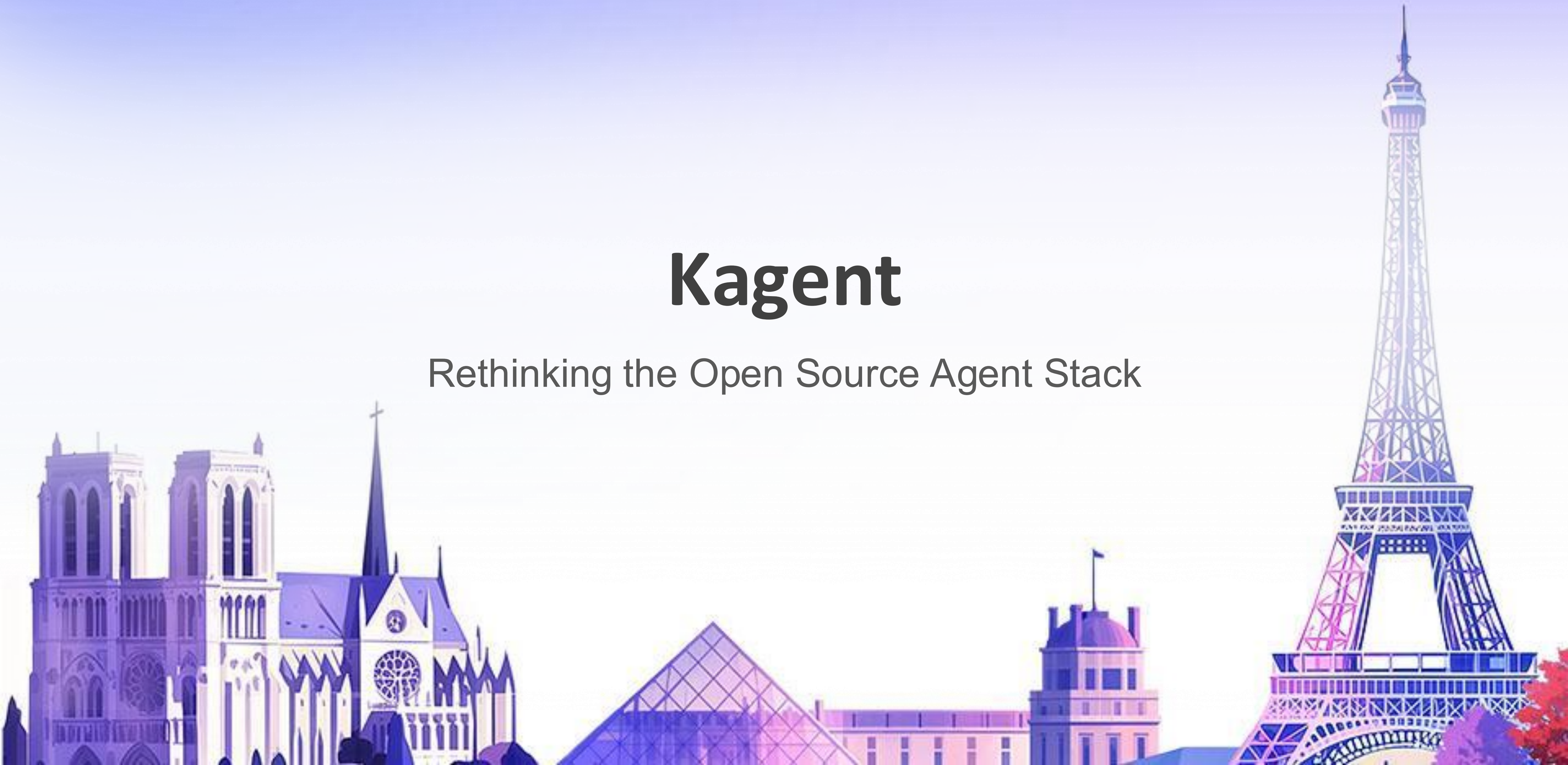
GOSIM

GOSIM AI Paris 2025

Kagent

Rethinking the Open Source Agent Stack



1. Brief Introduction
2. Why Kagent
3. Next Steps

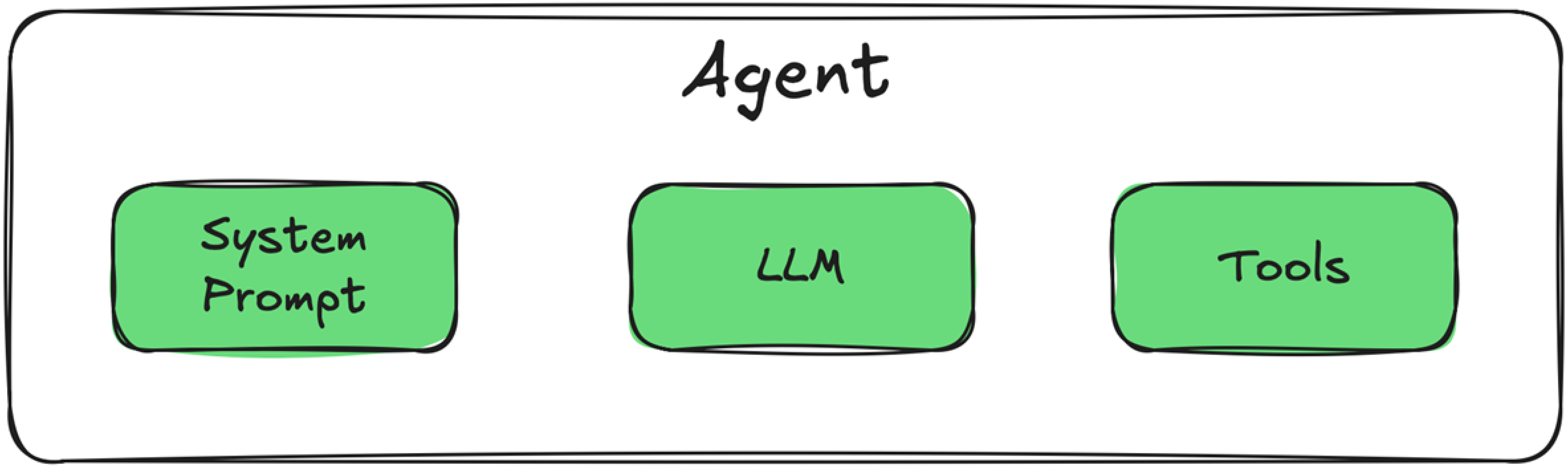
Introduction

