

DATA
STREAMING
WORLD TOUR

PARIS



CONFLUENT

**DATA
STREAMING**
WORLD TOUR

Building Intelligent Systems on Real- Time Data



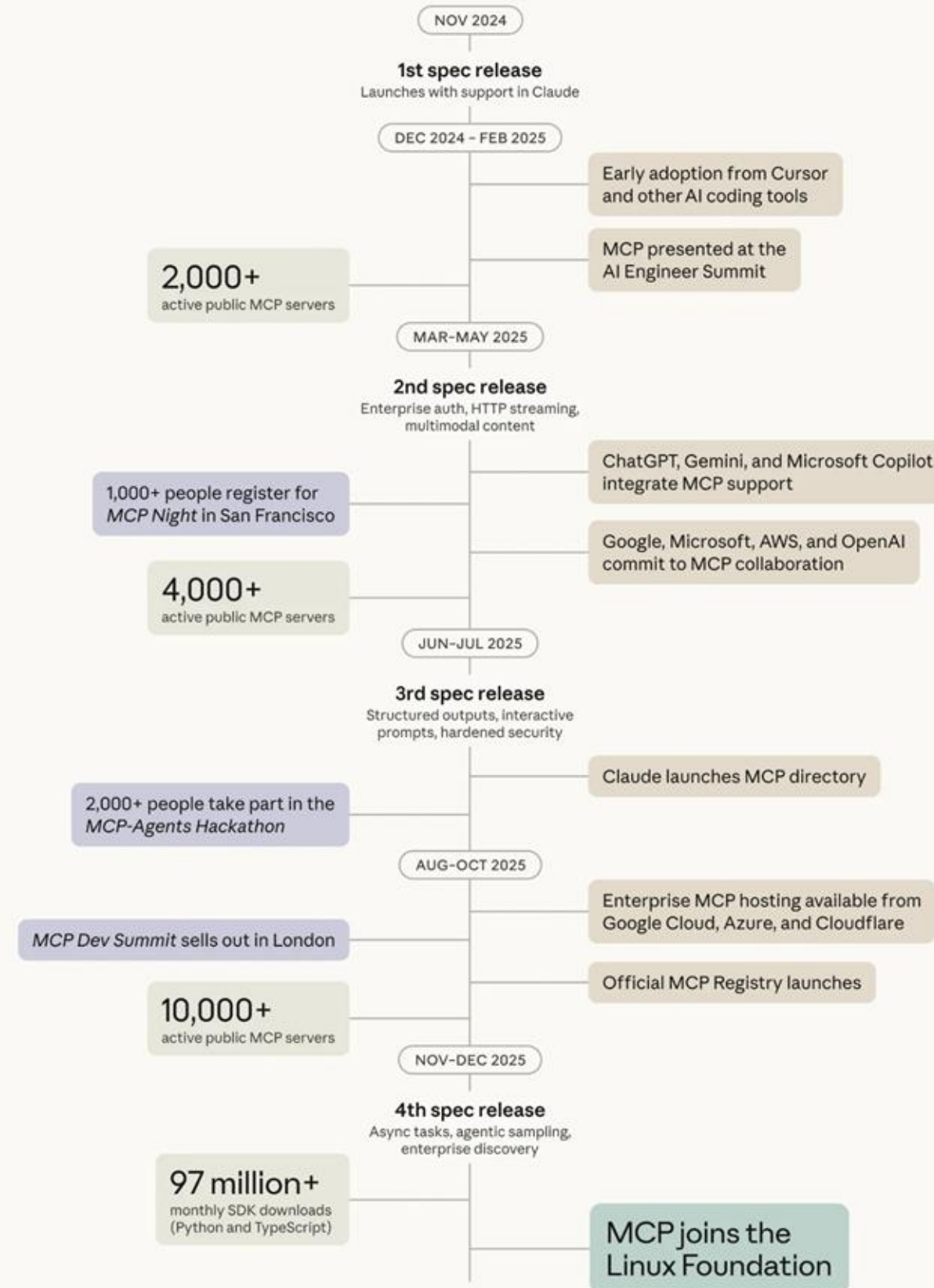
Andrew Sellers

VP, Technology Strategy and
Enablement,
Confluent





One year of MCP



Agentic Engineering



```
Python
```

```

      G.G
    (---)
   /---\
  /---\
 /---\
/---\

Load v1.0

Welcome, Will!

I am your friendly beaver-like coding assistant.

I can help you plan, analyze, debug and write code. To get started, talk to me in plain
English and I will do my best to help!

command | Explanation
---|---
/edit    | Edit the file at the given path.
/tree    | Show all the files in the current working directory in a tree.
/shell   | Drop in to the shell.

Build a calculator app with the Textual library for Python
Python - uv - ash Wills-MacBook-Pro.local ~/projects/load
```

Tools like **Claude Code** represent a paradigm shift in how we develop software.



