

ATOTI FOR FRONT OFFICE

Redefining enterprise-wide real-time risk hedging strategies

Unlock the power of on-the-fly consolidated analytics across your desks with multidimensional cross-asset risk and P&L.

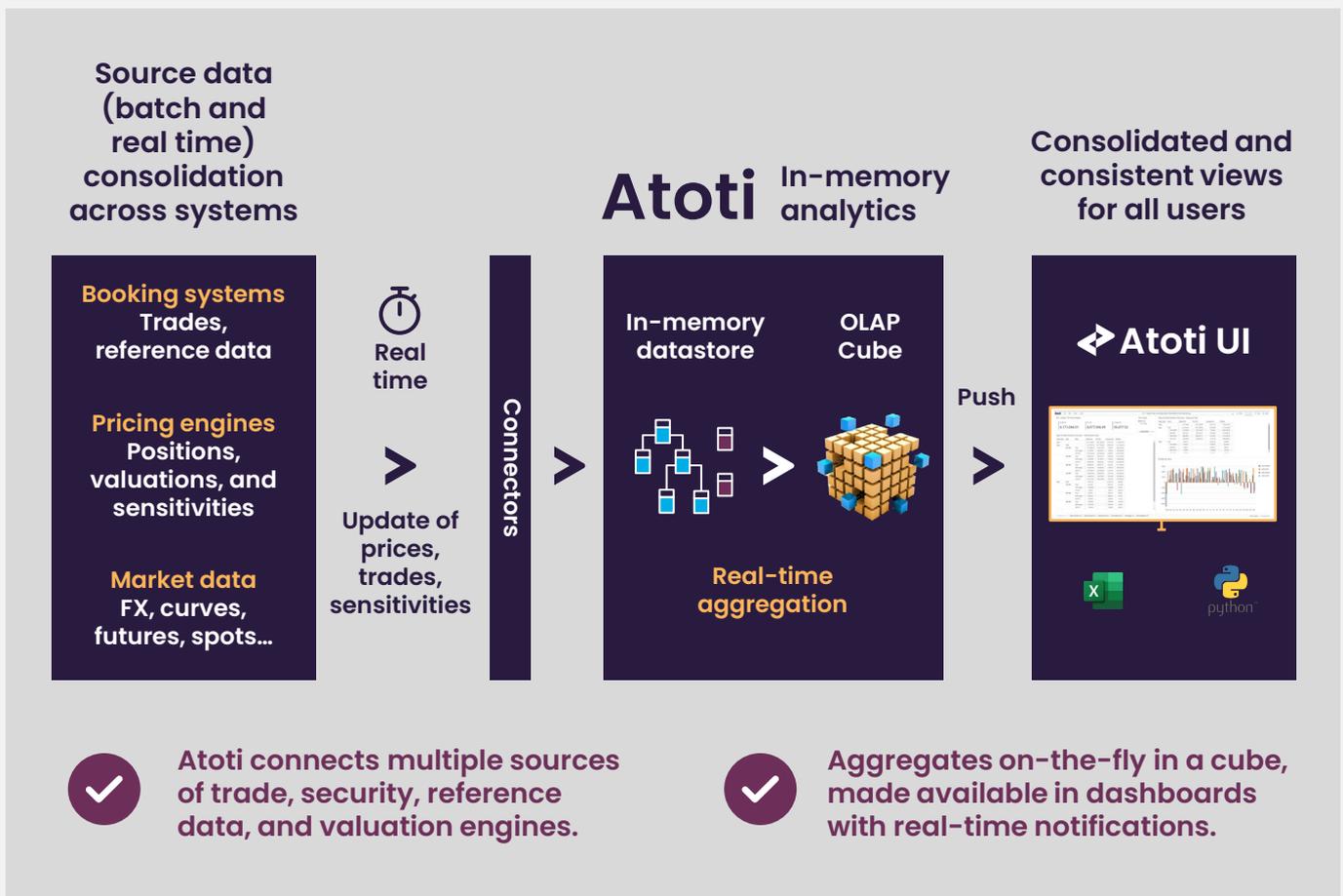
A day in the life of a front office

Know your start-of-day position

Atoti consumes cross-asset positions, valuations and sensitivities from your booking and risk engines in real time and aggregates them on the fly. It enables you to define customized aggregation rules so that you can look at your risk according to the way you trade and the market conventions for your desk.

Compare your start-of-day positions with the previous close and understand your starting point. Be confident that the pricing and booking systems have delivered everything needed. With Atoti, it is easy to check that market discontinuities, such as corporate actions, have been applied correctly.