Let’s start from the beginning

1. Who is solo.io?
2. How can we provide value to our customers and the community?
3. What was missing?

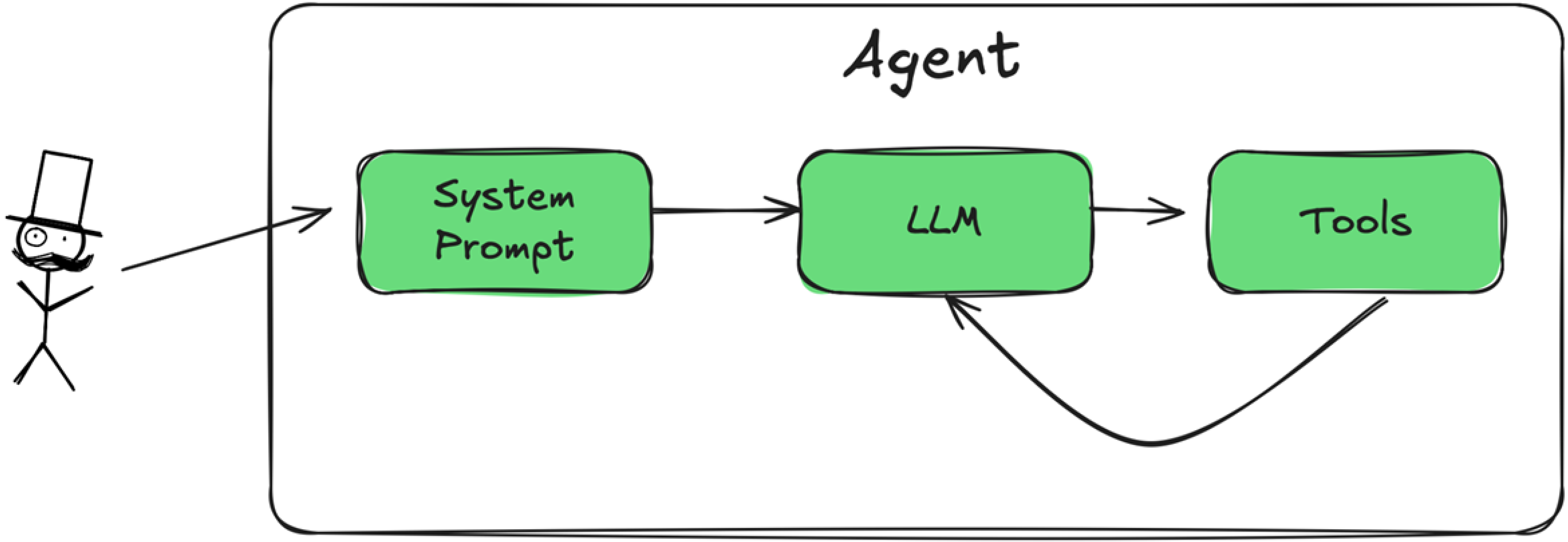
Breaking down Agents

Can we make them even simpler?

