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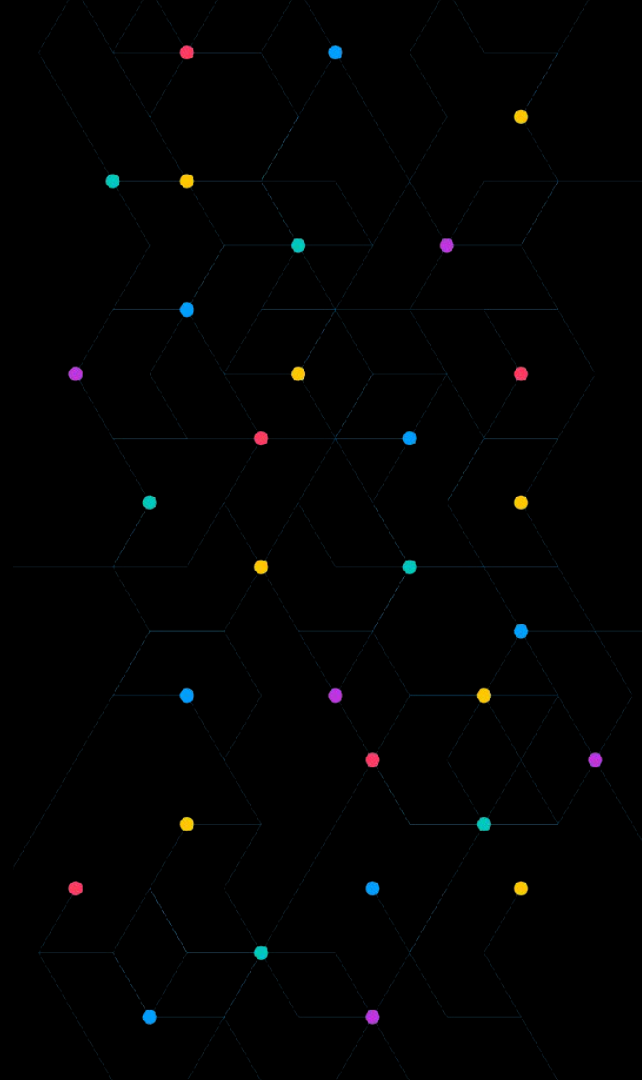
Agentic DX

Bringing Your IDP Into the IDE

Presented By:
Adnan Vahora, Dhvani Suthar



MOTOROLA SOLUTIONS



>6

Global contributor
teams

>4k

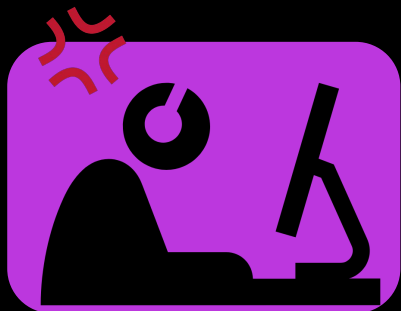
Monthly Active Users
for IDP



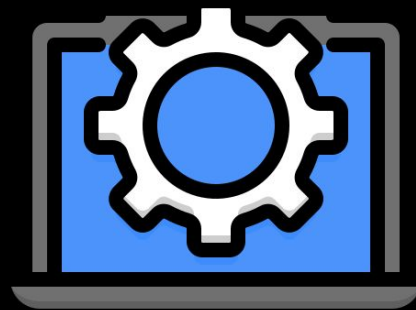
22

Adoption
%





User needs
Feature
Maturity



Needs
adoption to be
Mature

The Chicken Egg Problem :(



**How about *we* meet them
where *they* already are**

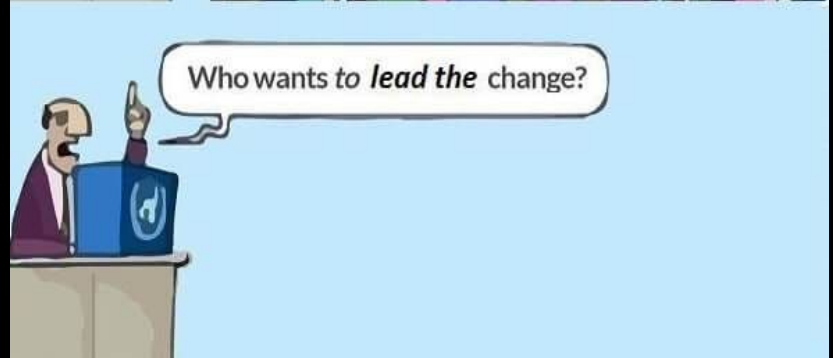


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The "Bring Your Own Agent" Strategy

The Ask

You Build It, We Integrate It.



psycholo

gy

Domain
Experts

≠

precision

_manufa

cturing

AI
Experts

The "Reality"



history
_toggl
e_off

Extended R&D

+

dynami
c_feed

Redundant Solving

Teams tackling the same
problems independently.

Slower time-to-market due to
complex research cycles.

Still a "Solvable" Problem



Impact:

Users Forced to Orchestrate between Agents

FinOps
Agent

Infra
Agent

OBS
Agent

SRE
Agent



Agent workflow constitution



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security

Security First

Zero Trust Execution

person_ search

Human-in-the-Loop

User approval **Before:**

- Tool Execution
- Agent Handoff

smart_t oy

A2A Native Agent

Direct agent-to-agent
autonomous collaboration.



