



temenos



temenos

www.temenos.com

Temenos Digital

Workshop for **BACB**

London, 23rd of October



Agenda

- Welcome & Introduction
- System Architecture Overview
- Channels Offering
- Integration Capability
- Managed Service
- System Security

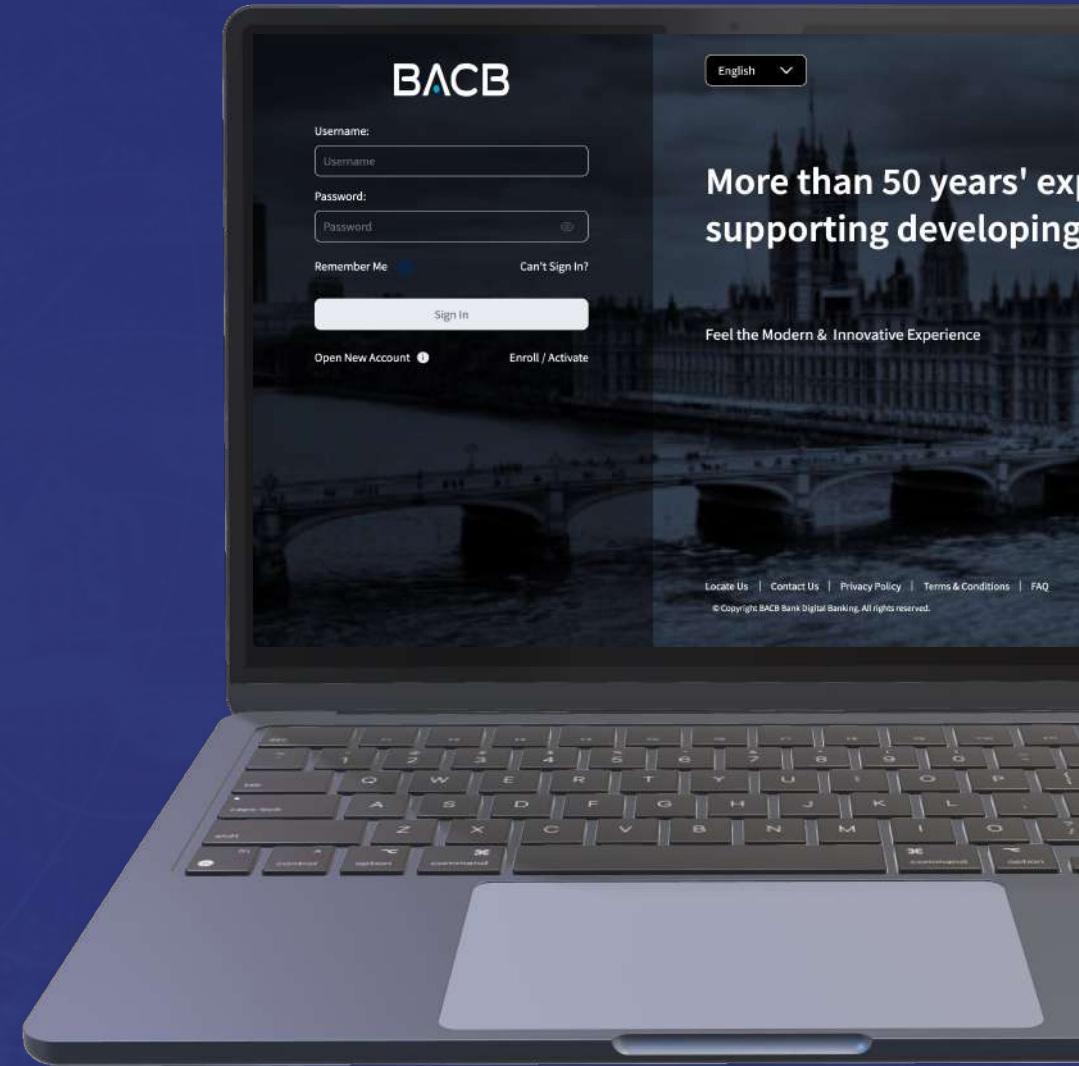
temenos



Agenda

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Temenos Digital Architecture



Responsive Web app



Native Mobile app



Admin Portal



Channels Layer

Onboarding and Origination

Digital Banking

Banking Portals

Visualizer

APIs Layer

Experience APIs

Integration Connectors

Identity Connectors

Custom Connectors

Orchestration

Reports / Dashboard

Fabric

Azure Cloud

Managed Hosting



Bank Systems

Temenos Core

PSD2 solution

CoP

ERP & CRM

Payment Solutions

Thick GL

Raisin

Data Warehouse


BACB

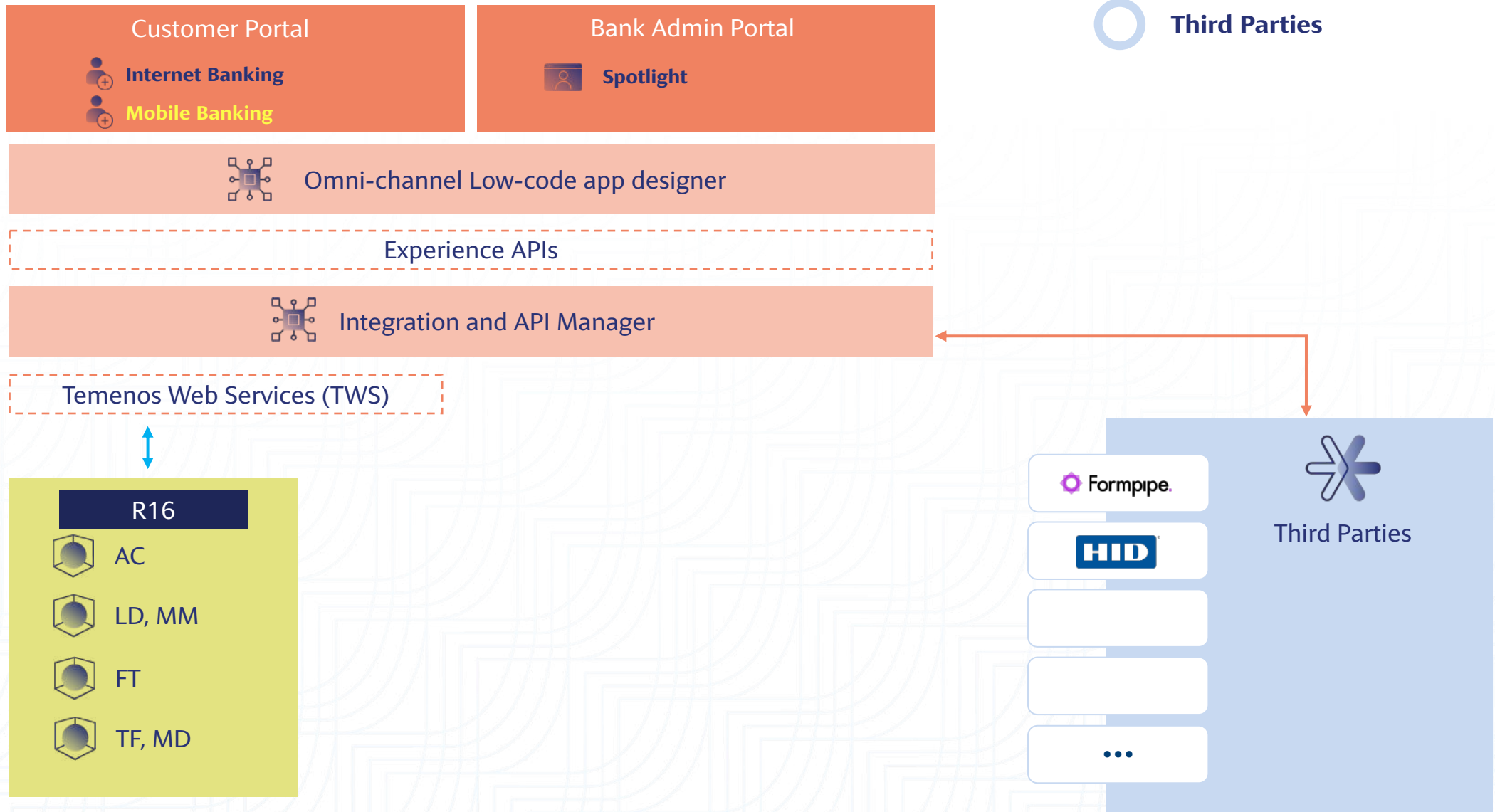
Third Parties

SALTEDGE Open Banking	surepay Confirmation of Payee	codat Accountancy integration	wise Payments	SETL Ledger orchestration	SALTEDGE AISP & PISP	Datavillage Data Collaboration
HID Authentication	HID IDV	SwissSign Electronic Signature	Formpipe. Document Management	unblu Engagement	salesforce CRM	Microsoft Dynamics 365