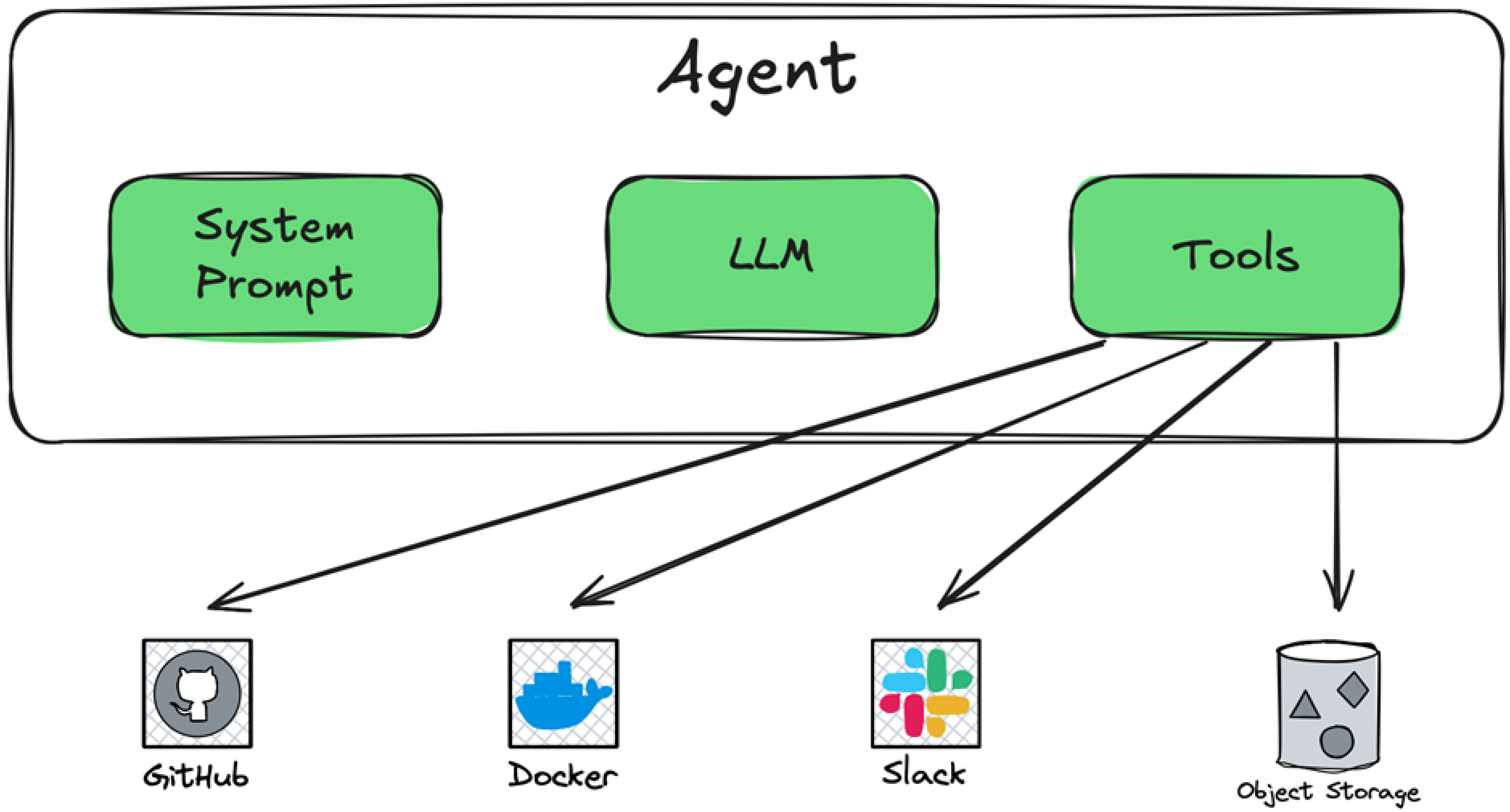


The core loop

