platform X
Interact. Compute. Explain

Capital Adequacy Calculation Engine

cognext
discover what's next

- Basel RWA Computation for Credit, Market, Counterparty Credit and Operational Risk

- Out of the box reporting for each regulatory jurisdiction

- Adapt to emerging ICAAP and Advanced IRB requirements

- Dashboards with drill downs and advanced Attribution, Scenario, What-if and variance analysis

The Platform X
Comprehensive solution providing Regulatory Capital Computation functionality, enabling banks to meet with Capital Adequacy directives and regulatory reporting with advanced What-if and Attribution analysis

Platform X

BASEL CAPITAL ADEQUACY
RATIO COMPUTATION

Capabilities of the Solution

Interactively compute risk weighted assets at the most granular level

Basel Methodologies

Comprehensive set of Basel defined RWA computation rules across Credit, Counterparty Credit, Market and Operational Risk

Contemporary Technology

Advanced Dynamic DAG compute engine that runs on Apache Spark and performs iterations on the fly

Reporting

Customized reports matching the regulator prescribed reporting formats

Declarative Metadata

Creates new computation sequences, models and result data sets without coding

Configuration Management

Configurable Capital computation logic from business segment to product level, Product mapping, Attribute mapping

Advanced Transparency

Enables deep variance and attribution analysis through advanced visualization and drill down capacity

What-If Analysis

Conduct What-if, attribution and variance analysis as well as Stress testing
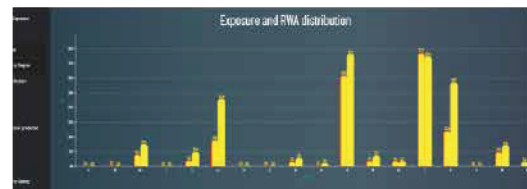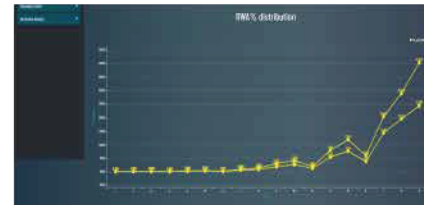
Scalability

Adapt to emerging ICAAP, IRB, BCBS239 requirements

Key Solution Features

Platform X is a comprehensive regulatory reporting solution specifically designed for Banks targeting to implement a cost effective Basel Regulatory Capital Computation engine. It establishes an automated process for regulatory capital computations across Credit, Counterparty Credit, Market and Operational Risk and also provides regulatory reports prescribed by regulators.

Calculation Rules
- Credit Risk capital assessment with national discretion options covering local regulations in Europe, Asia, MiddleEast and Americas – Basel II/III and IV supported
- Market Risk and Operational Risk capital requirement assessments

Configuration Management
- Provides for configuring calculation logic right from business line to product level
- Exhaustive set of attributes , premapped to required products and/or business lines

Collateral Allocation
- Limit and collateral allocation module via business rules, and/or other optimization routines
- Allocation at customer as well as facility level

Data Management
- Data integration provides for loading transaction data from multiple sources
- Data quality identification rules to fix data issues before computation steps
- Data reconciliation to the general ledger and mitigation of issues, if any

Reporting

- Preconfigured reports as well as deep drill downs for reconciliation
- Local regulatory reports supported for out of the box reporting and disclosures
- Customizable dashboard and MIS for Senior Management
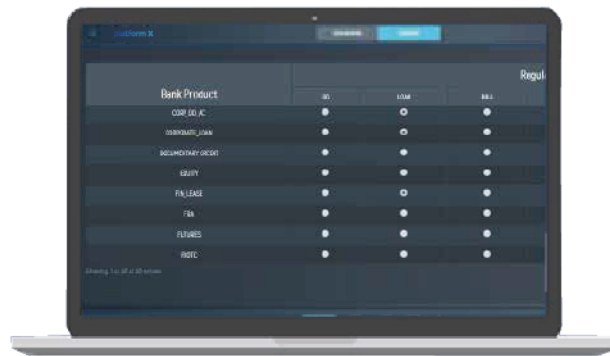
Adaptability

- Meet with national supervisor requirements and forward compliance with constantly evolving requirements like IFRS 9, IRB, Stress testing, BCBS239
- Consolidate the calculation requirements at group/sub-consolidated level/ jurisdiction
- Future proof RWA computations through our AMC support which supports any changes in Capital Adequacy directives

Solution Snapshots

Technical Features

Platform X makes use of open source software and is based on commodity hardware. Platform **X** computation engine is an Advanced Dynamic DAG compute engine that runs on Apache Spark and allows multiple methodologies and iterations on the fly. It has a browser based easy-to-use front end UI that complies with security and audit requirements.