Compressing time from idea to production.



APIs must be "Agent-Usable" at the core.



Agent usability gates agentic reasoning.

Engineering is tip of the spear, but more will come



OpenClaw

THE AI THAT ACTUALLY DOES THINGS.

Clears your inbox, sends emails, manages your calendar, checks you in for flights.
All from WhatsApp, Telegram, or any chat app you already use.

NEW

Introducing OpenClaw →

What's happening with agentic engineering is only the start.

OpenClaw—as scary and risky as it is—is a glimpse into the future where everyone is using agents to get work done.

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What's different about GenAI and Agentic AI



CLASSIC ML

Training of purpose-built models



(Offline / batch)



GENAI / AGENTIC AI

Inference with reusable foundation models



(Online / real time)

Your data



The Context Engineering Era

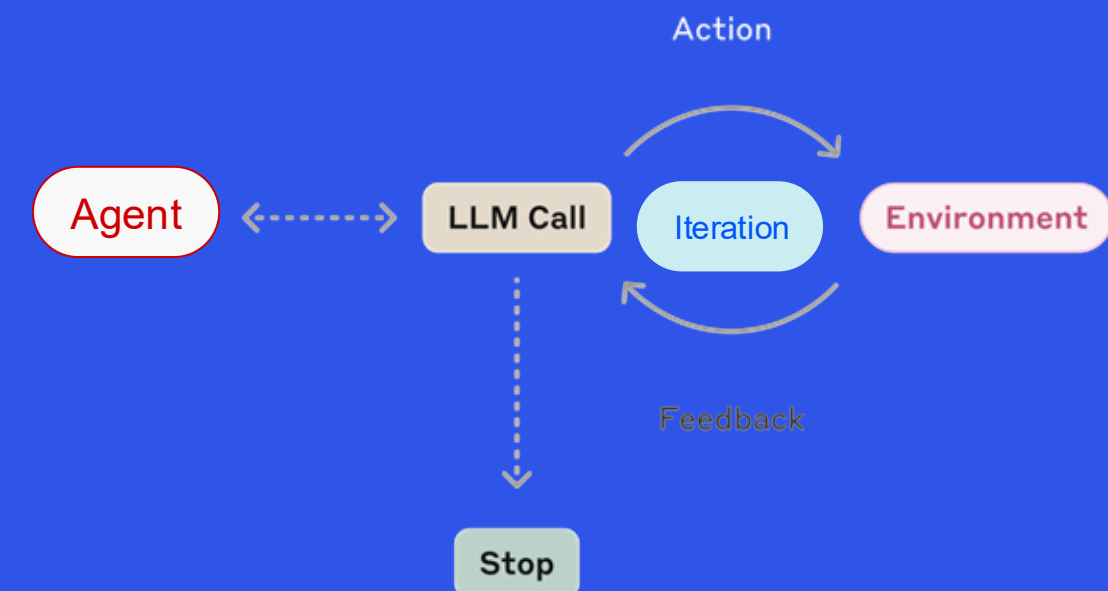
From Prompt Engineering to Context Engineering



PROMPT ENGINEERING



CONTEXT ENGINEERING



REACTIVE AI Assisting users

Chatbots and copilots.
Prompt-response (user driven).
Action happens periodically.

PROACTIVE AI Automating business tasks

Event-driven agents.
Always on.
Action happens continuously.

