

Scheduling at the Access Point

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Outline

Brief review of basic HTCondor architecture

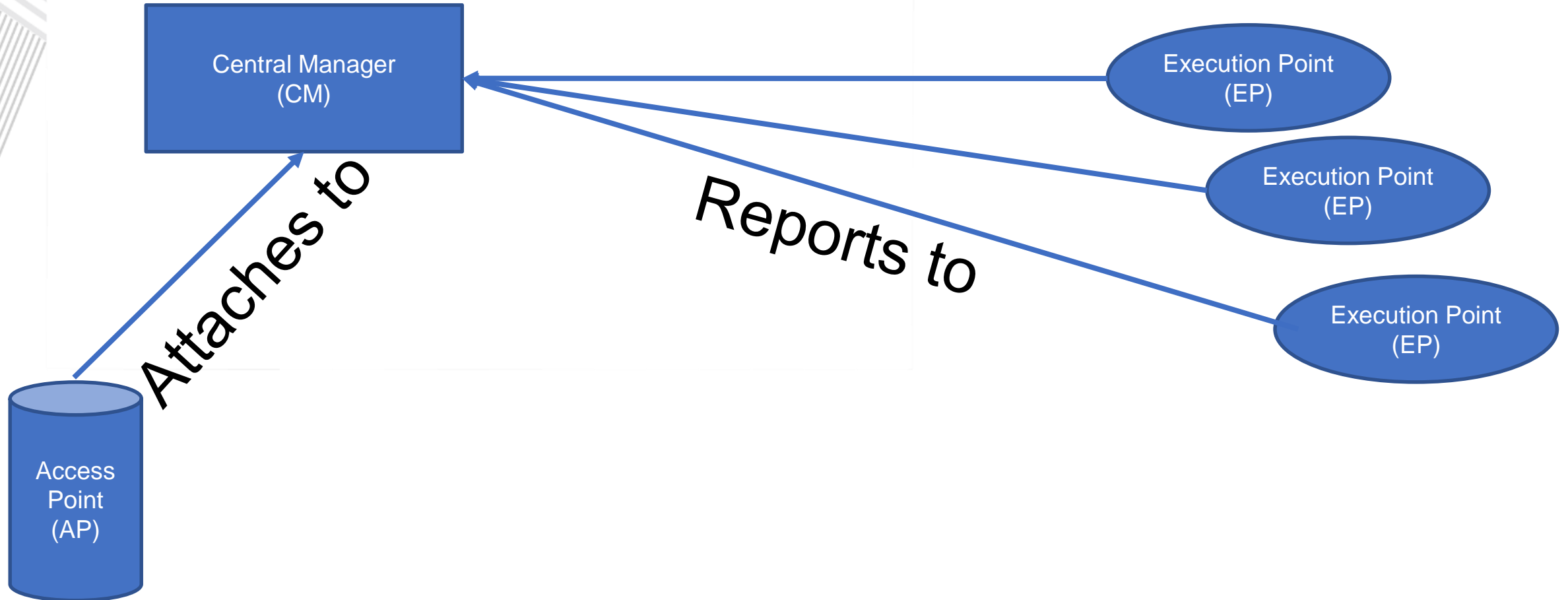
All the ways to join or federate pools, and why so many?