Distributed Agentic Patterns

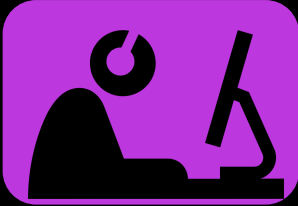
Canonical Mesh

Agent: Answer + **Route**

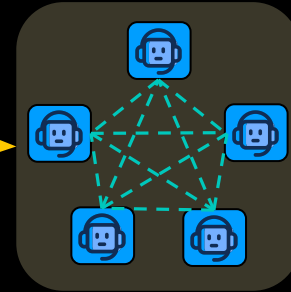
Flat Mesh does not scale

Hallucinations Snowballing

You are as strong as your weakest link

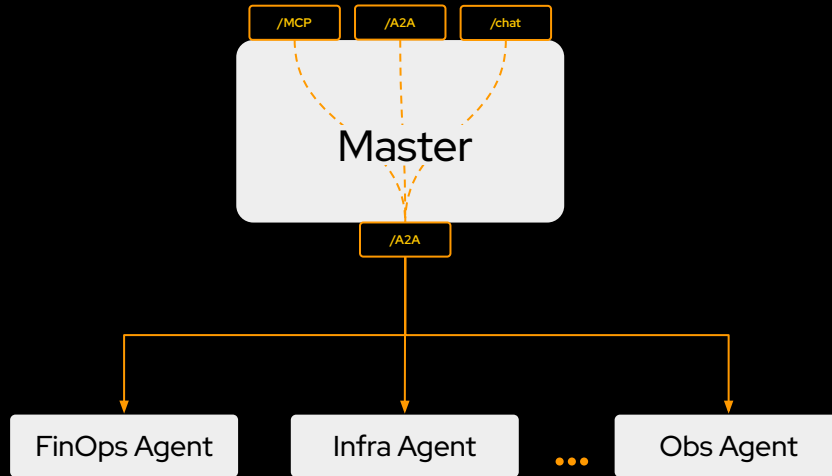


Off-load
orchestration



The Master Agent

Master with flat hierarchy



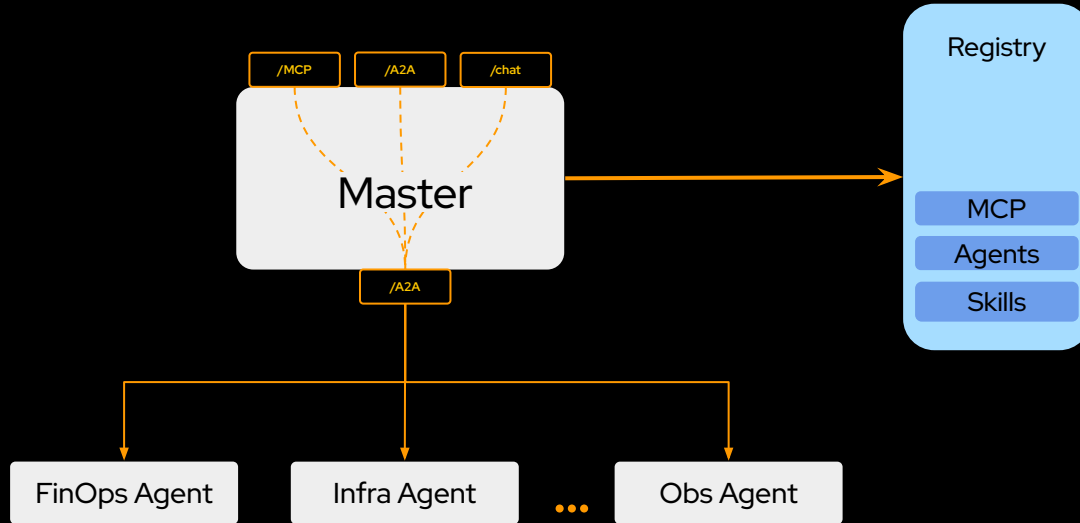
Problem

Missing Dynamic discovery



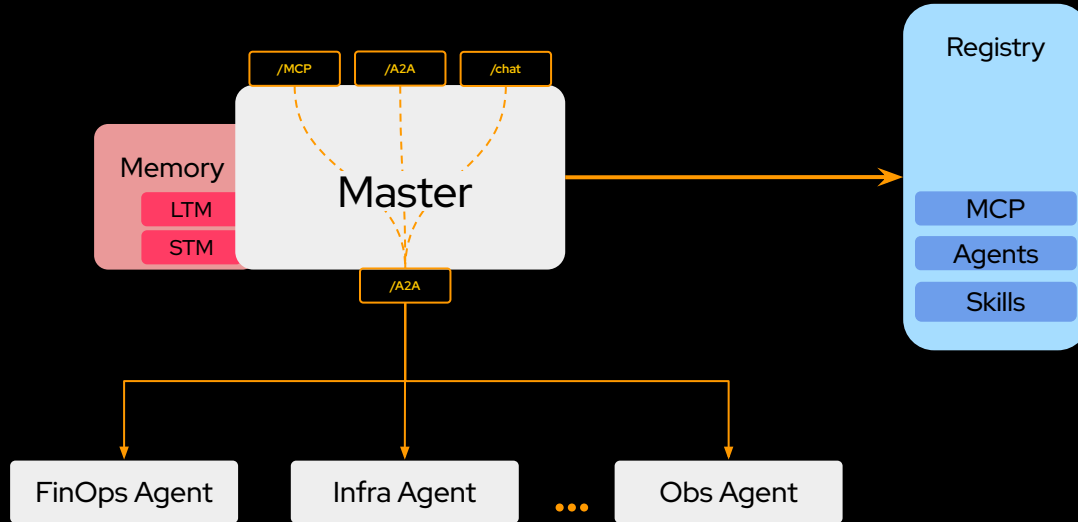
The Master Agent

MCP/Agent Registry



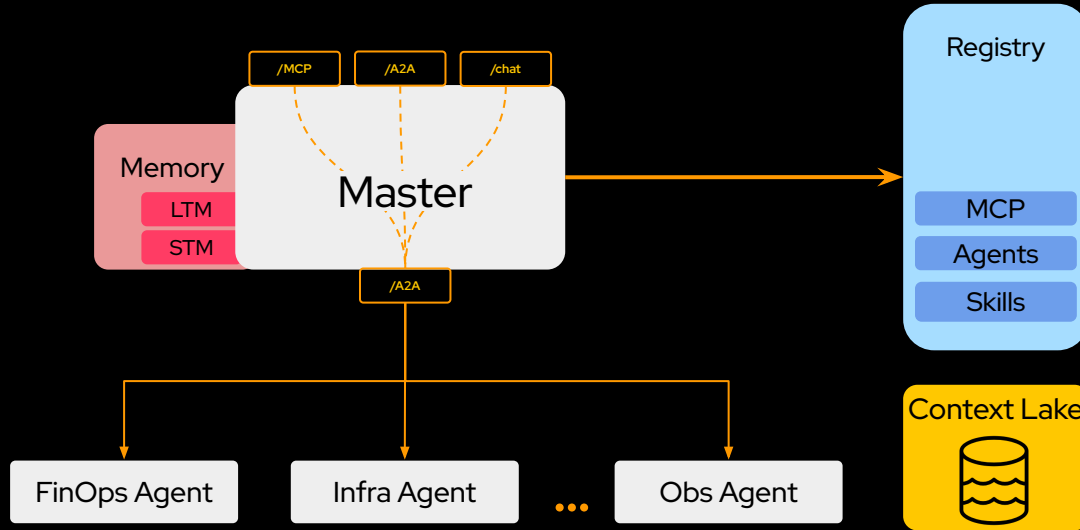
The Master Agent

Memory



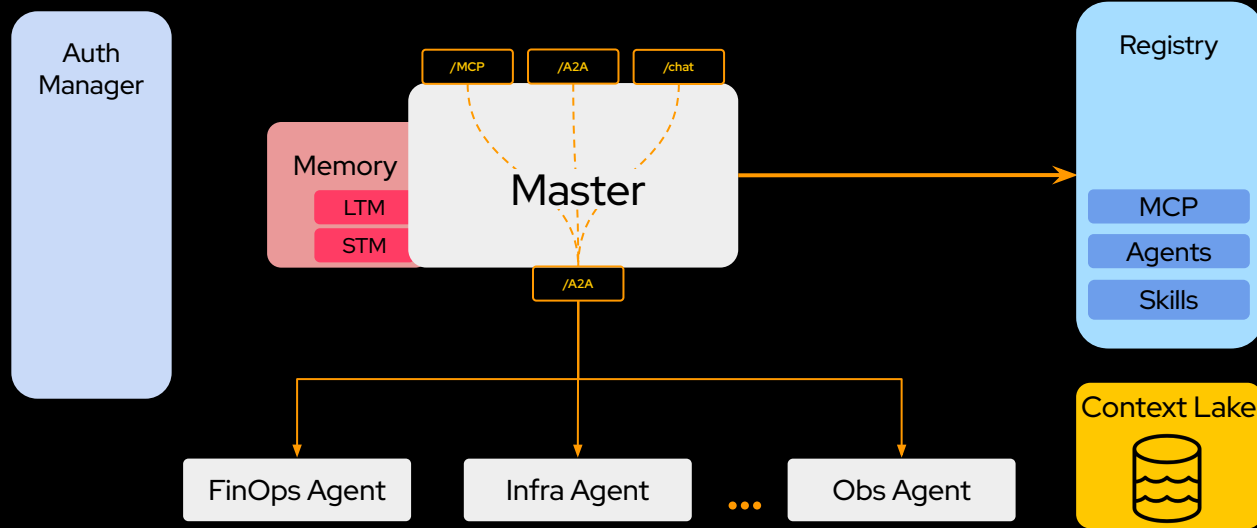
The Master Agent

Context Lake



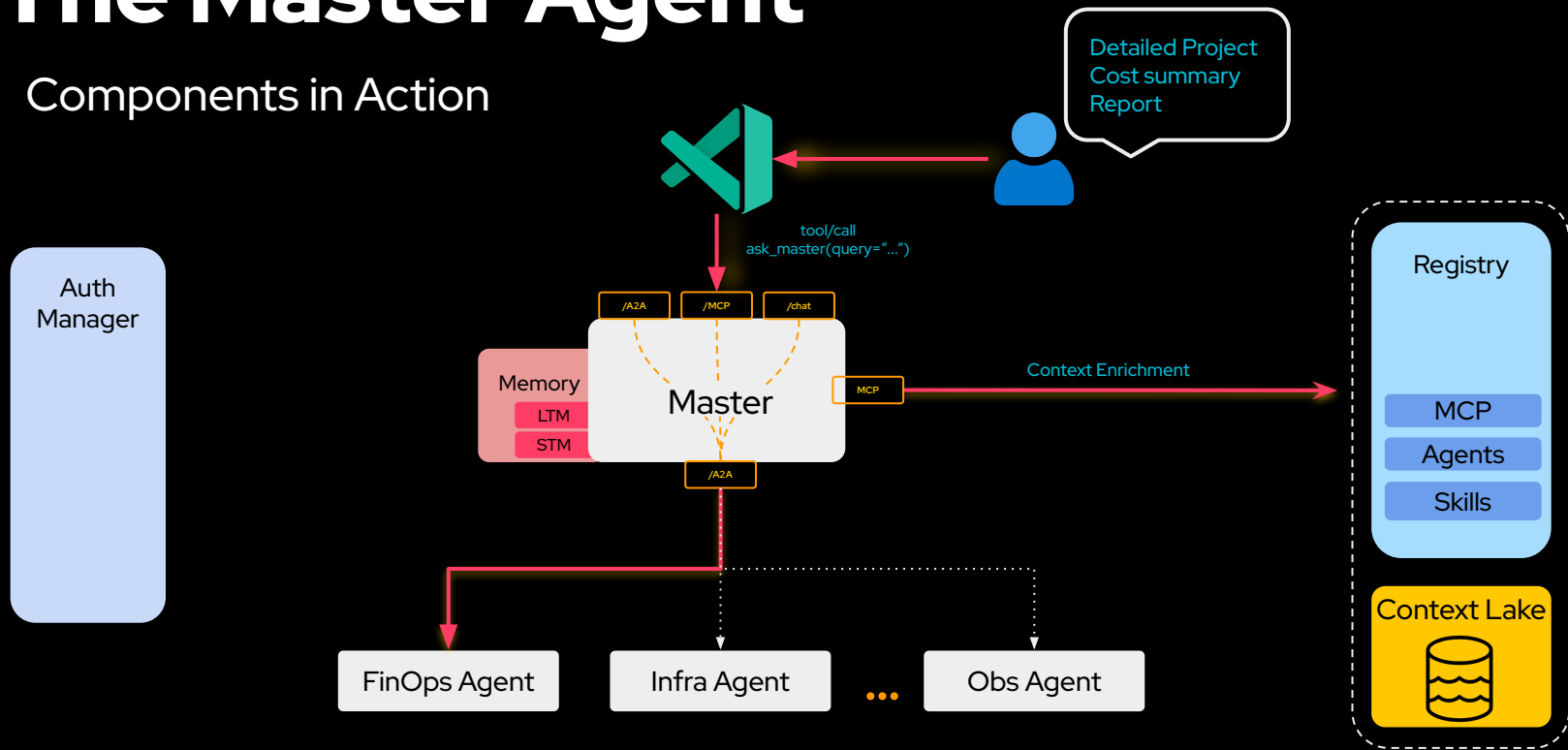
The Master Agent

Secure Authentication Manager



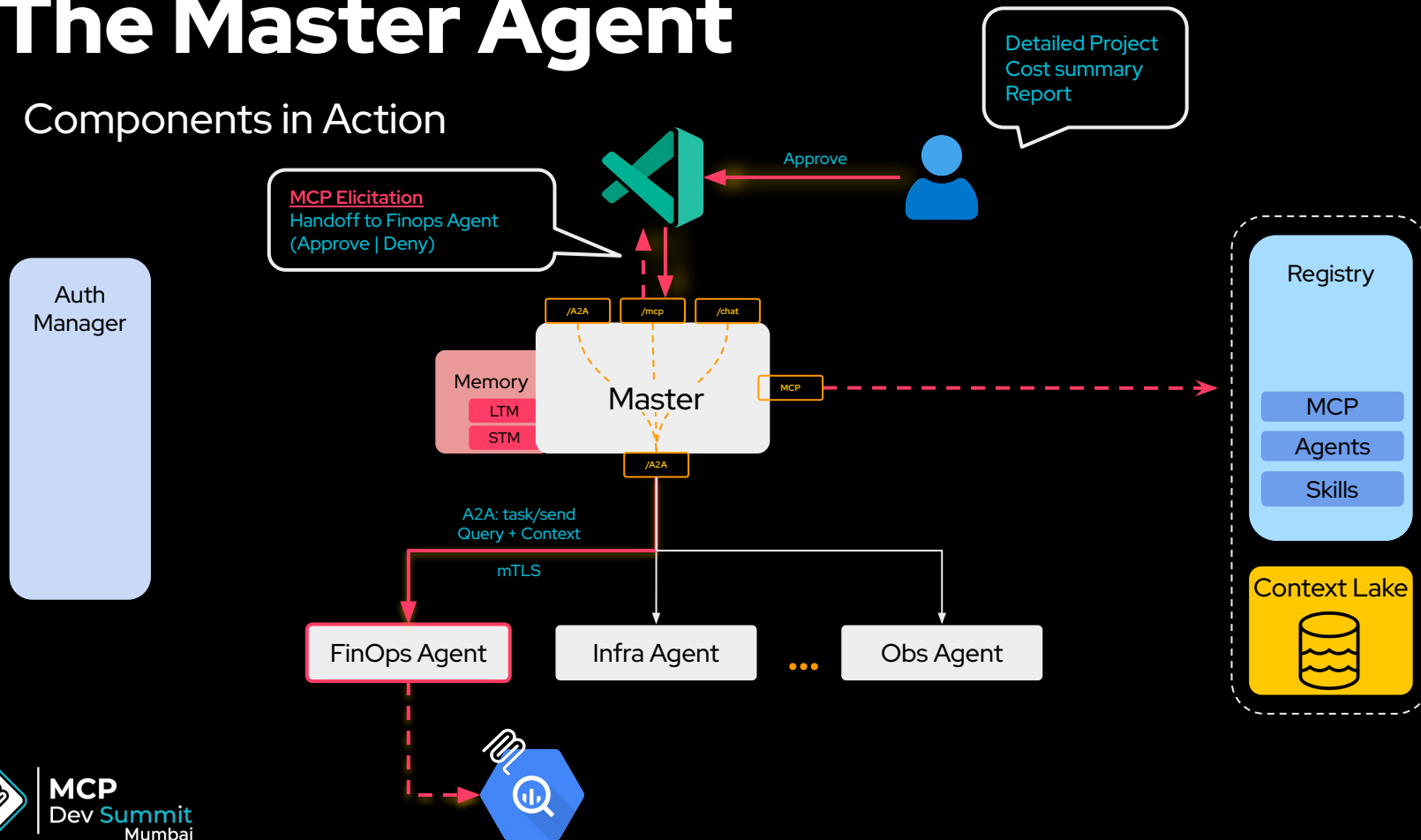
The Master Agent

