



adaptTo()

EUROPE'S LEADING AEM DEVELOPER CONFERENCE  
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## Rolling Out MCP on AEM: Lessons from Early Production

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# Every AEM Team is Running the Same Demo

***Claude Desktop. Content fragment. Natural language.  
Everyone claps***

*Then someone asks: "Can we give this to our content authors?"  
That question is where this talk begins.*

# Adobe MCP: The Five Servers

# Adobe's Five AEM MCP Servers

- **aem-content: full read/write access to aem content and assets**
- **aem-content-read-only: safe read access, no write operations**
- **aem-cloud-manager: pipeline operations and environment management**
- **aem-quickstart: local SDK operations and validation**
- **aem-dispatcher: Dispatcher config validation and cache inspection**
- **MCP operates under the authenticated user's identity. It does not add permissions. It uses the ones already there.**



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With great power, comes  
great responsibility

**Connecting  
MCP to AEM  
prod directly  
having write  
access**



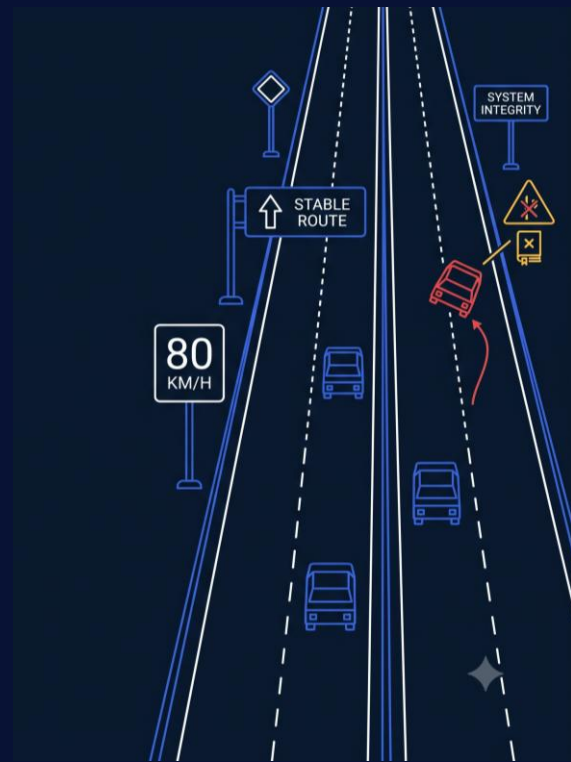
**Your website is  
showing 404  
on landing  
page**