Identities in a distributed environment

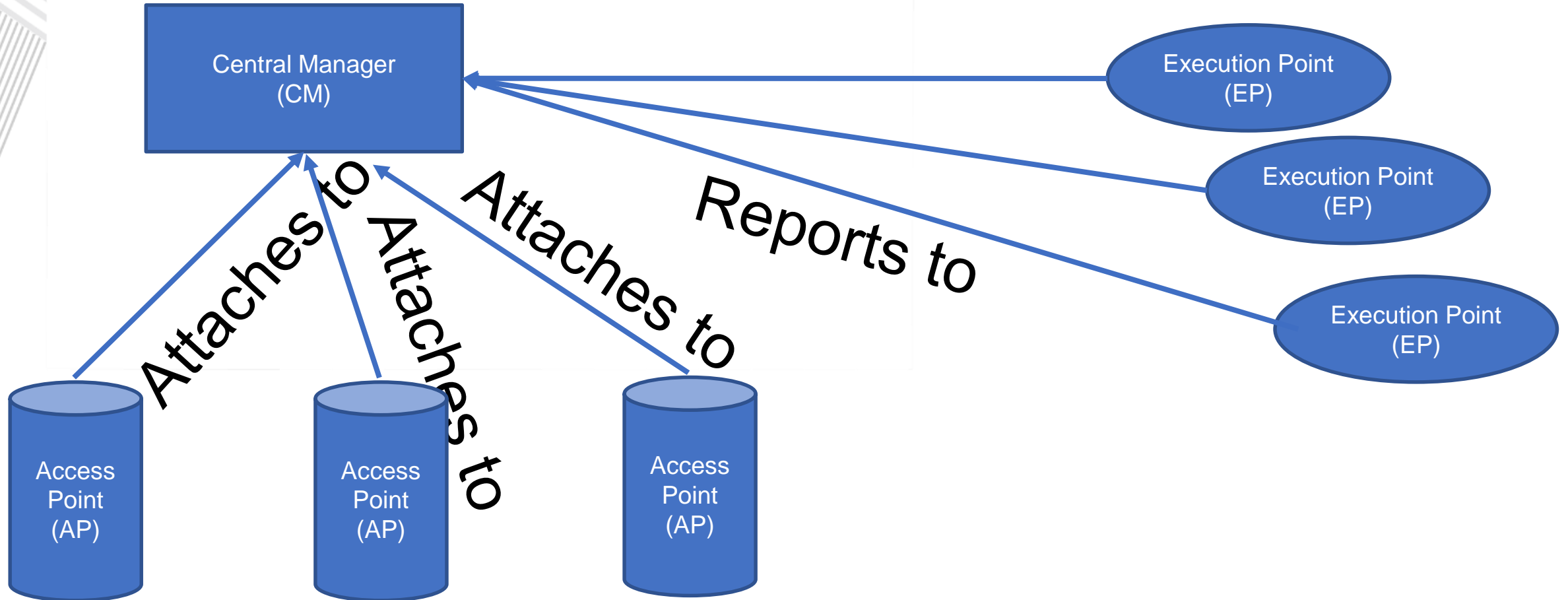
A new way with distributed identity



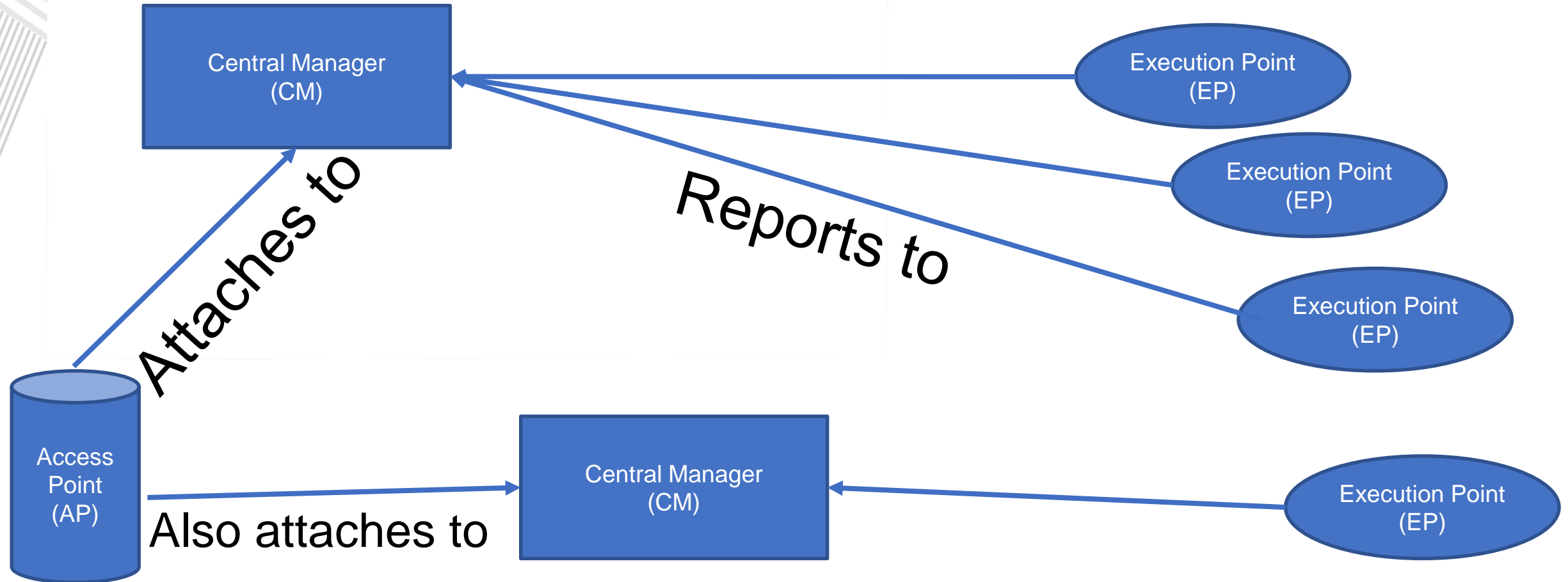