Components in Action



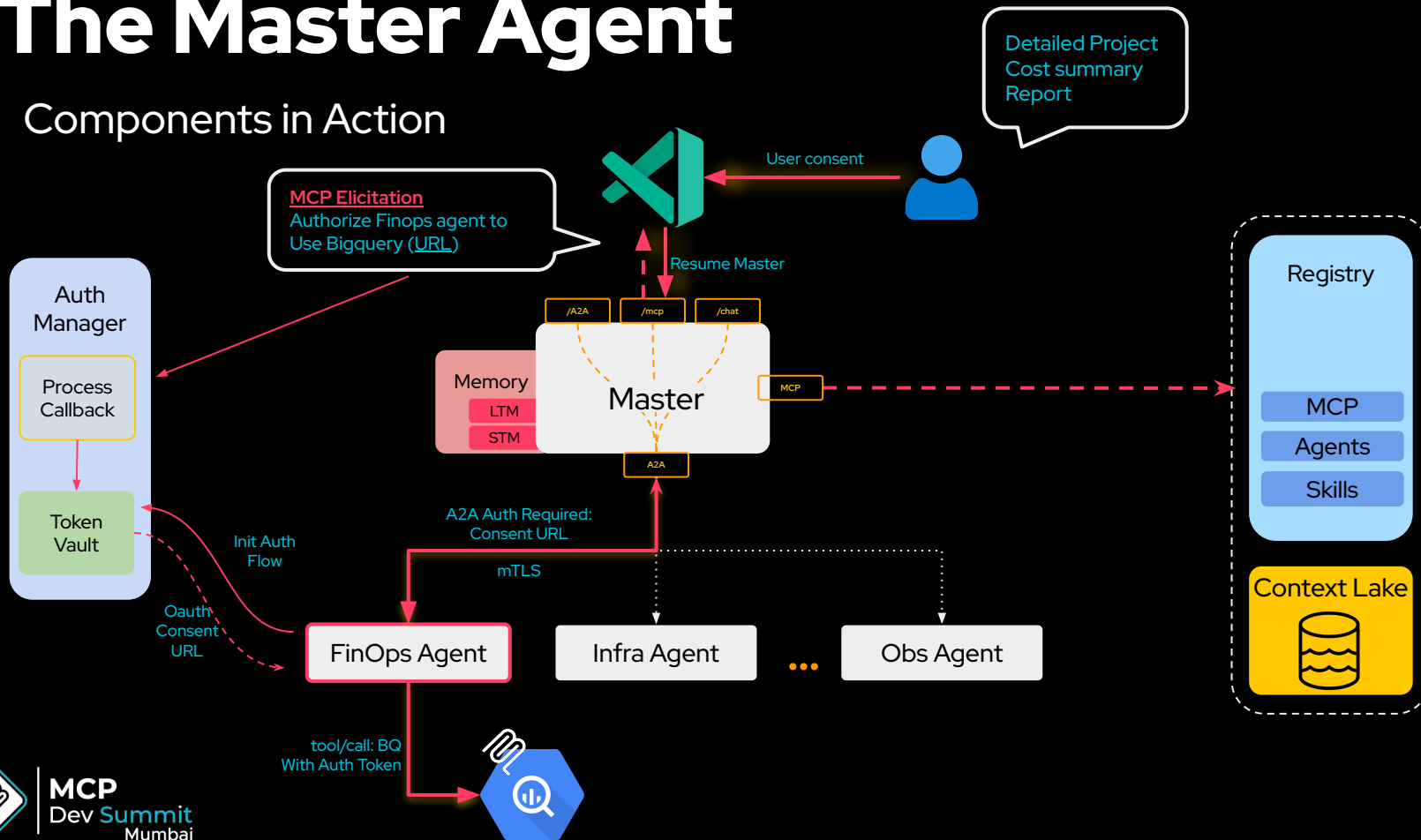
The Master Agent

Components in Action



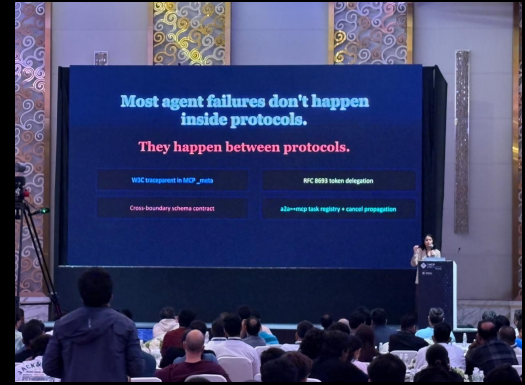
The Master Agent

Components in Action

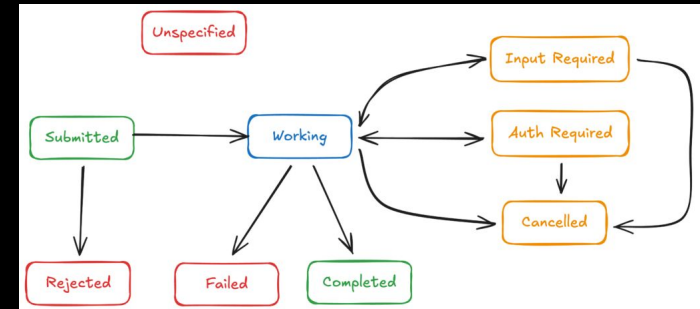


MCP x A2A state mappings

A2A	MCP
Input Required	Elicitation user clarification
Auth Required	Elicitation consent URL
Completed Failed	Tool result
Artifacts	MCP Resources
Cancelled	Notification / Cancelled



“Where MCP Ends A2A begins: Arushi & Shiva”



Context Pollution At Scale



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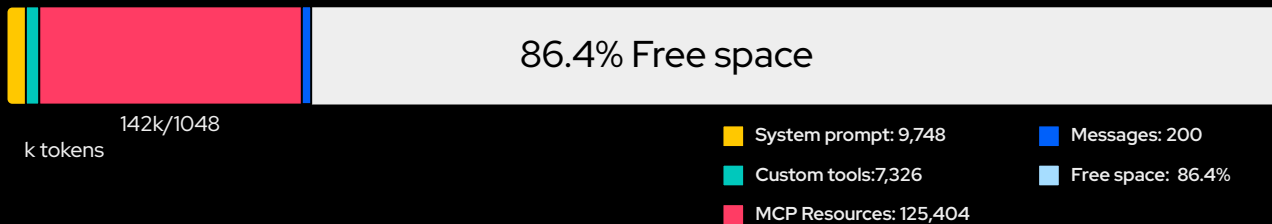
Caching saves money, not the
context



Search the tool on the **fly**



Traditional approach



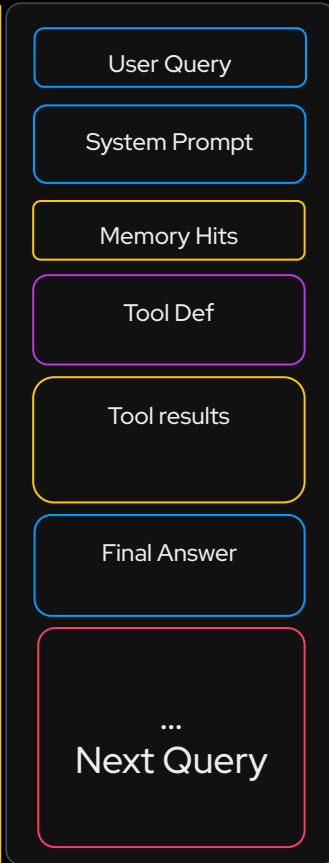
Tool Search Tool



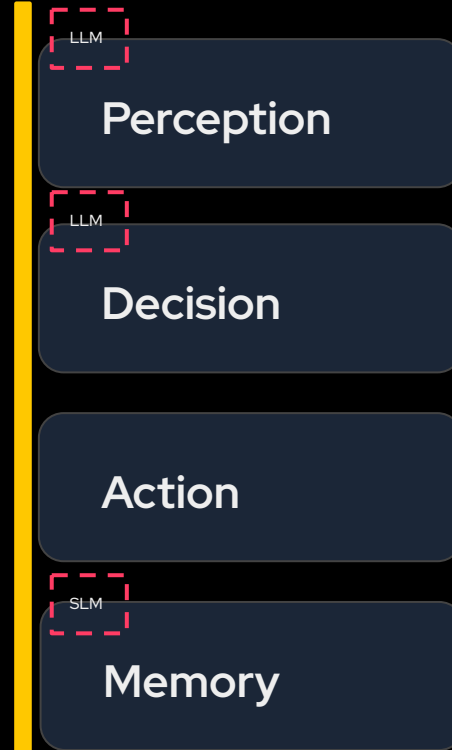
