



MCP
Dev Summit
Mumbai

Who's Calling?

Bringing Identity to MCP Host

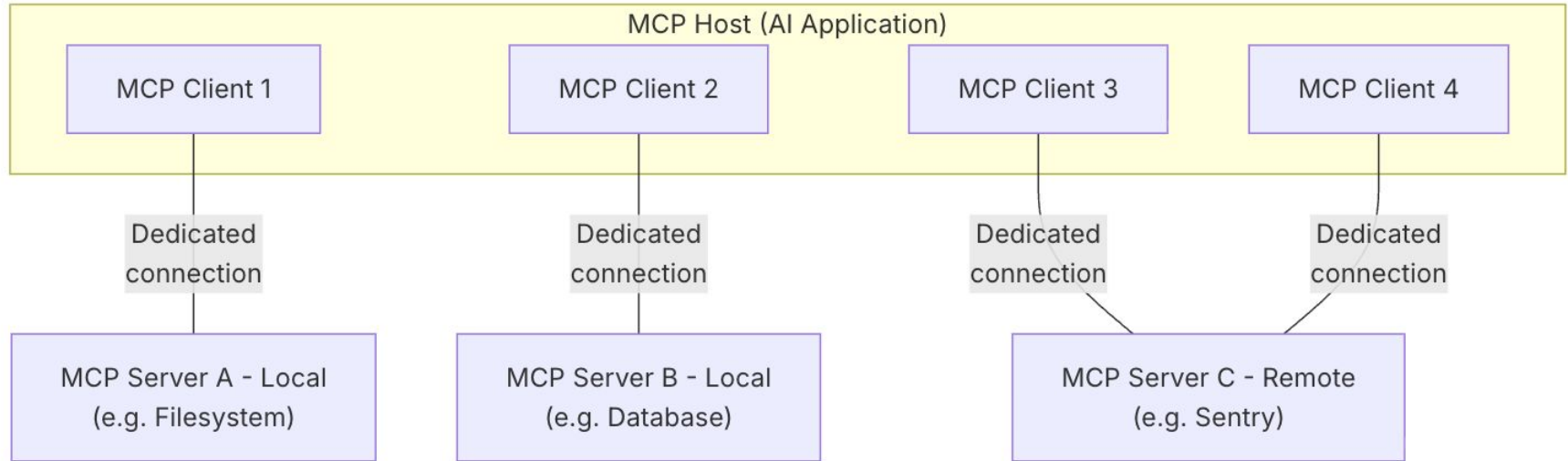


Ayesha Dissanayaka

Associate Director / Architect



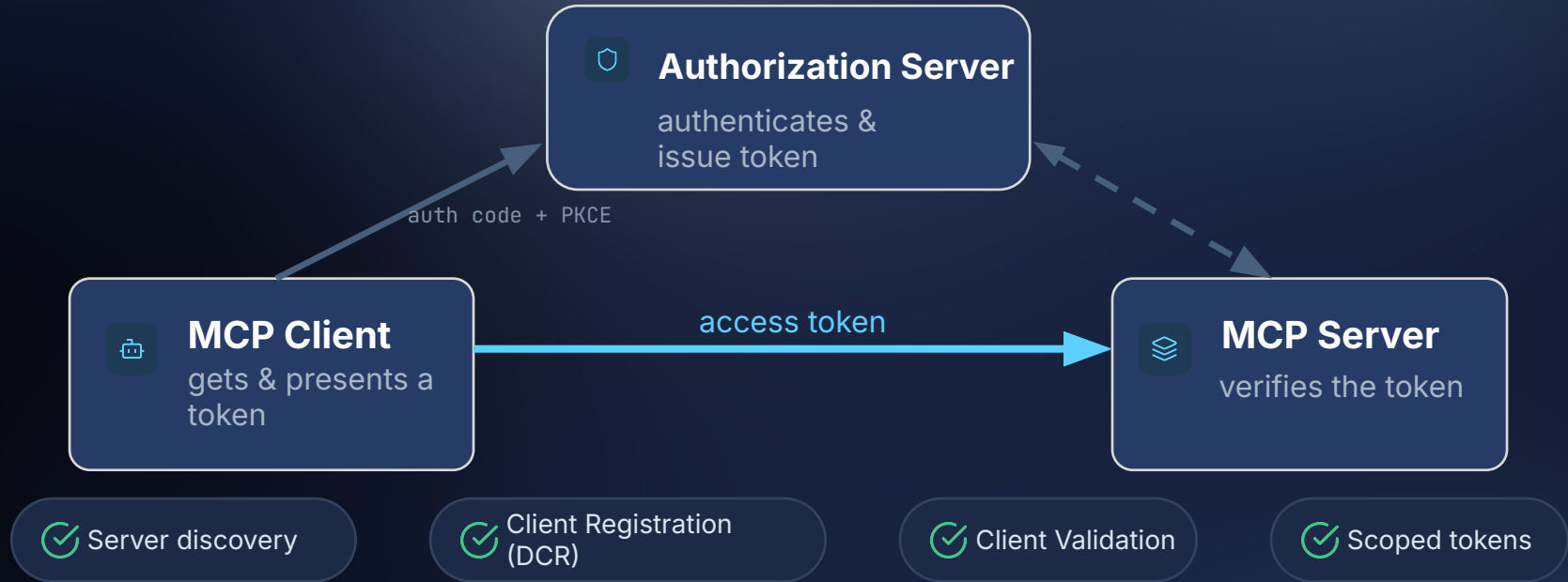
MCP Architecture



<https://modelcontextprotocol.io/docs/learn/architecture>