# Good Highways Aren't Enough

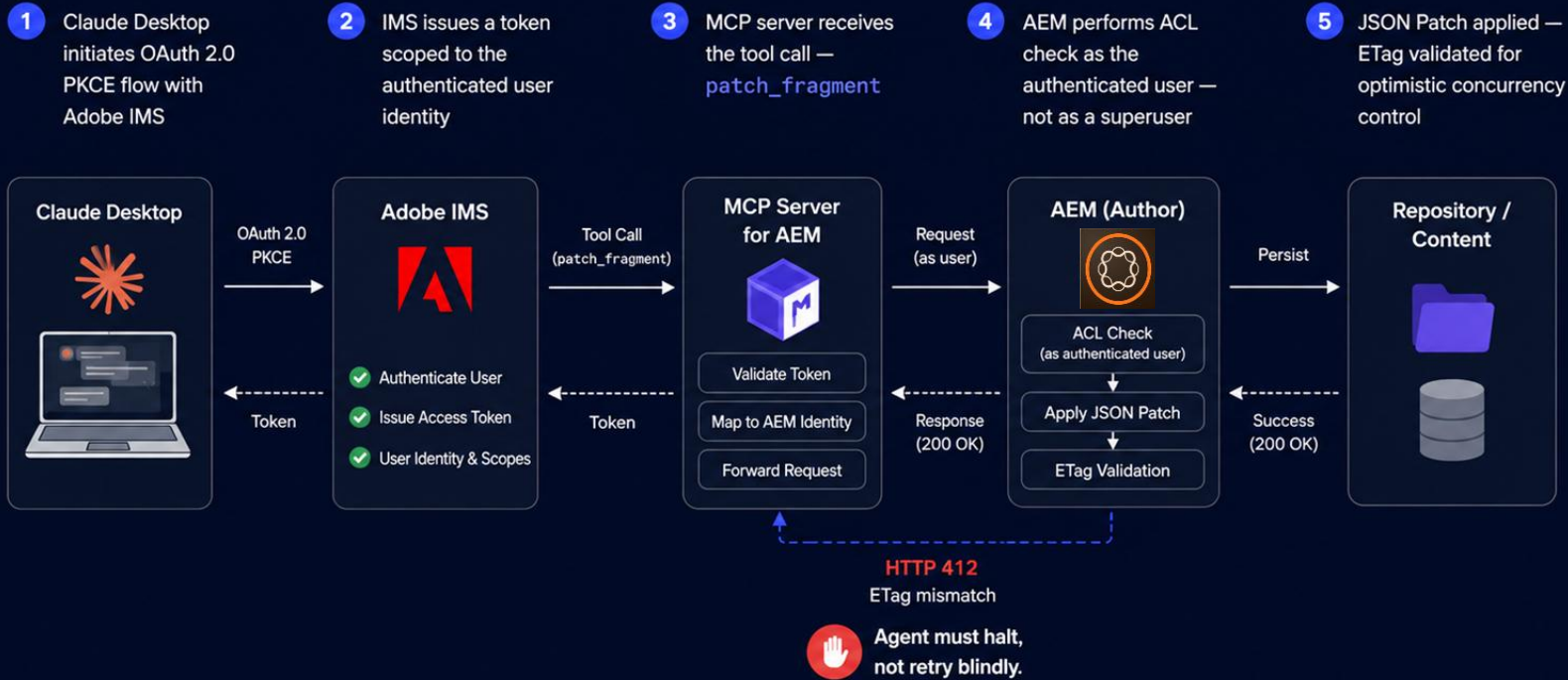
AI is good. MCP is solid infrastructure

But it's not about having the perfect highways. It's also about having the right drivers, people who follow the rules for a quick and safe ride.