Simple, "Classic" HTCondor Architecture



Extending the classic – multiple APs



Another "Classic" HTCondor Architecture



Degenerate, but useful HTCondor Architecture

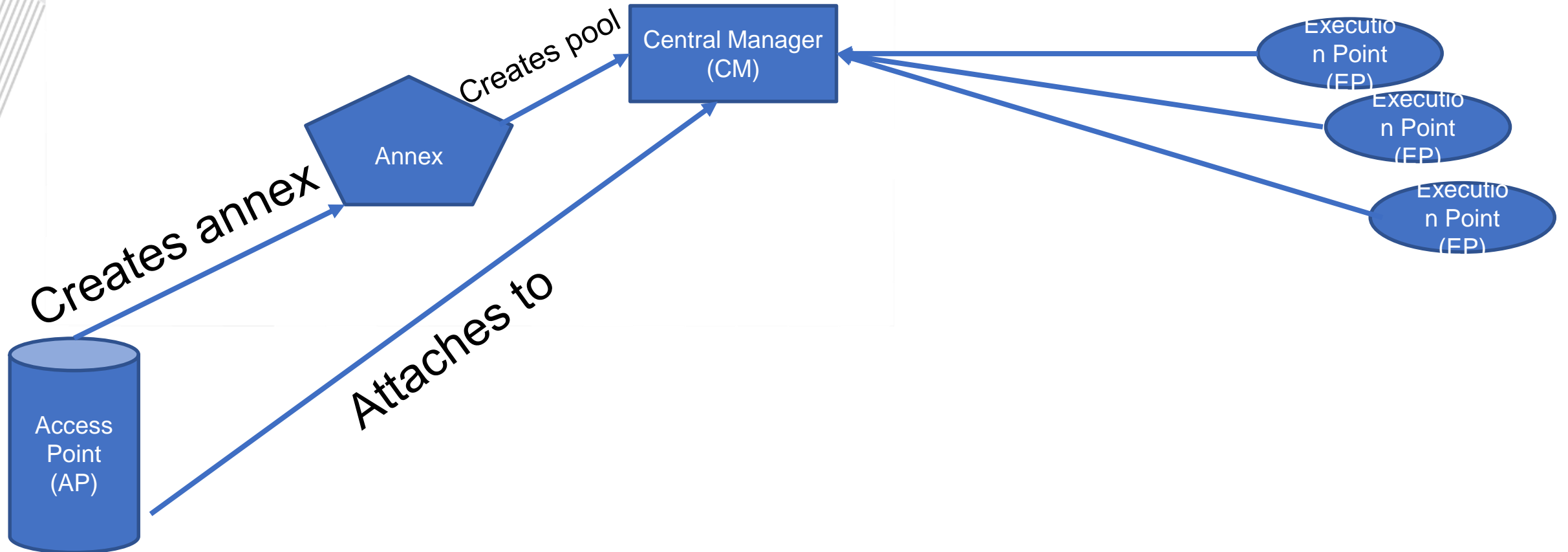


Not (yet) attached to anything

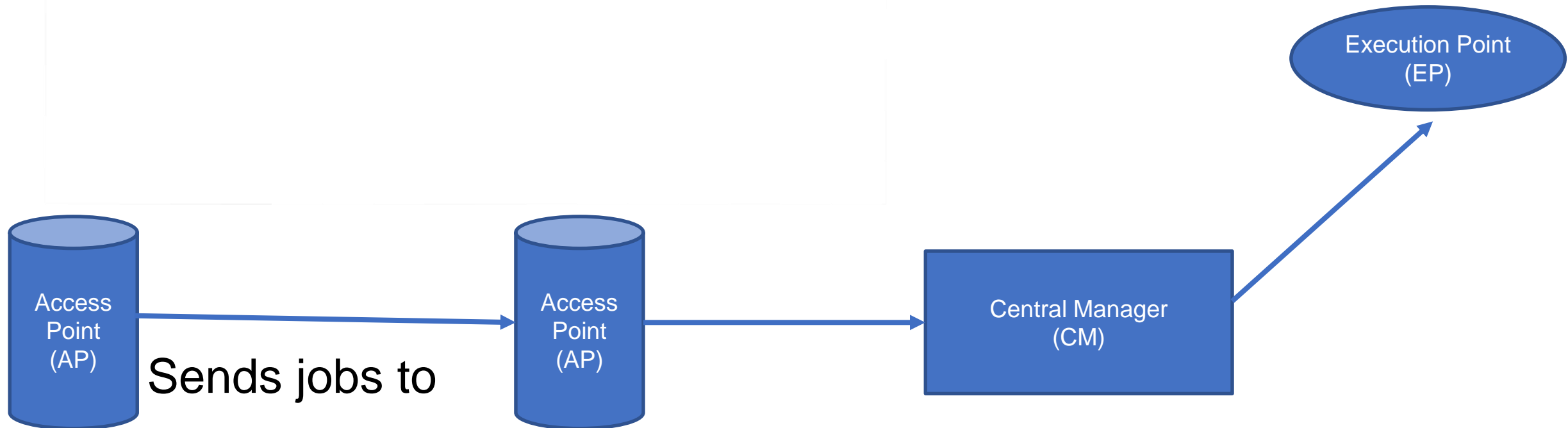


Now it is useful...