87% Reduction in
Tokens Usage



LLM in Agent loop

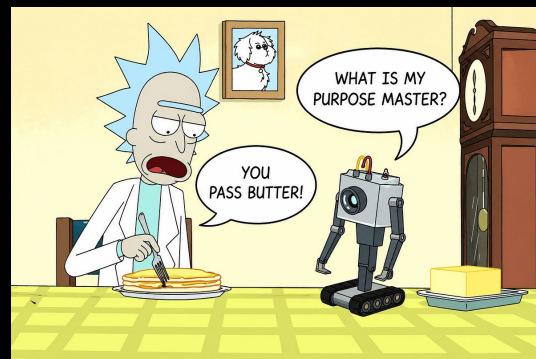


Decomposing the Context



Nodes receive
exactly what they
need to execute.
Nothing more.

The golden rule of Agentic Context Hygiene.



Tool-Blindness

Perception

Goal Decomposition

Reads query, history and memory hits to emit a bounded goal list.

Pollution at Risk

Injecting full MCP tool catalogue into the system prompt destroys reasoning capacity.

Percept

Goals



The orchestrator.

1. Reads the query, the memory hits, and the history.
2. Creates Goals for every query
3. Emits the current goal list with done flags and optional artifact attachments.



Dynamic Discovery



Decision

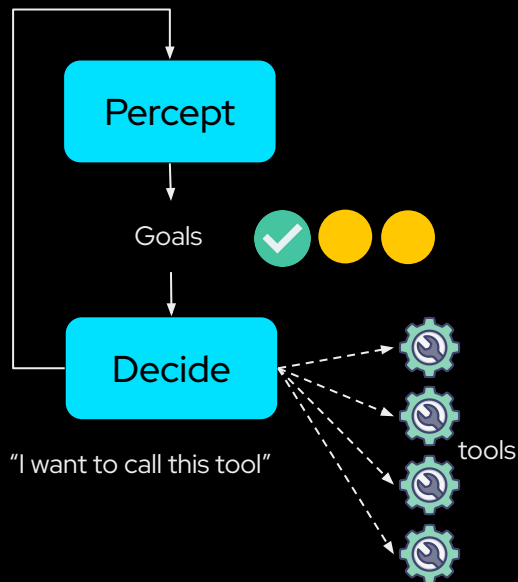
Tool Selection

Evaluates unfinished goals and dispatches exact MCP tool.