# Authentication: How It Actually Works

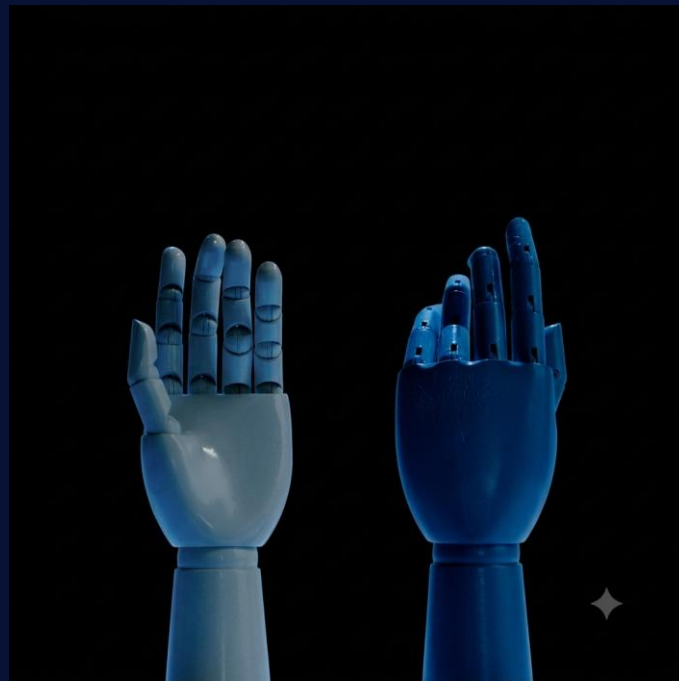
# The Authentication Flow



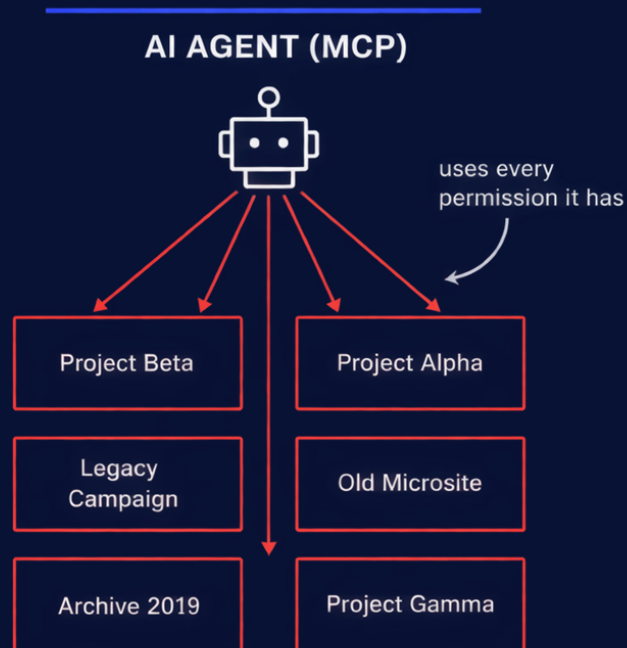
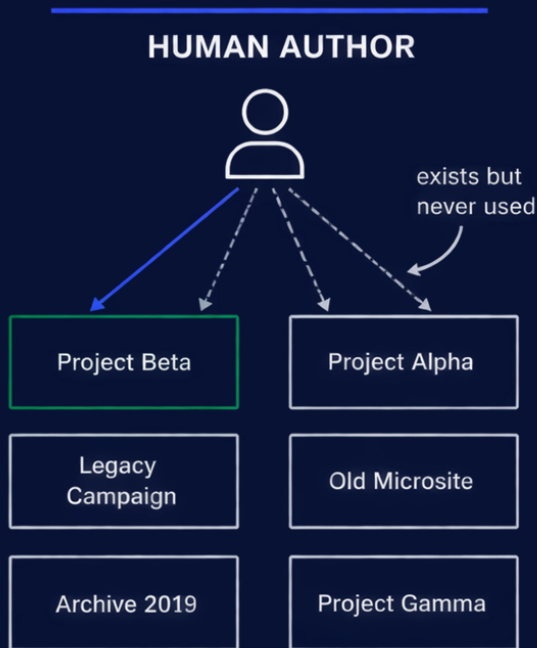
# Learnings from Early Production

# This Was Never About Who's Authorized

It's about authorized people's AI agents being too capable, too fast, and willing to act the moment they've decided what a task means with everything that account is allowed to touch.



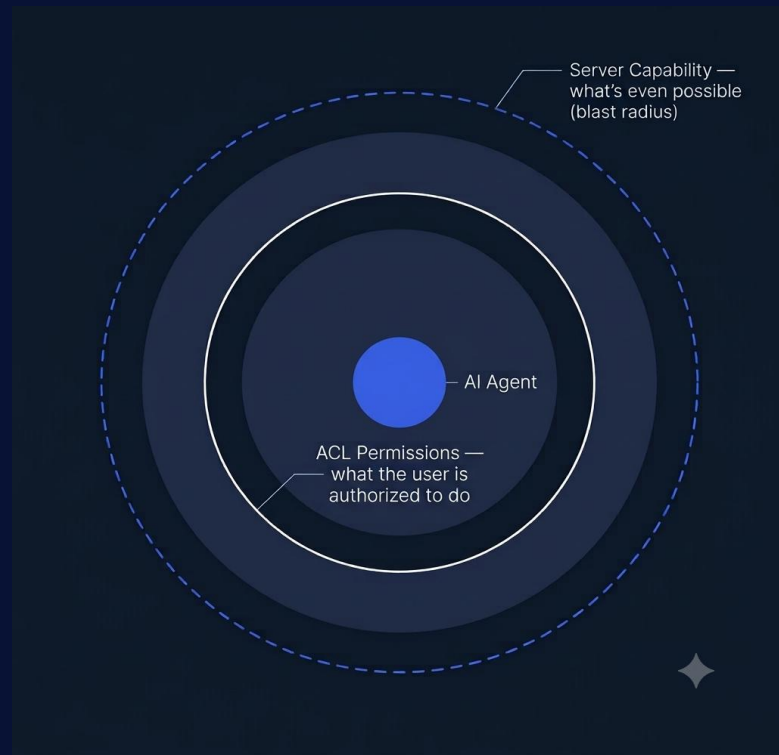
# Lesson 1: ACL Debt: What We Found When We Looked



# Blast Radius, not access control

Permissions decide what a person is authorized to do.