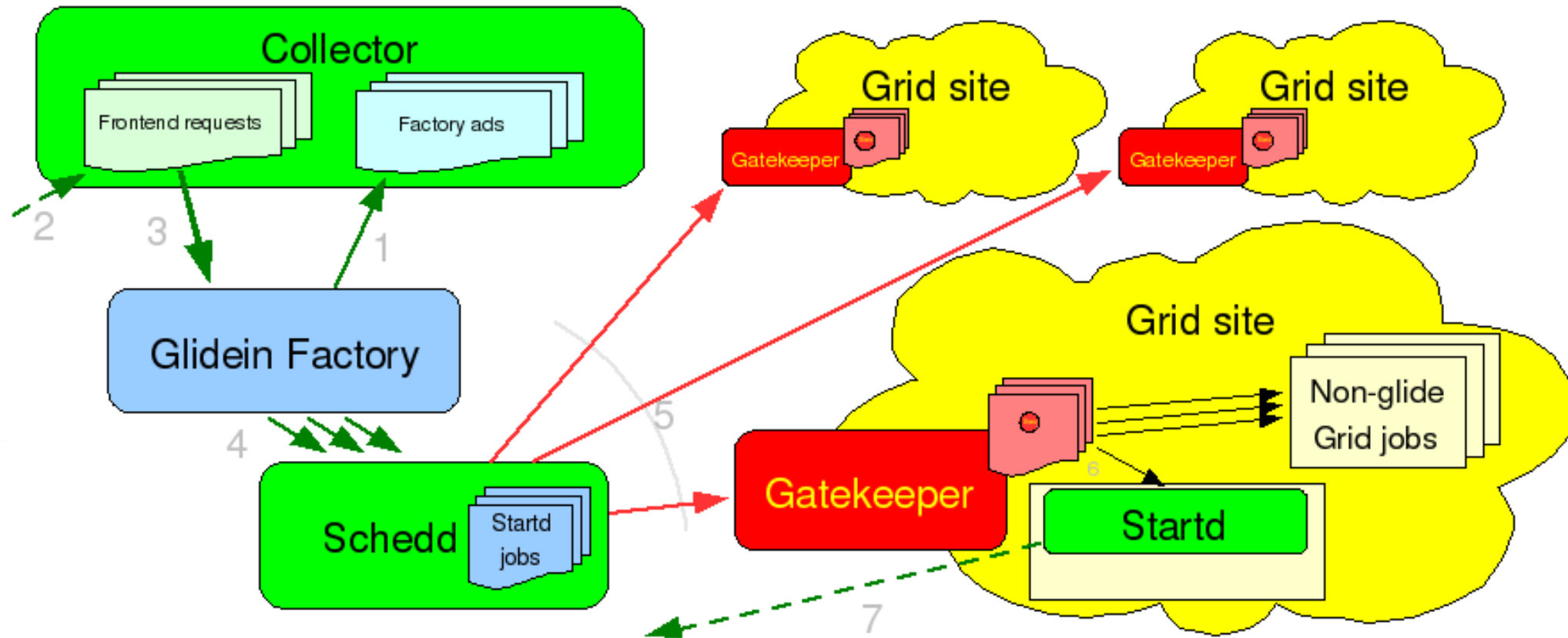
HTCondor Architecture



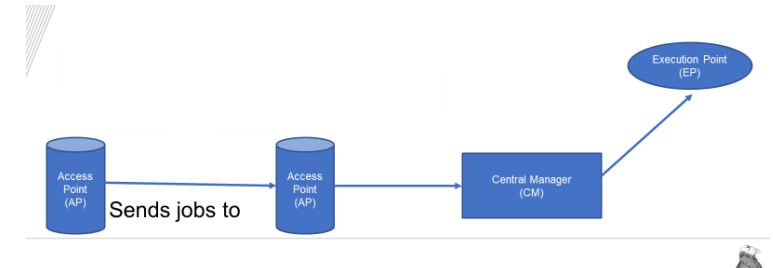
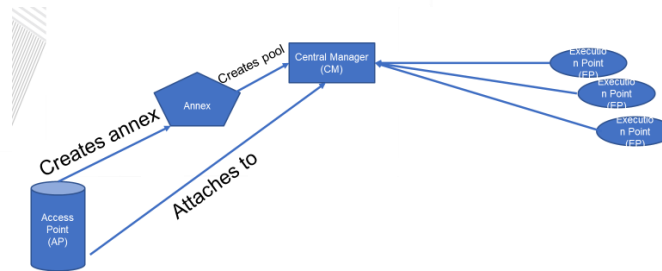
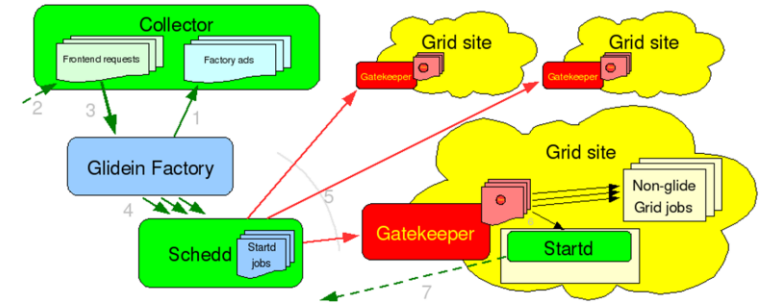
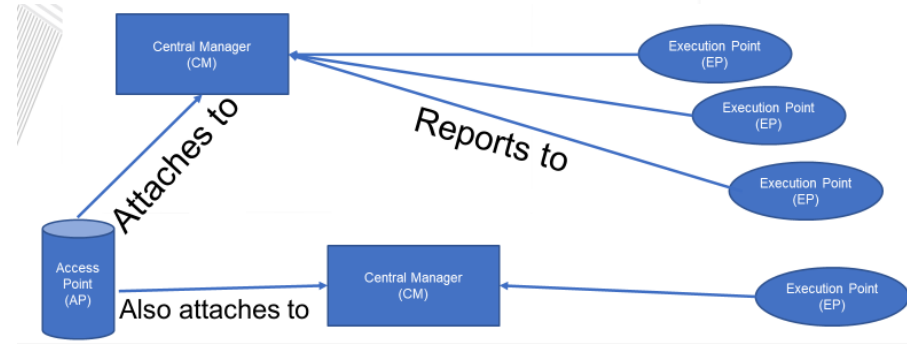
Another way to extend/attach the AP (as the CE does)