What's in Context



System Prompt

Documents

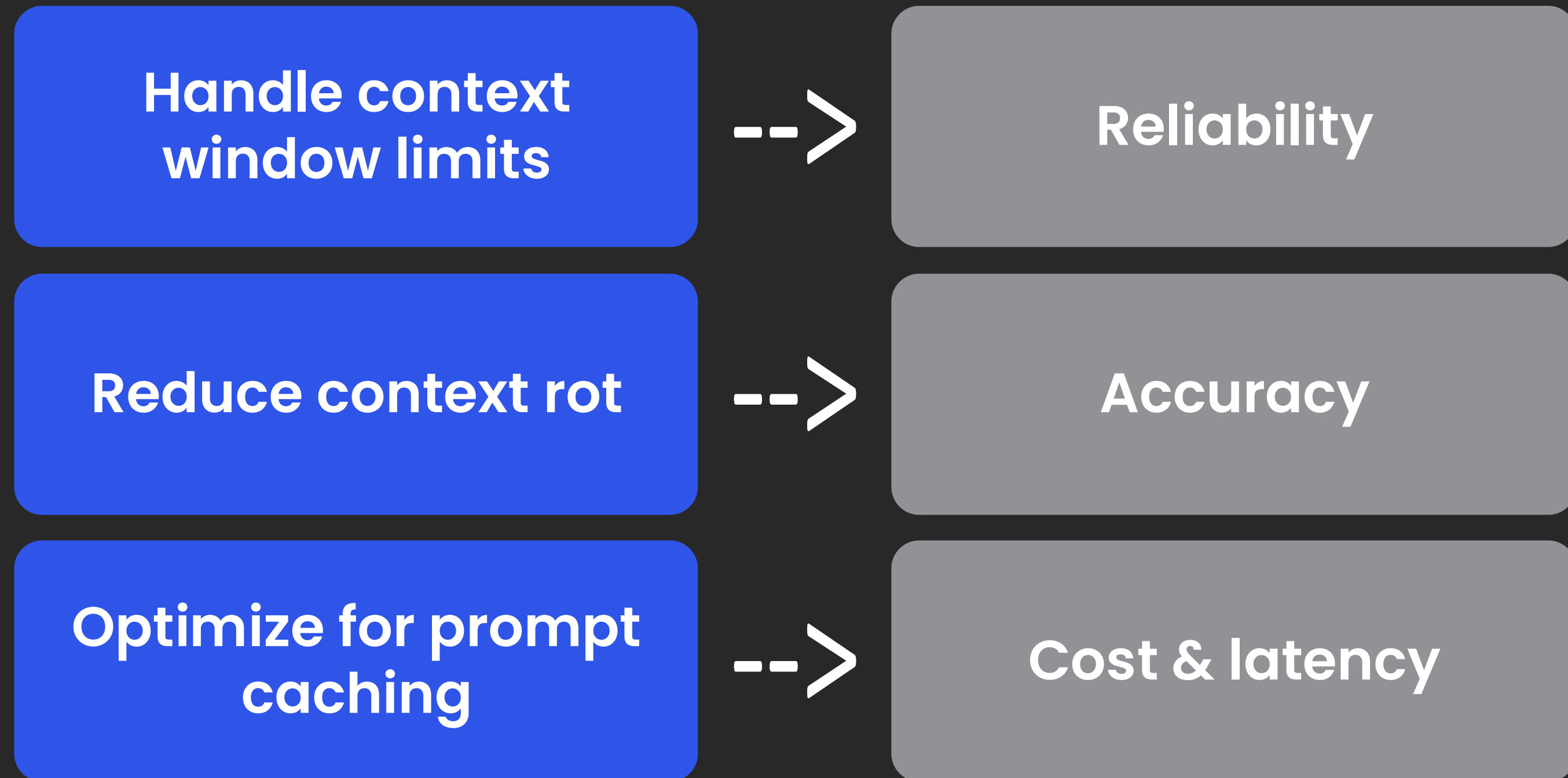
**Assistant
Message**

Tools

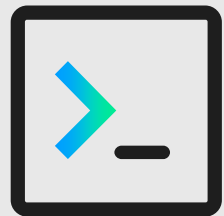
User Message

**Tool Calls &
Results**

Practical guidance for good Context Engineering

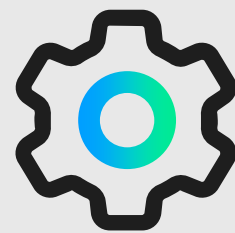


A framework for Context Engineering



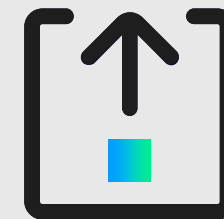
System prompt

Minimal, precise instructions using clear, simple, direct language