It's time to know your risks for certain.



Real-time analytics and limit monitoring

Atoti enables you to see aggregated risk, P&L and sensitivities across your organisation and asset classes. It also provides drill-down to the most granular data such as trade, instrument, or position level on the fly.



Atoti is great for reconciliation, lineage, and data quality checks.

Everyone can see a consolidated view of the risks and positions

Slice, dice, and rebucket as the market moves

It is not enough to aggregate; you need your data to react to market events and trade events that both affect your risk and P&L.

Atoti computes all impacted metrics on the fly and performs a Taylor approximation based on real-time trade updates (any attribute that is an input to the Taylor approximation including market rate, volatility, currency, maturity date, risk factor and so on). Other reference data used as classifications and hence driving slice/dice/filter functions, such as ratings and capitalisation, can also be real-time drivers.



Don't worry. Atoti evaluates and recalibrates with markets in real time while you concentrate on your job.



Consolidate and monitor your books and desks from multiple drivers and sources.



Rebucket your risk to optimize hedging strategies.

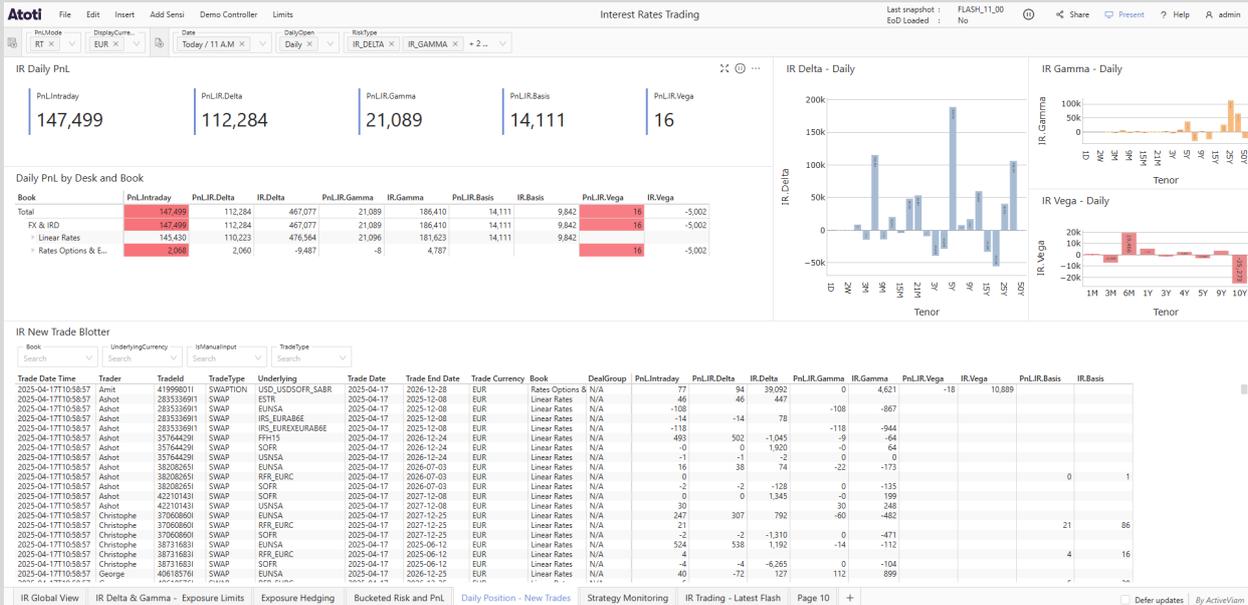


Define your own classifications and bucketing rules, such as:

- For rates, reproject sensitivities to the part of the curve where you trade or where your limits are set. Combine your EUR curves into a single-line summary row and drill down to the detail when needed.
- Equities can be grouped by capitalisation, liquidity, and volatility according to user-defined bucketing rules. Redefine those groups on the fly. Filter and group by sector, geography, and any other attribute or combination.
- Similarly, credit securities can be grouped by rating, liquidity, and risk levels and FX can be grouped by geography, liquidity and any other attribute or combination.

Atoti UI is designed to access the results with predefined and reconfigurable dashboards in Active UI. They are a starting point for more interactive analytics.

Use intuitive dashboards to navigate the data



Atoti UI with P&L and risk summary with a real-time trade blotter showing new trading activity.

Atoti enables you to view risk, exposures and P&L by booking hierarchy, book, desk, currency, sensitivities, other risk factors, asset class, or any combination of those and more.