Exchange

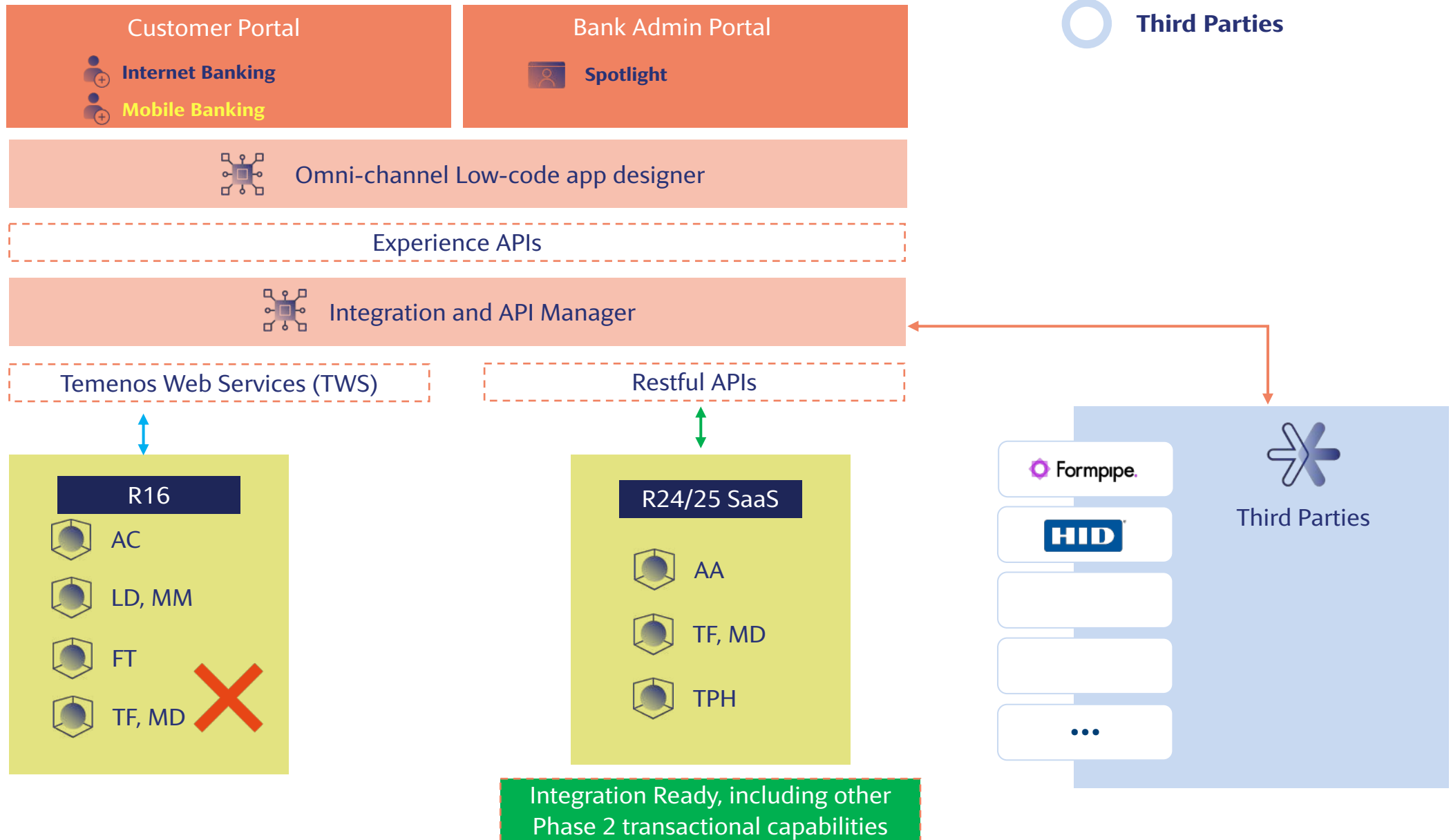
High level architecture and integration

-  Temenos Digital
-  Temenos Core / Any core
-  Third Parties





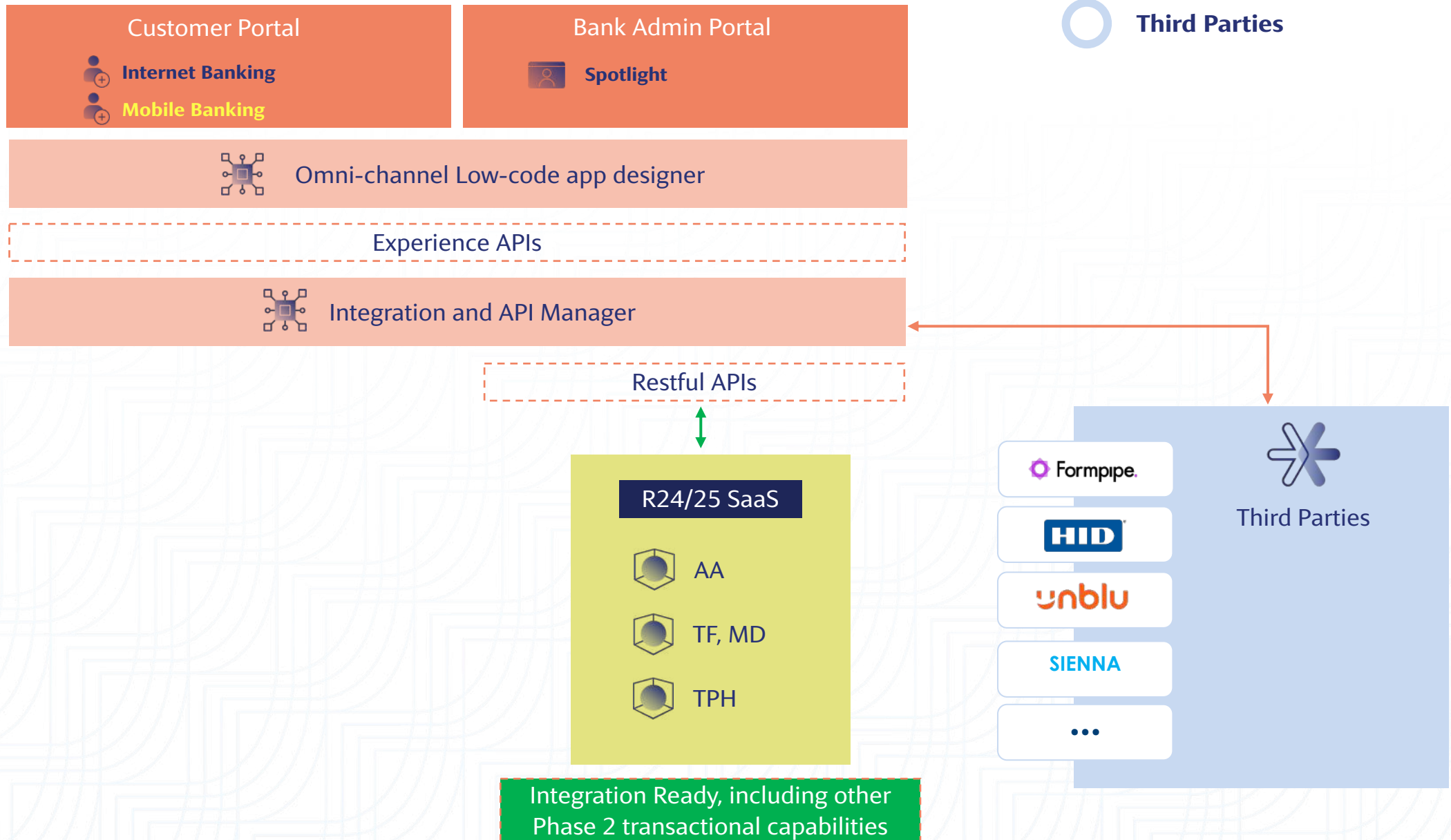
High level architecture and integration

-  Temenos Digital
-  Temenos Core / Any core
-  Third Parties




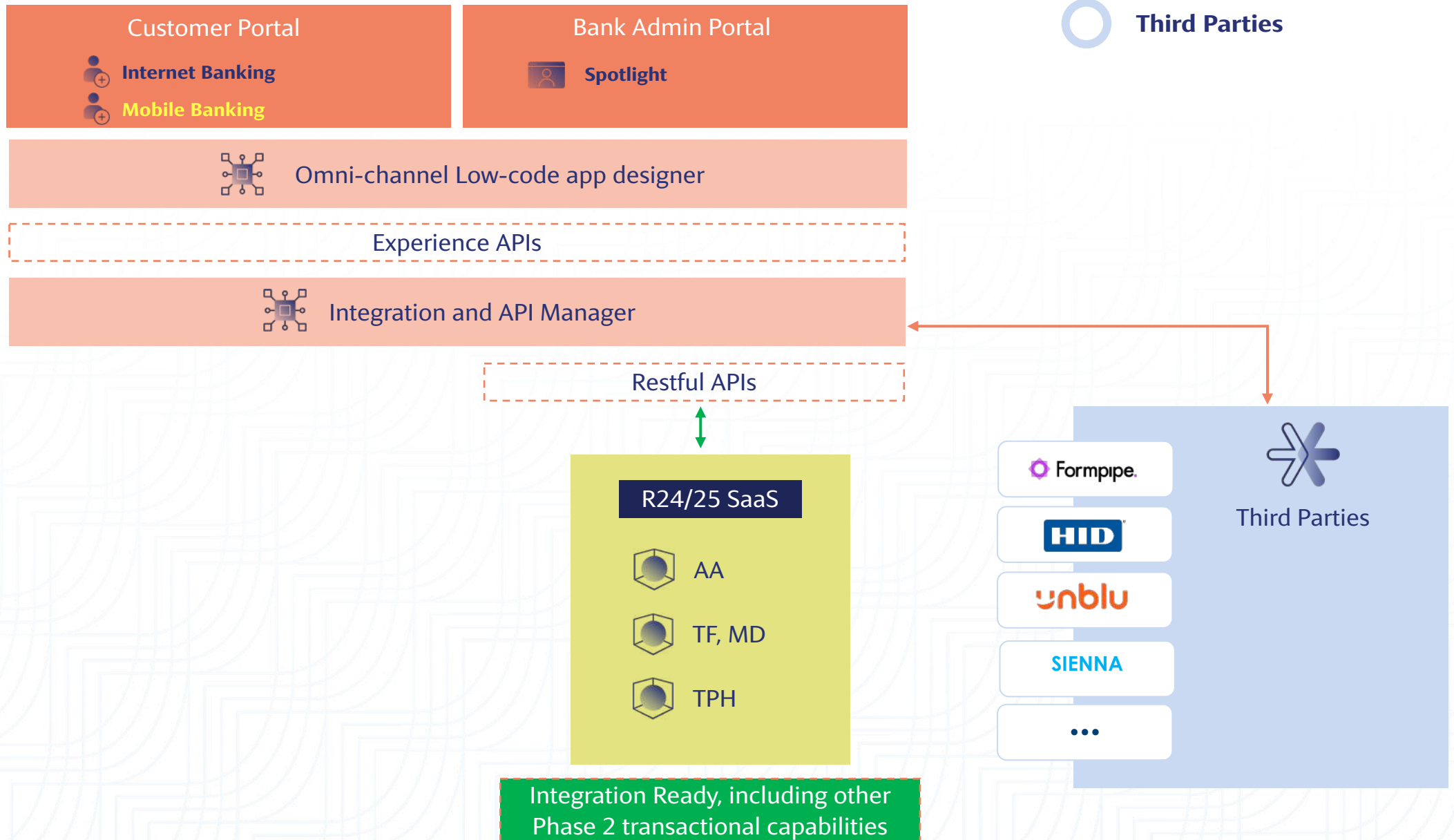
High level architecture and integration

-  Temenos Digital
-  Temenos Core / Any core
-  Third Parties



High level architecture and integration

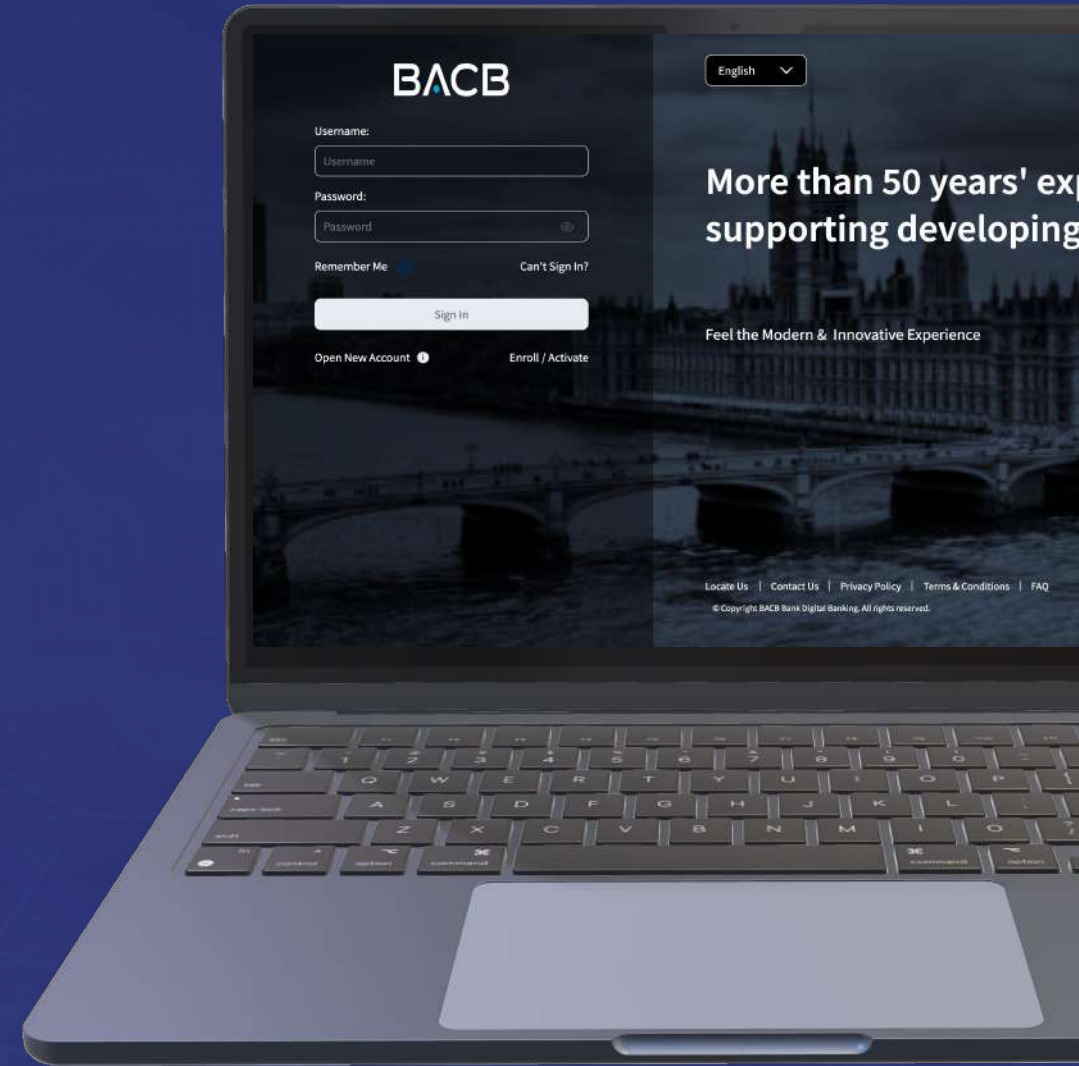
-  Temenos Digital
-  Temenos Core / Any core
-  Third Parties



Agenda

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Adopt

pre-built digital accelerator apps

Retail



Onboarding &
Origination

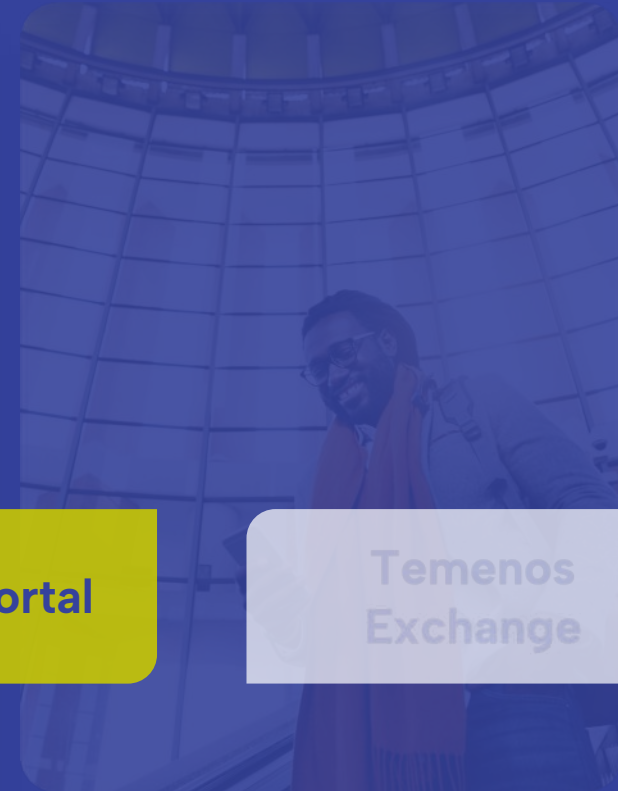
Business and Corporate



Digital Channels

Banking Portal

Wealth



Temenos
Exchange



User Management



User Types

- Administrator
- Inputter / Creator
- Authorizer
- View Only
- Custom Role



User Creation

- By Admin
- By BACB Staff
- Customer Self-Service Registration



User Management

- By Admin
- By BACB Staff
- User Self-Service Profile Management

Good Afternoon, POC

MY QUEUE **05**

[View All](#)

01
Assigned New

04
In Progress

NEW MESSAGES **20**

[View All](#)

05
Customer Service

03
Accounts

02
Change of Address

02
Change Repayment Account

APPROVALS & REQUESTS

ENTITY	REQUESTS	APPROVALS
Europe	00	00
BSG Company	00	00

Delete Archive Report Move Flag Mark Unread Sync Block

Account Activation



Infinity Apps <infinity_apps@temenos.com>

To: Abhishek Roy



Today at 13:26

Hi Abhishek Roy,

You are enrolled to Digital Banking Channel. Please activate your account now.

0642040707 is your username. Activation code is sent to you registered mobile number.

You are required to input your username & activation code in the link below.

To activate your account and set a password, [click here](#)
or paste the following link on your browser:

<https://poc63.temenos.com:443/apps/OnlineBanking>

The activation code will expire in 30 days , so activate it right away.

Regards,
Temenos Banking Team

This is a system generated mail. If you are not the named addressee please notify the sender immediately by e-mail at support@temenosbank.com and then delete the e-mail from your system. Although the company has taken reasonable precautions to ensure no viruses are present in this email, the company cannot accept responsibility for any loss or damage arising from the use of this email or attachments. Temenos, Inc. www.temenos.com

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< +18639009923

with Reference ID
PI241370DFPWL57K
has been sent .

16:34

Friday, 18 October

You have made a
transfer of 1.00 from
your a/c XXXX5791
to XXXX1215 on (Ref
no:). If you did not
do this transaction,
please call DBX bank
immediately.

10:17

Monday, 21 October

Dear Customer, You
are enrolled to digital
banking channel. smAsI
is your activation code.
Use it to activate your
profile. Username &
activation link are sent
to your registered email

13:27





English

Username:

Password:

Remember Me

[Can't Sign In?](#)

[Sign In](#)

[Open New Account](#)

[Enroll / Activate](#)

More than 50 years' experience of supporting developing markets

Feel the Modern & Innovative Experience

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Benefits

**Fewer
Operations
Activity for BACB**

**No Delay for the
Customers & its
Users**

**No Hard-Coded
User Roles**

Payments



Types

- Ac to Ac Transfer
- Domestic Payment
- International Payment
- Payee Management
- Account Sweep
- Bill Payment



Bulk Payment

- File Upload
- On-Screen Template



Manage Payment

- Future Dated Payment
- Standing Order
- Direct Debit
- Approval Workflow

Trade Finance



Trade Finance

- Import / Export LC
- Guarantees
- Collections

Communication



Methods

- Secure Message
- Email Alerts
- SMS Alerts
- Push Notification
- Notification Centre



Campaigns

- Email / SMS
- Push Notification
- In-App Banners

EMPLOYEE MANAGEMENT

CONFIGURATIONS

APPLICATION CONTENT MANAGEMENT

MASTER DATA MANAGEMENT

ENGAGEMENTS


Ad Campaigns

CREATE AD CAMPAIGN



CAMPAIGN NAME ⌵	PRIORITY ⌵	START DATE ⌵	END DATE ▼	STATUS ≡	
> BACB Sample Campaign	03	10/18/2024	01/09/2025	⏸ Paused	⋮
> BACB Campaign Three	01	10/22/2024	12/31/2024	● Active	⋮
> Nextgen-1	04	10/16/2024	12/24/2024	⏸ Paused	⋮
> Nextgen-2	05	10/16/2024	11/27/2024	⏸ Paused	⋮
> Nextgen-3	06	10/16/2024	11/27/2024	⏸ Paused	⋮
> NGUI_Validation	08	10/10/2024	10/31/2024	⏸ Paused	⋮



English 

Username:

5730809607

Password:


.....



Remember Me

[Can't Sign In?](#)

Sign In

[Open New Account](#) 

[Enroll / Activate](#)

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BACB

Welcome back Kmart Corporation.

573*****07

Password



[Can't Sign In?](#)

