

# TimeScape™ EDM+ for Prudent Valuation

## *Specialist Solutions for Risk Data Management*

### **INDUSTRY CHALLENGES**

Prudent valuation practices are becoming increasingly commonplace, prompted by edicts such as the European Union's Capital Requirements Regulation. Rather than simply verifying the fair value of an asset (or accuracy of a model) by comparing it to an independent source, prudent valuation goes one step further and assumes the process of deriving fair value is sufficiently uncertain to warrant additional adjustments that reflect valuation risk.

Prudent valuation therefore introduces a 'buffer' that reduces the value of assets (or increases the value of liabilities) to reflect risks associated with their valuation. The difference between the 'prudent value' of an asset (or liability) and the fair value of that asset (or liability) accounted for on a bank's balance sheet is known as the Additional Valuation Adjustment (AVA), which is deducted from Core Equity Tier 1 capital.

### **THE SOLUTION**

TimeScape EDM+ meets all data management requirements to support prudent valuation calculations.

#### ***Data Acquisition / Consolidation***

TimeScape EDM+ enables firms to consolidate data from any number of sources – with pre-built adapters to all leading data providers, as well as a range of options for integrating data from risk management and other internal systems. All sources are then normalised into a consistent model, allowing for ease of aggregation, comparison and consolidation between different data sources.

#### ***Data Derivation / Calculation***

TimeScape EDM+ is adept at all forms of analytical and statistical data management. The platform can be used to capture, derive and store any kind of risk measure. In addition, pre-built interfaces to leading financial analytics platforms such as FINCAD, Numerix

and Matlab, popular analytical programming languages such as Python, R and F#, and leading risk management applications, make it easy to integrate a complete range of model inputs and outputs into your data management workflows. For prudent valuation, users can easily specify rules to use the bid price as the starting point for valuing long positions and the ask for short positions.

The AVA is itself split into a number of components, which include Market Price Uncertainty (MPU); Close Out Costs (CoCo); Model Risk (MoRi); Unearned Credit Spread (UCS); Investing and Funding Cost (IFC); Concentrated Positions (CoPo); Future Admin Costs (FAC); Early Termination (EaT) and Operational Risk.

The approach taken to derive a 'prudent' value follows more of a risk management methodology when compared to typical accounting or finance workflows. That is because it is more probabilistic: the goal is to find a value that can be achieved with 90% certainty, which means understanding the distribution profile with respect to each respective risk, while also looking to weigh risks taking into account diversification. This risk-based approach is data intensive and requires the ability to support complex time-series and statistical analysis.

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#### ***Data Validation***

Once prudent valuations have been derived across a firm's assets and liabilities, all of those values can be run through validation rules. Rules can also be set to validate each individual input to the derived prudent value, to ensure the integrity of the process and flag any potential issues with calculations. Any corrections to the input data will automatically trigger recalculation of the relevant dependent valuation to ensure consistency, accuracy and integrity of the valuations.

## *Data Lineage and Process Auditability*

Deriving prudent values for assets and liabilities involves a complex series of calculations. With so many moving parts, the ability to maintain detailed insights

(data lineage and process auditability) into how each component of AVA is calculated plays a crucial role in ensuring the accuracy and integrity of the process.

## **CUSTOMER BENEFITS**

TimeScope EDM+ ensures firms can satisfy all of their prudent valuation requirements, alongside a full range of enterprise data management workflows.

### *Agile*

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TimeScope EDM+ is agile at its core. It supports a powerful data model that can be configured to incorporate even the most complex OTC structures and easily adapts to new business logic and workflows. It is simple to deploy, with pre-built adapters to integrate data from virtually any source. And it is agile in its distribution options, with interfaces to leading business intelligence tools, data distribution platforms and a wide range of applications.

### *Collaborative*

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As a centralised platform that everyone can access, TimeScope EDM+ provides your enterprise with a single version of the truth. It breaks through siloed delivery of IT and data, and supports true enterprise-wide workflows. Even if different teams decide to price the same instrument using slightly different models or data inputs, knowing those differences and having clear insights into data lineage means they can quickly reconcile any discrepancy.

### *Business-Focused*

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Timescape EDM+ serves the whole enterprise. It doesn't matter if you're a board-level executive, finance or risk manager - you get straightforward access to consistent, validated, cleansed data via your choice of interface. Most importantly, TimeScope EDM+ is simple to use and can be configured by business users without any prior programming expertise.

### *Comprehensive*

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TimeScope EDM+ covers all asset classes. It supports a complete range of vendor feeds. It integrates with different business intelligence tools, pricing and risk engines, programming languages and applications. It supports complex objects, data types and analytics. And it supports complex workflows - with adaptive validation rules and exception handling processes that can be prioritized based on factors most important to your business.

### *Future-Proof*

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Xenomorph has architected TimeScope EDM+ to be future proof by focusing on two qualities. First, the platform can easily adapt to new requirements, whatever the future holds. Second, we maintain backwards compatibility for our APIs, which ensures a smooth migration path for future upgrades. Our vision of future proofing means preparing you for future change, while ensuring you are not forced into change when it is not necessary.

### *Cost Effective*

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TimeScope EDM+ offers market-leading capabilities, but is extremely cost effective compared to rival solutions given its flexibility in addressing such a wide range of business, regulatory and IT challenges.