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Extensibility Overview

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Extensibility Framework - Workbench temenos



Low –code configuration tool



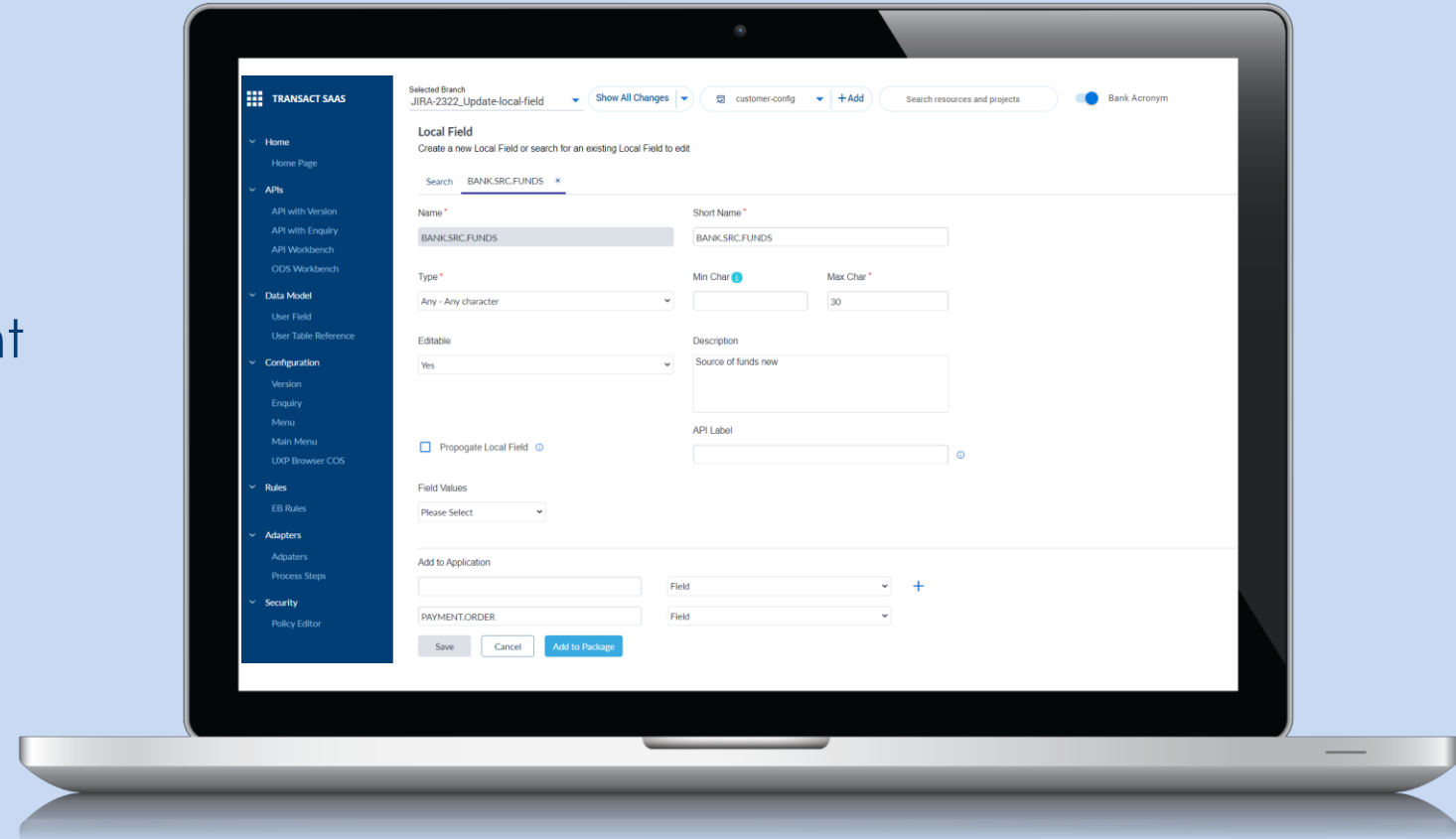
Configuration SDLC with GIT and Test Driven Development



Package management



Cloud or on-premise



Extensibility Framework - Features

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Data

- Extension: Workbench
- Addition: Virtual Tables



APIs

- Extension: Automated
- Addition: Workbench



Integration

- Integration Service
- Workbench



UI Extension

- Branding
- Configuration
- Low / No Code



Behaviour

- **Validation:** Regex, Rules, Python
- **Payload Enrichment:** APIs, Rules, Python
- **Workflow Routing:** Rules, Python, Workflow Management
- **Event Extension:** Adapter Framework