Pollution at Risk

Loading 50+ tool schemas upfront consumes several tokens of working memory.

Until all goals complete



1. Picks the next action for one bounded goal.
2. Returns either a final answer in plain text, or a single tool call to MCP.



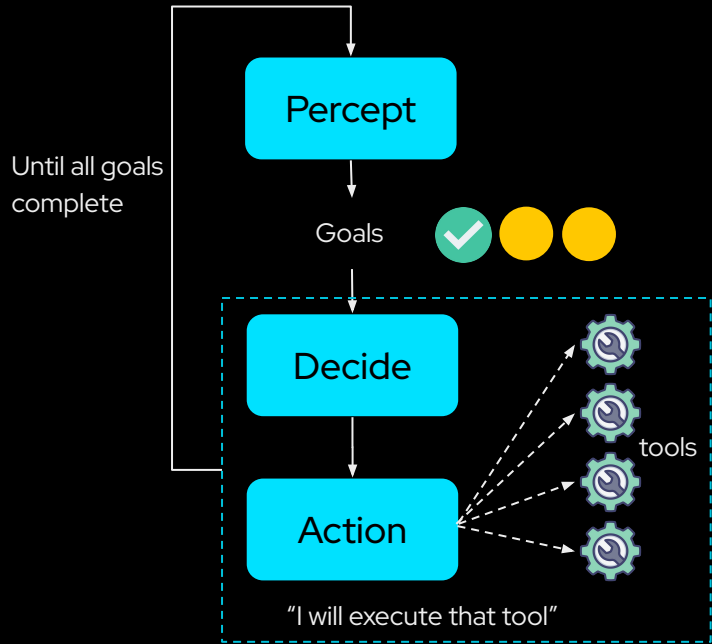
Artifact Score

Action

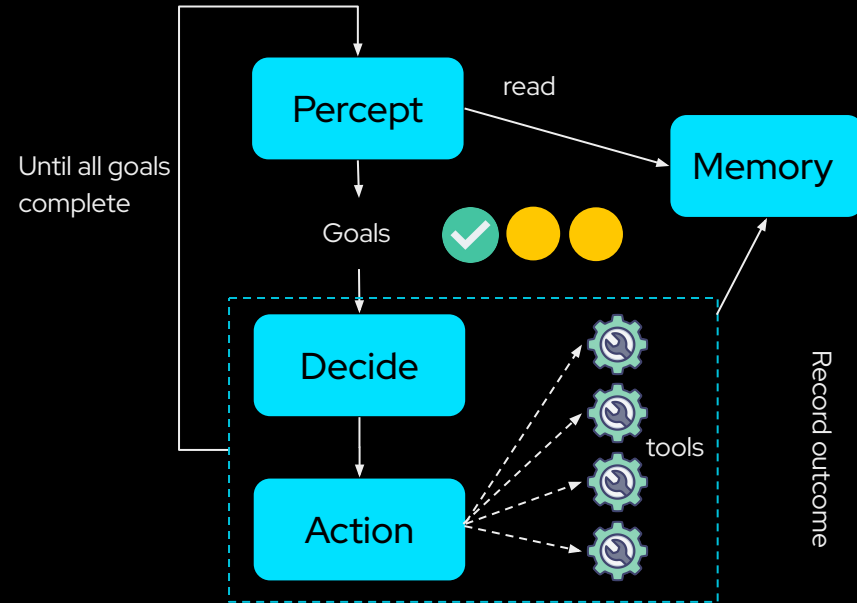
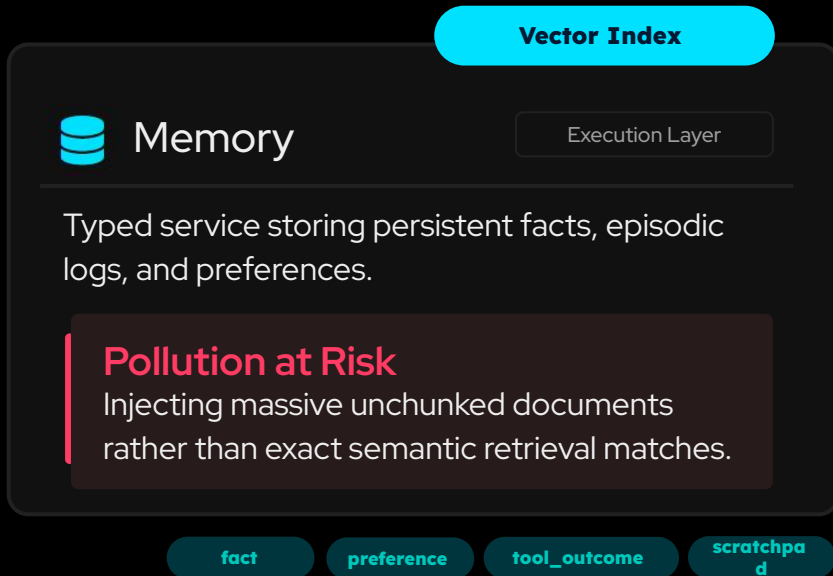
Execution Layer

Executes the dispatched tool and returns the resulting payload.

Pollution at Risk
Returning raw payloads (e.g., 6MB HTML dumps) directly into the chat history.