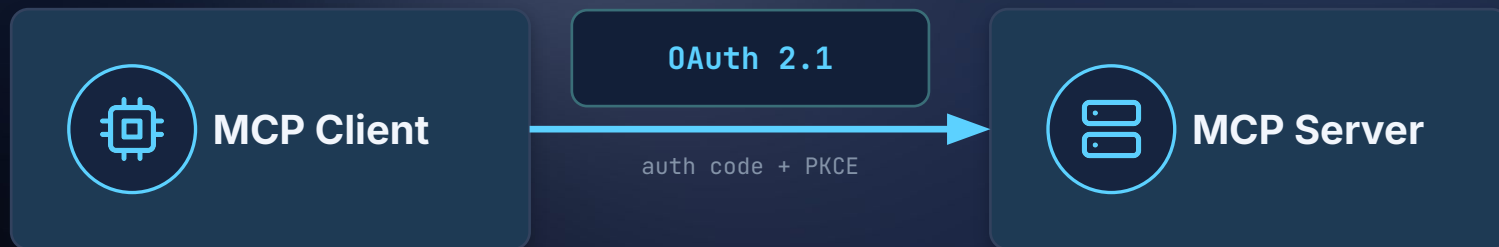
Where spec focus - A clean OAuth 2.1 story



For the client-server edge, this is genuinely solved. Now notice what's in this picture — and what isn't.



Where spec focus today



✓ Server discovery

✓ Client Registration (DCR)