Remember Me



Sign In



Enroll/Activate



Open Account



Locate Us



Language

Other



CARDS

- New Card Request
- Manage Card
- Manage Travel Plan



Settings

- Manage Phone No
- Manage Email
- Manage Address
- Online Banking Access



Innovation

- Smart Banking Advisor

User Authentication



Internet Banking

- User ID
- Password
- Soft Token
- Hard Token
- Push Authentication



Mobile Banking

- User ID
- Password
- Facial Recognition
- PIN
- Fingerprint

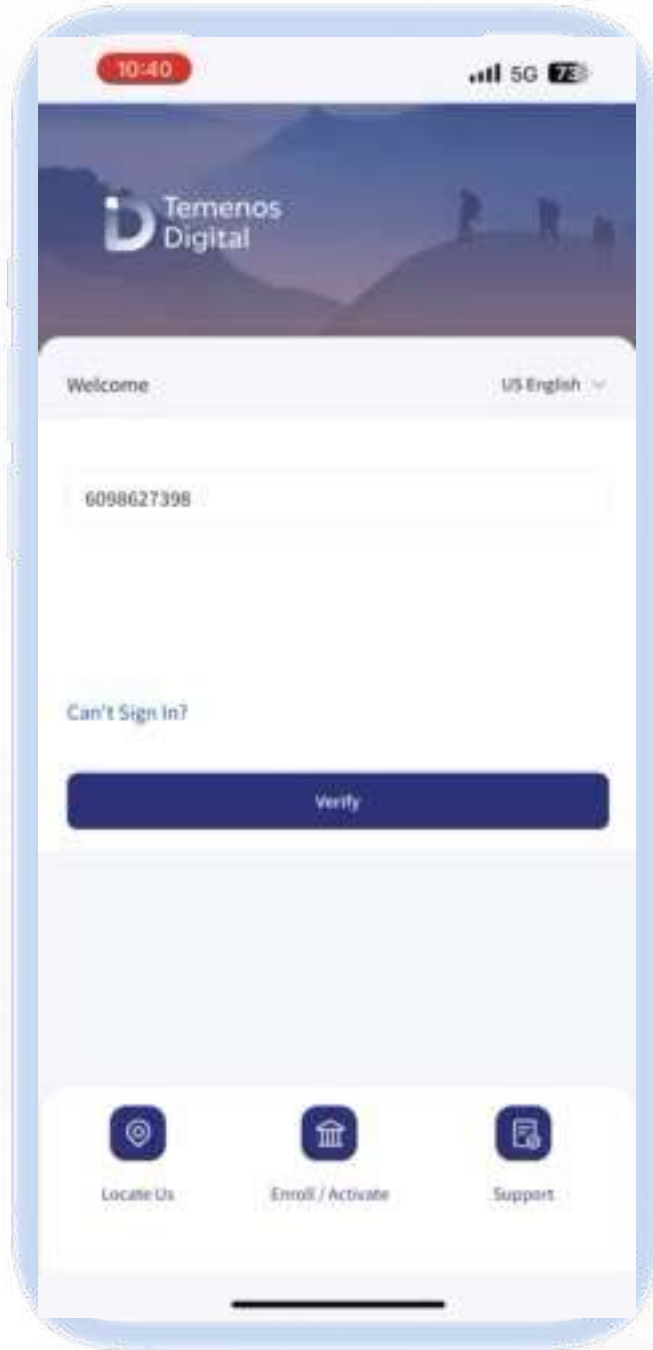


Spotlight

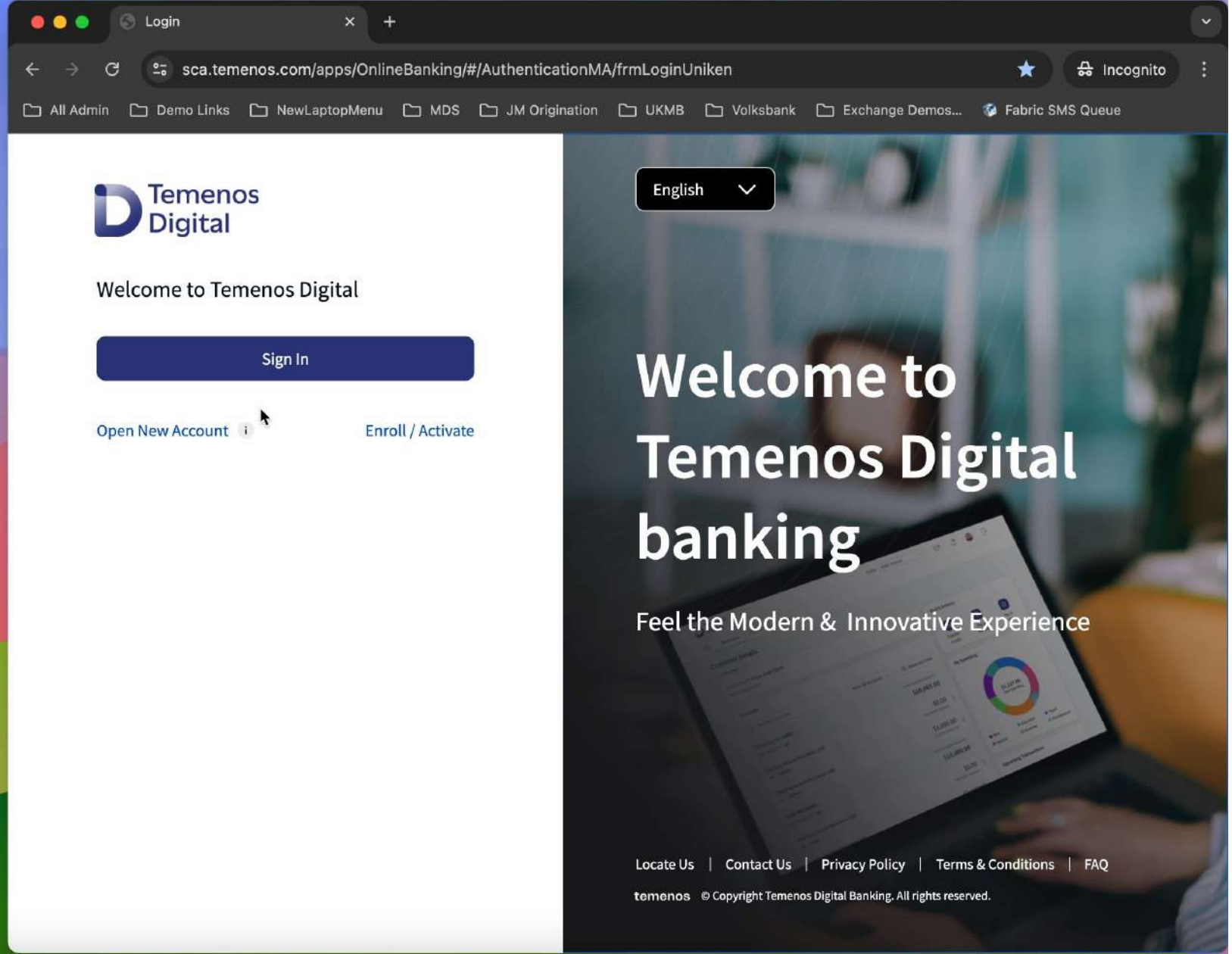
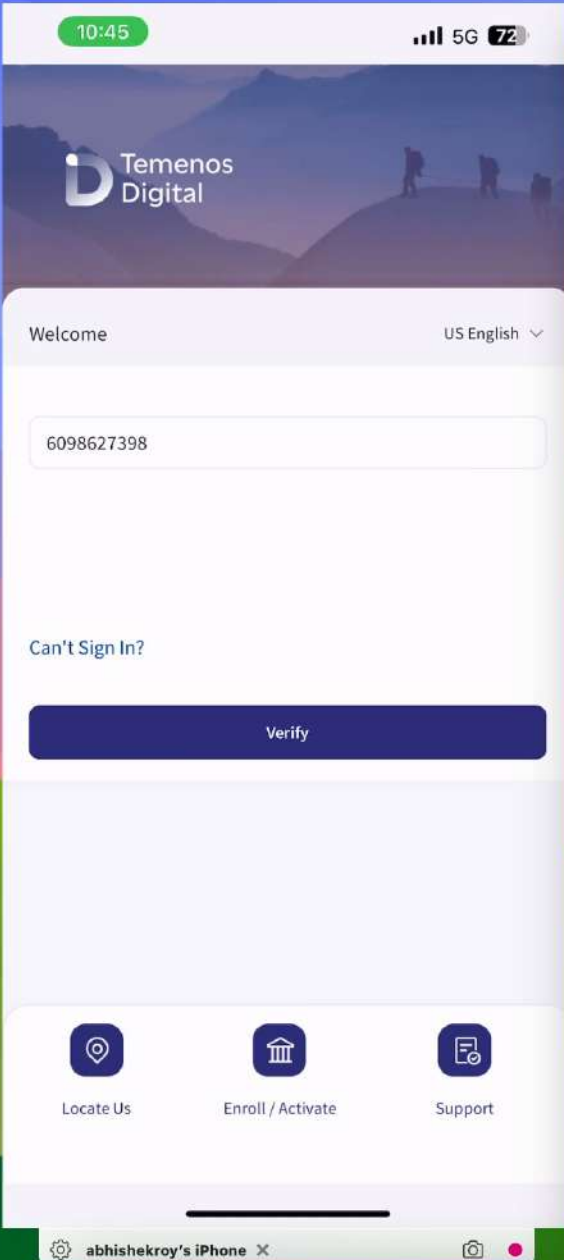
- Single Sign On (SSO)
- User ID
- Password

PSD2 Strong Customer Authentication

Mobile Banking Login Authentication
Online Banking Login Authentication
Transaction Signing



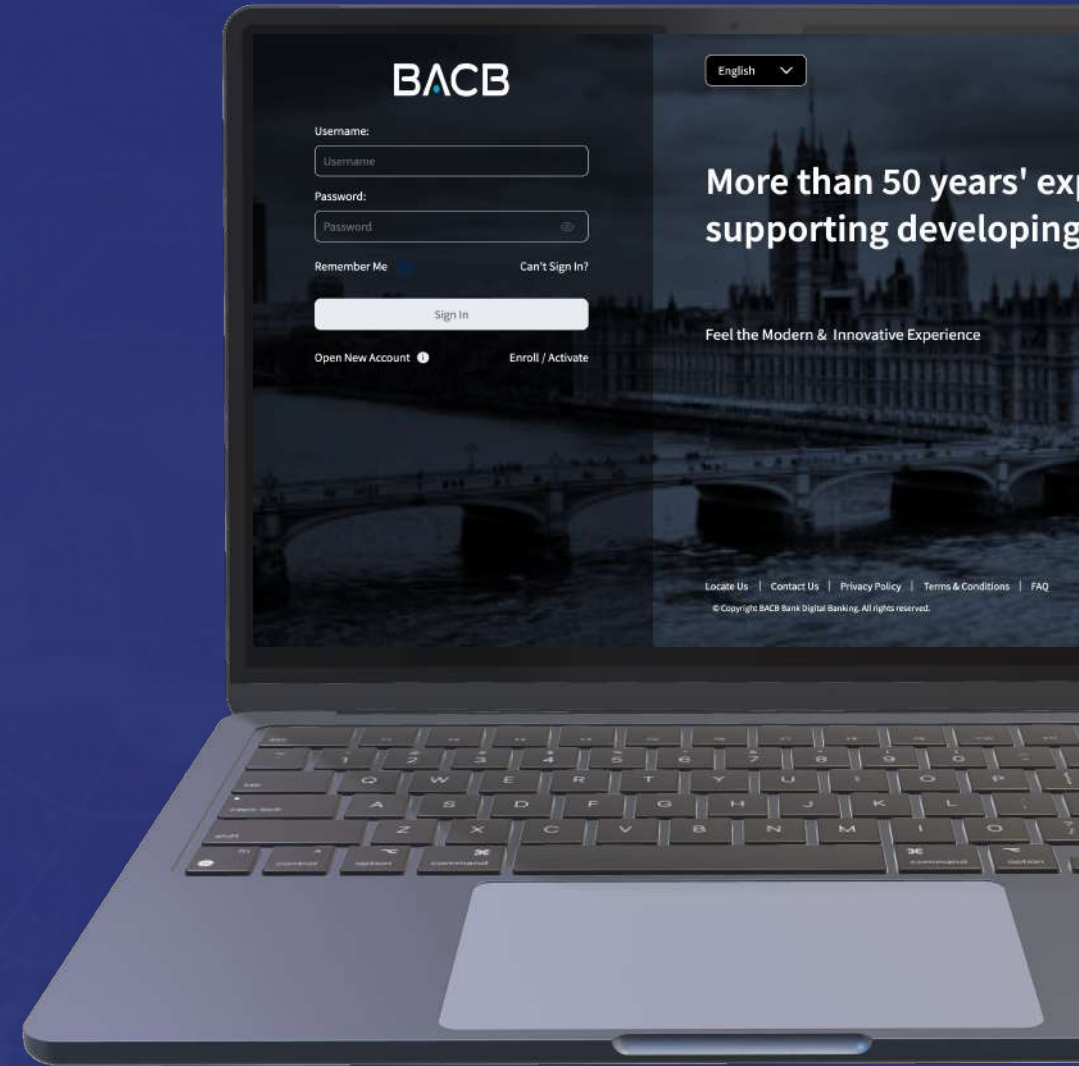
Login and Transaction Signing SCA (Strong Customer Authentication) – with Uniken



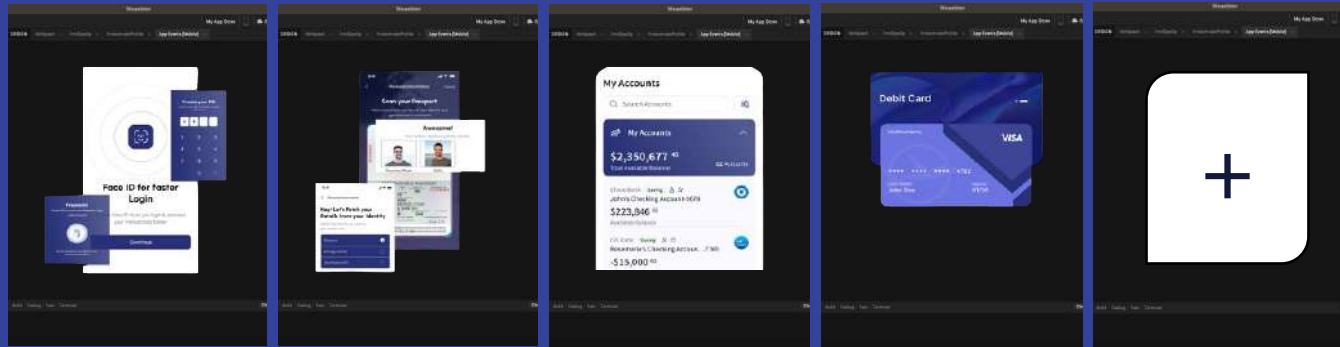
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Adapt with our multi-experience development platform

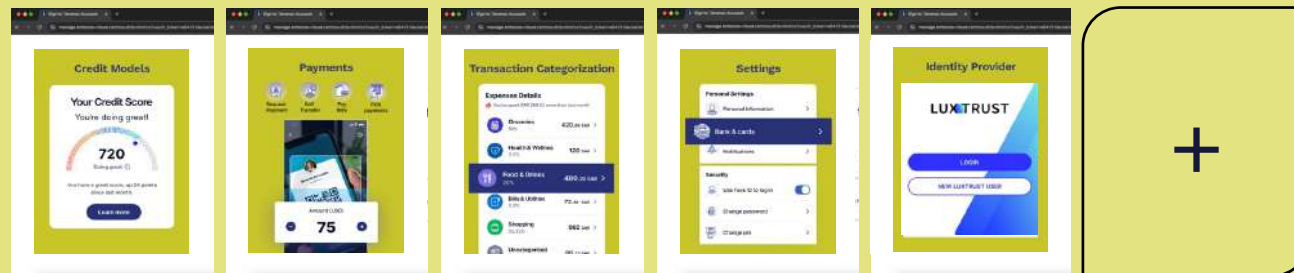


1

Visualizer

Omni-channel Low-code app designer

Experience APIs



2

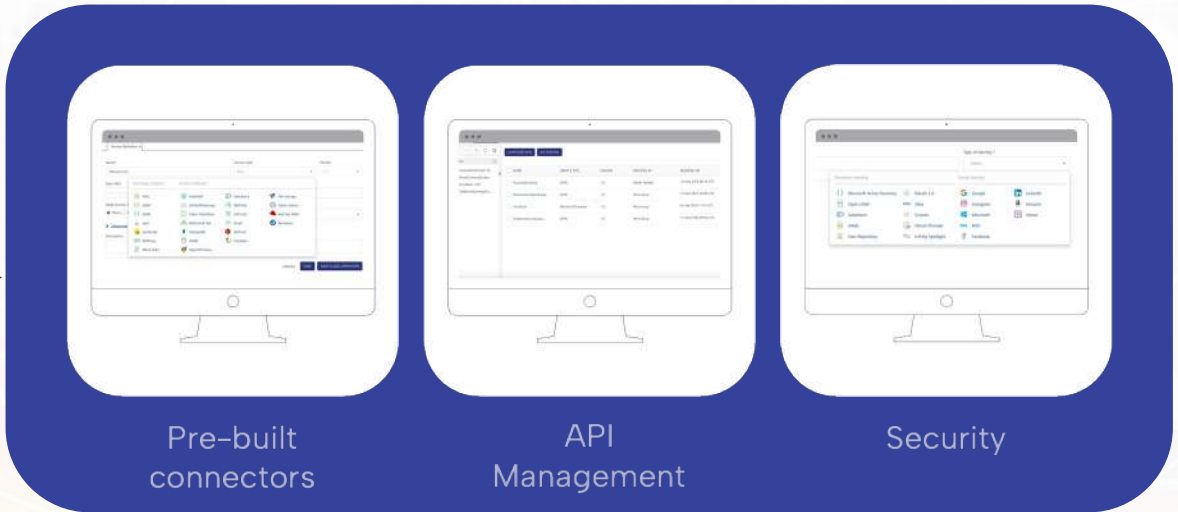
Fabric

Integration and API Manager

App Factory - DevOps

Accelerates omni-channel backend application development in an agile, open and secure way, connect end-to-end experiences

API's easy manage, tested, track and version at the API management layer.