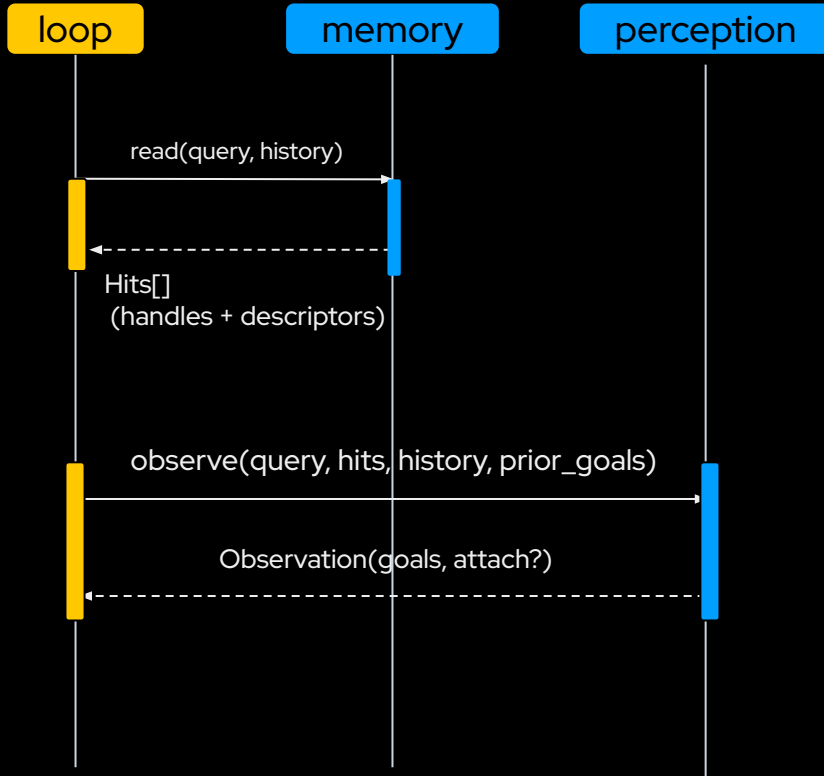


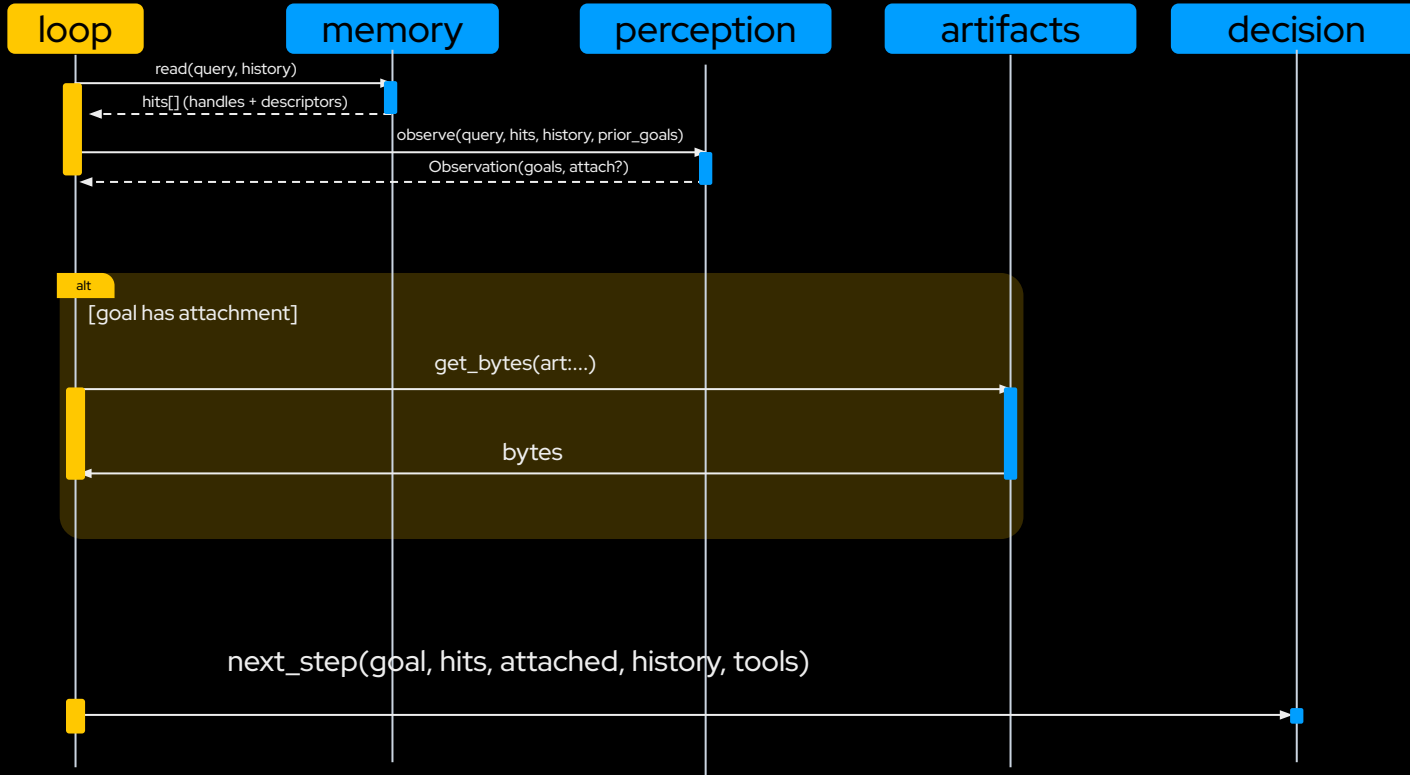
1. Dispatches the chosen MCP tool.
2. Pushes large results to the artifact store and returns a short descriptor.

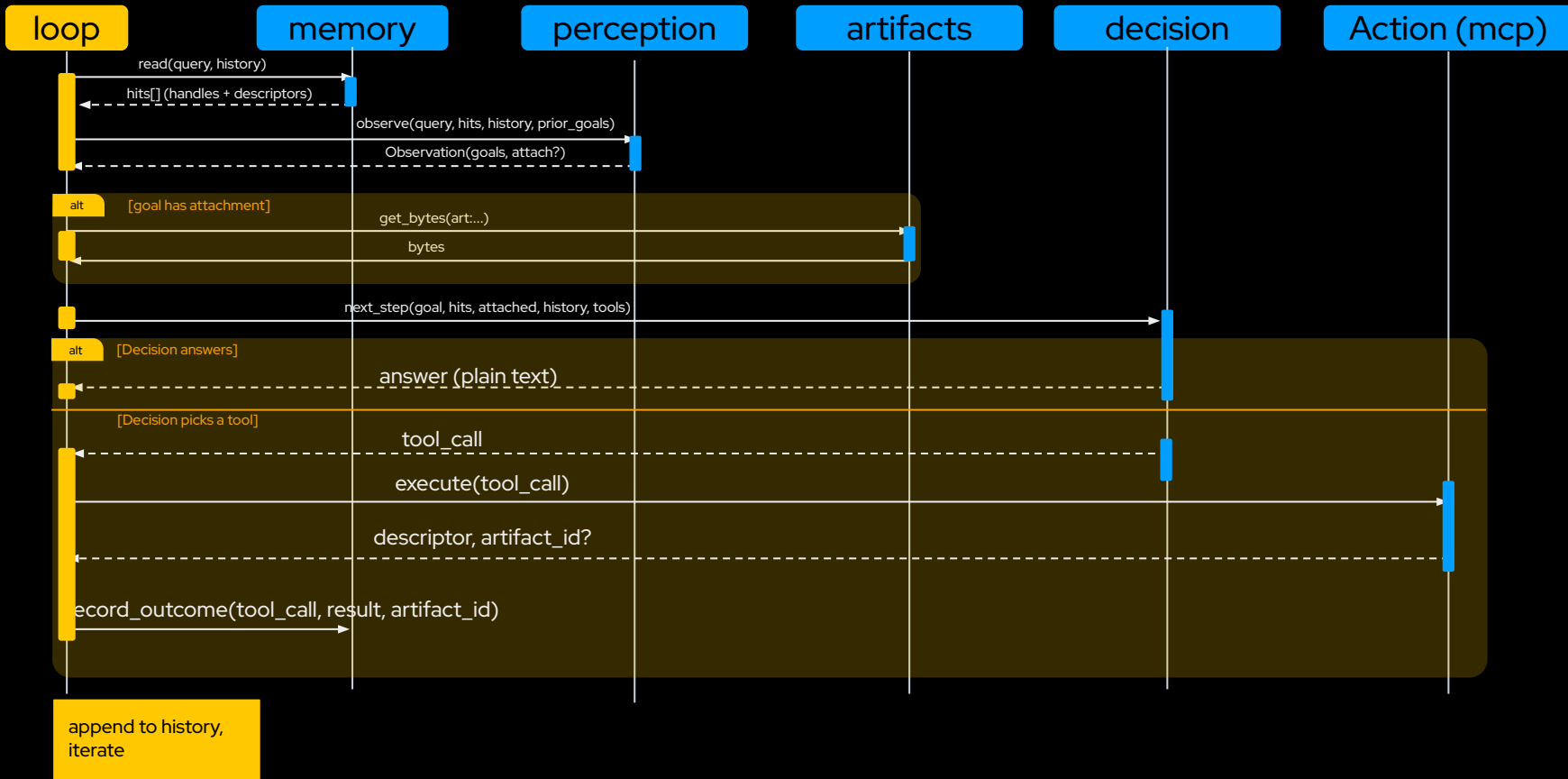


1. A typed service that stores facts, preferences, tool outcomes, and scratchpad entries.
2. Exposes read(query, history) and write methods.