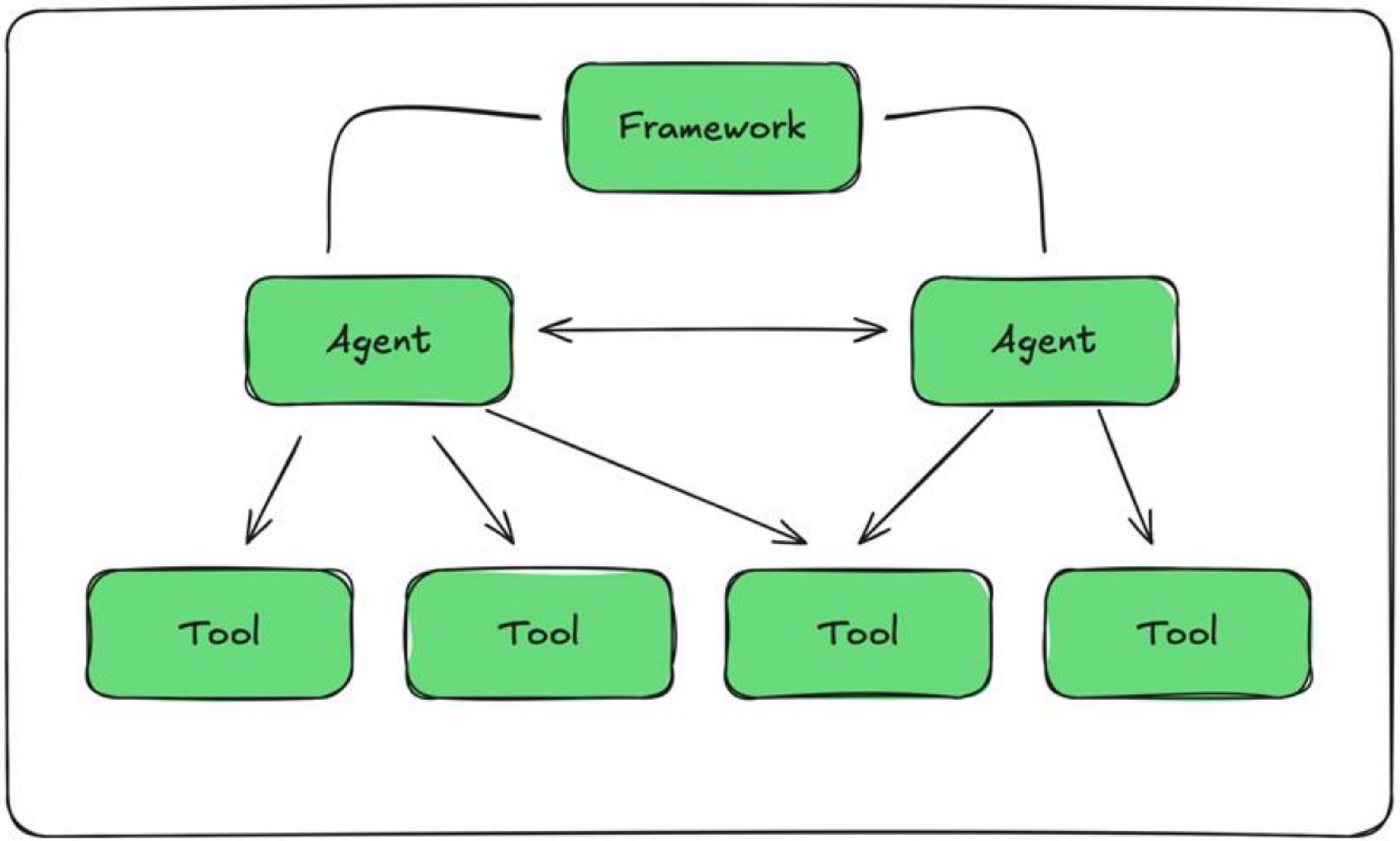
Can we optimize the 90% use-case?