Fabric



The user: **Bank/Partner** 

Helps you to connect with different backend systems or third parties

Identity/Security adapters



Integration adapters



Backend Services



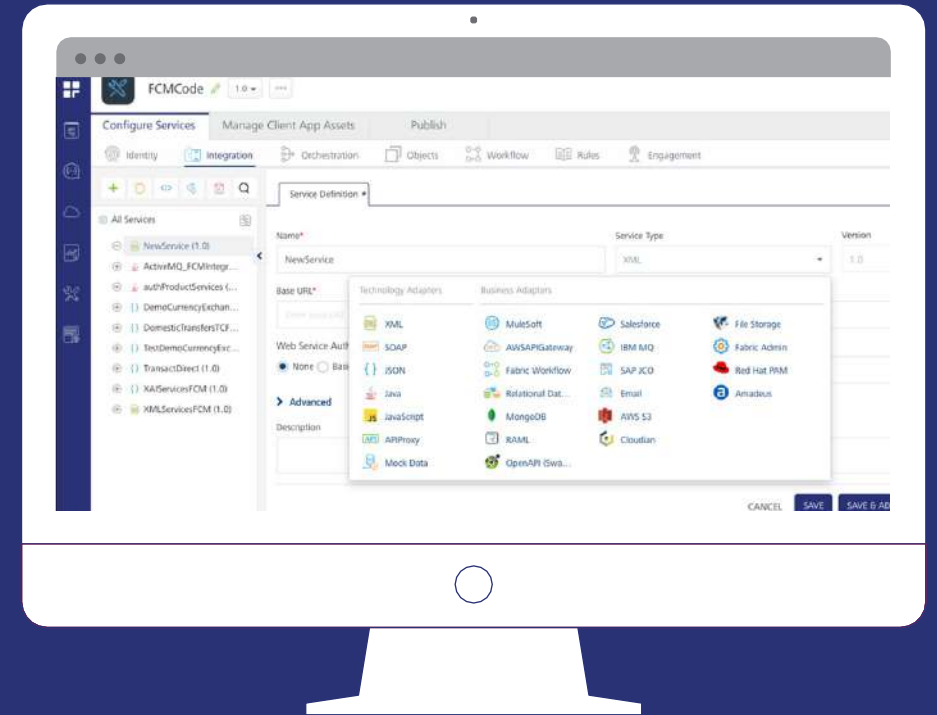
Pre-built connectors

API Management

Effortless Security

Explainable AI

Fabric



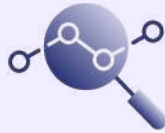
The user: **Bank/Partner** 

Helps you to connect with different backend systems or third parties


Orchestration



Analytics



Developer Portal



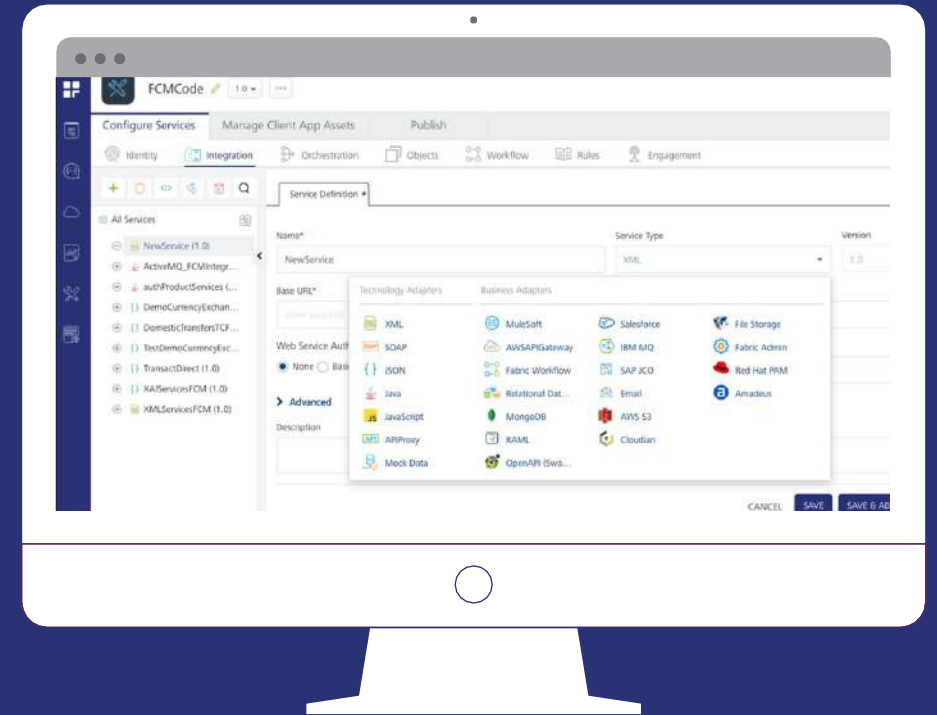
Pre-built connectors

API Management

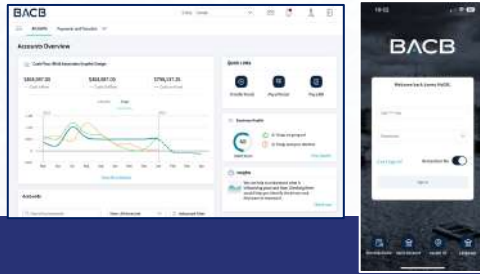
Effortless Security

Explainable AI

Fabric



PSD2 – Account Aggregation & Payment Initiation



SELF-SERVICING CHANNELS

Experience APIs



Integration and API Manager (Fabric)



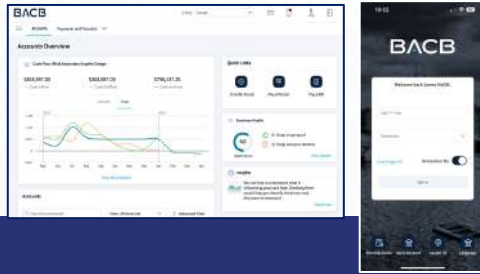
SALTEDGE



DBXDB

(Accounts,
Balances, Consent)

Client ERP – XERO QuickBooks Integration - CODAT



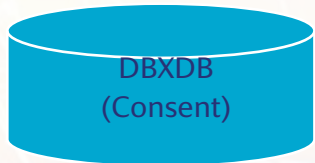
SELF-SERVICING CHANNELS

Experience APIs



Integration and API Manager (Fabric)

 **codat**
Universal APIs for Small Business Data



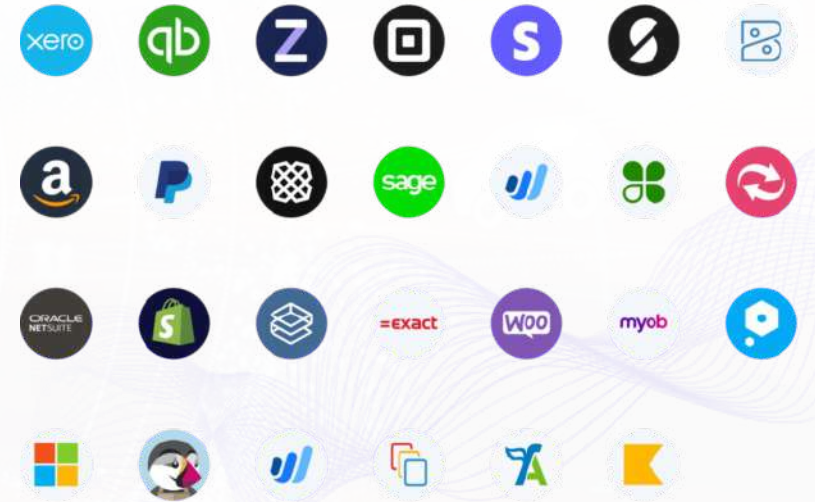
DBXDB
(Consent)



Temenos XAI



Data Lake
(Transactions)



CRM Integration



SELF-SERVICING CHANNELS

Experience APIs



Integration and API Manager (Fabric)



BACB
TEMENOS R16

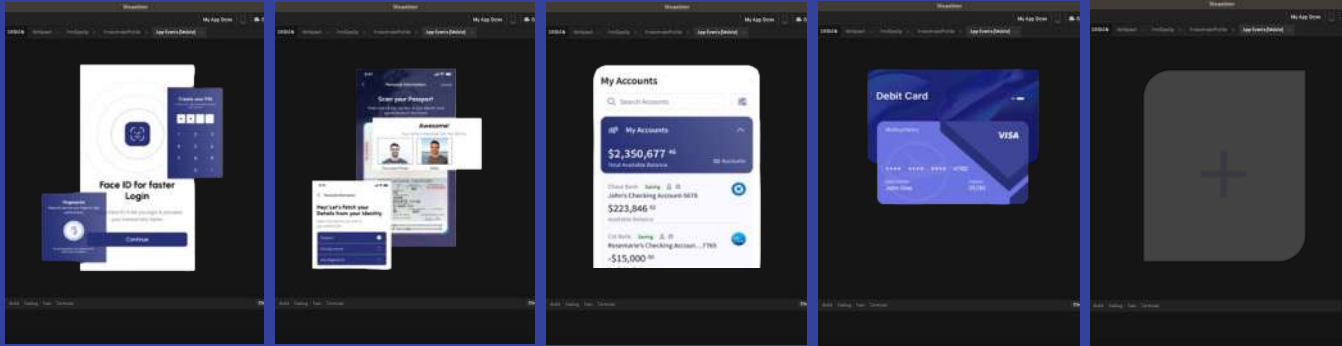
Channels Rated e.g. Campaigns



Replicate Customer & Account Information



Adapt with our multi-experience development platform

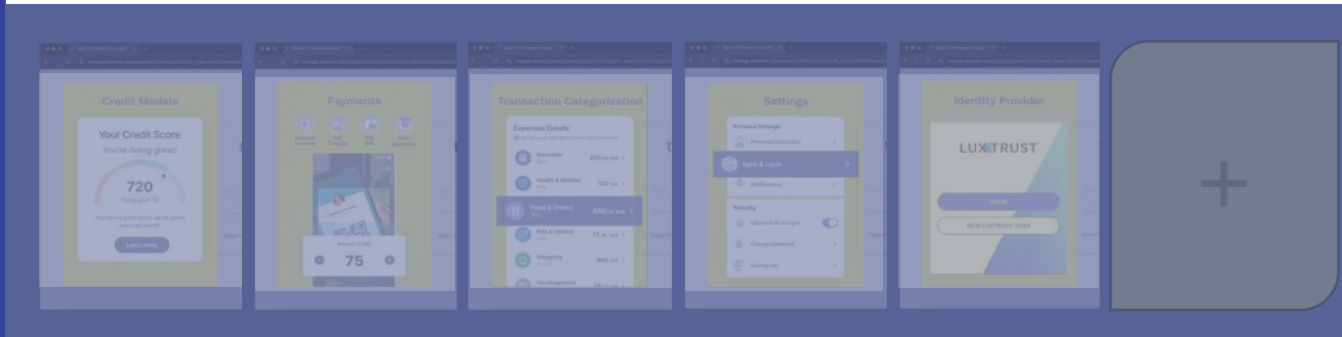


1

Visualizer

Omni-channel Low-code app designer

+ Experience APIs



2

Fabric

Integration and API Manager

App Factory - DevOps

Low-code: Enabling designers, developers and line-of-business to quickly build personalized apps across channels.

Tailor experiences across channels, making banking personal.

