

Use Case

20+ Years of Full-Revaluation Risk Analytics in Daily Production

How Raiffeisen Capital Management (RCM) built a proprietary market risk system, with full control over model selection, calibration, and instrument coverage, and has run it in continuous production since 2003.

20+

Years in continuous daily production

>15,000

Unique instruments valued daily

>600

Portfolios monitored every day

~80 bn €

Investment coverage under analytics

CLIENT



Raiffeisen
Capital Management

Subsidiary of Raiffeisen Bank International AG. ~300 funds across equity, bonds, and multi-asset strategies.

PRODUCT

UnRisk LIBRARY

Embedded quantitative engine, integrated into RCM's proprietary platform.

IN PRODUCTION SINCE

2003

Two years of joint development built for depth. Every milestone on time. Still running today.

THE CHALLENGE

Standard Platforms Lock Down What Risk Teams Need to Control

In 2003, RCM needed granular risk analytics across all managed client portfolios.

RCM's risk team required full control over model selection, calibration parameters, and instrument coverage, inside a self-built platform they could extend independently. They decided to build their own system and find a quantitative partner who could deliver the analytics layer with the depth and transparency this demanded.

THE SOLUTION

UnRisk LIBRARY as the Embedded Quant Engine

UnRisk had already proven its quantitative capabilities in a prior risk analytics project for a London-based hedge fund. Based on that track record, RCM selected UnRisk to deliver the pricing and risk engine as an embedded library integrated directly into their proprietary system, not as a standalone platform.

The architecture cleanly separates portfolio management logic from quantitative analytics. RCM's risk team controls what gets calculated and how. Instrument types, pricing models, and calibration parameters were jointly defined during the two-year development phase.

At each delivery milestone, RCM's risk team validated calculation results down to individual cash flows, building confidence in model behaviour before anything went into production.

INSTRUMENT COVERAGE

15,000+ Instruments Across All Major Asset Classes

Fixed Income

Callable, perpetual, amortizing, step-up, floating, fixed-to-floating, and inflation-linked structures

Equities & ADRs

Full equity coverage including depositary receipts across developed and emerging markets

Derivatives

FX forwards, FX swaps, equity index futures & options, currency & commodity futures

Support for ETFs and external funds is provided through a full look-through approach.

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The quantitative capability in UnRisk operates at a level of sophistication that serves our needs completely. For an organisation managing complex multi-asset exposure, that computational rigour makes a material difference to the quality of our risk management.

Michael Schmid - Head of Risk, Raiffeisen Capital Management

KEY OUTCOME

Proven Stability Across 600+ Multi-Asset Portfolios

Over more than two decades, the embedded engine has scaled from its initial scope to over 600 multi-asset portfolios in daily production without compromising stability or performance. The platform exceeds regulatory reporting requirements on every front. That analytical depth is a core reason RCM is the market leader in portfolio risk analytics in Austria.

SYSTEM SCALE

Quantitative Profile of the Embedded Engine

METRIC	VALUE
Assets under management	~80 bn EUR
Funds managed	~300 (equity, bonds, multi-asset)
Portfolios monitored daily	~600
Unique instruments valued	>15,000
Daily scenarios (historical simulation)	250
Market data curves processed daily	100+
Years in continuous production	20+

What This Means in Practice

Every Valuation Is Audit-Ready

- 1 RCM's risk team traces every valuation back to its model assumptions and calibration inputs, down to individual cash flows. Internal and external audits are passed without relying on vendor documentation or black-box outputs.

Full Transparency and Flexibility for Client-Specific Customization

- 2 RCM has full control and visibility over every input factor and every step of the analytical process. Any portfolio result can theoretically be recalculated by hand. This level of transparency gives the risk team a high degree of flexibility to customize analytics for specific client requirements.

Engine Modernized Without Downtime

- 3 The underlying engine has been modernized multiple times over 20 years without interrupting a single production run. Valuation consistency was maintained across every architecture transition, critical for regulatory reporting continuity.

Significant Cost Savings Over Two Decades

- 4 RCM estimates the embedded model approach cost significantly less than comparable licensed platforms over the same period.

Quant-Level Support, Not a Helpdesk

- 5 Every extension request is discussed in quantitative detail with the UnRisk team. Implementation turnaround is short. The UnRisk team functions as an extension of RCM's own quant resources, not a vendor support desk.

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UnRisk has been a reliable partner for over twenty years. The collaboration is built on mutual respect. Every adaptation request is discussed in detail, and we have always found a solution that was implemented quickly.

Michael Schmid - Head of Risk, Raiffeisen Capital Management

Discuss your analytics architecture and talk to our team.