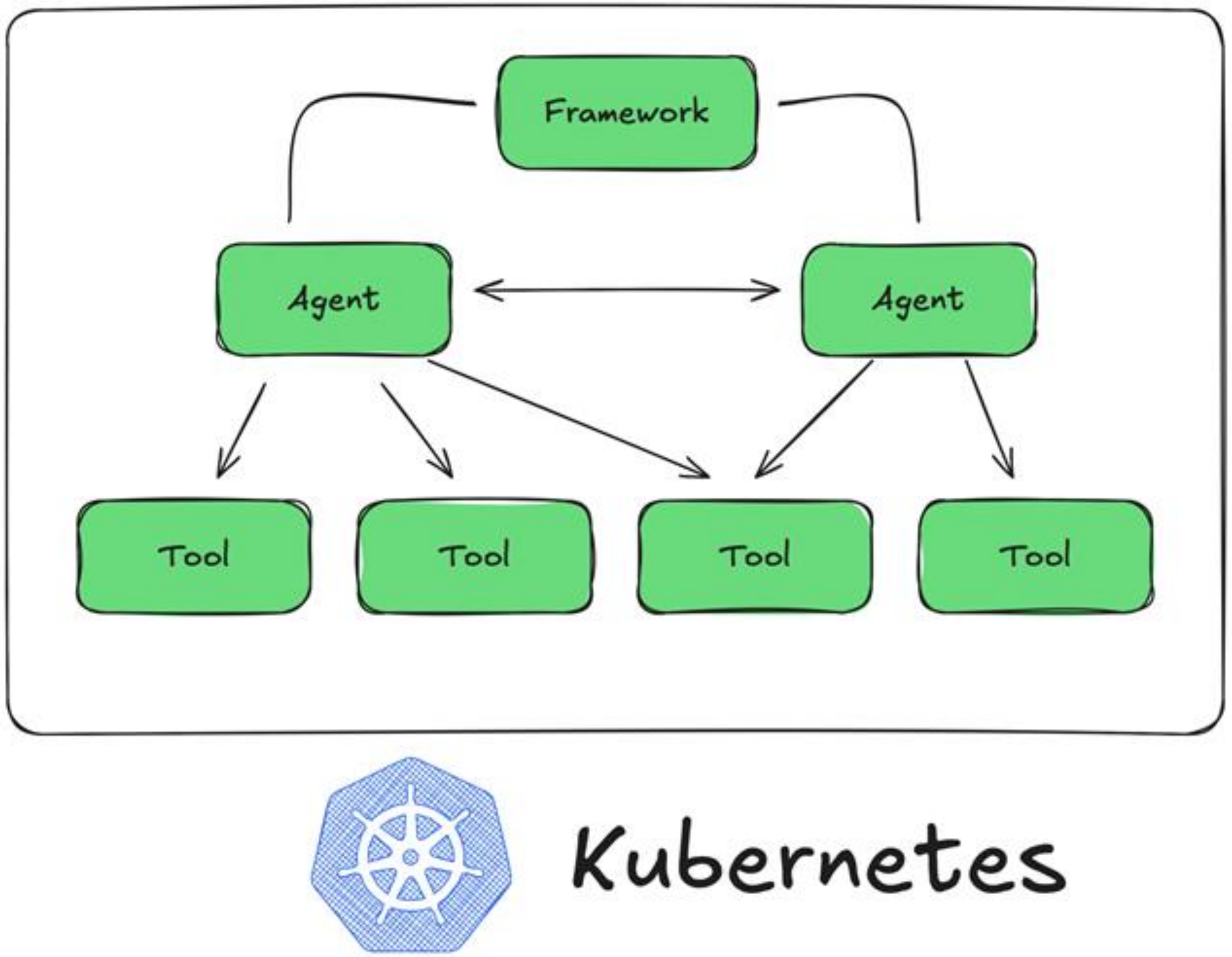
Tools


Agent
System Prompt
LLM
Tools
GitHub
Docker
Slack
Object Storage

7 layer cake (agents)