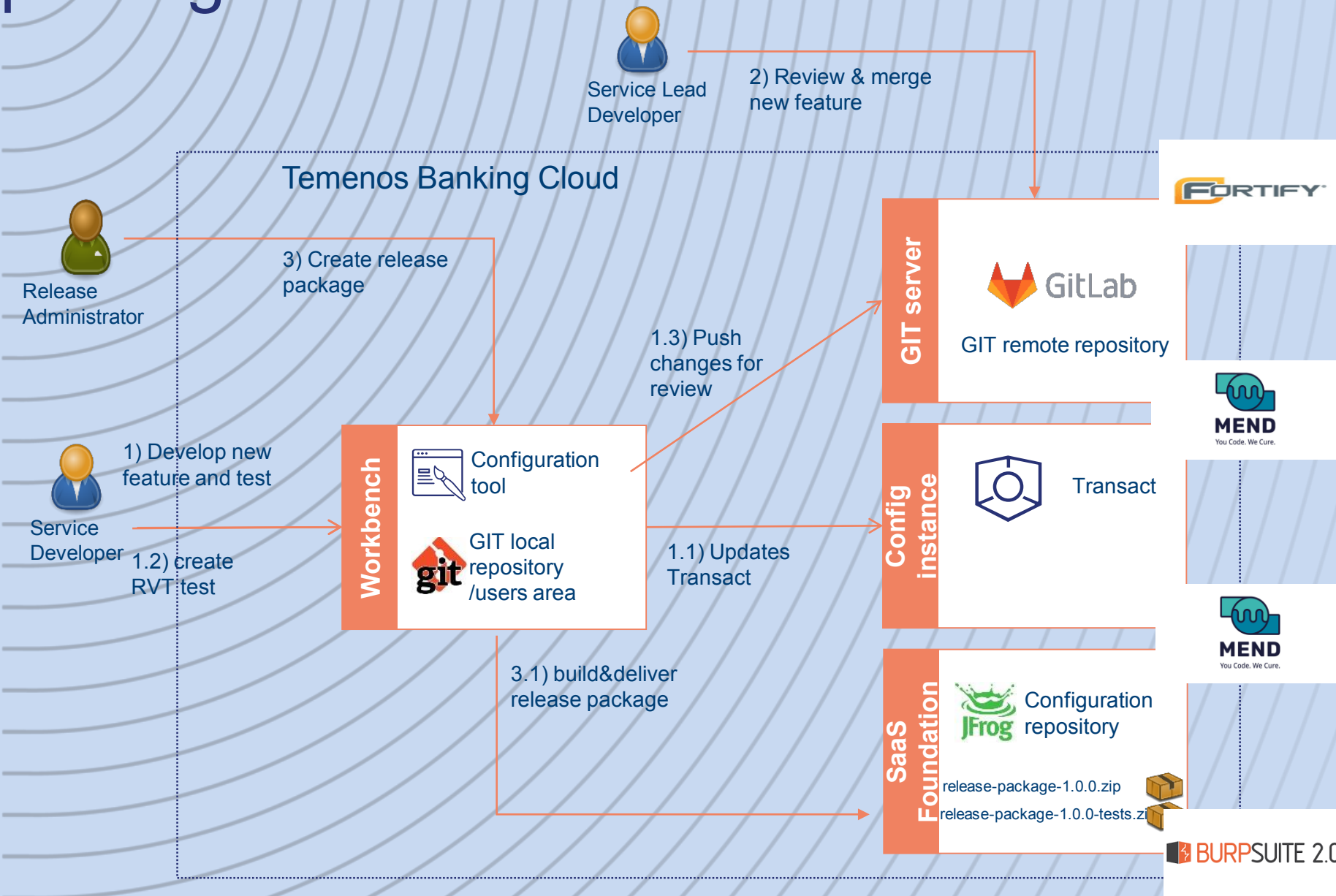


Reporting

- **Operational Reporting:** Operational Data Store
- **Extracts:** Extract Data Store

Workbench – Configure and create release packages

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- Store all the solution configuration elements of the solutions that are promoted through path-to-live principle
- By far, the most widely used modern version control system in the world today
- Vast numbers of developers already have Git experience
- Distributed architecture
- Enables best in class SDLC principles (collaboration, reviewability, conflict management, ...)