The server split decides what a machine is even capable of attempting



# Lesson 2: Roll Out Across Environments in Phases

Adobe AEM as a Cloud Service lets you configure MCP access per environment. Use it.

|         | Dev                    | Stage                  | Production             | Notes                                                   |
|---------|------------------------|------------------------|------------------------|---------------------------------------------------------|
| Phase 1 | aem-content<br>(write) | aem-content-read-only  | aem-content-read-only  | team learns MCP safely.<br>no risk to live content.     |
| Phase 2 | aem-content<br>(write) | aem-content<br>(write) | aem-content-read-only  | write confidence builds.<br>production still protected. |
| Phase 3 | aem-content<br>(write) | aem-content<br>(write) | aem-content<br>(write) | only after ACL audit and<br>author training complete.   |

Never give write access to production on day one. Earn it.

# Consistency, Not Capability

Capability decides what the tool can do. Consistency decides whether five different people use it the same way.

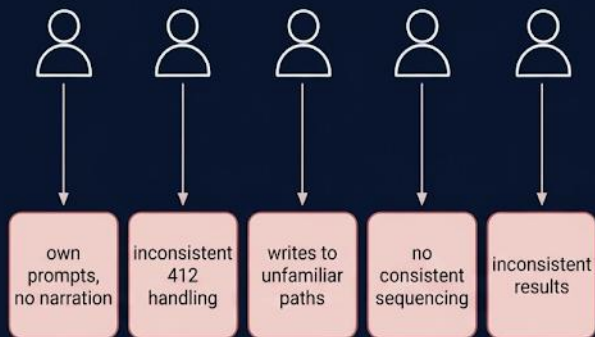
***Two different problems that look identical until five agents produce five different outcomes.***



Same access. Same starting line. Five different outcomes →  
because nobody agreed on the rules of the road.

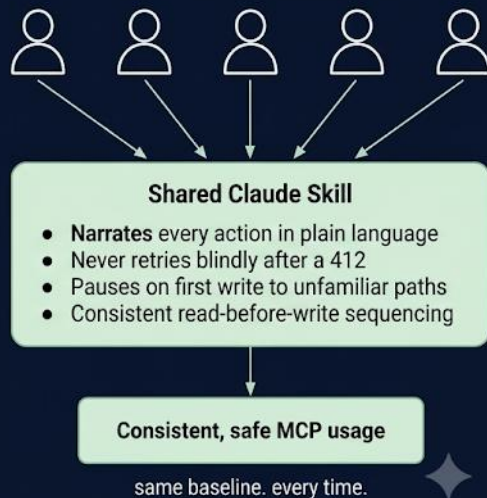
# Lesson 3: Give the Team a Shared Starting Point

## Without a shared skill



5 developers. 5 different approaches. Some unsafe.