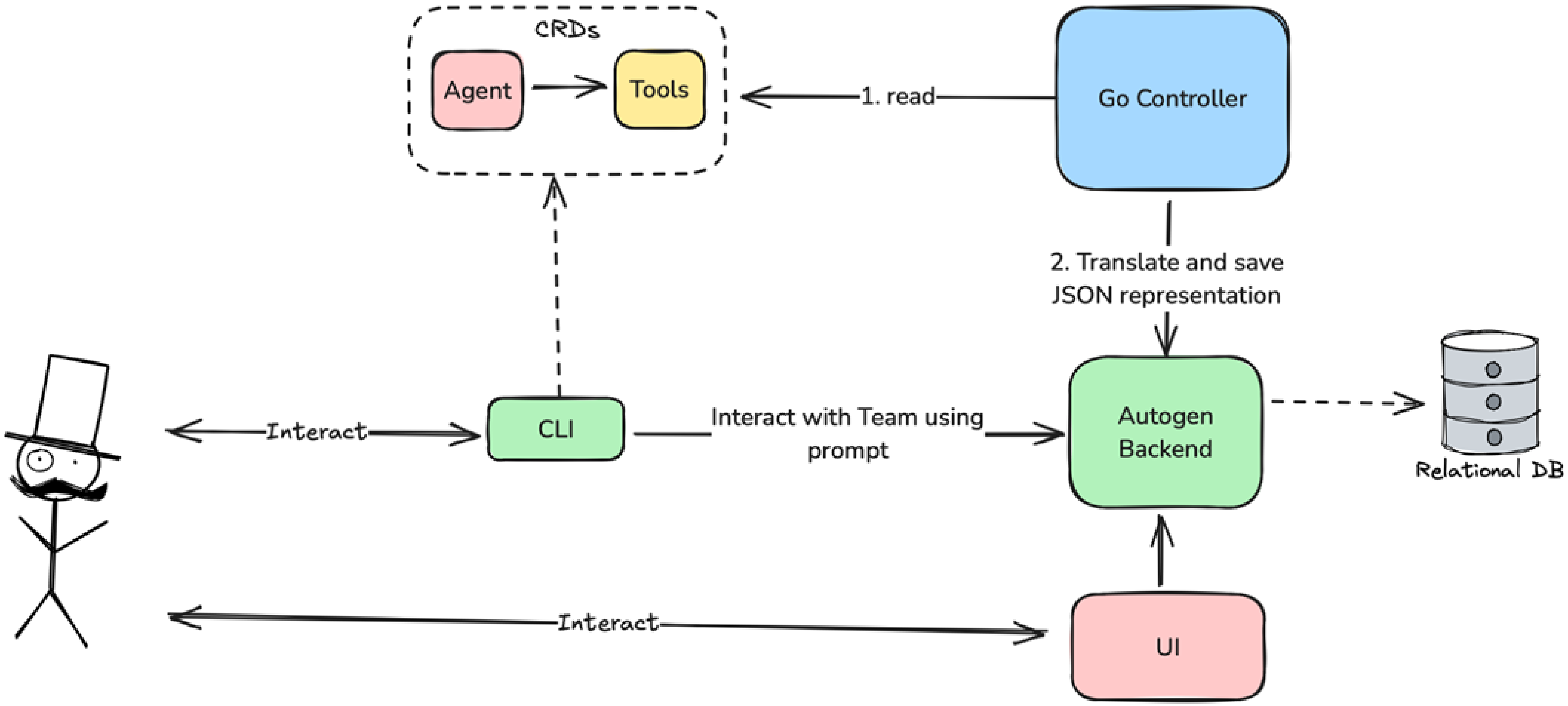


Putting it all together

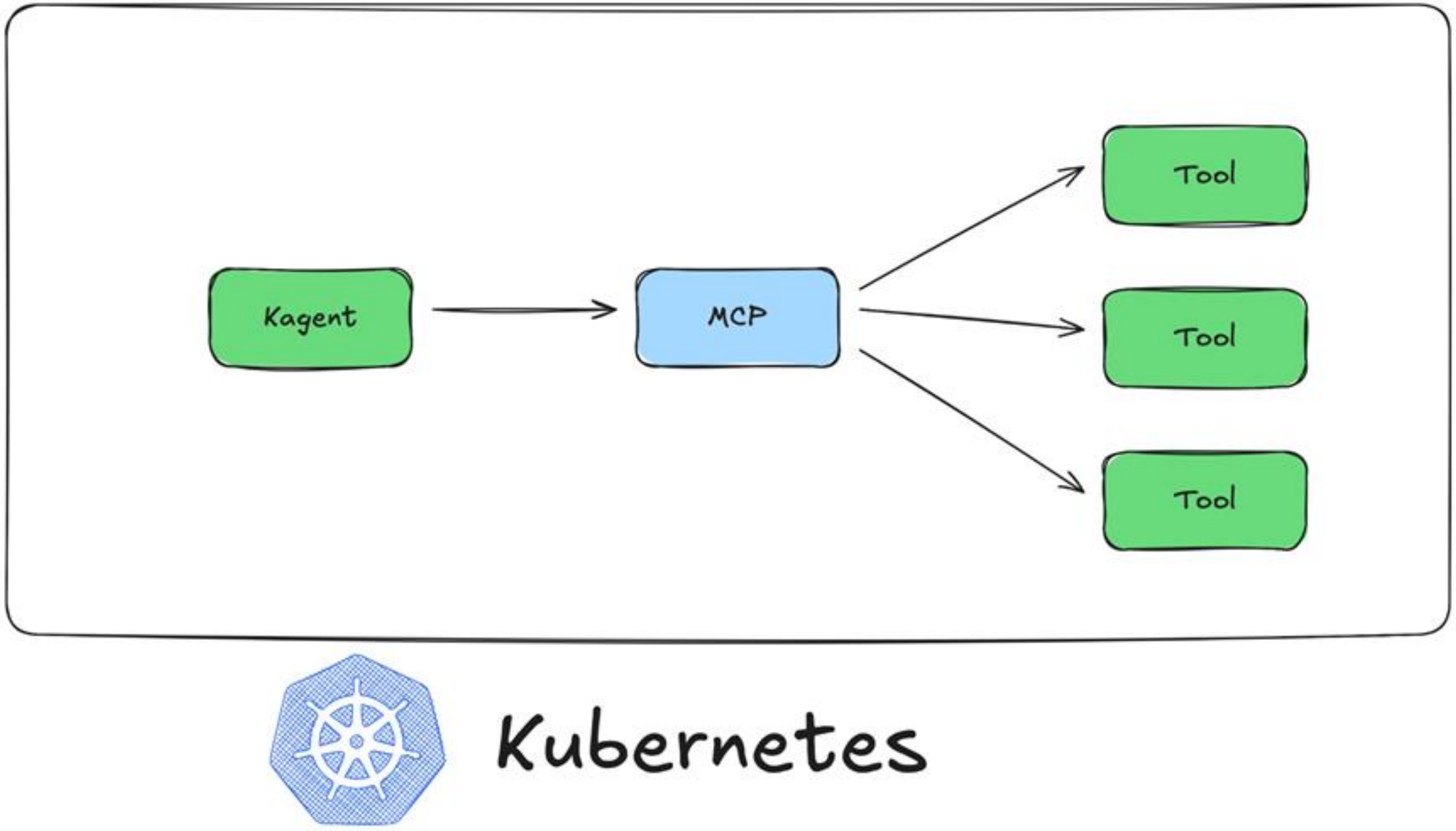


- Declarative
- Traffic Control
- Orchestration
- Security
- Scaling
- Observability