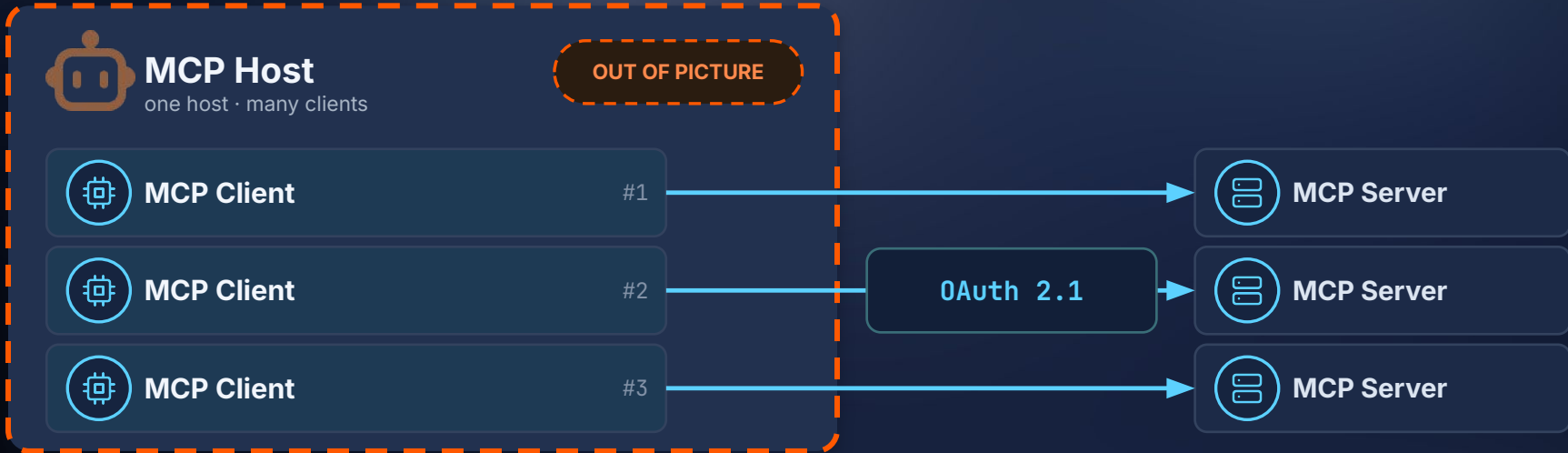
✓ Client Validation

✓ Scoped tokens

For the client-server edge, this is genuinely solved. Now notice what's in this picture — and what isn't.



The host is the **control center**



That's where enterprise deployments quietly break.



The agents enterprises will build

Same MCP plumbing — different functional modes, and very different access patterns.

ON USER'S BEHALF



Delegated copilots

IDE coding copilot · IT-helpdesk assistant · CRM email drafting



Async assistants

Overnight inbox triage · 6am morning brief · auto-filed expenses

ON ITS OWN PERMISSIONS



Shared service agents

Public support assistants · KB Q&A · procurement desk



Autonomous workloads

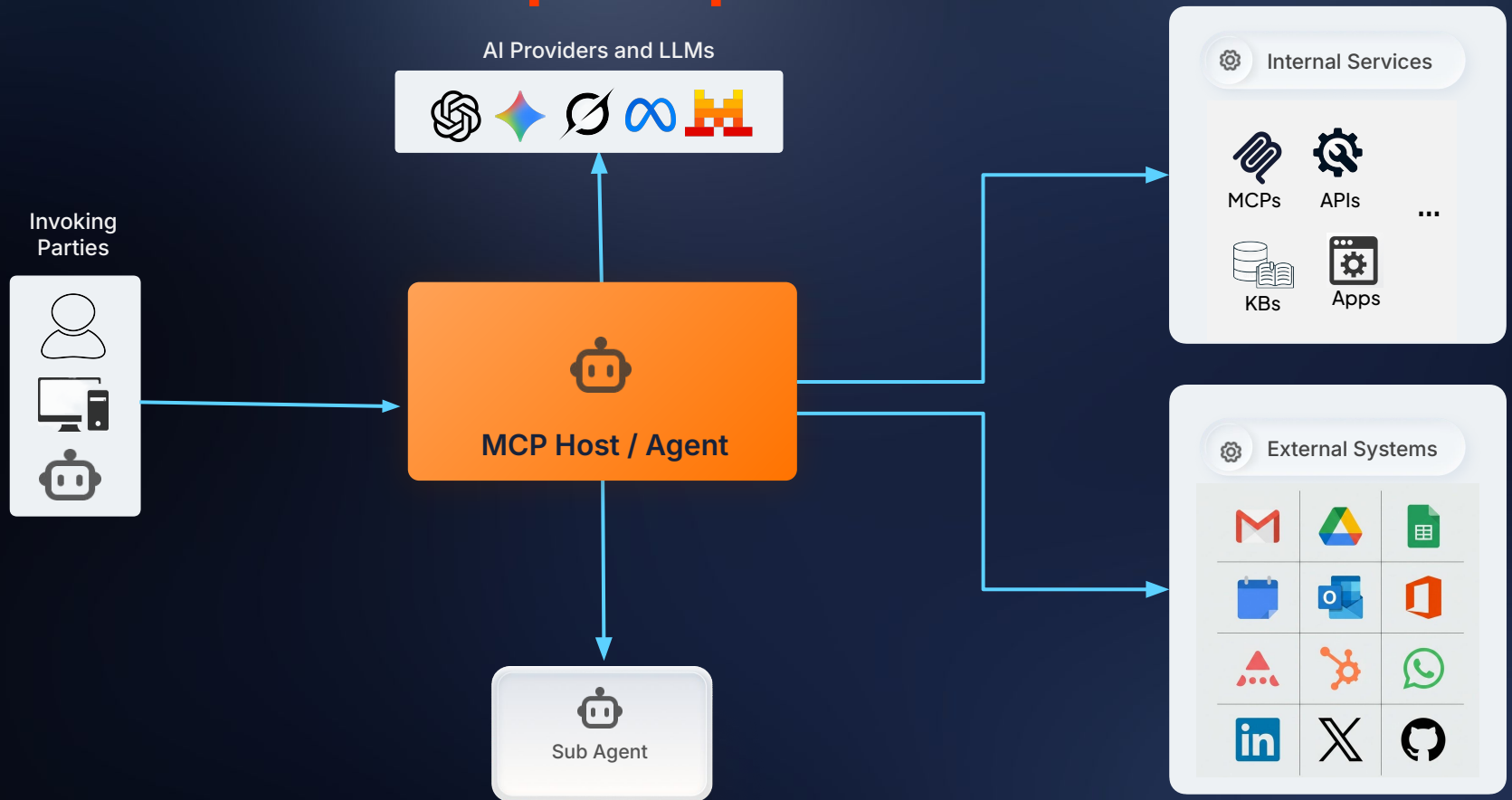
SRE remediation · security response · ETL pipelines