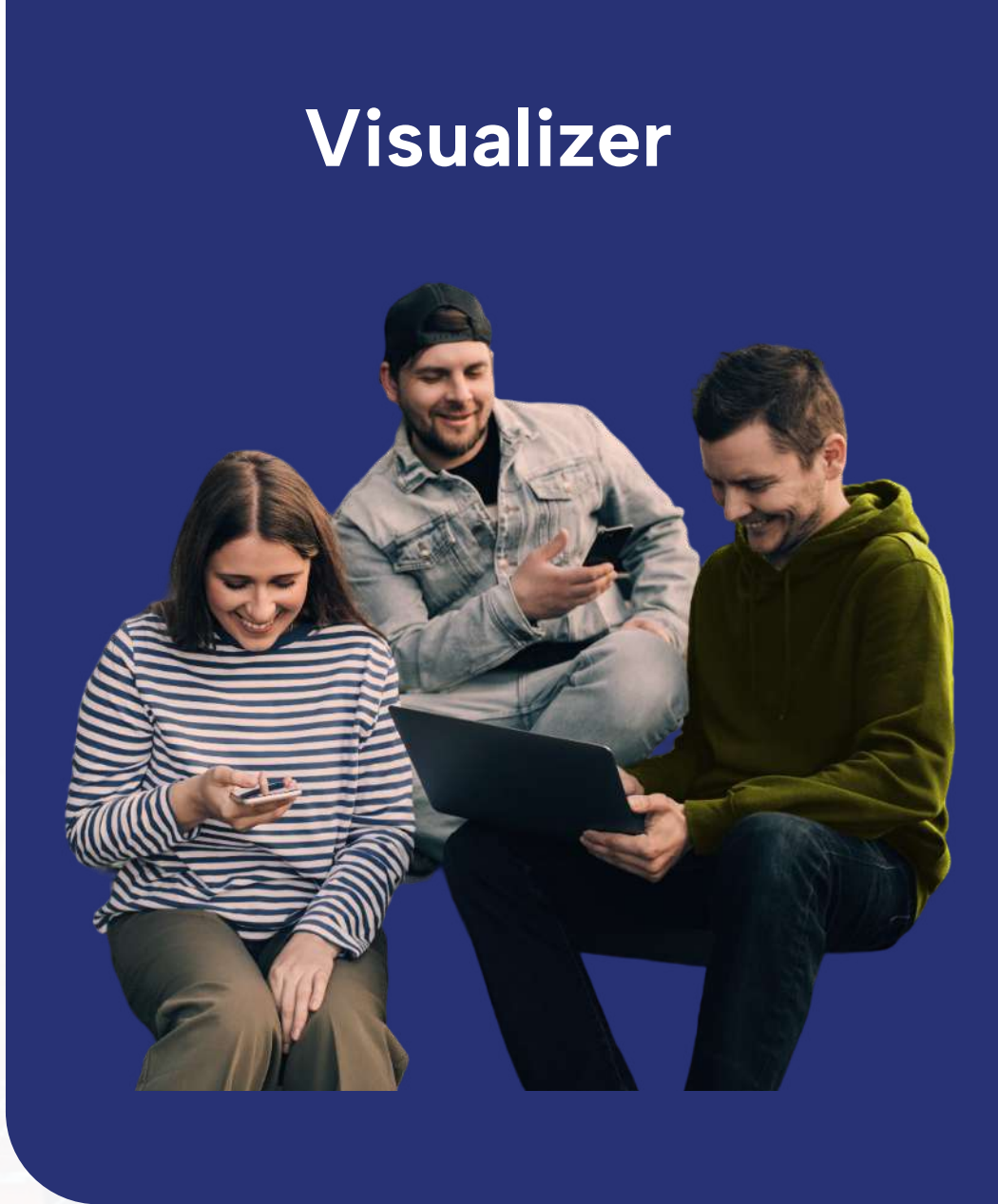


Omnichannel

Low Code

Micro apps

Visualizer



The user: **Bank/Partner** 

One stop shop for all your developer needs regardless of the channel

**Prebuilt
Widgets**



**Omnichannel
Components**



Internationalization

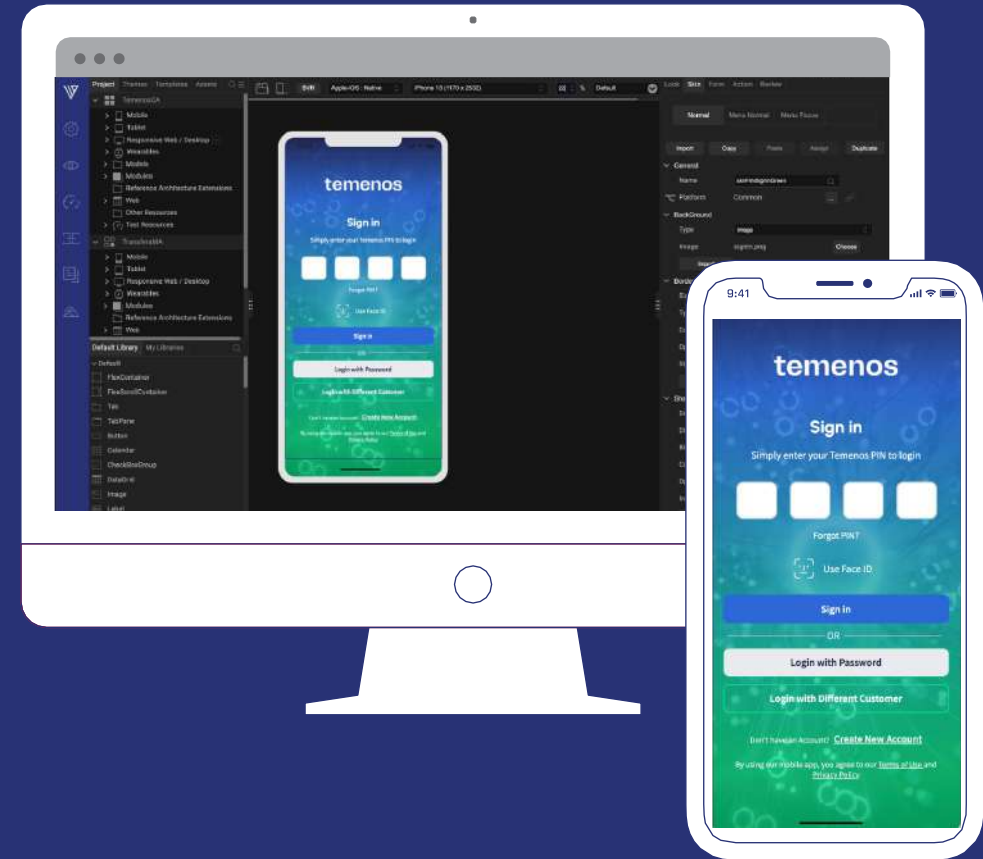


Omnichannel

Low Code

Micro apps

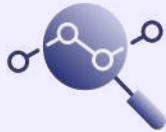
Visualizer



The user: **Bank/Partner** 

One stop shop for all your developer needs regardless of the channel

Testing



Accessibility
WCAG 2.1



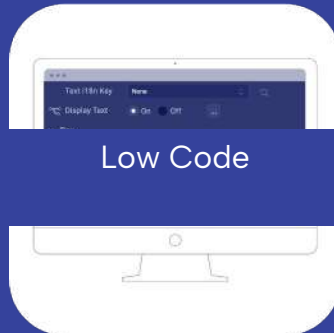
Import
Components



Omnichannel



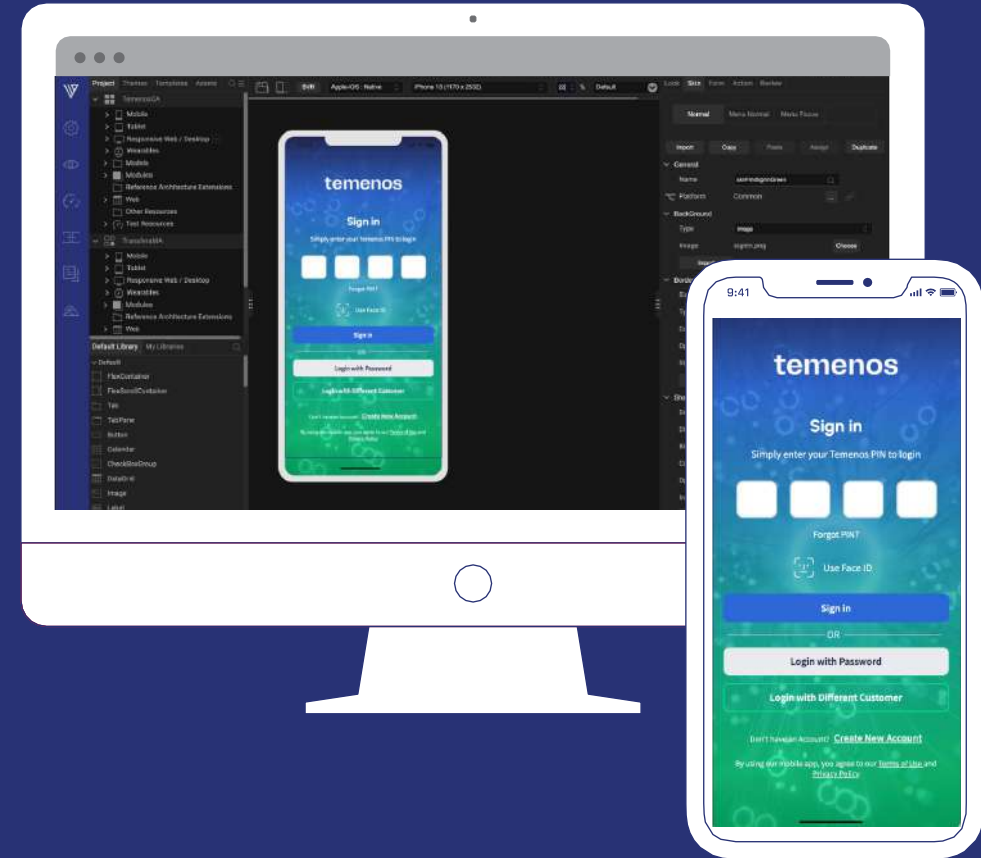
Low Code



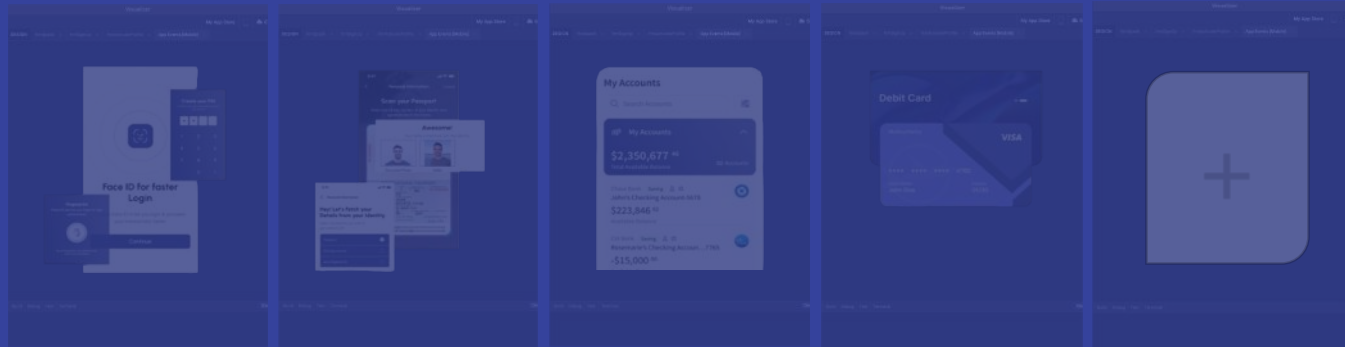
Micro apps



Visualizer



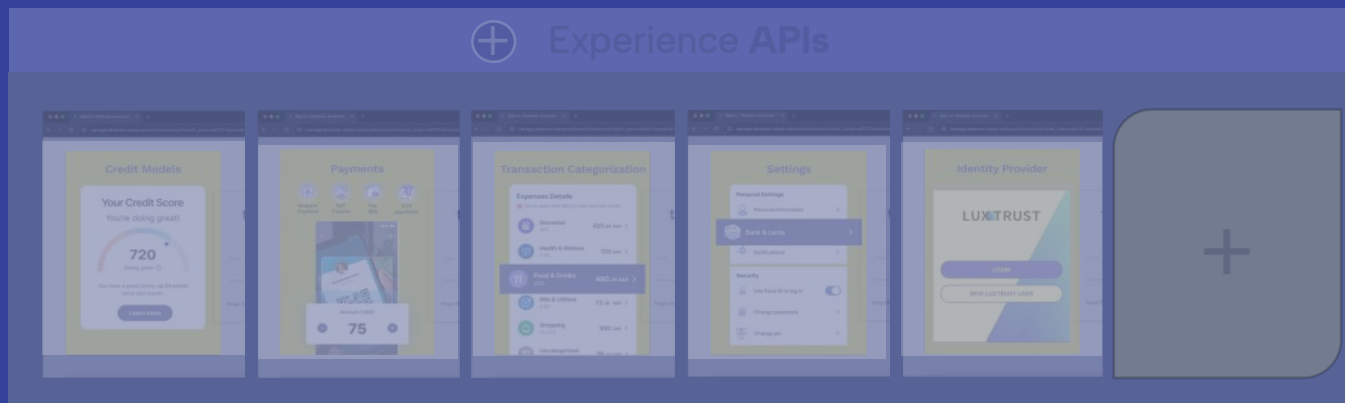
Adapt with our multi-experience development platform



1

Visualizer

Omni-channel Low-code app designer



2

Fabric

Integration and API Manager

App Factory - DevOps

App Factory

Take the best of breed for development & testing Digital Apps across channels which in turn helps to speed up the Software Development Life Cycle.

Enabling CI/CD for the Temenos Digital Apps



Developer



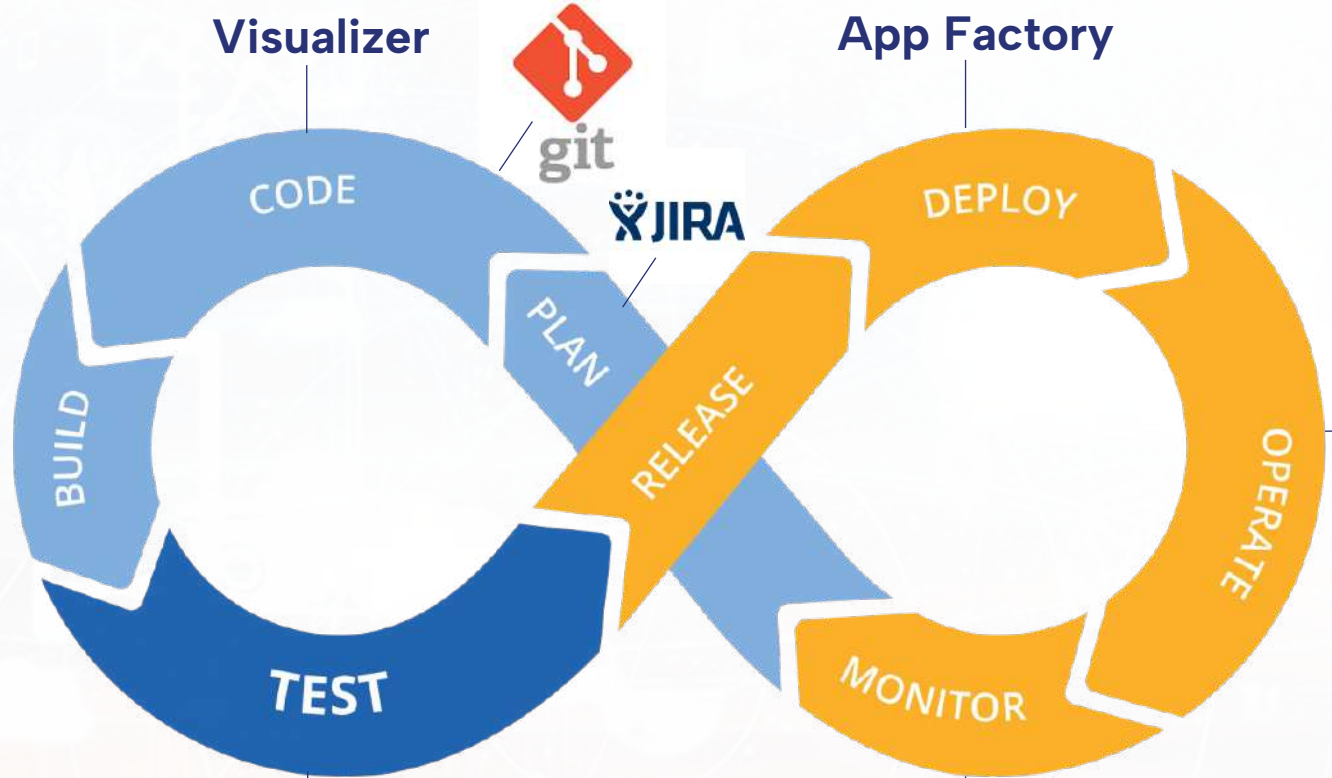
Tester/QA



Operations



App Factory
iOS
Android
Web



App Factory
Quantum Testing Framework (Jasmine)
Appium TestNG
Selenium TestNG

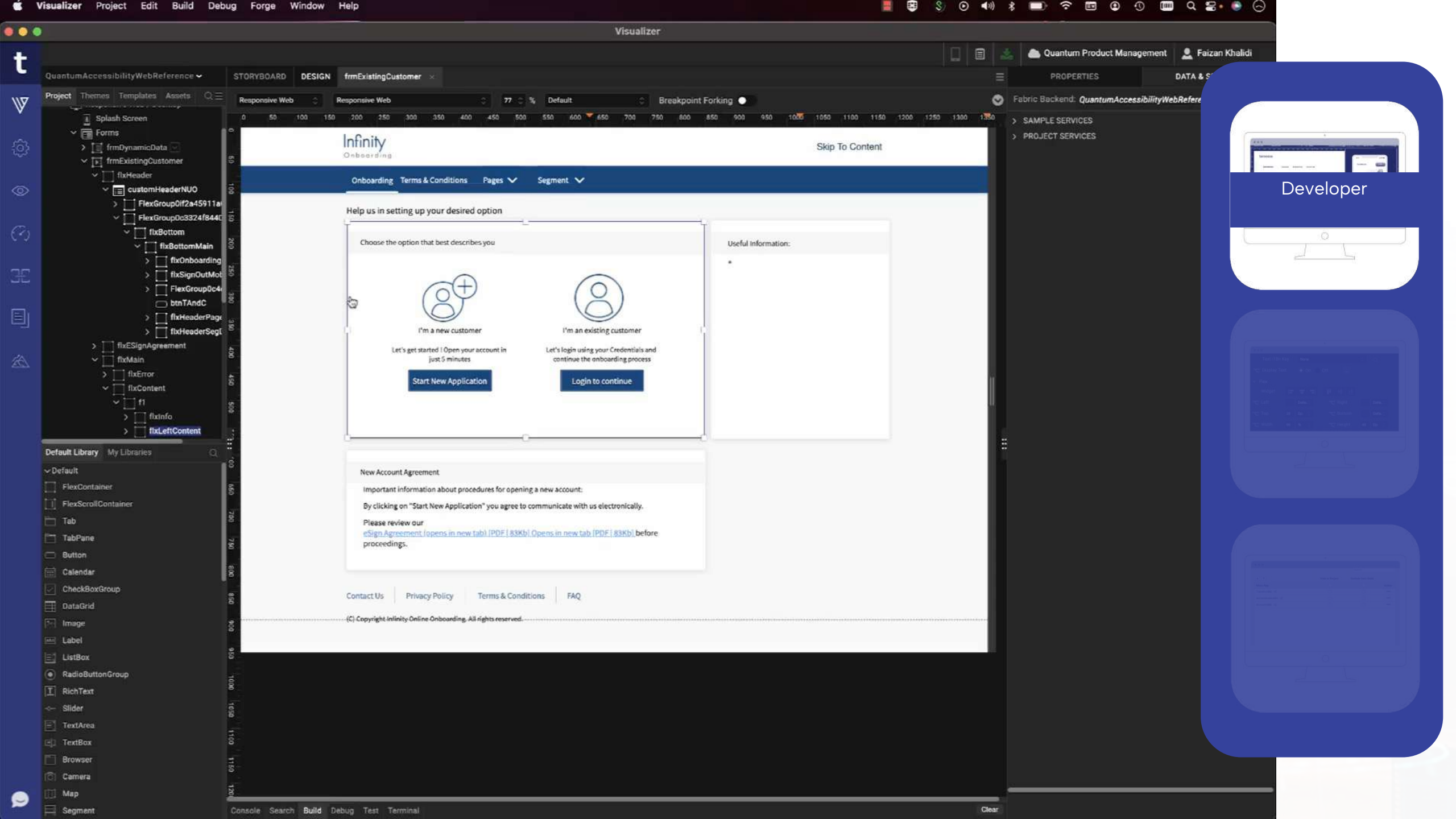
App Factory
Synthetic Testing

Fabric
Alerts & Crash Analytics
User Journeys
Reports

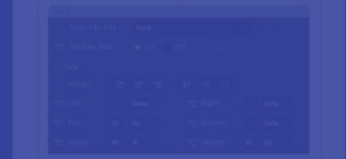
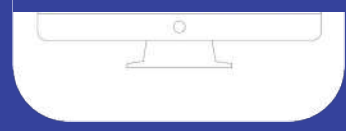
Fabric

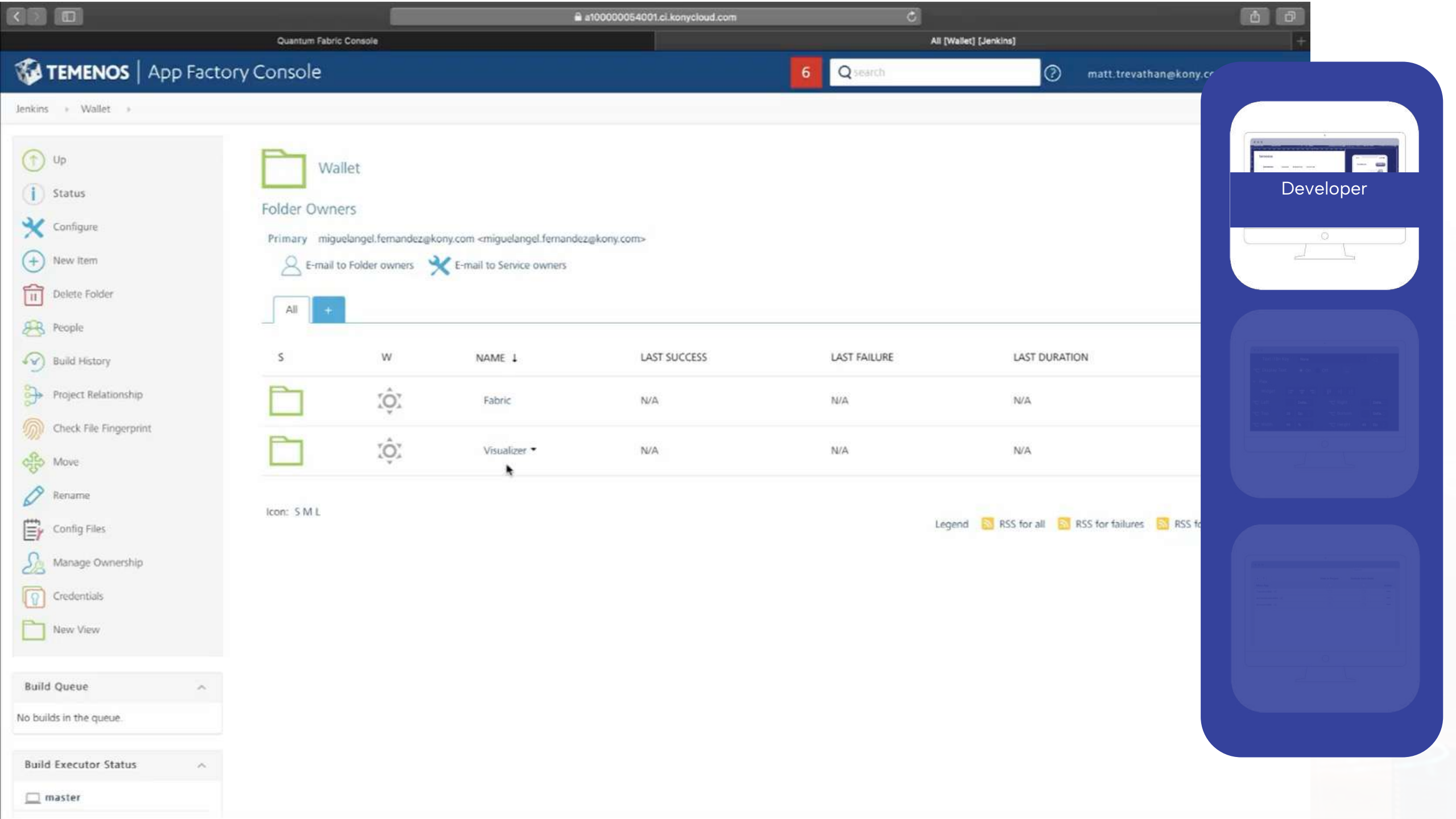
A vertical stack of four rounded rectangular boxes, each containing a device icon and a role label. From top to bottom: 1. A laptop icon with the label 'Developer'. 2. A tablet icon with the label 'Tester/QA'. 3. A desktop monitor icon with the label 'Operations'. 4. A desktop monitor icon with an unlabeled role.