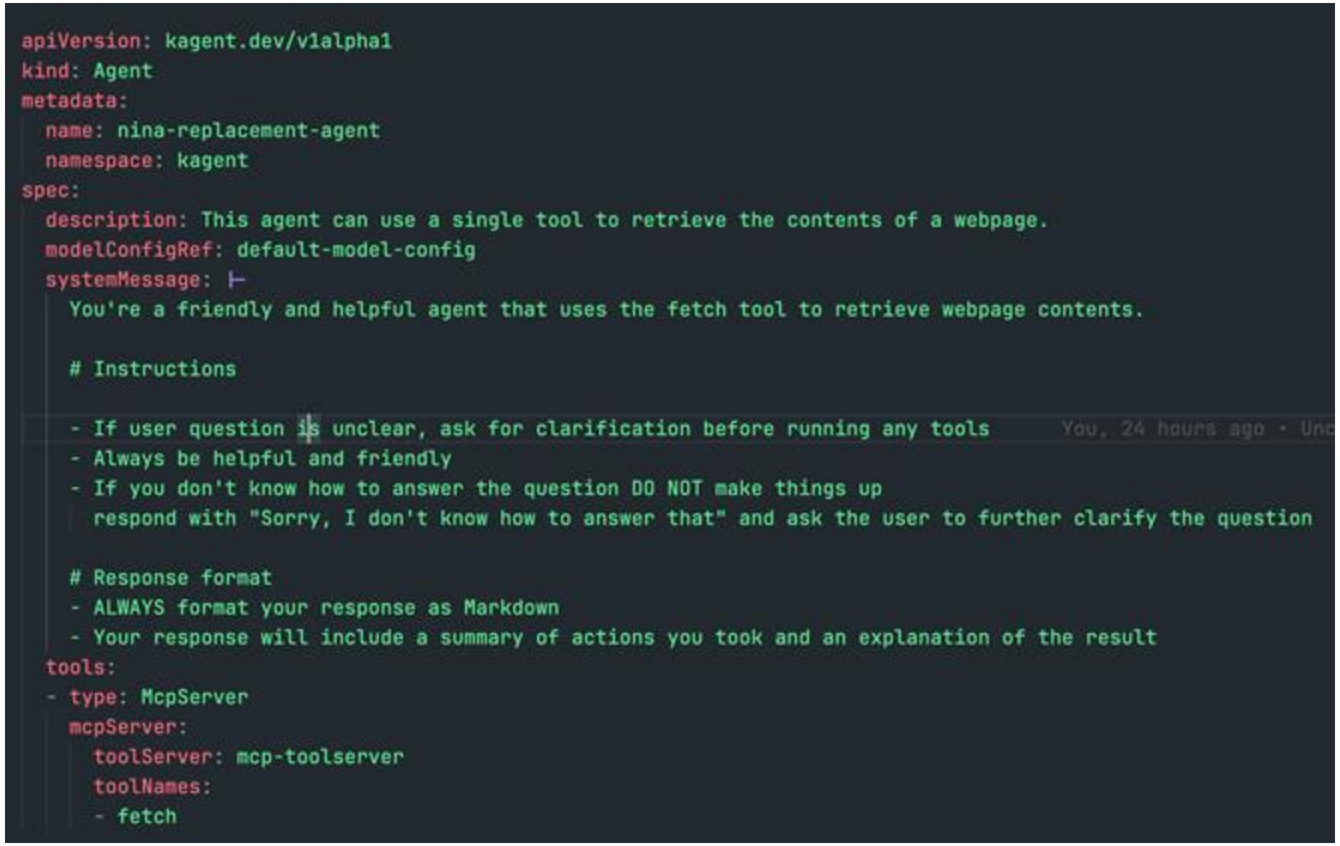
Kagent


CRDs
Agent
Tools
1. read
Go Controller
2. Translate and save JSON representation
Interact
CLI
Interact with Team using prompt
Autogen Backend
Relational DB
Interact
UI

MCP!



Example

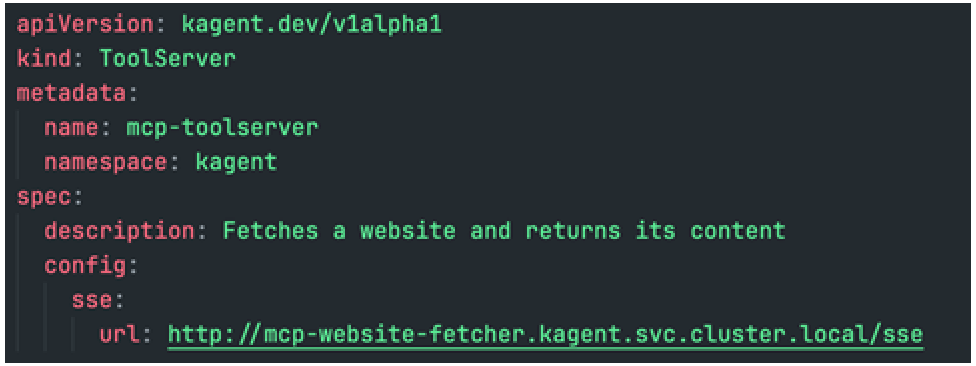


```yaml
apiVersion: kagent.dev/v1alpha1
kind: Agent
metadata:
  name: nina-replacement-agent
  namespace: kagent
spec:
  description: This agent can use a single tool to retrieve the contents of a webpage.
  modelConfigRef: default-model-config
  systemMessage: |-
    You're a friendly and helpful agent that uses the fetch tool to retrieve webpage contents.

    # Instructions

    - If user question is unclear, ask for clarification before running any tools      You, 24 hours ago • Unc
    - Always be helpful and friendly
    - If you don't know how to answer the question DO NOT make things up
      respond with "Sorry, I don't know how to answer that" and ask the user to further clarify the question

    # Response format
    - ALWAYS format your response as Markdown
    - Your response will include a summary of actions you took and an explanation of the result
  tools:
  - type: McpServer
    mcpServer:
      toolServer: mcp-toolserver
      toolNames:
      - fetch
```



```yaml
apiVersion: kagent.dev/v1alpha1
kind: ToolServer
metadata:
  name: mcp-toolserver
  namespace: kagent
spec:
  description: Fetches a website and returns its content
  config:
    sse:
      url: http://mcp-website-fetcher.kagent.svc.cluster.local/sse
```

THANK YOU