INTERACTIVE
human in the loop

NON-INTERACTIVE
ambient · headless, autonomous



And it is an **active principle**



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Same MCP plumbing — different functional modes, and very different access patterns.

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Autonomous workloads

SRE remediation · security response · ETL pipelines

INTERACTIVE
human in the loop

NON-INTERACTIVE
scheduled · autonomous



The security many starts with: Long-Lived API Keys



What Teams Do

1. Generate a personal access token, or get a API key
2. Grant the broadest scopes "to be safe"
3. Set expiry to 1 year (or never)
4. Paste it into an env variable



The Risk

- ▶ Massively over-privileged
- ▶ Long-lived — a standing liability
- ▶ No per-action audit trail
- ▶ Violates principle of least privilege





Your **Agent X**

An ordinary enterprise AI agent — the one you shipped last quarter, or the one you're about to.

01. Do you even exist?

02. Who do we know it's you?

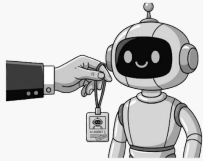
03. What are you allowed to do?

04. Can you prove what you did?



The **Four A's** : The Pillars of Agent Identity to address AI Agent Challenges

ADMINISTER



AUTHENTICATE



AUTHORIZE

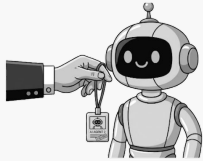


AUDIT



The **Four A's** : The Pillars of Agent Identity to address AI Agent Challenges

ADMINISTER



Define and manage agent identities

- Registration
- Lifecycle
- Deprovision
- Ownership
- Suspension
- Visibility

AUTHENTICATE



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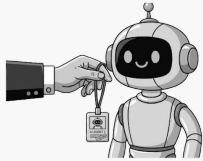


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Secure credentials for agent access

- Attestation
- Zero-trust
- Short Lived tokens
- Credential Rotation, Revocation
- WID integrations

AUTHORIZE

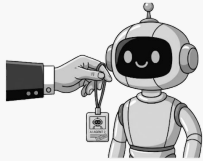


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Enforce policies for agent actions and tool access

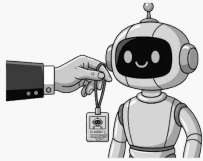
- Least privilege
- Just-in-Time
- Tool level grain
- Autonomous vs. H-I-L approval
- Delegation / on-behalf-of