Multiple teams can work together- allowing for collaboration

Speed of execution allows what-if analysis and rapid exploration of alternatives

Built for On-premise as well as Cloud Deployment and concurrent, interactive work-group

Built on Spark and other OpenSource technologies for dynamic, responsive in-memory computations and extreme scale

Platform Framework creates new computation sequences, models and result datasets without coding

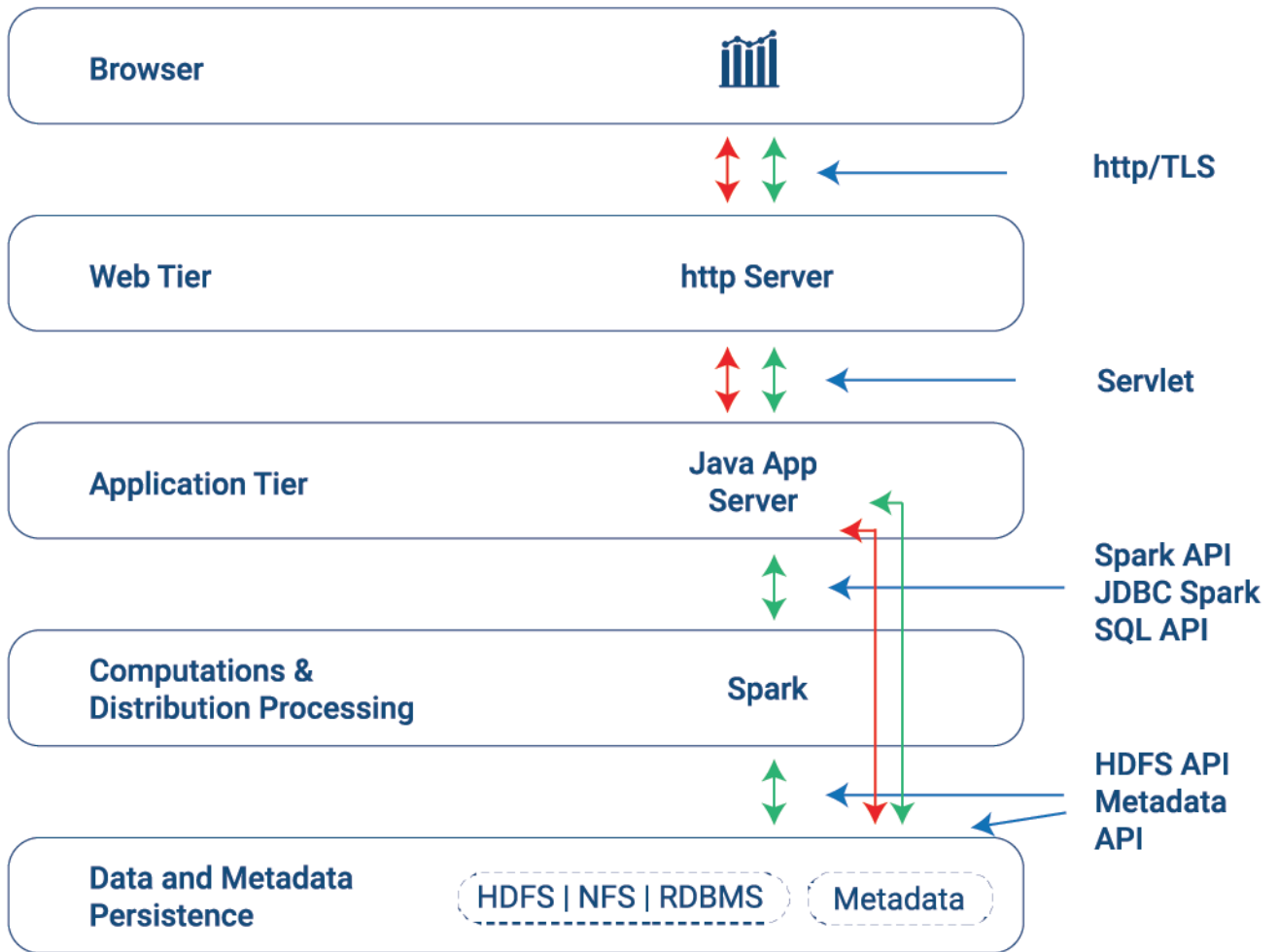Advanced metadata technology automatically traces, versions, compares and details all results