## With a shared Claude skill



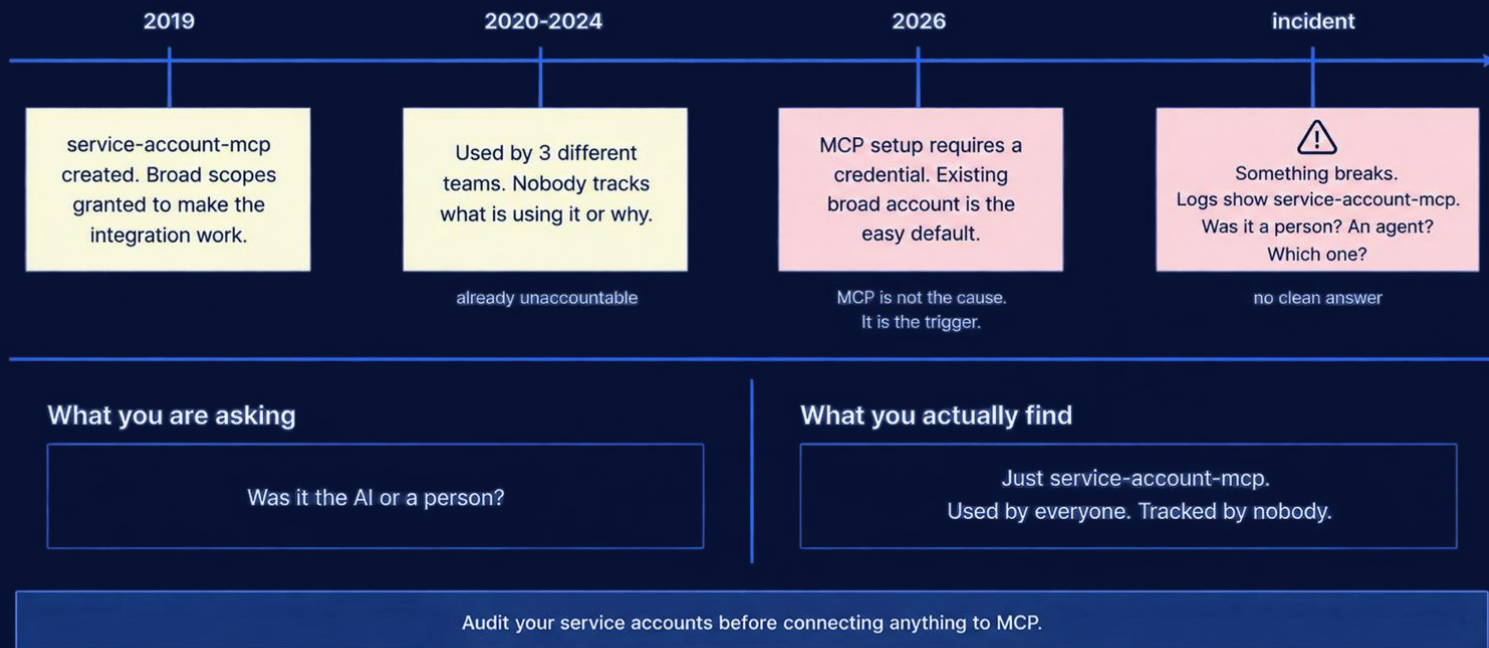
# Accountability, Not Identity

- Identity tells you who authenticated.  
Accountability tells you who's responsible for what that credential touched.

***Two different problems that look identical until an incident happens and the logs show one shared account.***



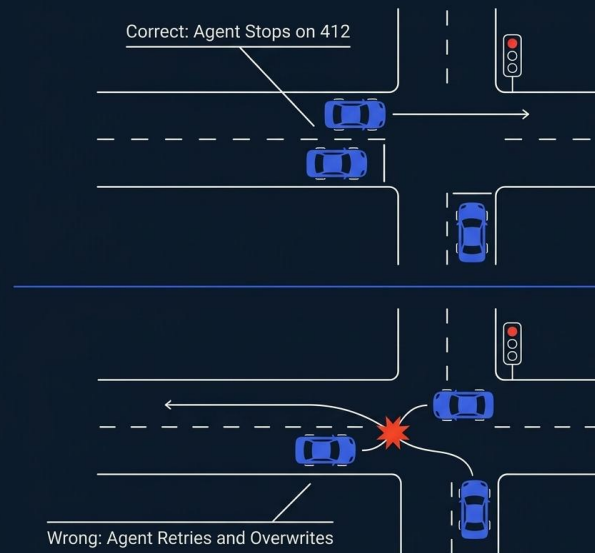
# Lesson 4: Old Service Accounts Are a Problem Waiting to Happen