AUDIT



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- Delegation / chaining

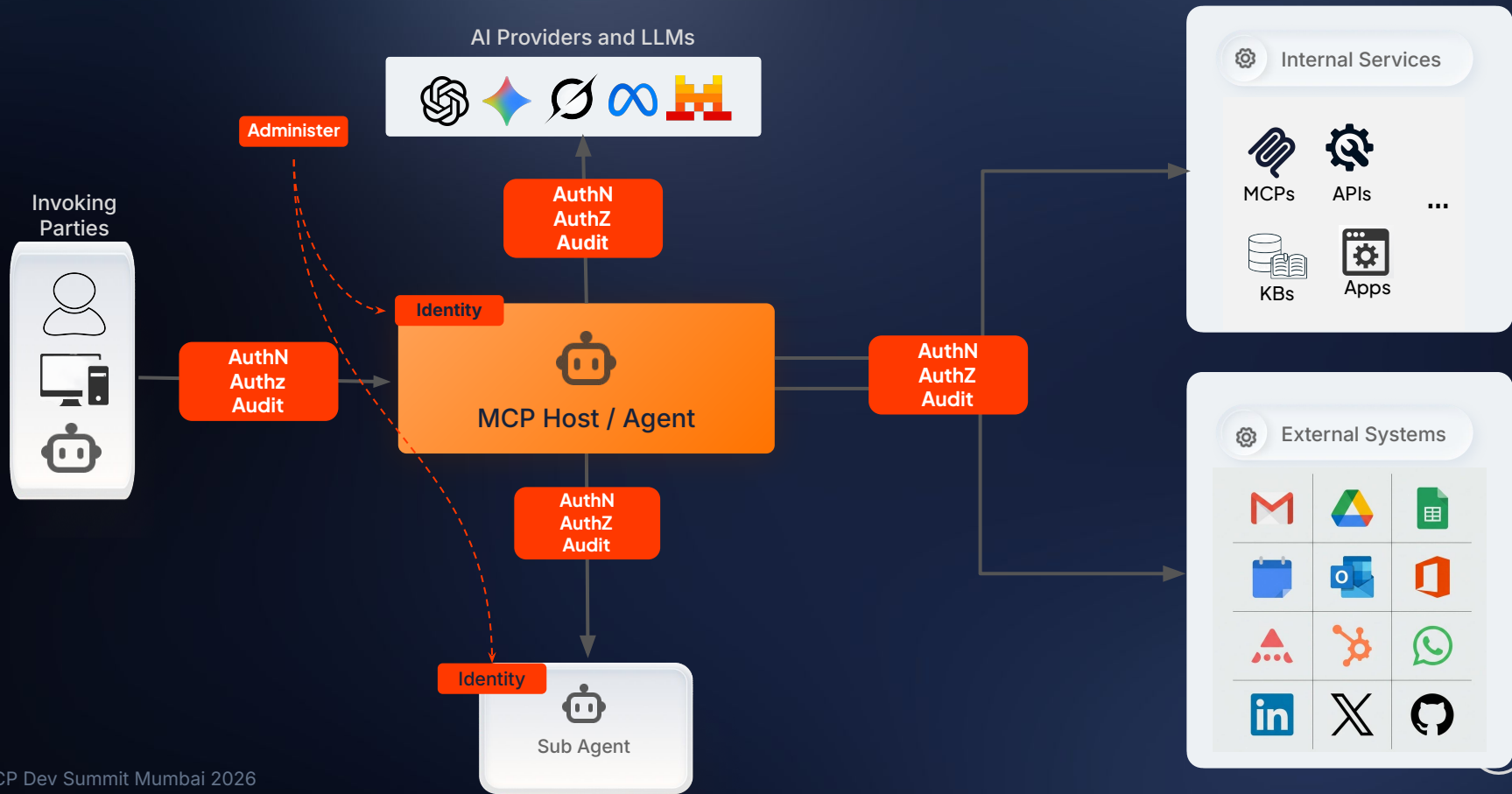
AUDIT



Enable tracking agent activity for accountability

- Audit trail
- Compliance evidence
- Decision provenance
- Anomaly detection
- Forensic replay

Host ID enables the 4A's for each interaction



Welcome back, Ayesha Dissanayaka.

Flights Hotels Trips

Round trip One way Multi-city

From Colombo	To Singapore	Dates Jun 24 - Jun 26	Travelers 2 adults
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Flexible fares
Compare routes, cabins, and timings from one calm workspace.

Protected bookings
Keep booked trips connected to secure account sign-in.

Fast comparison
Filter practical options

FRESH PICKS

Flight ideas for your next window of free time.

AI ASSISTANT
Wayfinder Concierge

Hi Ayesha, How can I help?