Developer





- Up
- Status
- Configure
- New Item
- Delete Folder
- People
- Build History
- Project Relationship
- Check File Fingerprint
- Move
- Rename
- Config Files
- Manage Ownership
- Credentials
- New View

Wallet

Folder Owners

Primary miguelangel.fernandez@kony.com <miguelangel.fernandez@kony.com>

E-mail to Folder owners E-mail to Service owners

All +

S	W	NAME ↓	LAST SUCCESS	LAST FAILURE	LAST DURATION
		Fabric	N/A	N/A	N/A
		Visualizer	N/A	N/A	N/A

Icon: S M L

Legend RSS for all RSS for failures RSS for...

Developer

Build Queue

No builds in the queue.

Build Executor Status

master

Visualizer Project Edit Build Debug Marketplace Window Help

Visualizer

My App Store 2Z6W8 ACME Co. matt trevathan

AcmeRealtorMT STORYBOARD DESIGN [ad-only] SubmitCase.js [read-only] Logout.js [read-only] Smoketest.js [read-only]

Project Skins Templates Assets

- Wearables
- Modules
- Web
- Other Resources
- Test Resources
 - Jasmine
 - Common
 - Mobile
 - Test Cases
 - Test Suites
 - Smoketest.js
 - Test Plans
 - automationStartup.js
 - Tablet
 - Responsive Web/Desktop
 - Test Cases
 - Test Suites
 - Test Plans
 - automationStartup.js
 - TestNG

Default Library My Libraries


- FlexContainer
- FlexScrollContainer
- Group
- Tab
- TabPane
- Button
- Calendar
- Date
- CheckBoxGroup
- DataGrid
- Image
- Label
- Line
- ListBox
- RadioButtonGroup
- RichText
- Slider
- TextArea

```
1 describe("Smoketest", function() {
2   it("Login", async function() {
3     kony.automation.textbox.enterText(["frmLogin", "txtUserName"], "matt.terry@temer
4     expect(kony.automation.widget.getWidgetProperty(["frmLogin", "txtUserName"], "
5     kony.automation.textbox.enterText(["frmLogin", "txtPassword"], "Password@1");
6     kony.automation.button.click(["frmLogin", "btnLogin"]);
7     await kony.automation.playback.wait(3000);
8   });
9
10  });
11  it("SubmitCase", async function() {
12    kony.automation.flexcontainer.click(["frmLanding1", "flxDashboard"]);
13    await kony.automation.playback.wait(3000);
14    kony.automation.segmentedui.click(["frmLanding1", "segApplications[0,0]"]);
15    // :User Injected Code Snippet [// - [2 lines]]
16
17    expect(kony.automation.widget.getWidgetProperty(["frmApplicationDetails",
18    // :End User Injected Code Snippet {f79e3077-c4a5-a663-c26f-c7fea8ebac7b}
19    kony.automation.button.click(["frmApplicationDetails", "btnsubmit"]);
20    await kony.automation.playback.wait(1000);
21    kony.automation.button.click(["frmConfirmation", "btnContinue"]);
22  });
23  it("Logout", async function() {
24    await kony.automation.device.deviceBack();
25  });
26 });
```


Console Search Build Debug Test Terminal

Visualizer Preview

Responsive 1280 x 900



Tester/QA



Dashboard

- People
- Build History
- Project Relationship
- Check File Fingerprint
- Quick Start
- New App Factory Project
- My Views
- AppFactory Version
- Temenos Product Document...

Build Queue ^
No builds in the queue.

Build Executor Status ^

Build-In Node
1 Idle
2 Idle
3 Idle
4 Idle
5 Idle
6 Idle
7 Idle
8 Idle
9 Idle
10 Idle

My App Factory Projects

S	W	Name ↓	Last Success	Last Failure	Last Duration
	⚙️	ApiKeyTestProj	N/A	N/A	N/A
	⚙️	AppFactAutomation	N/A	N/A	N/A
	⚙️	APPPLT12695	N/A	N/A	N/A
	☁️	AppV9SP7HF1	N/A	N/A	N/A
	⚙️	AppViewer	N/A	N/A	N/A
	⚙️	BuildIconsTesting	N/A	N/A	N/A
	☁️	C360App	N/A	N/A	N/A
	☁️	CrossAppV9505	N/A	N/A	N/A
	☁️	Customer360	N/A	N/A	N/A
	⚙️	DigitalBanking	N/A	N/A	N/A
	⚙️	EmpDirNative	N/A	N/A	N/A
	⚙️	EmpDirWeb	N/A	N/A	N/A
	☁️	FabWorkSpaceTest	N/A	N/A	N/A

A vertical blue graphic on the right side of the page. It features three rounded rectangular boxes. The top box contains a blurred screenshot of a mobile application interface. The middle box contains a blurred screenshot of a desktop application interface with the text 'Tester/QA' overlaid in white. The bottom box contains another blurred screenshot of a mobile application interface.

Jenkins

- People
- Build History
- Project Relationship
- Check File Fingerprint
- Quick Start
- New App Factory Project
- Temenos Product Documentation
- AppFactory Version
- My Views
- Lockable Resources
- Credentials

My App Factory Projects

S	W	NAME ↓	LAST SUCCESS	LAST FAILURE	LAST DURATION
		Cloudcts	N/A	N/A	N/A
		FooApp	N/A	N/A	N/A
		LombardOdier	N/A	N/A	N/A
		MyBankingApp	N/A	N/A	N/A
		MyBankingServices	N/A	N/A	N/A
		T365Spotlight	N/A	N/A	N/A

Icon: S M L

Legend RSS for all RSS for fail

Build Queue ^

No builds in the queue.

Build Executor Status ^

master

- 1 Idle
- 2 Idle
- 3 Idle
- 4 Idle
- 5 Idle



- Source Control
- Build Automation
- Testing



User Checks in Project

Continuous Integration Scheduler Auto builds

User logs into Build Console and executes a manual build

PARALLEL PROCESS

- Build Android
- Build iOS
- Build Responsive Web
- Build Progressive Web Apps
- Build wearable apps

Build Complete

Email User

Store Results

Deploy Back-end Service to Runtime

Executed Automated Device Testing (Device Farm)

AWS Device Farm

Test Complete

Email User

Store Results

App Store Deployment

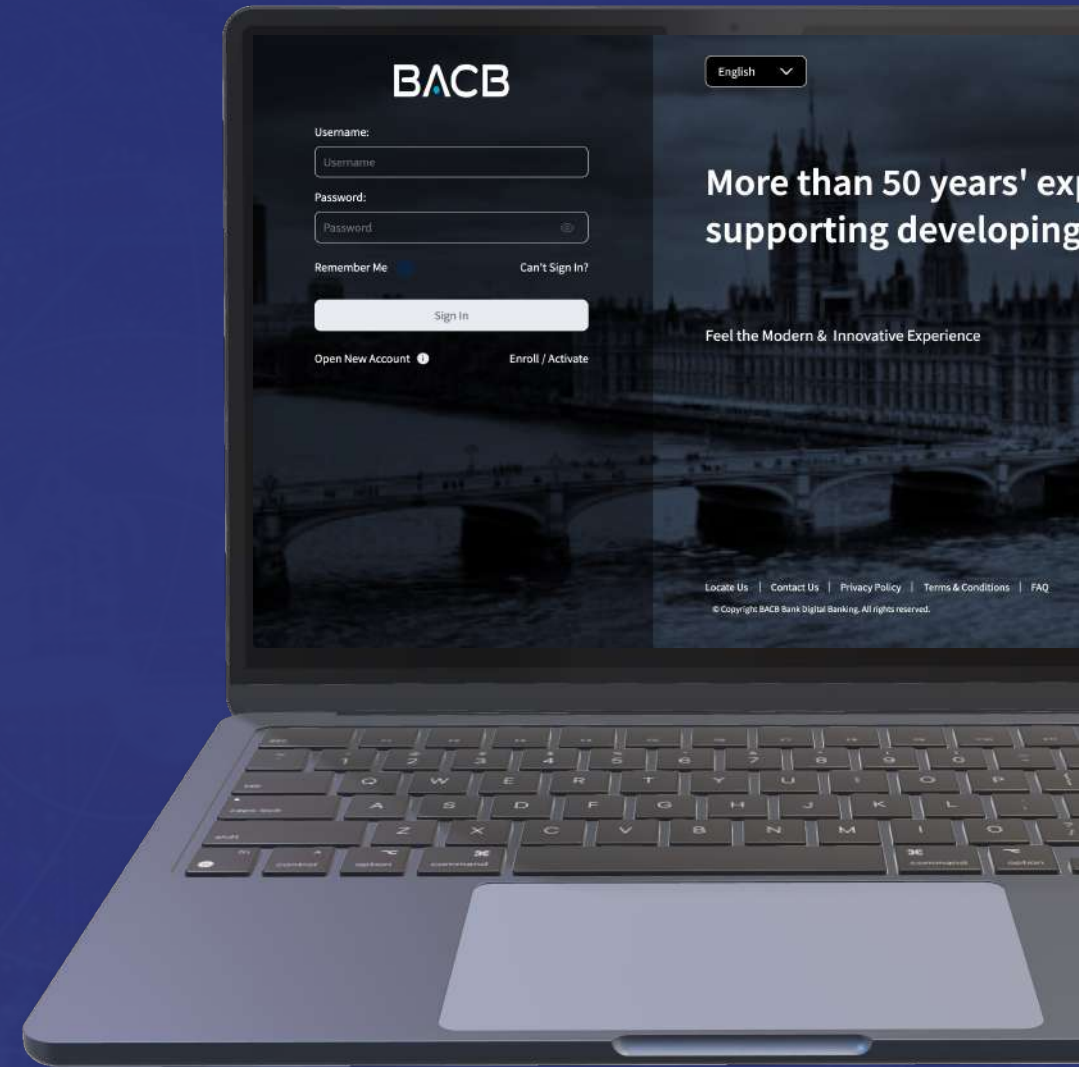
Web App Deployment



Agenda

- Welcome & Introduction (DJ)
- System Architecture Overview (AR)
- Channels Offering (AR)
- Integration Capability (RG)
- Managed Service (WZ)
- System Security (WZ)

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Choice of Operating Model

Temenos runs the software

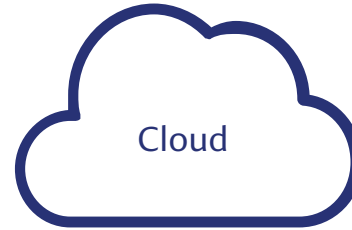


Standards & regulations



Bank adopts the uniform terms offered by Temenos

Bank runs the software



Public cloud



Bank makes the operational and technology choices



Private cloud



Single code base, same product

SaaS: Excellence delivered for all Temenos banking solutions



Client managed

Run the Bank including direction, oversight & control

1st line support

Change: Configuration & UAT

Governance, Security & Risk assurance

Service Continuity (DR & BCP)

24x7 NOC, SOC, support desk

Infra/app management & maintenance

Upgrades & updates

Licence & maintenance

Change development

temenos
banking
cloud

Run the Bank including direction, oversight & control

1st line support

Change: Configuration & UAT

Governance, Security & Risk assurance

Service Continuity (DR & BCP)

24x7 NOC, SOC, support desk

Infra/app management & maintenance

Upgrades & updates

Licence & maintenance

Change development

Temenos Service

Temenos Software



Bank



Temenos

Leverage the value of the Service



Run the Bank including direction, oversight & control

1st line support

Change: Configuration & UAT

Governance, Security & Risk assurance*

Service Continuity (DR & BCP)

24x7 NOC, SOC, support desk

Infra/app management & maintenance

Upgrades & updates

Licence & maintenance

Change development



Bank



Temenos

Governance, Security & Risk assurance

- Highest standards for certification and auditing including SOC2, ISO2700X, EU Cloud Conduct and CSA
- Proven under 30+ regulators around the globe
- Continuous governance development through dedicated Temenos Data Privacy, Temenos Security and Temenos Risk teams

Service Continuity (DR & BCP)

- BCP aligned with ISO 22301, actions audited and reflected in the SOC 2 report
- Azure platform provide managed services, security measures, networking capabilities and database etc. enabling a resilient and cloud native architecture
- Record elastic scalability allows for automatic and dynamic allocation of resources

24x7 NOC, SOC, support desk

- 24x7x365 Network Operations Center for Cloud Operations
- 24x7x365 Security Operations Center
- 24x7x365 service desk and associated critical support center
- Temenos SaaS designed governance including Security, GRC and SaaS CoE

Infra/app management & maintenance

- Patching of all infrastructure, platform and application components
- Network management, firewall configuration, traffic management
- Performance monitoring, tuning, scaling of application environment
- Monitoring of application integration
- IT Service Continuity testing,
- Back-up and restore

Upgrades & updates

- Annual upgrade for both infrastructure and applications
- Monthly patches and updates
- Automated Testing Framework to easily consume and minimize effort for upgrade

* Shared responsibility for bank and Temenos

Temenos SaaS on Azure

Temenos Applications



Operations: Cloud Command Centre, Security Operations Centre, DR & BCP



Support: Service Desk, Incident Management, Problem Management, Change & Release Management, Request Fulfilment



Platform Management: Security Hardening, Configuration Management, Monitoring, Data Management, Patch Management

Managed Services



Application Management: Monitoring, Batch process management, database tuning



GRC: Security & Privacy Controls, Security testing, Risk Management Board, External Audit & Certification, Business Continuity

Microsoft Azure

IaaS



Facilities Management: Data centres, Physical network, Physical hardware, Physical access control



Operations: Monitoring, Physical maintenance, Platform-as-a-Service management, Security Monitoring

PaaS



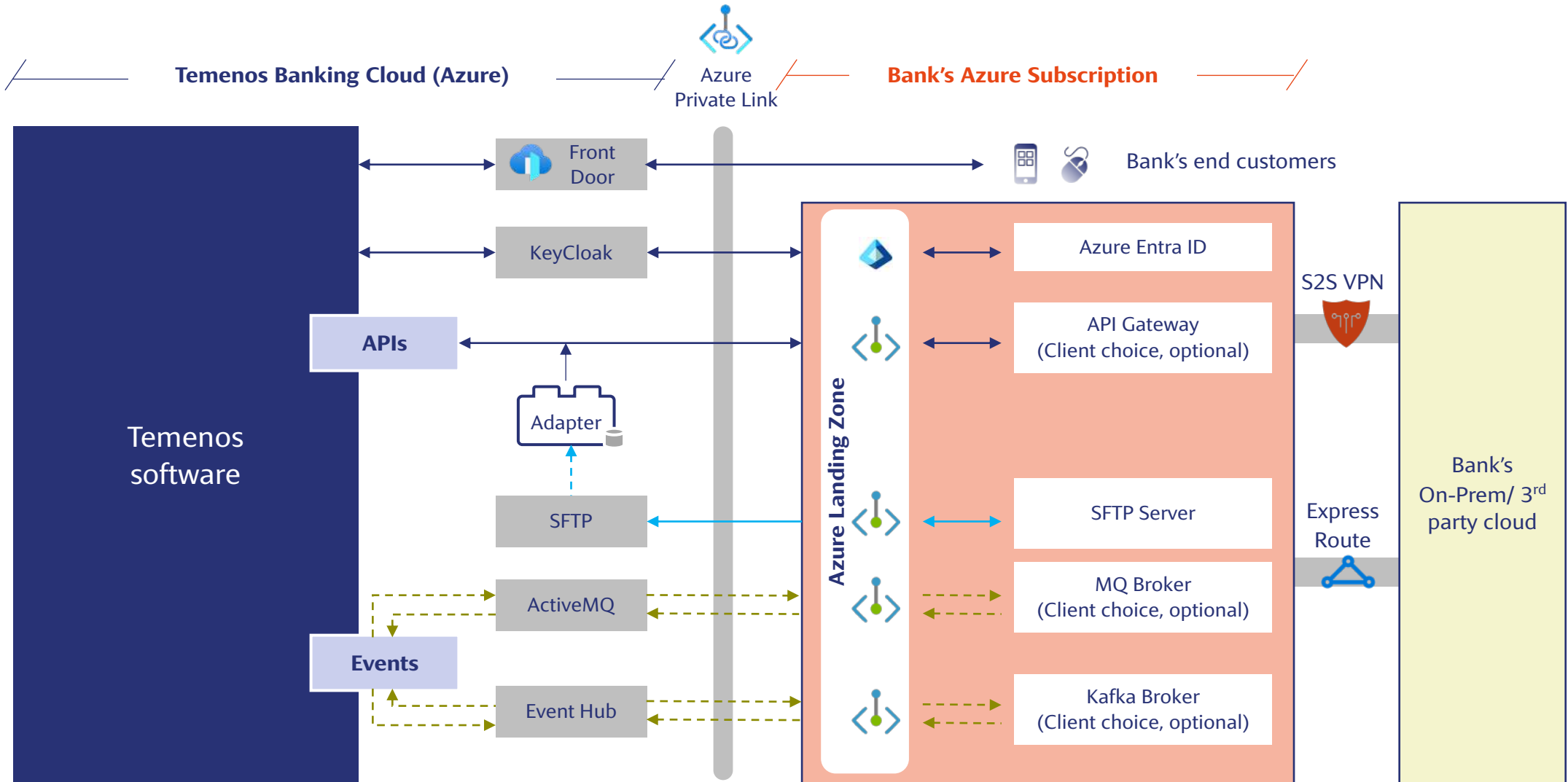
GRC: Financial services compliance program, External Audit & Certification, Red/Green Security Testing, Risk Management