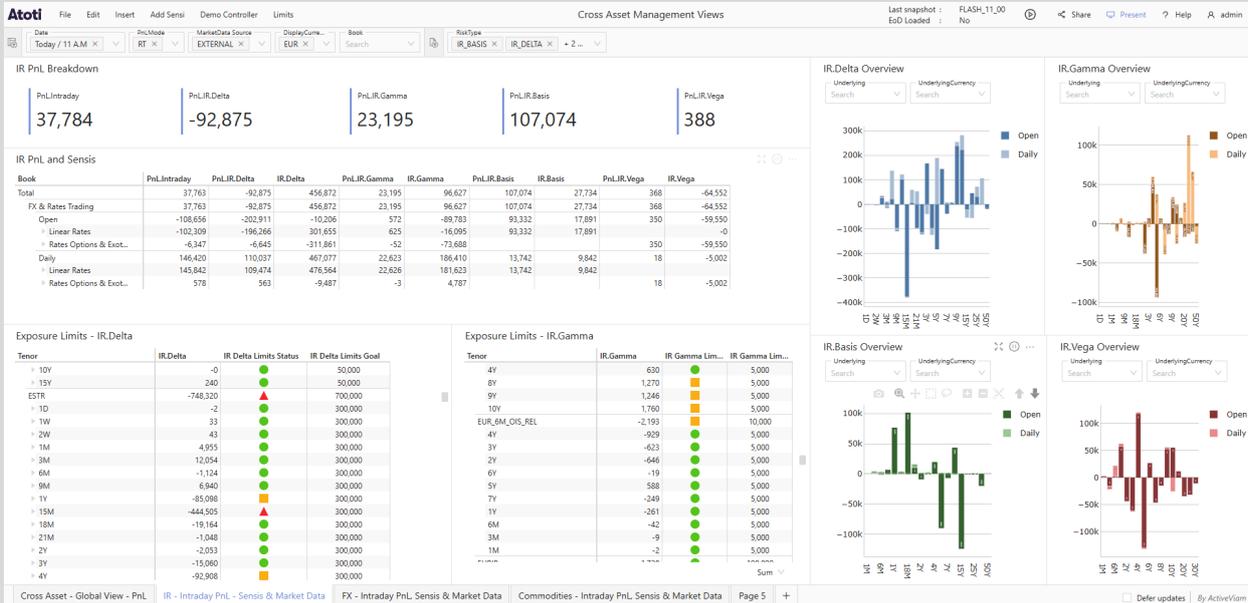
Atoti monitors limits continuously. It gives you early warning of problems as metrics approach thresholds and exceed limits.

Apply any business metric from a simple aggregate of raw sensitivities to a complex derived value such as an estimated P&L or change in P&L from one day to the next.

Warning!
It looks like you might breach some limits.

Make better decisions about trading strategies in line with your firm's risk appetite.

Dashboards to identify outliers and breaches



Atoti dashboard showing interest rate risk, P&L and limits. EUR. ESTR 1Y and 15M points are problematic and need to be investigated and fixed.

Application of what-if strategies

Atoti can connect to any source for pre-deal simulation or previews. You can create a trade based on risk exposure according to your strategy to see the impact and you can remove that What-if trade when the deal has been fully processed in the booking system.

Atoti What-if capabilities can also be used to understand the impact of both pre-defined and ad-hoc price and position change scenarios on the risk and P&L. Either by applying some temporary shifts to the sensitivities and market data or by loading a full revaluation, Atoti can reaggregate and provide comparative and root-cause analytics between stress scenarios and benchmarks.

Atoti helps you understand and validate end-of-day risk and P&L

A full end-of-day revaluation dataset can be loaded on the fly and reconciled with the estimated P&L; flexible drill-down and filtering enables the root cause of discrepancies to be identified and mitigated rapidly, whether the cause be missing trades and positions, incorrect market data, or any other factor.

Can it be mitigated?

Atoti excels in providing cost-effective real-time solutions for front-office applications, offering superior performance in monitoring intraday P&L and risks and quickly assessing the impact of risk factors and new trades on portfolios.

Société Générale S.A.

Accelerate sign-off

Risk and P&L need to be signed off every day. Atoti enables anomalies to be identified, investigated and corrected with adjustments. Everything is audited and checked. When it all looks good, the results can be signed off.

The approval process and risk validation are configurable at every level to align with your firm's hierarchies and approval workflow.



Regulators are assured that the firm complies with policy and regulation.

Dashboards for reconciliation and adjustments



Atoti UI dashboard highlighting that the EUR.IRD desk has a large unexplained P&L that needs to be investigated and explained.