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- Enabling reduction in implementation time & complexity
- Easy to maintain & upgrade



Open APIs



Event Driven Integration



Data Event Streaming



Files



Adapter Framework



Code

- Consumed by channels & real-time systems
- 3'000 Business RESTAPI End Points
- Driven by Open API Specifications (OAS) leveraging Swagger

- Classic System to system near-real-time integration
- XML/JSON structured messages via MQ, JMS
- Integrated via standard ESBs & Middleware

- Stream data to analytics & big data platforms
- Pub/ Sub, high throughput, low latency

- Legacy bulk data transfers
- Extract & Consume fixed length, CSVs
- Trigger same real-time business functions

- Decoupled adapter microservice
- Bulking & Debunking
- Protocol transformation

- Documented APIs
- Java/Python
- Upgradable

APIs Catalog



Events
Catalog



Kafka, Kinesis, Event hub

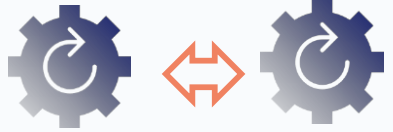
Batch, ACH, Wire

Lightweight integration

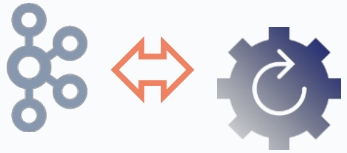
Complete Control

Integration Service (Adapter Framework)

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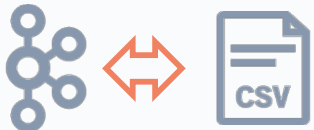
API to API Conversion



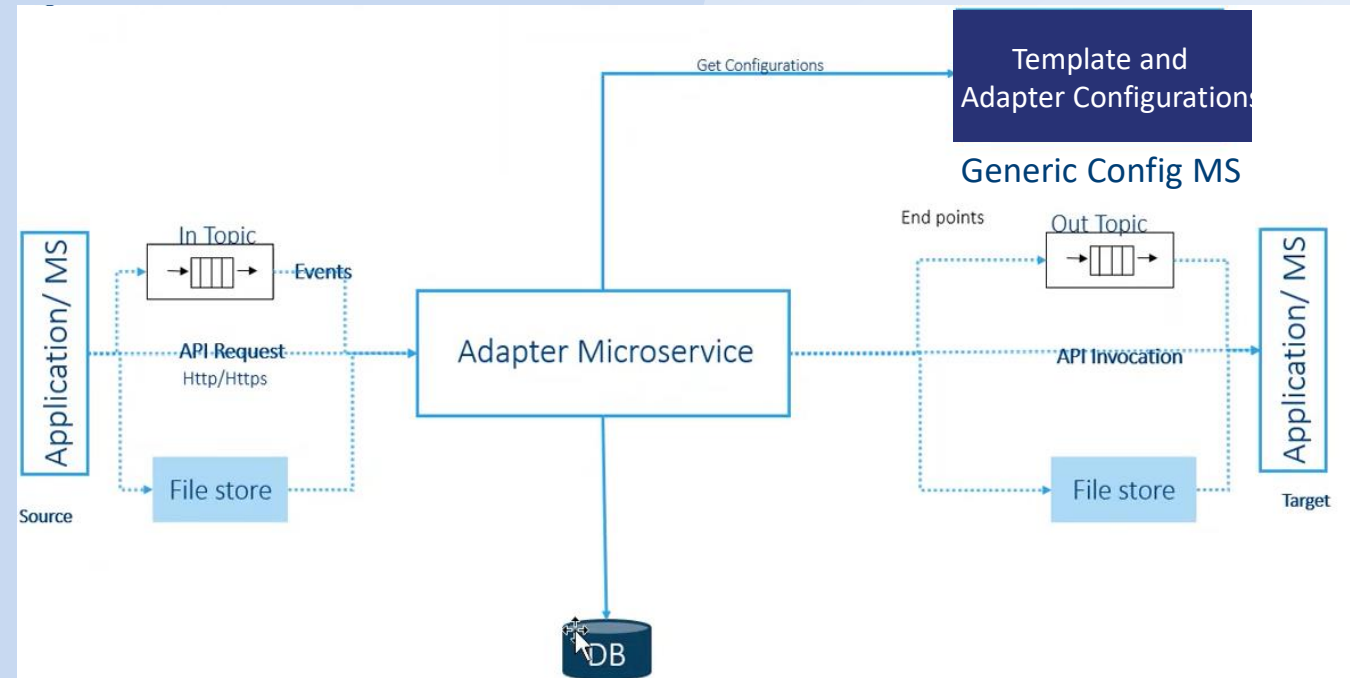
Event to API Conversion



CSV to API Conversion



Event to CSV Conversion



Technology Stacks – 2022 (up to and including R22 AMR)

