



How a \$7B NYC PE firm made 150,000+ CRM records and decades of data usable by agents.

Port of Context built specialized architecture for data-intensive work across CRMs, spreadsheet archives, and deal rooms. It turned two promising prototypes into production workflows: a portfolio view that refreshes across 14 companies and eight quarters and a relationship brief delivered in under 60 seconds.

THE OPPORTUNITY

The \$7B PE firm needed answers that reached across its largest data stores.

The firm wanted to know two things: What changed across the portfolio this quarter? Who in its network could make a credible introduction to a company under evaluation? Answering either question required more than a quick search.

01

PORTFOLIO
MONITORING

Build one complete view of portfolio performance.

The agent had to gather and organize eight quarters of financial data for 14 companies without leaving a company or reporting period out.

02

NETWORK
INTELLIGENCE

Find the strongest route to the right person.

The agent had to resolve target companies, work through ambiguous matches, trace relationships, and rank the best introduction paths.

112

company-quarter comparisons in each portfolio update.

150,000+

company records in the firm's CRM.

<60 sec

to return a relationship brief for a target.

SPECIALIZED ARCHITECTURE FOR DATA-INTENSIVE TASKS

Port of Context handles the heavy data work before the AI model writes the answer. Its architecture can search the CRM, organize spreadsheet data, and work through large document collections inside the firm's environment. The model receives a compact set of decision-ready evidence, which keeps a workflow spanning large data stores economical to run.

A complete portfolio update across 14 companies cost \$0.03 in model input.

The earlier portfolio dashboard could not update itself. Port of Context turned the workflow into a repeatable process that gathered the records for all 14 companies, standardized 112 company-quarter comparisons, and returned one complete eight-quarter view. Every company and reporting period was included.

COLLECT Include every company and quarter. The research layer works through the full set of records required for the update.	STANDARDIZE Make the figures comparable. Financial data is organized into the same fields across companies and reporting periods.	DELIVER Return one complete portfolio view. The agent receives the finished eight-quarter summary and presents it to the team.
--	---	--

Each refresh has to cover the same 14 companies and eight quarters. Port of Context organizes those records before the model prepares the finished view, keeping the cost of each update low.

SPECIALIZED ARCHITECTURE \$0.03 measured input cost for the complete 14-company update.	CONVENTIONAL WORKFLOW \$46.38 estimated input cost when pages and intermediate results pass through the model.
---	--

99.9% lower model input cost for a portfolio view designed to refresh repeatedly.

The firm's 150,000+ company CRM could return a relationship brief in under 60 seconds.

The firm's CRM and relationship history had accumulated over decades. For six target companies, the agent identified the correct records, worked through ambiguous matches, traced paths across people and prior investments, and ranked the strongest routes. The deal team received the best-supported paths with recency and relationship-strength signals.

RESOLVE Identify the correct companies. Ambiguous names and incomplete records are checked before the relationship search begins.	TRACE Follow the credible paths. The research layer works across people, companies, and prior relationships.	RANK Return the strongest routes. The agent receives the best-supported matches and recommends where the team should start.
--	---	--

Making the relationship search economical to repeat

The firm's target list and relationship data change throughout the deal cycle. To keep each brief current, the team needs to rerun the entire search, including entity checks, fallbacks, relationship tracing, and ranking. Port of Context completed that six-target workflow for \$0.17 in model input, compared with an estimated \$1.97 when the intermediate search results pass through the model.

SPECIALIZED ARCHITECTURE \$0.17 measured model input cost for the complete six-target search.	CONVENTIONAL WORKFLOW \$1.97 estimated model input cost for the same searches when intermediate results pass through the model.
--	--

91% lower model input cost for the same complete six-target workflow.

THE RESULT

The firm gained two reusable capabilities on one data-intensive architecture.

Port of Context handled exhaustive retrieval and organization across the firm's data. The deal and portfolio teams received complete, repeatable outputs, while the model focused on judgment and explanation.

14 × 8

companies and quarters in a refreshable view.

The workflow standardizes every company and reporting period into one complete update.

<60 sec

to map the strongest paths to a target.

The workflow resolves identities across the firm's sources and returns recency and relationship-strength signals.

\$0.20

in model input cost for one run of both workflows.

The same pair would cost an estimated \$48.35 when intermediate data passes through the model.

The same architecture extends from CRM and portfolio data to spreadsheet archives and deal rooms.

In this case, it supported 150,000+ company records, a relationship brief in under 60 seconds, and 112 company-quarter comparisons in every portfolio update. The architecture can also support diligence and reporting across large document collections without forcing the model to read the source archive in full.