# Concurrency, Not Connectivity

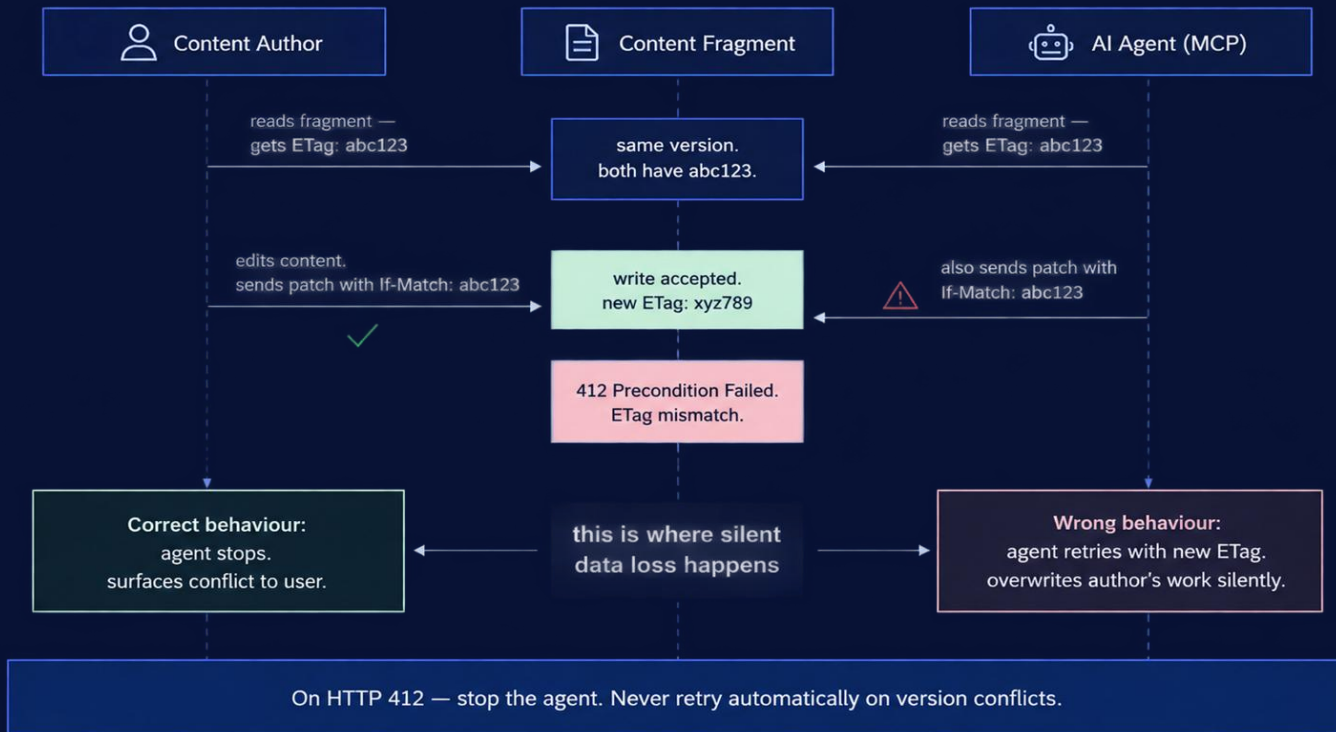
- A failed request looks like a network blip. A version conflict looks like a network blip too in the logs, they're indistinguishable.

***Two different problems that look identical — until an automatic retry silently overwrites someone's work.***



Both drivers were following the rules. They just arrived at the same intersection at the same time — that's not a consistency problem, it's a concurrency problem. ✦

# Lesson 5: ETag Conflicts and Silent Data Loss



# Lesson 6: Authors Need Onboarding, Not Just Access

## MCP onboarding plan for content authors — before access is granted

| Day 1-2                                                                                                  | Day 3                                                                                                   | Day 4                                                                                                       | Day 5                                                                                              | Access granted                                                                                                                        |
|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| What is MCP.<br>What it can do.<br>What it cannot do.<br>How it connects to their existing AEM workflow. | ETags and concurrency.<br>Why conflicts happen.<br>What HTTP 412 means.<br>What to do when they see it. | Hands-on walkthroughs.<br>The specific tools they will use day to day.<br>Live practice in dev environment. | What to do when something goes wrong.<br>Who to contact.<br>Escalation path.<br>Known issues list. | Production access enabled.<br>Author is ready.<br> |
| no access yet                                                                                            | the technical bit. keep it simple.                                                                      | first time touching MCP                                                                                     | most important day                                                                                 |                                                                                                                                       |

Authors who understood what MCP was doing used it confidently.