Metadata allows for rapid changes to methodology and approach when required by regulators/business requirements

Robotic Process Automation reduces the time and cost footprint of analytical tasks, allowing banks to realize significant efficiency gains

Technical Architecture

Browser	
Web Tier	http Server
Application Tier	Java App Server
Computations & Distribution Processing	Spark
Data and Metadata Persistence	HDFS | NFS | RDBMS Metadata

http/TLS

Servlet

Spark API
JDBC Spark
SQL API

HDFS API
Metadata
API

Business User
- Interactive Compute
- Interactive Data Visualization

Business Expert User
- Interactive compute, formula, chart, scenario design
- Interactive dimension data loading and changes

Operations User
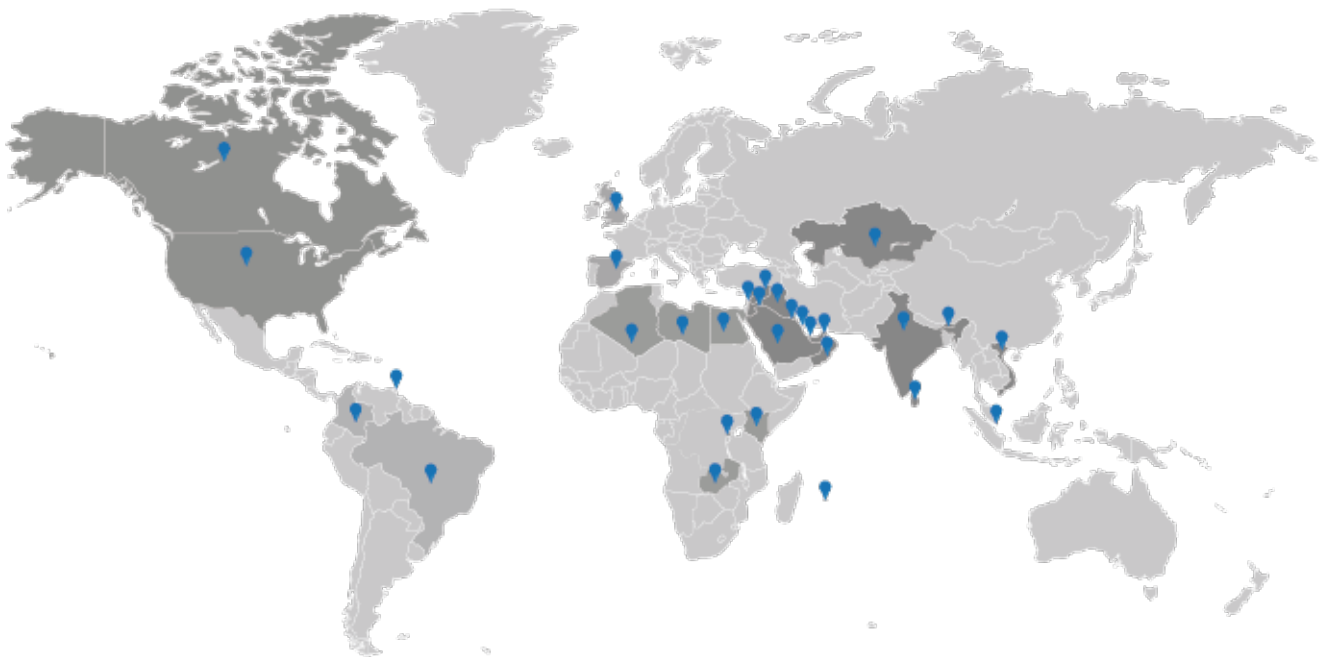- Interactive Business data load
- Interactive quality check and re-loads

Administrative User
- User Management
- Setup Roles, Groups and Rights

Technical User
- Interactive Resource Tracking
- Clean up and refresh
- Upgrades and software updates

About Us

Financial Institutions have started automating routine tasks and eliminate inefficiency, but higher order and expensive Analytical Processes requiring intelligence and human decision-making are not automated. Generic automation platforms would not be able to handle Analytical Processes that require deep-domain knowledge.

CogNext, incubated by Aptivaa, intelligently incorporates cognitive technologies such as AI-ML and NLP into robotic process automation. Combined with our domain knowledge, CogNext brings Automation at Scale for Financial Institutions, thus assisting the knowledge worker by removing repetitive, replicable and routine analytical tasks.

100+	30+	15+ Yrs
Clients	Countries	Experience