MCP APPs

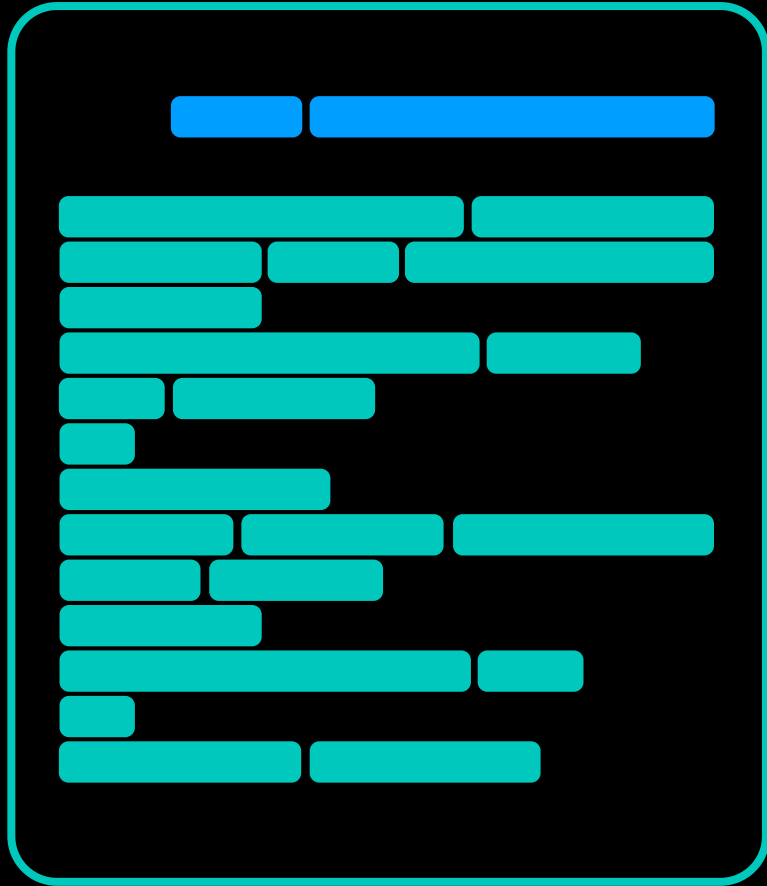


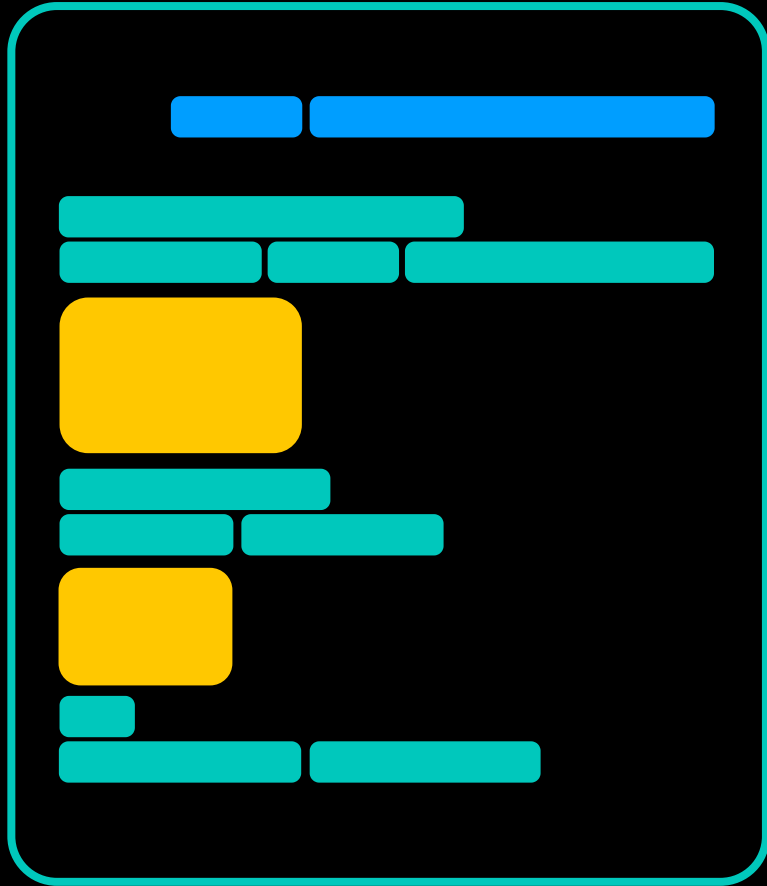
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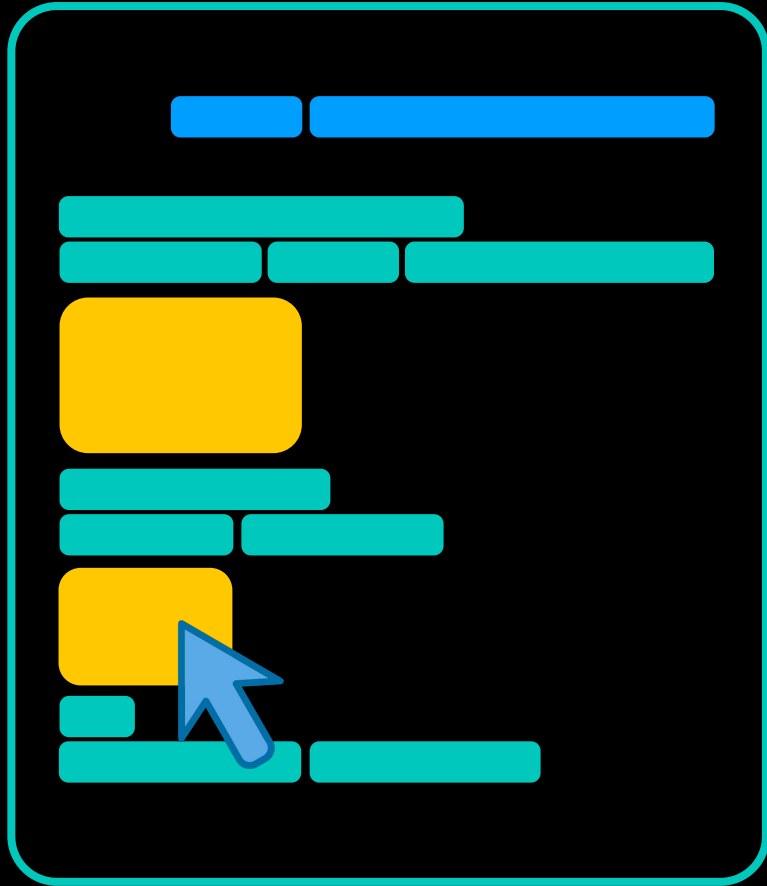
Spent decades perfecting the
UX.

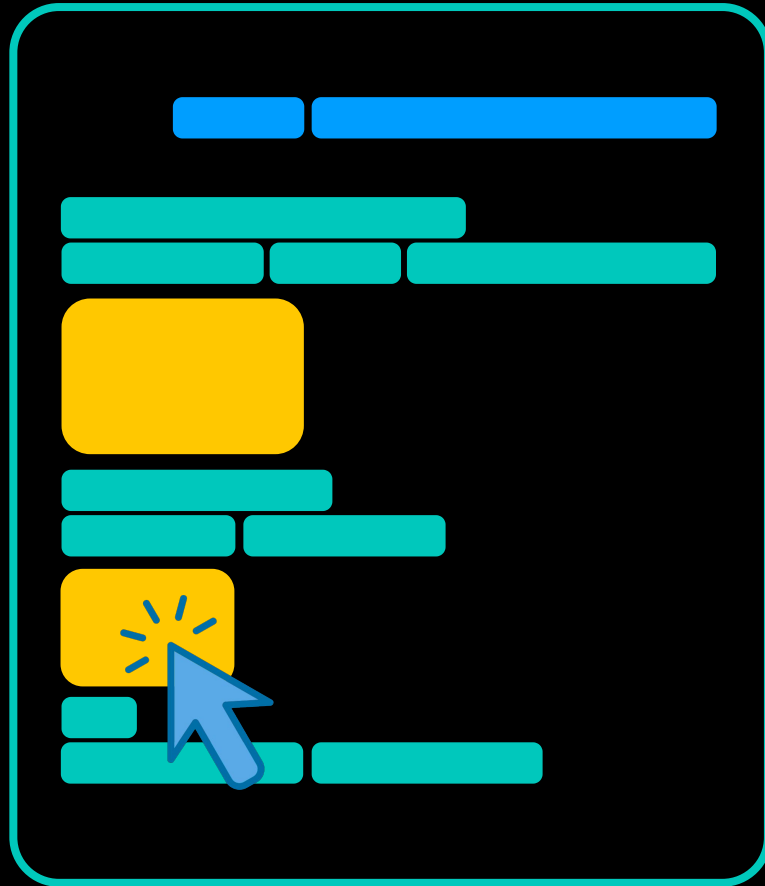
Why evolve backward to **text**?