Authors who did not understand created incidents.

Access without onboarding is just a faster way to create incidents.

# Takeaways: Adapt with Confidence and Strategy

# Your Production Checklist

- **01 Run a full ACL audit before giving anyone MCP access**
- 02 Start with aem-content-read-only for the first two weeks
- 03 Restrict tools by role. Authors should not have access to pipeline tools.
- 04 Build a shared Claude skill so the team starts from a consistent baseline
- **05 Enforce ETag validation on every write: no blind retries ever**
- 06 Train content authors before giving them MCP access
- 07 Governance before impersonation

# Resources

- LLM onboarding skill
- Adobe MCP Documentation
- How to add skills to claude
- How to add skills to cursor
- How to add skills to antigravity

# Q & A

# Slides Archive

# Why You Need a Strategy Before You Start

- Adobe shipped MCP servers for AEM in early 2026: Content, Read-Only, Cloud Manager, Quickstart, Dispatcher
- Most teams have run the demo. Very few have given it to real users on a production author instance.
- MCP does not add new permissions. It operates under the authenticated user's existing ACLs, nothing more.
- **This talk is a retrospective of running MCP in production, not a product walkthrough.**

# Lesson 1: ACL Debt: What We Found When We Looked

- What we tried: Rolled out aem-content MCP to developers on production author
- Within days, agents were modifying content paths from old projects that nobody had touched in years.
- The root cause was permission debt. Group memberships from finished projects were still active, and agents used every permission they had.
- Human authors apply judgment about what they should touch. Agents apply permissions literally.

Run a full ACL audit before rollout. MCP will expose permission debt you did not know you had.

# Lesson 2 — Start with aem-content-read-only

- What we tried: Jumping straight to write operations on day one
- What happened: Confusion, unintended writes, loss of team confidence
- What we changed: Mandated read-only for the first two weeks
- Surprise: Most of the real use cases were read-only anyway.

**Takeaway: Read-only is a structured learning phase, not a limitation.**

# Lesson 4: Old Service Accounts Are a Problem Waiting to Happen

- **Standard practice:** Old service accounts still carry broad scopes granted years ago "to make something work", long before MCP existed.
- ✦ **The hidden cost:** Nobody has tracked everything using them since. They were already unaccountable before MCP touched them.
- ✦ **Where MCP fits:** MCP is not the cause; it is the trigger. Setup requires a credential, and the existing broad account becomes the easy default.
- ✦ **When something breaks:** You are not asking "AI or person?" You are asking who has used this account : and there is no clean answer.

**Audit your service accounts before connecting anything to MCP. The setup takes longer but makes incidents much easier to resolve.**

# Lesson 5: ETag Conflicts and Silent Data Loss

- AEM uses ETags for concurrency control. Every write operation requires passing the current ETag in the If-Match header.
- If an agent retries automatically on HTTP 412, it will overwrite whatever another user changed in between. There is no warning.
- MCP always passes If-Match header with current ETag on every patch operation
- **On HTTP 412, stop the agent and surface the conflict to the user. Do not continue.**
- **Automated retry on version conflicts is how silent data loss happens.**

# Lesson 6: Authors Need Onboarding, Not Just Access

- Content authors think about their work differently from developers. Giving them MCP access without preparation created confusion.
- Days 1-2: What MCP is, what it can and cannot do, and how it connects to their existing AEM workflow.
- Day 3: ETags and concurrency. Why conflicts happen and what to do when they see a 412 error.
- Day 4: Hands-on walkthroughs of the specific tools they will use.
- Day 5: What to do when something goes wrong and who to contact.

**Authors who understood what MCP was doing used it confidently. Those who did not created incidents.**