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Item	Stack 1 ¹ Red Hat & JBoss	Stack 2 Red Hat / WebSphere	Stack 3 Red Hat / WebLogic	Stack 4 AIX / WebSphere	Stack 6 Windows / JBoss	Stack 8 Cloud AWS	Stack 9 Cloud Azure
	On-premise Stacks					Cloud Stacks	
Products	Transact TCIB ¹⁶ TCMB ¹⁶ TAP DataSource TPH Infinity ⁷ FCM TDH Analytics	Transact TCIB ¹⁶ TCMB ¹⁶ TAP TPH Infinity ⁷ TDH Analytics	Transact TCIB ¹⁶ TCMB ¹⁶ TAP TPH Infinity ⁷ TDH Analytics	Transact TCIB ¹⁶ TCMB ¹⁶ TAP TPH Infinity ⁷	Transact TCIB ¹⁶ TCMB ¹⁶ Analytics Treasury Trader FCM TPH DataSource TDH Analytics Infinity ⁷	Transact Infinity ¹⁷ TPH DataSource TDH Analytics	Transact Infinity TPH DataSource FCM TDH Analytics
UTP Tested Products	Transact, Temenos DataSource, Wealth Front office, Funds - Global Initiation, Funds - Global Accounting		Transact		Transact, FCM, DLM, Transact Provider API, DSF Workbench, Integration Framework, Interaction Framework, Transact Provider API, Publisher API, Transact User Agents, Infinity Retail Services		Transact, DES, DSF Workbench, Microservices (Party , Marketing Catalogue)
Java and application server version	Java 8 OpenJDK 1.8 JBoss 7.x EAP	Java 8 OpenJDK 1.8 IBM JDK 1.8 WebSphere v9 ⁶	Java 8 OpenJDK 1.8 WebLogic ^{14c}	Java 8 OpenJDK 1.8 IBM JDK 1.8 WebSphere v9 ⁶	Java 8 OpenJDK 1.8 JBoss 7.x EAP	OpenJDK 1.8 WildFly 23	OpenJDK 1.8 WildFly 23
Integration bus	ACE v11	ACE v11	OSB 12c	ACE v11	ACE v11	N.A.	N.A.
Message broker	Red Hat AMQ Broker 7.x IBM MQ 9.x ApacheActiveMQ 5.x	IBM MQ 9.x	JMS	IBM MQ 9.x	Red Hat AMQ Broker 7.x IBM MQ 9.x Apache ActiveMQ 5.x	Amazon MQ	Apache ActiveMQ 5.x
Supported database software for Transact	Oracle 19.6.0.0.0 and later ^{4, 5} MS SQL Server 2019 ⁴ PostgreSQL 13 ⁴	Oracle 19.6.0.0.0 and later ^{4, 5} PostgreSQL 13 ⁴	Oracle 19.6.0.0.0 and later ^{4, 5} PostgreSQL 13 ⁴	Oracle 12.2.0.x ^{4, 12} PostgreSQL 13 ⁴	SQL Server 2019 ⁴ PostgreSQL 13 ⁴	Amazon RDS for Oracle ⁵ Amazon Aurora (PostgreSQL) ^{10, 13} Amazon RDS for PostgreSQL	Azure SQL Database Azure SQL MI Azure Database for PostgreSQL ^{4, 13}

In conclusion...

Temenos offers...



Choice

- A single code base
- Investments benefit everyone
- Temenos or Bank runs the software



Composable Banking

Compose services from the most comprehensive set of banking capabilities, augmented with capabilities with Exchange partners



Cloud Native Technology

Scale, evolution, future proof, proven track record



Extensibility

- Continuously upgrade safely
- Opens the platform for partner innovation
- Embedded DevOps for implementations, upgrades and BAU



Efficiency

- Simpler to implement
- Leaner and greener to deploy
- Hyperscale operations



Thank you