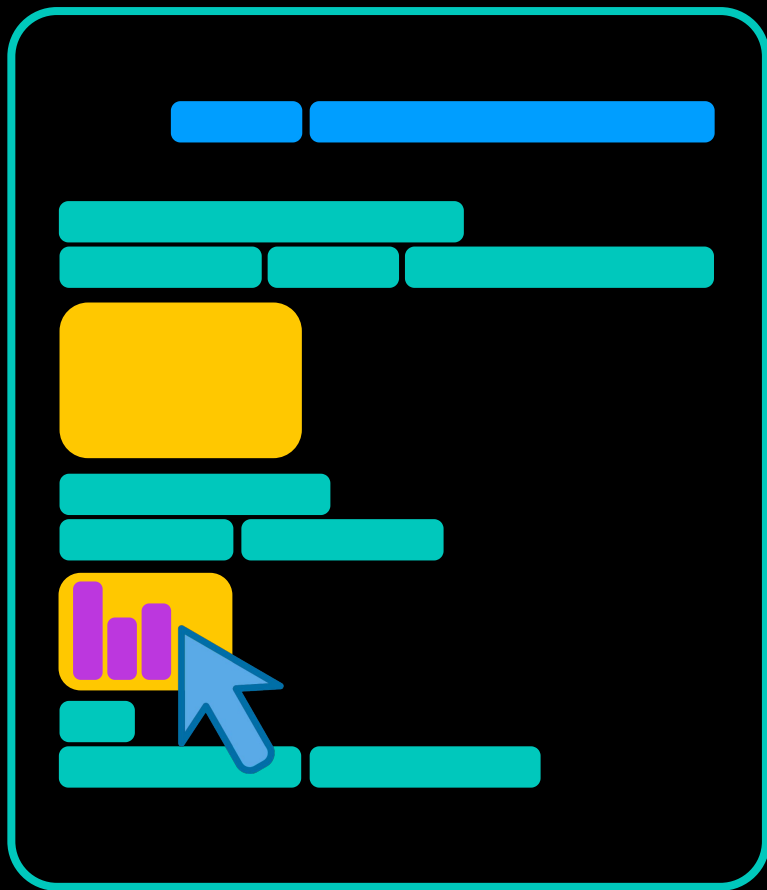








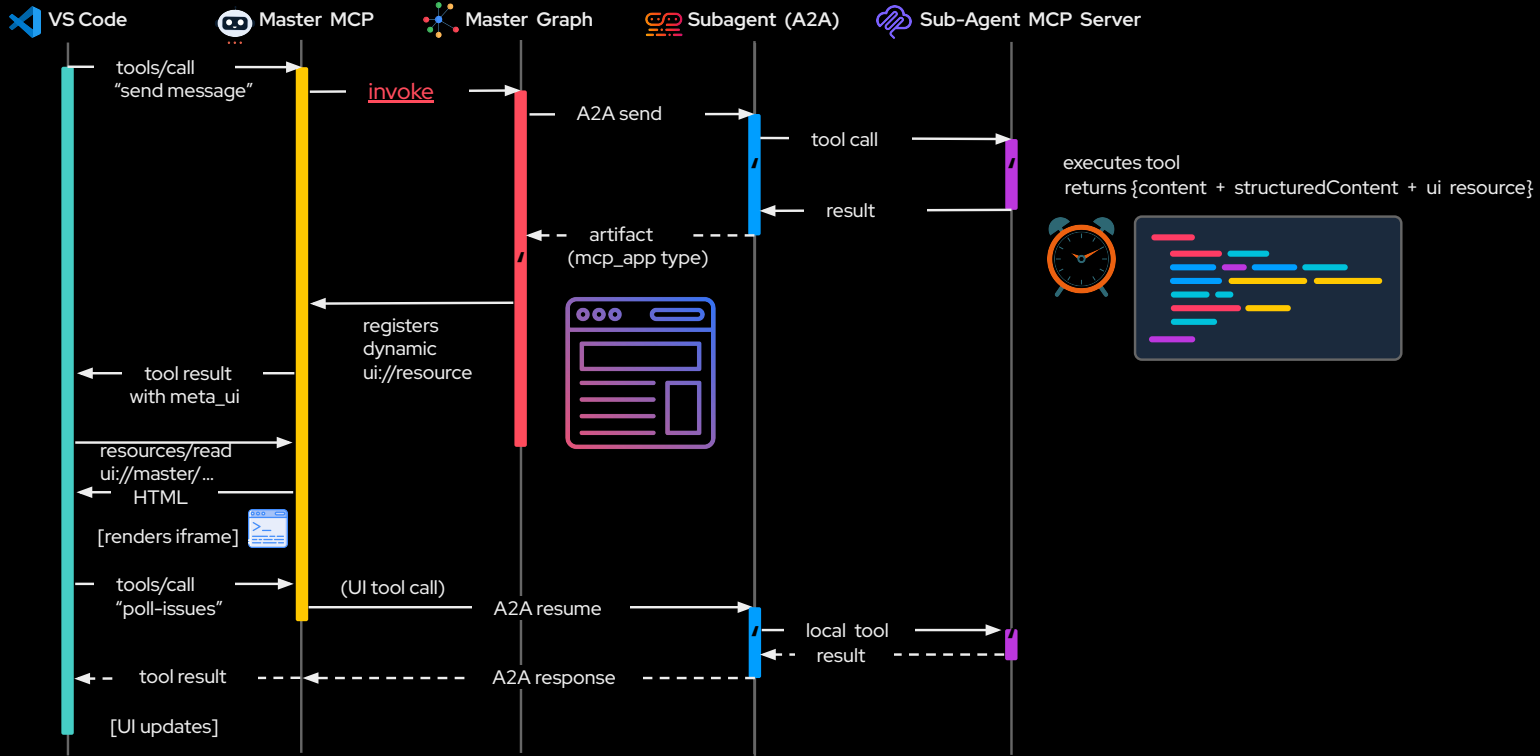




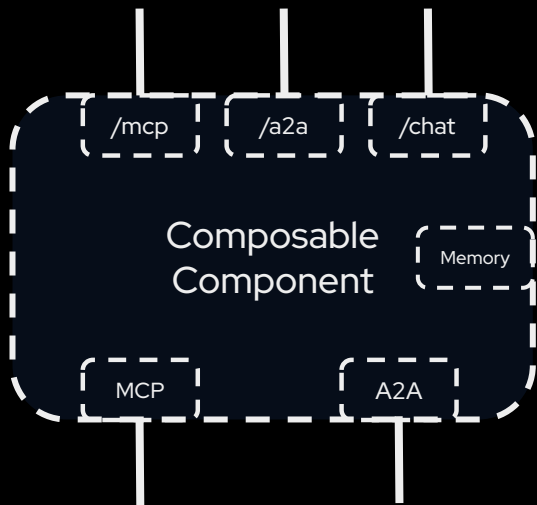
How do we even pass **UI** over
A2A?



Sequence Diagram: Full Round-Trip



What if!



agent-template.yaml

```
version: "1"
agent_id: "my-agent"

system_prompt: |
  You are a helpful SRE assistant.
  Use available tools to answer questions about incidents and system health.

llm:
  provider: "bedrock"
  model: "anthropic.claude-3-5-sonnet-20241022-v2:0"

mcp_tools:
  - name: "ops-tools"
    url: "http://localhost:8001/mcp"
    auth:
      mode: "static"
      header_value_env: "OPS_TOOL_TOKEN"

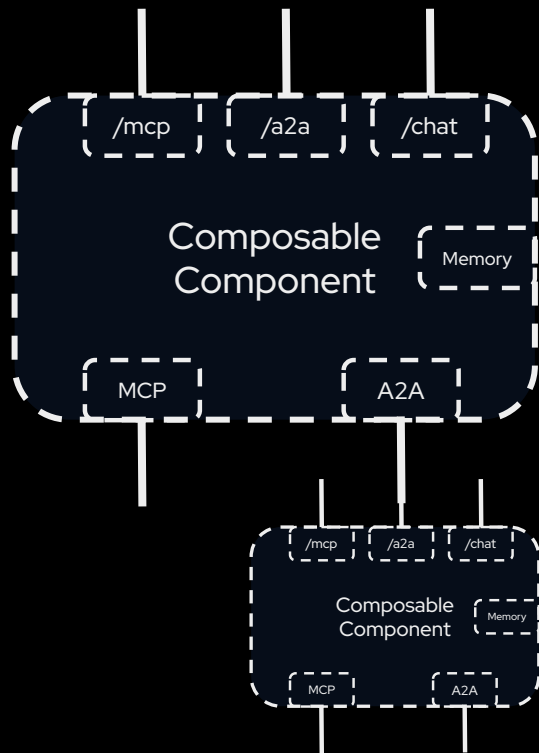
sub_agents:
  - name: "incident-specialist"
    agent_card: "http://incident-agent:8000/a2a/.well-known/agent-card.json"
    auth:
      mode: "passthrough"

hitl_policy:
  default_mode: "auto_stream"
  auto_approve: false

auth:
  ingress:
    dev_mode: true
```



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```



Meet the Speakers



Adnan Vahora

Software Engineer

Motorola Solutions



Dhwani Suthar

Software Engineer

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