Tools

Self-contained, no overlap, and clear purpose



Data retrieval

Balance between pre-loading and dynamic fetching



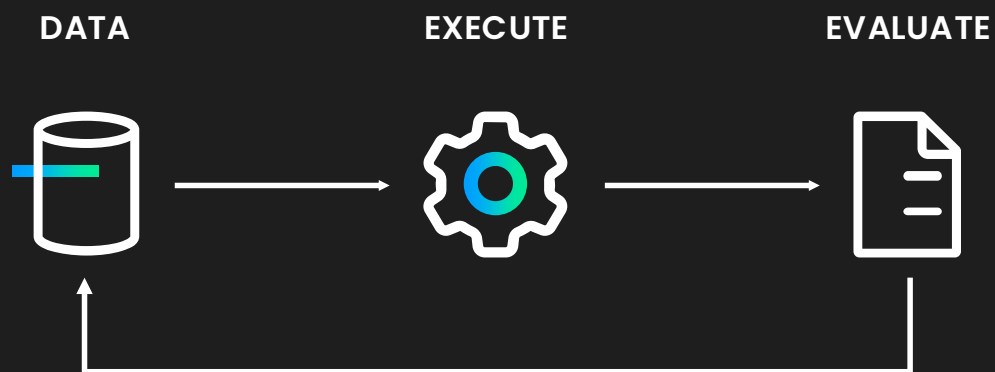
Long-horizon optimizations

Consider compaction, memory, and subagents

What AI systems need for Data Retrieval



Evaluation on Real Data



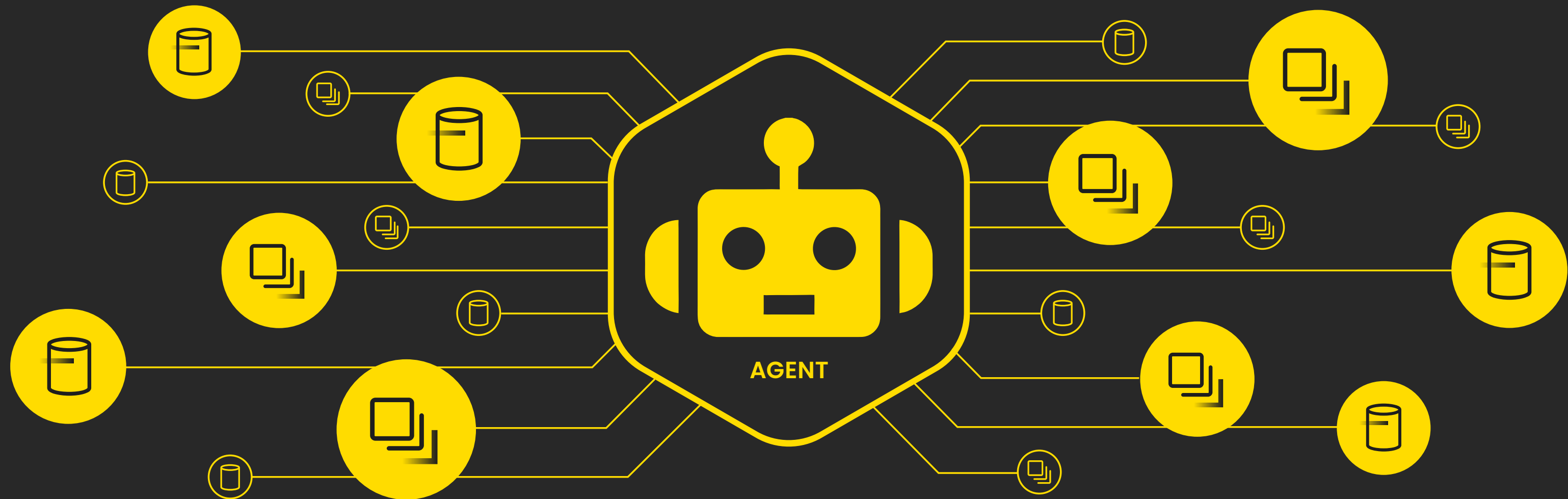
Fresh, Real-time Context



Always-on Governance



Can we MCPify everything?