Eliminate spreadsheet risk

Excel has been used by many organizations with an immediate, tactical need to provide intraday risk exposure and end-of-day reconciliation metrics. When it comes to cross-asset, enterprise-wide consolidation, spreadsheets reach their limit. They bring their own well-known challenges and difficulties, such as multiplicity of versions and customizations, data lineage and auditability issues, and lack of consolidated views.

Operational risk can create major reputational risk. Atoti's rigorous approach to data security, consistency and integrity makes the Atoti UI a superior solution.

Product control P&L reconciliation

Atoti can load end-of-day snapshots and Flash P&L, making it a powerful reconciliation tool for product control operations. Sensitivities and market data can be overridden to overcome defects coming from risk engines. Because multiple business days can be analyzed at the same time it is possible for product control reconciliation to start on the same day but continue T+1 and beyond if necessary.



Traders, managers and regulators trust the analytics from Atoti.



Atoti enables reconciliation of the end of day P&L.

What benefits does Atoti bring?



Real-time risk and P&L

- Instantly track and update P&L without batch-processing delays.
- Combine risk from multiple source systems in real time.
- Support multiple snapshots through the day.



P&L explainers

- Granular breakdown by risk factors, trade impacts, and market moves.
- P&L estimates fully reconciled with the Flash P&L and Official revaluation.



Sensitivity aggregation

- Lightning-fast computation.
- Configurable rebucketing according to market conventions.



Dynamic drill-downs

- Instantly investigate and explain at any level of aggregation and filtering.



Optimized decision-making

- Real-time insights for better execution of hedges; what-if scenarios for pre-trade.
- Run intraday stress scenarios, great for complex derivative desks and longer dated positions.
- Real-time monitoring of risk indicators versus risk appetite.



Rigorous approval and reporting

- Be confident that your P&L has been reconciled.
- Know that adjustments have been authorized according to policy.



Eliminate shadow IT and spreadsheet risks

- Demonstrate that the risk is computed rigorously and that decisions are made using complete and correct data.
- Know that the risk is consistent across the firm.
- Improve trader and quant productivity by providing self-service analytics.



Futureproofs the firm

- Be ready for the unexpected.
- Be ready for new technology infrastructure and new markets, trading conditions, and regulations.
- Be prepared for high data volumes and ready to scale as the business grows.



Do not keep your traders in the dark: make better trading and hedging decisions with Atoti.

How does Atoti do it?



In-memory OLAP cube engine

- Uses an in-memory database with full MVCC model, lockless transactions, and bitemporal (time travel) features.
- Features lightning-fast aggregation, slicing, and drill-down across billions of records.



Real-time data ingestion and incremental updates

- Ingests data from multiple sources in real time.
- Supports incremental updates without requiring full reloads.
- Can support intraday full reloads without interruption.



Multidimensional data model

- Uses a flexible, multidimensional schema and semantic layer.
- Enables users to analyze and pivot data by any combination of attributes (e.g. book, time bucket, trader, commodity, sector, country).



Dynamic aggregation and on-the-fly calculations

- Recalculates complex measures such as VaR.
- Recomputes P&L approximations in real time using on-the-fly aggregations and built-in formula logic.



Hybrid cloud

- Atoti supports both on-premise and cloud data sources.
- Supports hybrid configurations where some data nodes are deployed on premise and some others on cloud technology.



Embedded governance, audit and limits framework

- Features built-in data lineage, access control, limit monitoring, and audit trails.
- Ensures enterprise-grade data integrity and operational transparency.

Key facts from a Tier 1 deployment

200k+
price updates
per second

P&L approximation
with Taylor
expansions

**Ingestion of
revalued
sensitivities
intraday**

200m+
data points

250+
measures

200+
dimensions

16Tb
dataset with
concurrent read
and write

24x7
global
operation

30+
desks

200+
traders



**Hybrid operation is
great for ad hoc
historical analytics.**



About ActiveViam

ActiveViam delivers active intelligence for complex financial analytics, providing institutions with precise real-time and deep historical analysis capabilities to inform challenging trading, risk, and treasury management decisions. Clients can use ActiveViam's Atoti platform as their universal semantic layer to build proprietary business solutions or buy pre-packaged solutions for key regulations and risk metrics.

Built for and trusted by finance, ActiveViam combines first hand industry expertise with unrivaled technology, relentless innovation, multi-dimensional analysis capabilities and easy integration with a broad range of data and analytics providers, making it the missing link in financial institutions' existing business intelligence stacks.

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Best use of cloud
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