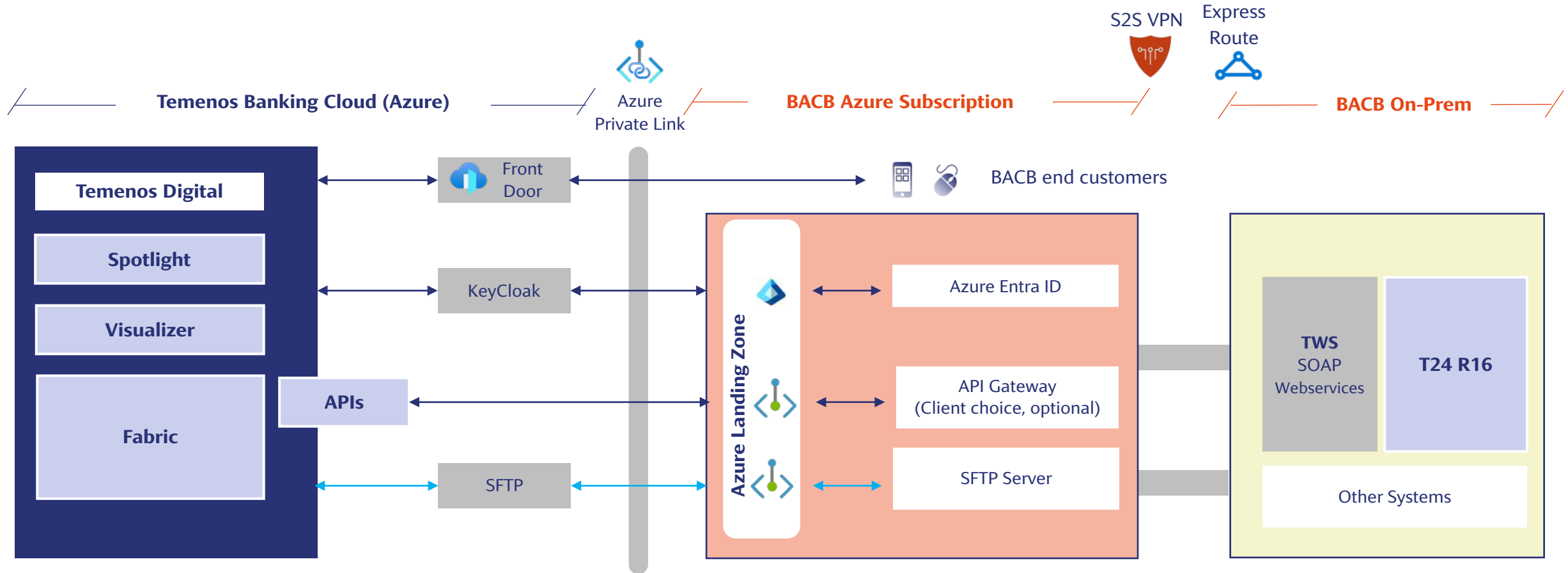
Location: Primary & Secondary sites for DR

The Temenos SaaS solution is built on the standard Azure IaaS and PaaS services made available to all. These services are then configured and hardened for use within the Temenos SaaS

SaaS Integration & Connectivity approach



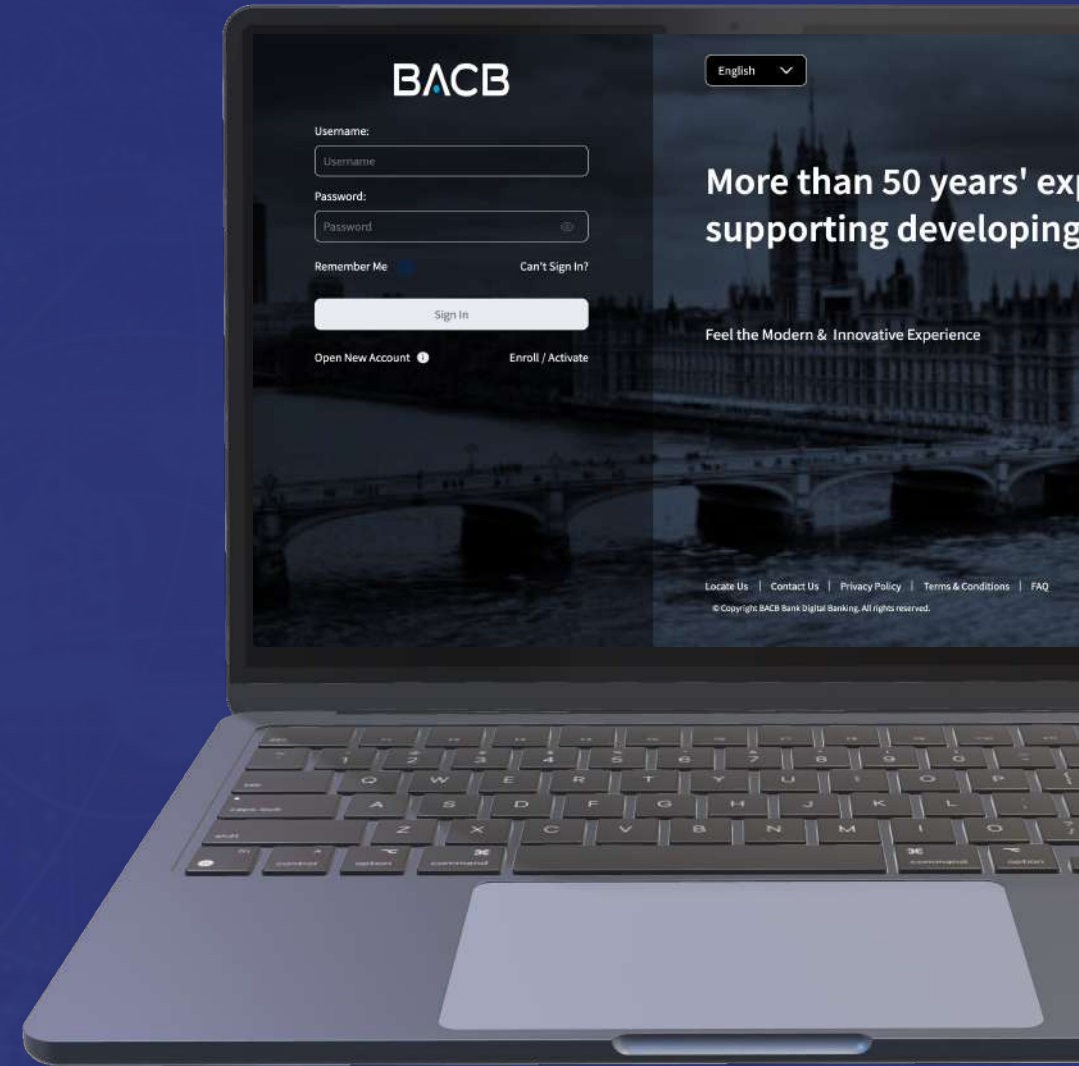
BACB Integration with Temenos SaaS



Agenda

- Welcome & Introduction
- System Architecture Overview
- Channels Offering
- Integration Capability
- Managed Service
- System Security

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Security

Protection mechanisms and related standards



Authentication

Bank's IAM/SSO



Authorization

Spotlight

Privacy & Encryption

- TLS/HTTPS
- TDE
- Application Encryption (via 3rd party)

Security in development (standards and processes)

Fortify | BURPSUITE ENTERPRISE EDITION | mend.io | Jfrog Xray | Se | OWASP | SANS

Source code scanning (SAST) | Security testing (DAST) | Open source detection (SCA,OSL) | Container scanning | Testing

SaaS security standards & Certifications

ISO 27001 ISO 27018
ISO 27017 ISO 22301

AICPA SOC
SOC 1 Type II
SOC 2 Type II
SOC 3

CSA cloud security alliance

STAR LEVEL TWO

Trusted Cloud Provider CSA

EU CLOUD COC

GDPR

Data Controller

Bank | To determines the purposes for which and the means by which personal data is processed

Data Processor

Bank + Temenos (SaaS) | Processor acts under the instructions of the controller only, by processing personal data on behalf of the controller.

Audit Logs

- All activities are logged at a system and application level.
- Clients have access to application-level audit logs when provided by the application.
- System level audit logs are not provided to clients.
- As an optional service (with commercials) we can provide a feed of security events from Azure Security Centre to clients. This allows the client to integrate key security events into their own SOC.

Source	Description
Azure Activity Logs	Azure resource activity logs relating to modification of Azure resources.
Azure Bastion Logs	Azure Bastion is used to provide Temenos with remote access to servers
Operating System Logs	Security Audit logs relating to authentication, process creation and exit, and firewall connection events.
Azure SQL Security Logs	Database authentication events.
Azure Defender Alerts	Security Alerts from Azure Defender
Azure Key Vault Events	Key Vault events relating to access to key material.
Azure Dedicated HSM Logs	Azure Dedicated HSM logs relating to access to key material.
Application Logs	User related activities in the application.

Microsoft Azure Monitor | Activity log

Looking for Log Analytics? In Log Analytics you can search for performance, diagnostics, health logs, and more. Visit Log Analytics.

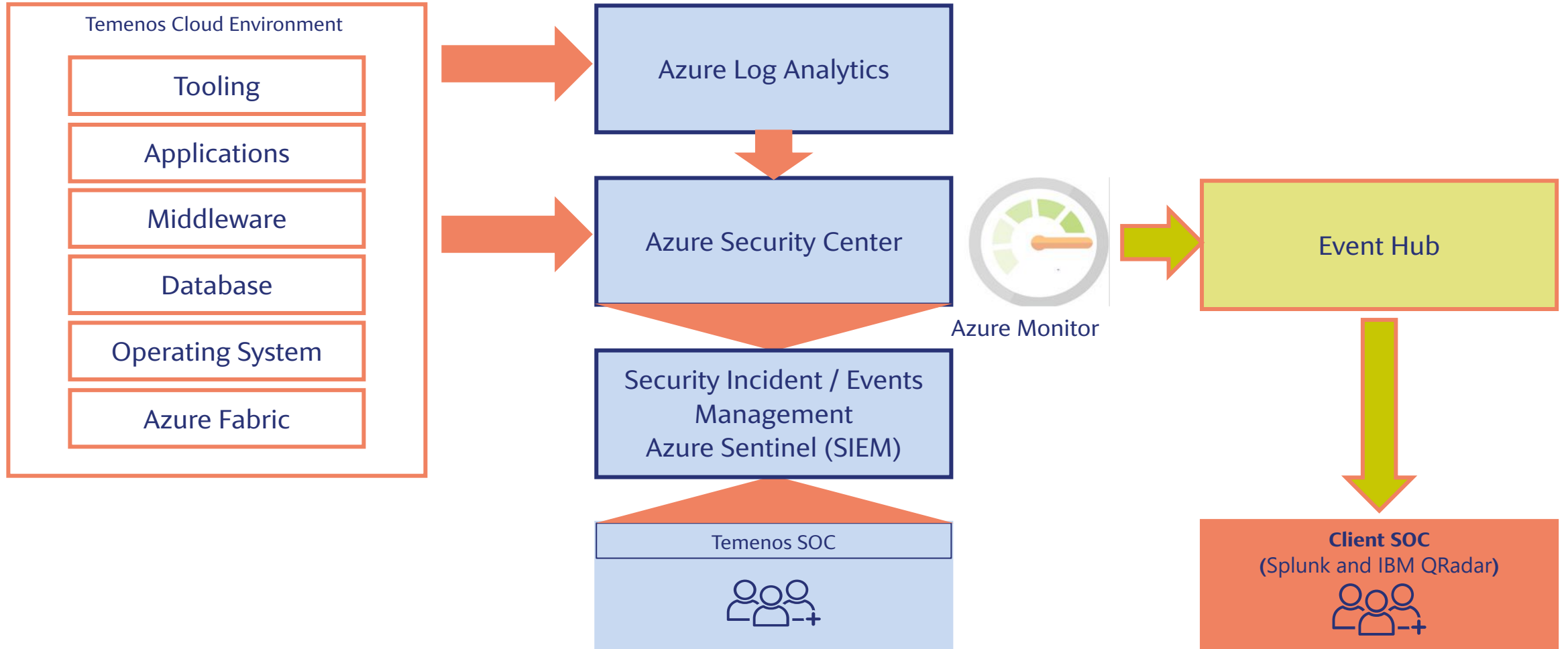
Search (Ctrl+)

Management Group: None | Subscription: [Redacted] | Event severity: All | Timespan: Last 6 hours | Add Filter

Operation name	Status	Time	Time stamp	Subscription
> List clusterAdmin credential	Succeeded	51 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterUser credential	Succeeded	51 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterUser credential	Succeeded	52 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterAdmin credential	Succeeded	52 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterAdmin credential	Succeeded	53 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterAdmin credential	Succeeded	56 minutes ...	Wed Jan 12 ...	[Redacted]
> List clusterAdmin credential	Succeeded	57 minutes ...	Wed Jan 12 ...	[Redacted]

Note: The number of events generated by the services is huge

Security Event Feed

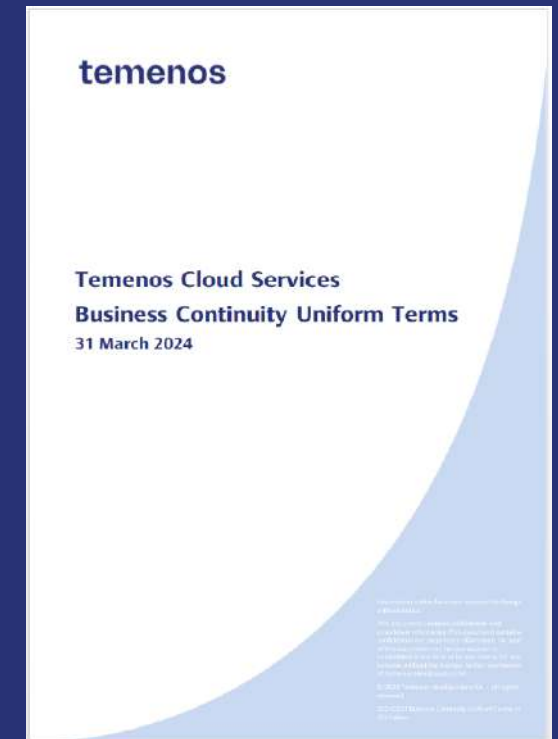


Disaster Recovery (DR) is for Class A Environments

- **Distribution of services** across different and multiple Availability Zones
- **Replication of Client Data** between Availability Zones and Temenos Regions
- **Geo-redundant replication** to Secondary Region
- Operational and support activities from **multiple locations**
- **Data backups** are stored in redundant storage (by default)

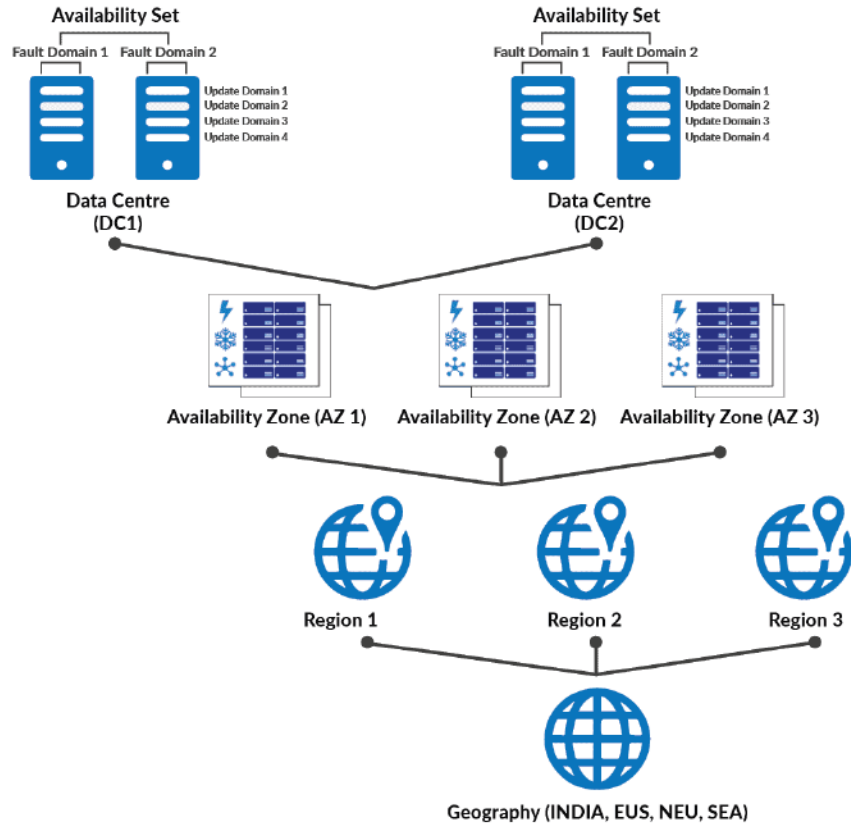
Disaster Recovery Plans and Testing by Temenos Global Cloud Availability and Service Continuity team on annual basis

Temenos is **not responsible** for the Client's corporate BCP and DRP or for the Client's internal IT systems.