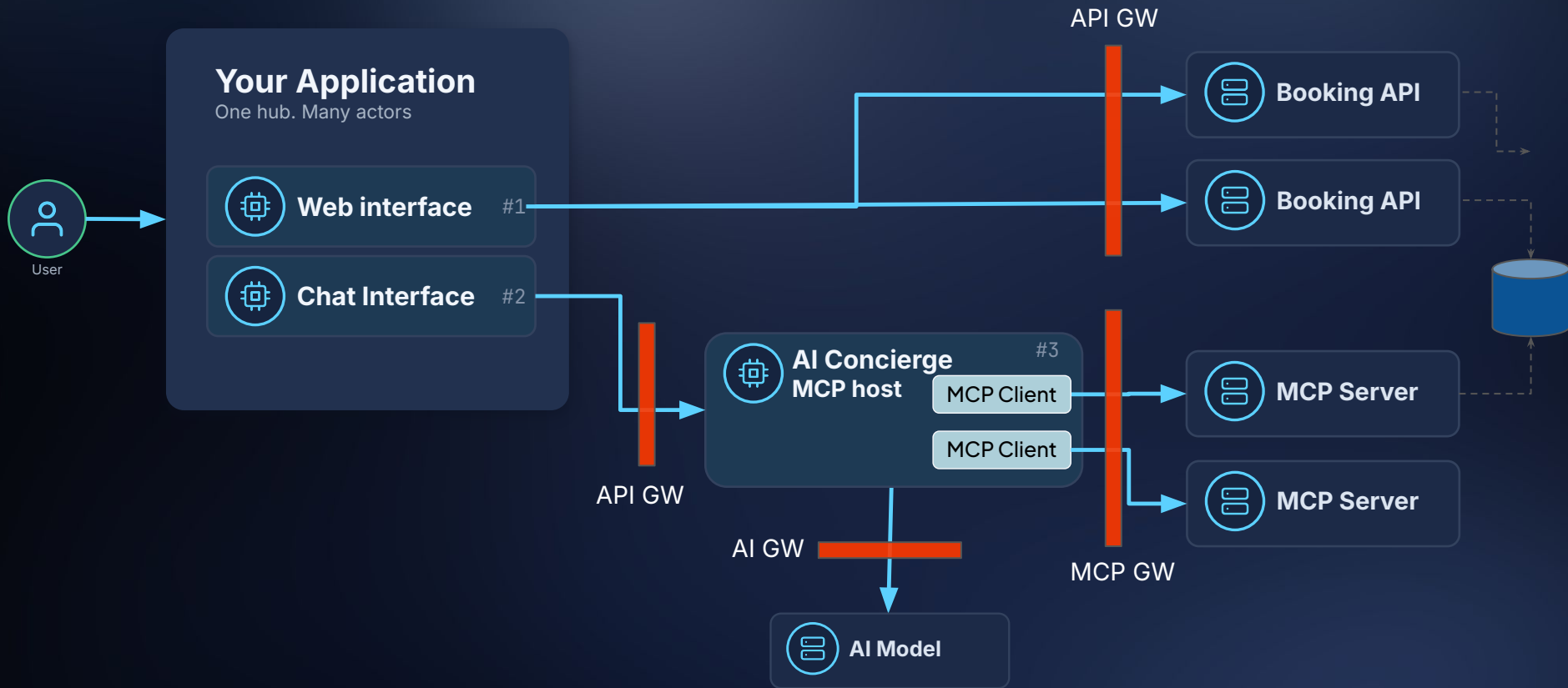
Plan my trip to MCP Dev Summit Mumbai

Thinking...

