



numerix  
**NxCore**  
for Partners

## Build Your Capital Markets System with Numerix's Cutting-Edge Analytics and Calculation Engine

Today's fast-moving markets are more complex than ever. Today's fast-moving markets are more complex than ever. Market participants face numerous challenges, including keeping up with continually changing regulations and deploying new technology quickly to stay ahead of competition while maintaining cost controls.

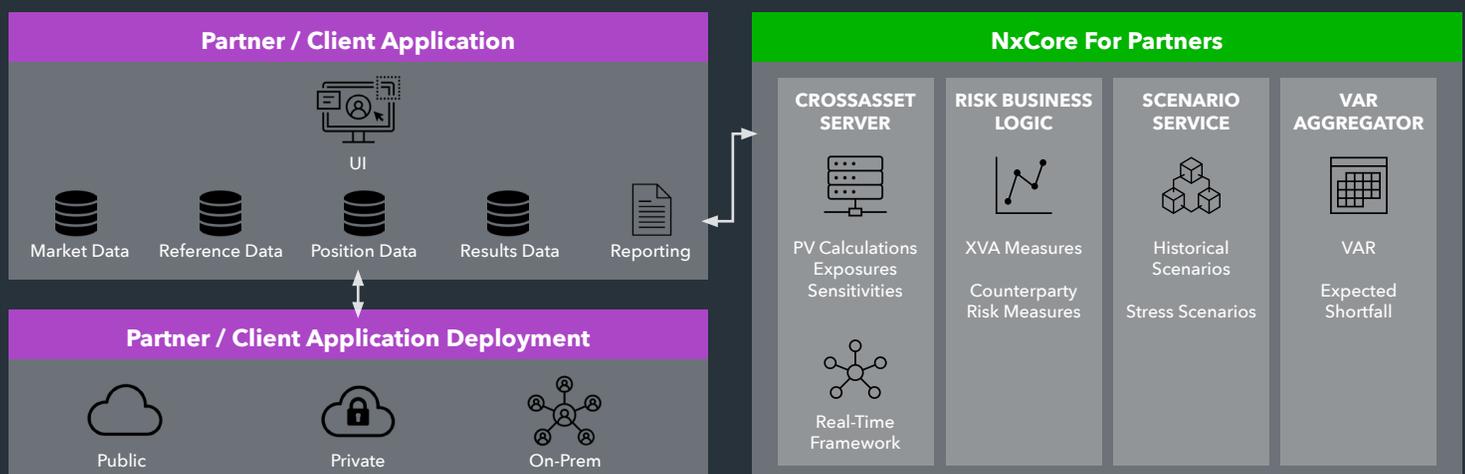
NxCore for Partners is an innovative capital markets system development platform that leverages Numerix's street-tested, award-winning pricing and risk analytics and technologies. It helps users rapidly build a broad range of capital markets systems, including pricing/valuation, XVAs, market risk and counterparty risk systems without the complexity of building an in-house system from scratch or the implementation challenges of buying an off-the-shelf system.

With NxCore for Partners as the foundation of your development project, you can build exactly what you need—whether that is on-premise, on a private cloud or on your own public cloud instance—and benefit from Numerix's proven expertise in the world of valuations and risk analytics while significantly reducing your time to market.

### Everything You Need to Build Your Ideal System

Designed specifically for Capital Markets systems, NxCore for Partners is built from the ground up to ensure scalability, modularity, performance, resilience, and adaptability. NxCore for Partners' components come with an extensive range of integration technologies (APIs in multiple languages, JSON over WebSocket etc.) and support for any deployment model (on-premise or cloud) across a range of operating systems and platforms (Linux, Windows, Kubernetes). This helps you create a seamless integration experience and gives you the flexibility to easily integrate with any of your existing applications/systems to suit your needs.

### High Performance Calculation Engine + Advanced Analytics



# Why NxCore for Partners?

The challenges of building a new capital markets system are common to many firms. NxCore for Partners provides the right off-the-shelf components to help accelerate and de-risk development projects.

## OPTIMIZED FOR EFFICIENCY

Leverage Numerix's experience and off-the-shelf components to speed up development and dramatically reduce time-to-market and project risk.

- Full flexibility to either use Numerix components or your own
- Solutions can be deployed to large multi-core servers for production or scale horizontally across many smaller servers
- NxCore for Partners can be deployed on-prem, but it can also be deployed on your private or public clouds to meet elastic demand, increase performance, and cut infrastructure costs
- Accelerate system return on investment by completing the system faster and start generating returns sooner
- Empower system developers to focus on high value business functionality rather than infrastructure
- Reduce project complexity by using proven tools and components

## PROVEN TECHNOLOGY

Why build from scratch when you can use street-tested, award-winning, industrial-strength technologies and tools?

- NxCore for Partners is built from the ground up for performance, efficiency, consistency, resilience, adaptability, and scalability
- Five standalone modules to help maximize development efficiency and ease the headaches commonly associated with scaling, upgrades and development
- Each component communicates over open, documented REST APIs and Python interfaces, so integration with other third-party or proprietary components is simple

## POWERFUL AND FLEXIBLE

NxCore for Partners is optimized to be both flexible and powerful

- Flexible analytics platform allowing for the easy addition of new trade types (including exotics) and customization of pricing models, curves, calibrations and CSAs
- Optimized for performance even during periods of unprecedented volatility
- Full transparency into all inputs, calibration parameters and intermediate calculation steps

## KEY FEATURES

### Cutting-edge Analytics



Stay ahead of your competitors with Numerix's award-winning analytics library at the core of your offering.

Our comprehensive multi-asset pricing and risk analytics library powered by CrossAsset Server and real-time framework will make calculating valuation, cashflows, counterparty exposure and risk sensitivities a breeze.

### Award Winning XVA Calculation Engine



Numerix's XVA calculation engine supports a board array of use cases such as XVA calculations and counterparty risk exposures, sensitivities, cheapest to trade analysis, regulatory capital requirements and pre-trade scenarios for any OTC derivative trades, from vanilla to exotic, at any level of aggregation.

### Powerful Scenario Engine



Numerix's scenario engine can help you gain a more holistic view of risk tailored to your needs. It can generate historical scenarios with normalized markets and time series data.

### Comprehensive VAR Aggregator



Numerix's VaR Aggregator is able to provide a full range of VAR analytics from aggregating P&L Vectors to VAR calculations and Expected Shortfall.

### Real-Time Graph Framework



Leverage our proprietary graph framework to build high performance market marking, trading, and risk systems. Achieve true real-time performance through its intelligent and scalable design, triggering modules only if the data they depend on changes, resulting in continuous and efficient real-time calculations.