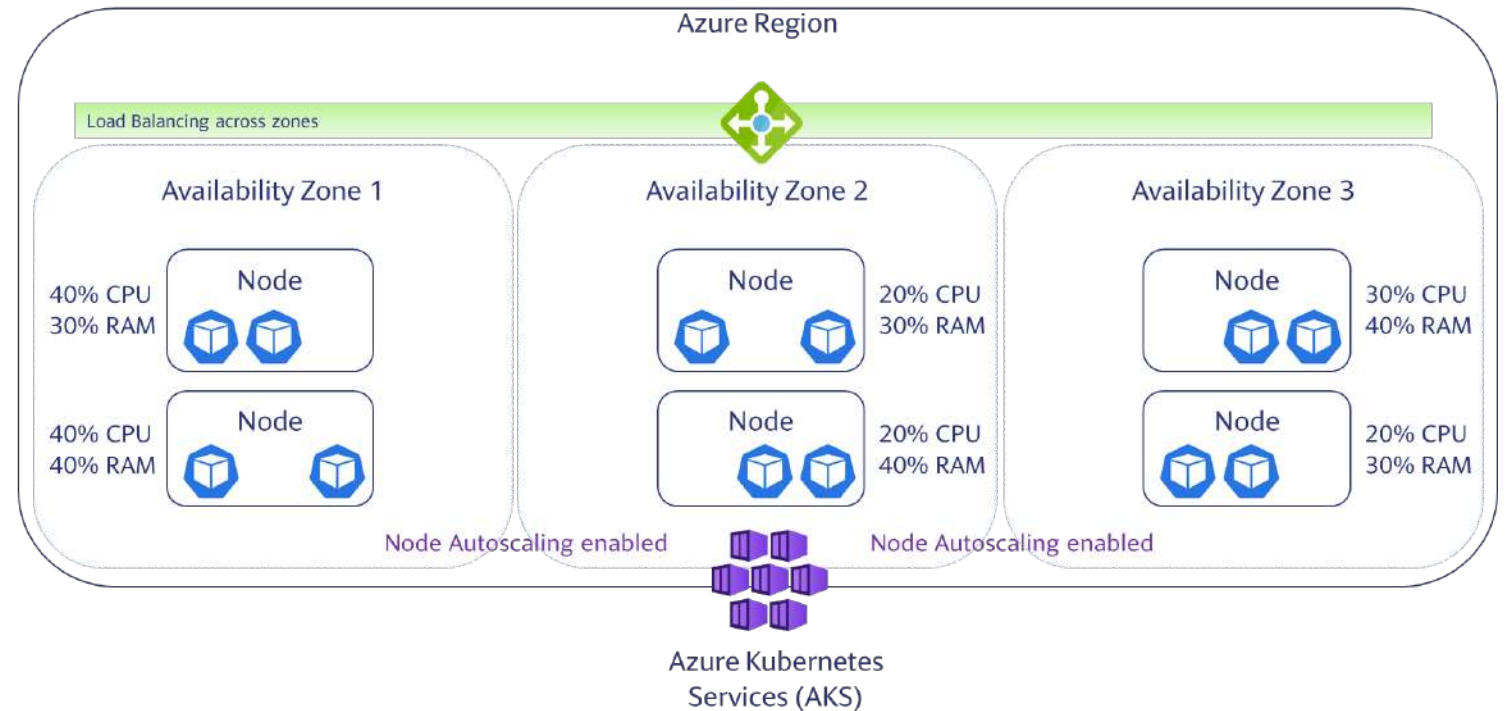


Operational Architecture

Availability – Multi-AZ Deployment

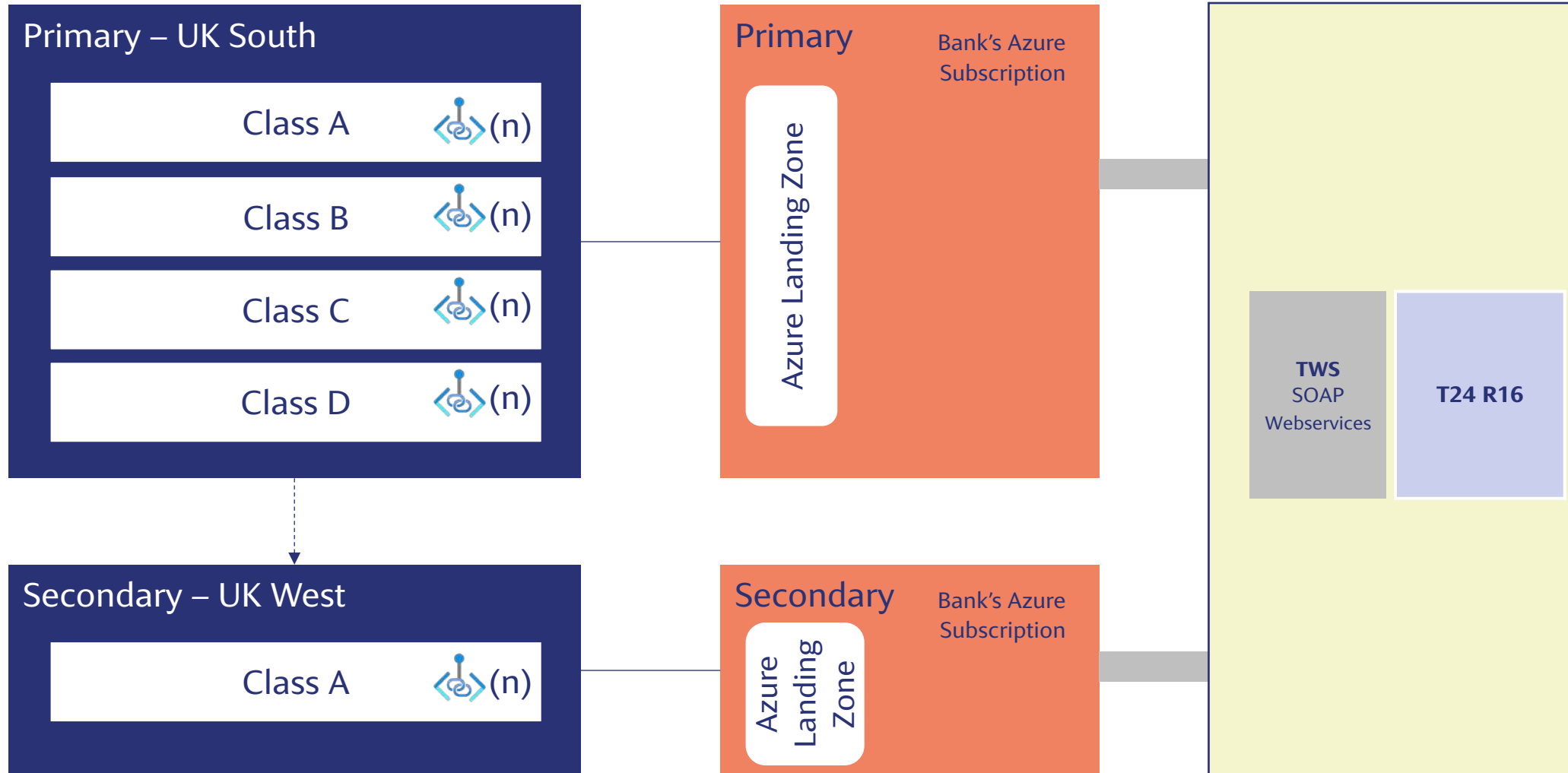


Enhanced/Premium Availability deployment



Active/Active capability at each layer
(web/middleware/application/database)

Indicative deployment across regions



Temenos Uniforms Terms and SLAs

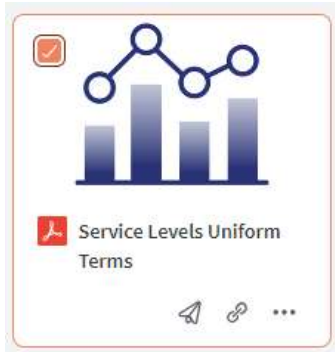
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- Fostering transparency and clarity in Temenos' client interactions.
- Serve as the foundation for understanding the services provided, obligations, and rights of both parties involved.
- Provide a clear and consistent language and structure for all interactions BACB would have with Temenos.
- Less confusion and more trust between the Bank and Temenos platform.
- With standardized terms, the Bank can confidently navigate Temenos services, knowing exactly what to expect and easily understanding Temenos policies.



Operational Architecture (SaaS)

Service Levels Uniform Terms



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Temenos Cloud Services
Service Levels Uniform Terms
31 March 2024

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SEVERITY (as defined in Support Uniform Terms)	1 Critical	2 Urgent	3 High	4 Medium	5 Low
NOTIFICATION ARRANGEMENTS	Ticket + (mandatory) phone call	Ticket + (optional) phone call	Ticket only	Ticket only	Ticket only
INITIAL RESPONSE	≤ 15 minutes ^[1]	≤ 1 hour	≤ 1 Business Day	≤ 2 Business Days	≤ 5 Business Days
UPDATE INTERVAL^[2]	≤ 30 minutes (bridge, email, support ticket)	Cloud Services: ≤ 2 hours (via support ticket) Temenos Software: ≤ 1 Business Day (via support ticket)	On progress/Service Resolution (via support ticket)	On progress/Service Resolution (via support ticket)	On progress (via support ticket)
SERVICE RESTORATION / DATA CORRECTION	≤ 4 hours	Cloud Services: ≤ 8 hours Temenos Software: ≤ 7 Business Days	Cloud Services: ≤ 3 Business Days Temenos Software: ≤ 10 Business Days	Cloud Services: Not applicable Temenos Software: Not applicable	Cloud Services: On progress Temenos Software: Not applicable
SERVICE RESOLUTION	Managed under Problem Management ^[3]	Cloud Services: ≤ 7 Business Days Temenos Software: ≤ 14 Business Days	Cloud Services: ≤ 3 Business Days Temenos Software: ≤ 21 Business Days	Cloud Services: Not applicable Temenos Software: Next release	Cloud Services: Not applicable Temenos Software: Next release

[1] Must be notified to Temenos Cloud Service Desk via ticket and phone call.
 [2] Update interval is from the time of initial response or the most recent update, as appropriate.
 [3] Post-Incident Reports are issued for Severity 1 Incidents (and upon request for Severity 2 Incidents). Note that Service Resolution does not include cases where the Post-Incident Report is pending the OEM analysis/confirmation (e.g., Microsoft, Oracle, Red-Hat, AWS). See also Support Uniform Terms.

2.2 Service Credits

Where applicable, the Client may claim Service Credits in accordance with the Agreement and subject to the following conditions:

- Service Credits only apply during Post-Go-Live.
- Service Credits apply from the point in time that the Minimum Service Level is not met.
- Service Credits do not apply whilst the Cloud Services are provided from the Secondary Region.
- The Service Credits available monthly shall not exceed ten per cent of the Fees pro rata on a monthly basis excluding any applicable taxes, pass through expenses and all other reimbursable items under the Agreement.
- Where a single Incident results in failure of one or more Service Level(s), the Client has the right to select one relevant Service Level under which it can claim a Service Credit.
- Any Service Credits claim must be made within four weeks of the commencement of the Incident for which the Service Credit is being claimed. Claims must be submitted in writing to Temenos, with reference to the relevant monthly report and the supporting evidence.
- The Service Credit is the sole and exclusive remedy for the Incident and failure of the Service Level.
- Temenos will process any Service Credits claim within forty-five days of its receipt.
- If a Service Credit is applicable, Temenos will apply it as a credit against the Client account, provided that the Client is in compliance with the Agreement and no undisputed invoices remain unpaid 90 days after the invoice date. The Client may not unilaterally offset any Service Credit amount against Fees due.

3.3.2 Performance Service Credits

Service Level : API Response Time (Transact)

Metric Description

The API response times and Service Levels below apply only to Transact, and only under the following conditions:

- The baseline performance and load testing are complete and have been agreed by the Client and Temenos.
- The necessary Non-Functional Requirements (NFRs) have been defined for the Temenos Environments concerned, and these Temenos Environments are being used within the confines of those NFRs.

In addition:

- These metrics only apply to APIs published and/or approved by Temenos (as listed on the [Temenos Environments Portal](#)).
- Certain business operations are performed asynchronously. APIs in these cases perform the initiation of the asynchronous activity.

API Category	API Response Time (ms)	Data Structures	Records Returned	Max TPS*
Category 1	<100 ms for simple requests	<5	<10	2,000
Category 2	<300 ms for typical requests	<50	<50	1,500
Category 3	<500 ms for complex requests	<100	<100	1,000
Category 4	<1500 ms for any other requests	Not defined	Not defined	500

* "Max TPS" is the maximum transactions per second of the specific API.

Measurement Window: Monthly

Algorithm: $\frac{\text{Total Number of API Calls during the Measurement Window for which API Response is achieved within the designated API Response Time}}{\text{Total Number of API Calls during the Measurement Window}} \geq 95\%$

Minimum Service Level: 95%

API Response Time	Service Credit
Less than 95% but greater than or equal to 80%	1%
Less than 80%	2%

Constraints / Dependencies

- This SLA does not apply to any third-party integrations, local developments and unique APIs created by the Client.
- This SLA is subject to completion of baseline performance testing and re-validation on a six-monthly basis.
- This SLA applies to the APIs as published by Temenos. Any changes or extensions are the responsibility of the Client, including validation and optimisation against the defined API categories.

Operational Architecture (SaaS)

Service Level Agreements – SLAs – Incident Response Time

- Support SLAs which assigning the priority and severity level of the software Issues and response times.
- All support incidents logged on the Temenos Customer Support Portal (TCSP)/JIRA by the client will have a priority assigned by Temenos support during analysis of the incident.
- Categorization according to the severity of the problem and is classified accordingly as Severity 1, 2, 3, 4 and 5. The SLA's form a part of our software agreements with clients.

Severity Level	Description
1 (Critical)	<ul style="list-style-type: none">• The Cloud Services are down or in a severely degraded state, impacting the majority of the Client Users and/or Client's customers; or• A key processing or Cloud Services component failure is causing significant impact to normal operations, with no immediate Workaround available
2 (Urgent)	<ul style="list-style-type: none">• The Cloud Services performance is materially degraded but can reasonably continue its operation via a Workaround or temporary manual processes; or• The impact of the Incident is moderate and limited, introducing a medium level of risk and exposure to the Client's business.
3 (High)	<ul style="list-style-type: none">• The Cloud Services do not function correctly, but the malfunction is limited to a specific area of the Cloud Services' functionality and does not impede the ability of the Client and/or the Client's customers to operate the Cloud Services; or• The impact of the Incident is minor and localized, introducing a low level of risk and exposure to the Client's business.
4 (Medium)	<ul style="list-style-type: none">• The use of an isolated part, characteristic or feature of the Cloud Services deviates from normal or documented use, or is subject to some restrictions or difficulties in use; or• The impact of the Incident is procedural, introducing a very low level of risk and exposure to the Client's business; or• The identified issue has minimal impact to the Client's customers.
5 (Low)	<ul style="list-style-type: none">• A potential non-conformity has been identified with the Cloud Services that is deemed non-critical but must be corrected; or• The identified issue is of a cosmetic nature and has no functional impact to Client's customers.

Service Level Agreements – SLAs – Incident Fix Time

- Support SLAs which assigning the priority and severity level of the software Issues and response times.
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The logo consists of a central dark blue circle containing the text 'BACB' and 'temenos' in white. This is surrounded by a white ring, which is further enclosed by a light blue ring, and finally a dark blue outer ring.

BACB
temenos

A background image of a diverse group of people smiling, overlaid with a semi-transparent dark blue filter.

Thank you!

www.temenos.com