Real-Time Serving

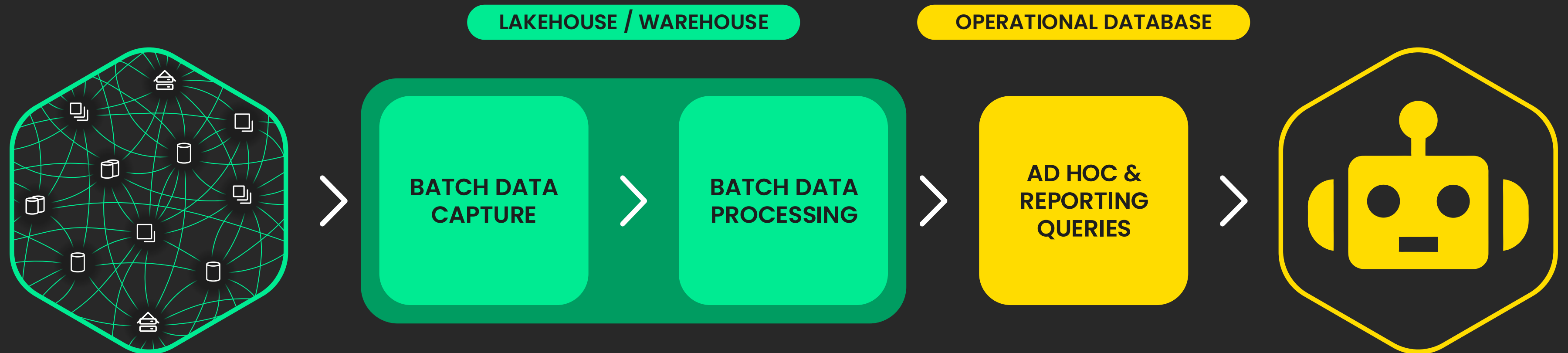


Unprocessed Data



**Access Control,
Token Sprawl**

What about batch processing?



**Evaluation on
Real Data**



**Stale Data in
Production**



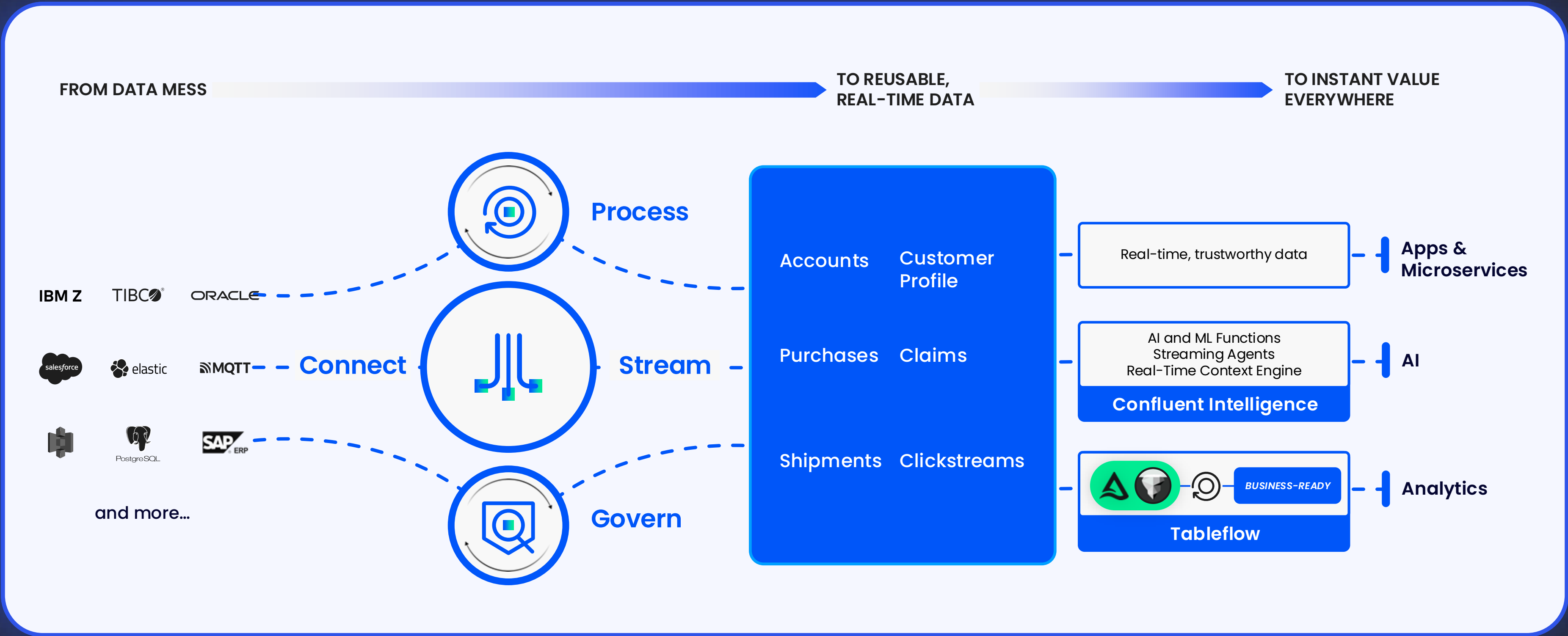
Governance at Rest

What about streaming?



