) with Infosys and client teams. Provided go-live support and ensured smooth transition to production. Designed service desk and support model (L1/L2/L3), business continuity and DR plans. 	

Case study 3: Direct-to-Zelle P2P implementation for a global financial institution

A global financial institution launching a digital checking account in the US sought to strengthen its payments proposition by enabling peer-to-peer (P2P) payments through Zelle.

Challenge: Deliver seamless P2P payments within tight timelines while ensuring compliance and scalability.

Infosys approach: End-to-end delivery, including product design, architecture, building, testing, certification, and launch.

Outcome: Successful P2P launch, faster time-to-market, and a scalable foundation for future innovation.

A Global Financial Institution has embarked on Direct to Zelle P2P Journey

Problem statement / Challenges / Objectives

- Financial Institution recently launched Digital Consumer Checking Account product in the US market and as part of its Payment Strategy, the FI wanted to provide Zelle as an additional payment channel to its Customers

Summary of Solution

- Infosys partnered and engaged with FI to execute end to end Zelle P2P implementation
- The Direct-to-Zelle integration journey included product envisioning, product discovery & solutioning, product delivery, product certification, and go-to-market

Key outcomes

- Enabling fast and near real time fund transfers for its Customers
- Successful integration with the existing systems - Core Banking, Fraud, AML, Servicing & Disputes, ACH
- Customized build of Zelle Platform based on Client existing landscape and future demands
- Customer centric with focus on personalized customer experiences

Details of Approach / Solution

- 1. Product Envisioning**
 - Conducted market research
 - Conducted workshops to prioritize key Zelle journeys and use cases
 - Defined L0/L1 process flows
 - Defined features and capabilities
 - Developed a robust program plan to implement Zelle
- 2. Architecture and Design**
 - Defined target state solution architecture
 - Conducted solution architecture workshops
 - Aligned with money movement, fraud and servicing platform requirements
- 3. Build and Launch**
 - Implemented a sandbox working with EWS to quickly test Zelle journeys
 - Engaged a crowd testing partner to perform a pre-launch testing
 - Performed EWS certification
 - Launched Zelle solution

These implementations demonstrate how financial institutions can successfully integrate RTP systems while maintaining operational stability, strong governance, security, and regulatory compliance.

Preparing for Canada's RTR future

The launch of RTR represents a critical inflection point for Canada's financial ecosystem. Banks should begin by focusing on several strategic priorities:

- 1. Define an RTR strategy:** prioritize high-value use cases and clarify how RTR supports the bank's digital and corporate banking strategy.
- 2. Modernize payments infrastructure:** progress toward a multi-rail payments hub that supports RTR alongside existing rails.
- 3. Strengthen liquidity and fraud controls:** prepare for continuous liquidity monitoring and real-time fraud decisioning aligned to irrevocable payments.
- 4. Prioritize customer-facing innovation:** embed RTR into digital journeys and corporate services with clear service-level expectations.

Moving Forward

Canada is entering the next era of payments. With RTR and Interac, the ecosystem will soon have the infrastructure to support real-time financial experiences at scale.

The key question now is not whether RTR will reshape Canadian payments, but how quickly banks can lead that change. Institutions that invest early in infrastructure, use cases, and operating readiness will be best positioned to capture growth, efficiency, and resilience benefits.

Infosys brings frameworks, accelerators, and delivery experience to help Canadian banks prepare for RTR in a structured, low-risk, and scalable way - from launch planning and use-case rollout to operating model and modernization. Now is the time to begin the journey.

Authors:



Anwesh Chatterjee
Senior Principal, Business Consulting



Megha Sharma
Senior Consultant, Business Consulting



Parantap Chakrabarti
Senior Consultant, Business Consulting



Sanket R. Singhania
AVP, Infosys Financial Services, Canada

For more information, contact askus@infosys.com



© 2026 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.