Ask about flights or bookings

Start searching

Real world scenario in enterprises



Delegation: On-Behalf-Of(OBO) Token

User/Subject
Token

+

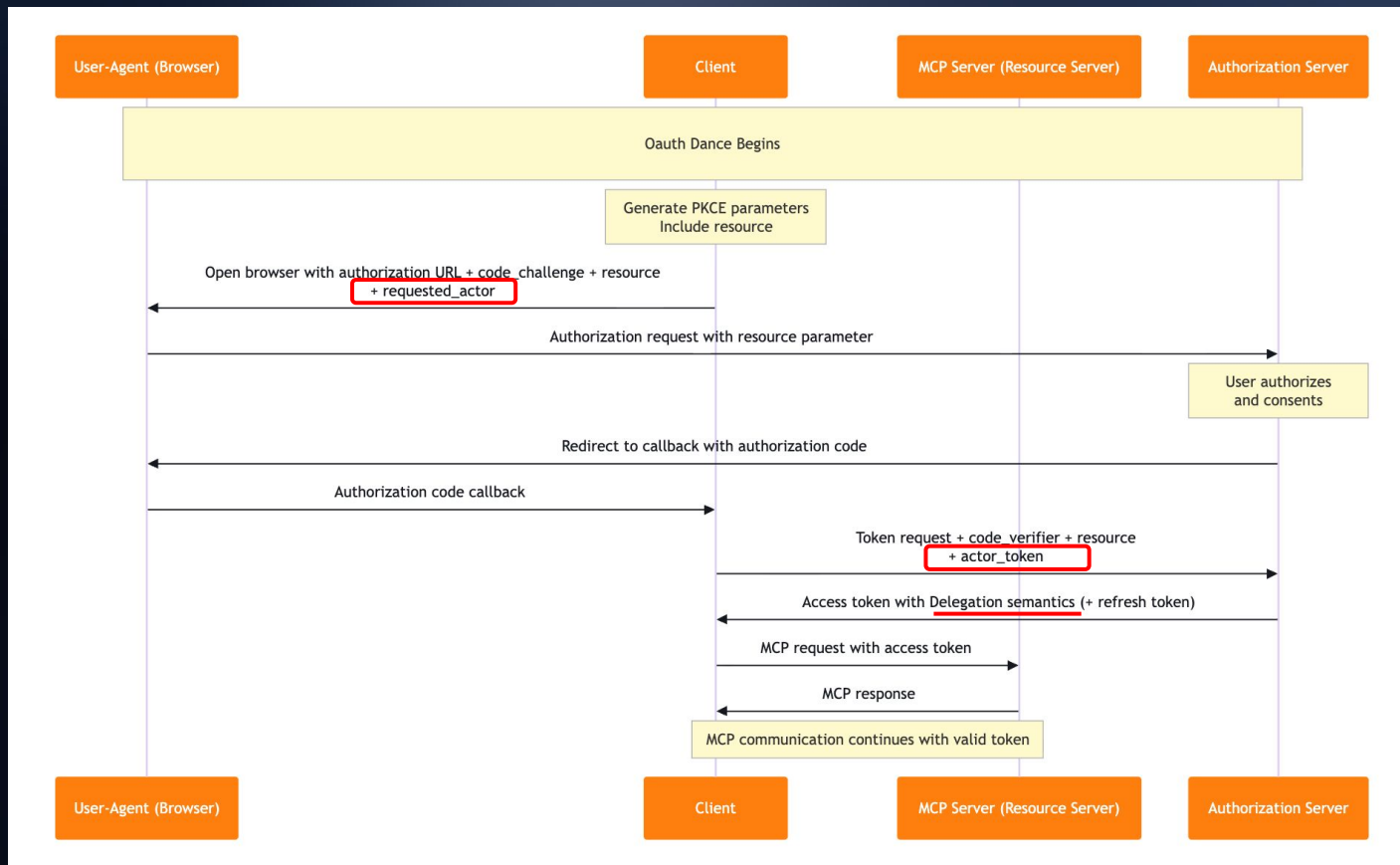
Agent/Actor
Token

Exchange

```
{
  "sub": "7a6f7b26-f9ea-48ea-9012-87d6b54f4055", ← user identifier
  "aut": "APPLICATION_USER",
  "iss": "https://localhost:9443/oauth2/token",
  "client_id": "7KafXIoqkfzS6TugWBBtby9A7FYa", ← OAuth/MCP Client identifier
  "aud": "http://localhost:8000/mcp",
  "nbf": 1762978120,
  "act": {
    "sub": "91bb155e-b23c-4a34-94e5-77478691f4bd" ← agent/MCP Host identifier
  },
  "azp": "7KafXIoqkfzS6TugWBBtby9A7FYa",
  "org_id": "10084a8d-113f-4211-a0d5-efe36b082211",
  "exp": 1762981720,
  "org_name": "Super",
  "iat": 1762978120,
  "jti": "f692e5cc-6906-4935-862d-bdab3a18623c",
  "org_handle": "carbon.super"
}
```



User Consented OBO Token



Where the ecosystem is converging



OAuth Token Exchange

RFC 8693 + actor claims



Workload Identity

SPIFFE / SVID & attestation



On-Behalf-Of Flows

multi-hop agent chains



Back channel Auth

ambient . background . long running



MCP for Enterprise

extending the spec upward



Least Privilege

by default · scopes from the task

The building blocks exist — they're just not yet assembled into the MCP host story. Let's assemble them before ad-hoc workarounds calcify.



So - who's calling?

Make the MCP host an identity you can name, scope, and hold accountable.

Thank you!



MCP
Dev Summit
Bengaluru



WSO2



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Ayesha Dissanayaka

Associate Director / Architect