Need a **derived data set** that represents the current state of the business

Confluent's data streaming platform powers real-time AI

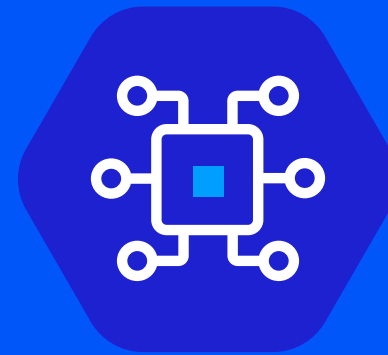


Confluent Intelligence



AI and ML Functions

Build real-time pipelines for fraud, forecasting, anomaly detection, and more



Streaming Agents

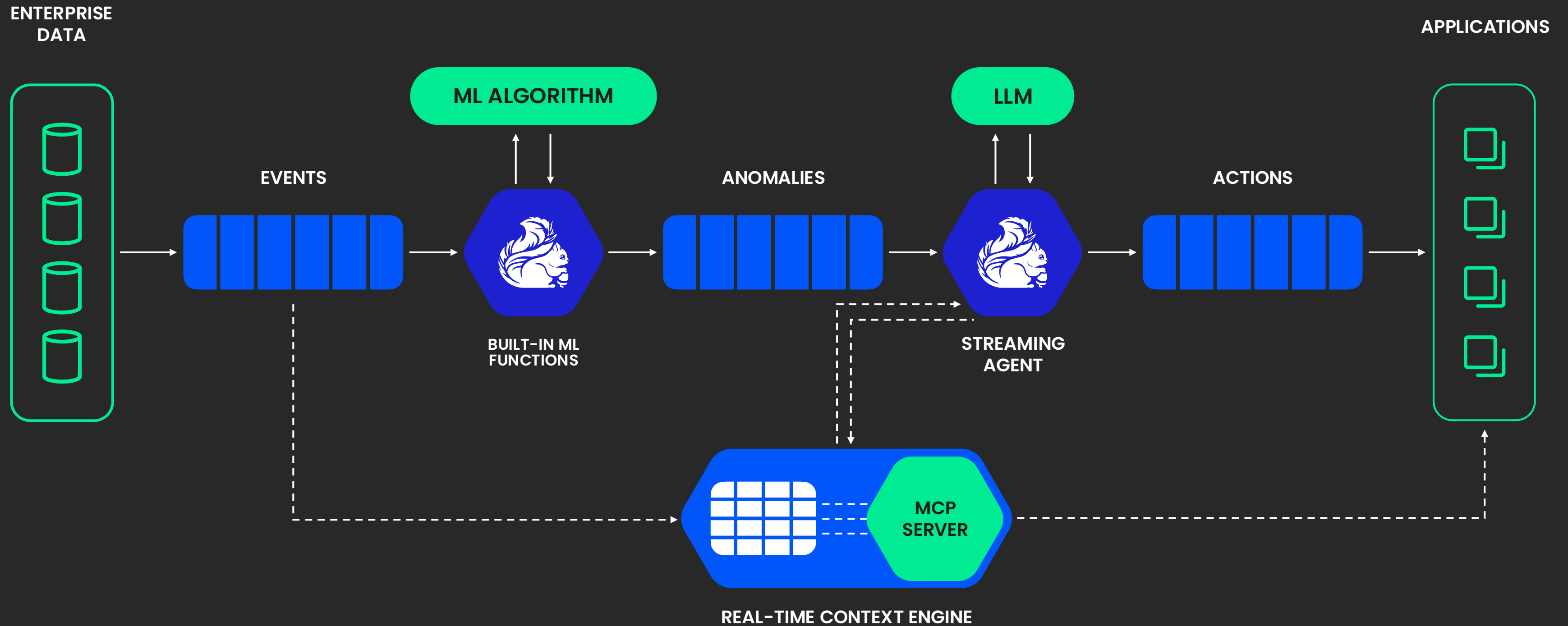
Build, deploy, and orchestrate event-driven agents on Apache Flink



Real-Time Context Engine

Serve real-time context to any AI agent or application

How it fits together



Empowering customers to build real-time AI



PALMY

FOCAL

Reworkd

Notion

Agent
Taskflow

thuno

Atomic
Tessellator

Kmart



PENSKE



apna

Citizens
Bank

outsystems

ACERTUS

SIEMENS
Healthineers

iag

zyte

HENRY SCHEIN ONE

thrivent

optimove

sccc
by stc

Recursion

Ladder

Sencrop

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- The barrier to production AI is data, not models
- Fix it upstream, not downstream
- The platform exists, and it's proven





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Thank you!

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