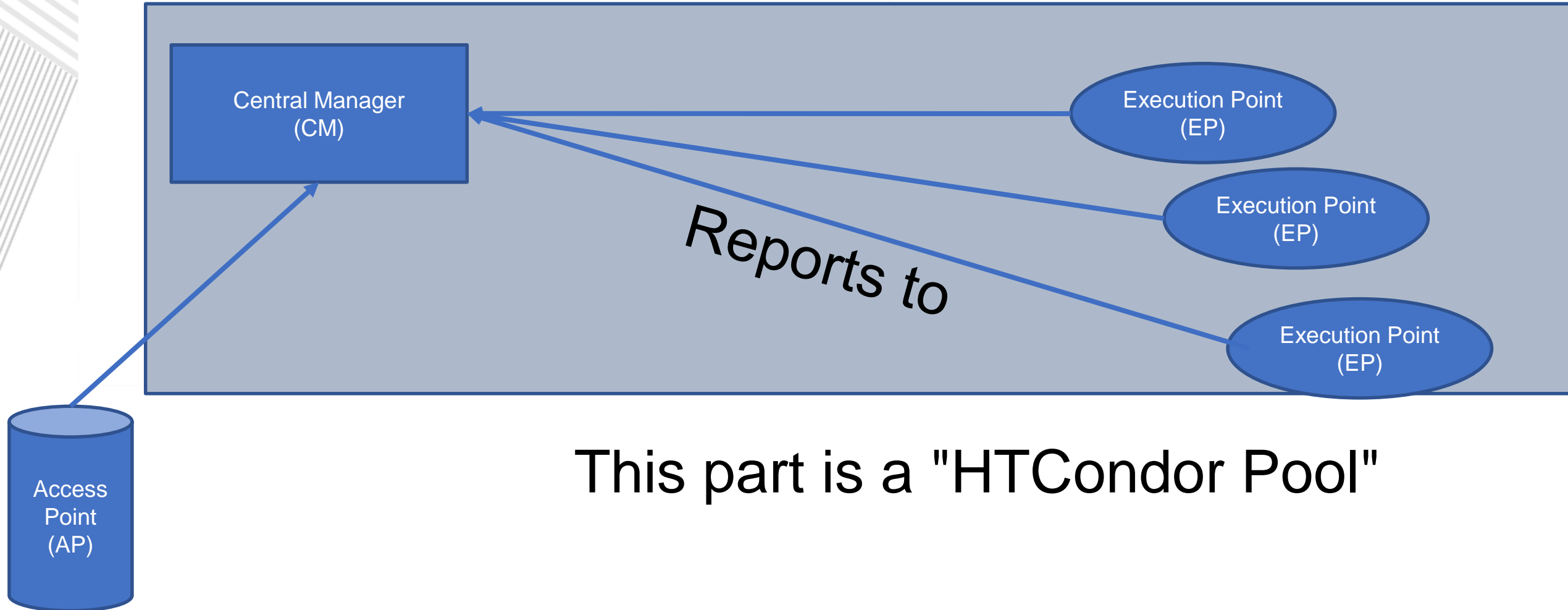
(and I don't even want to talk glidein...)



What is "A Condor Pool"



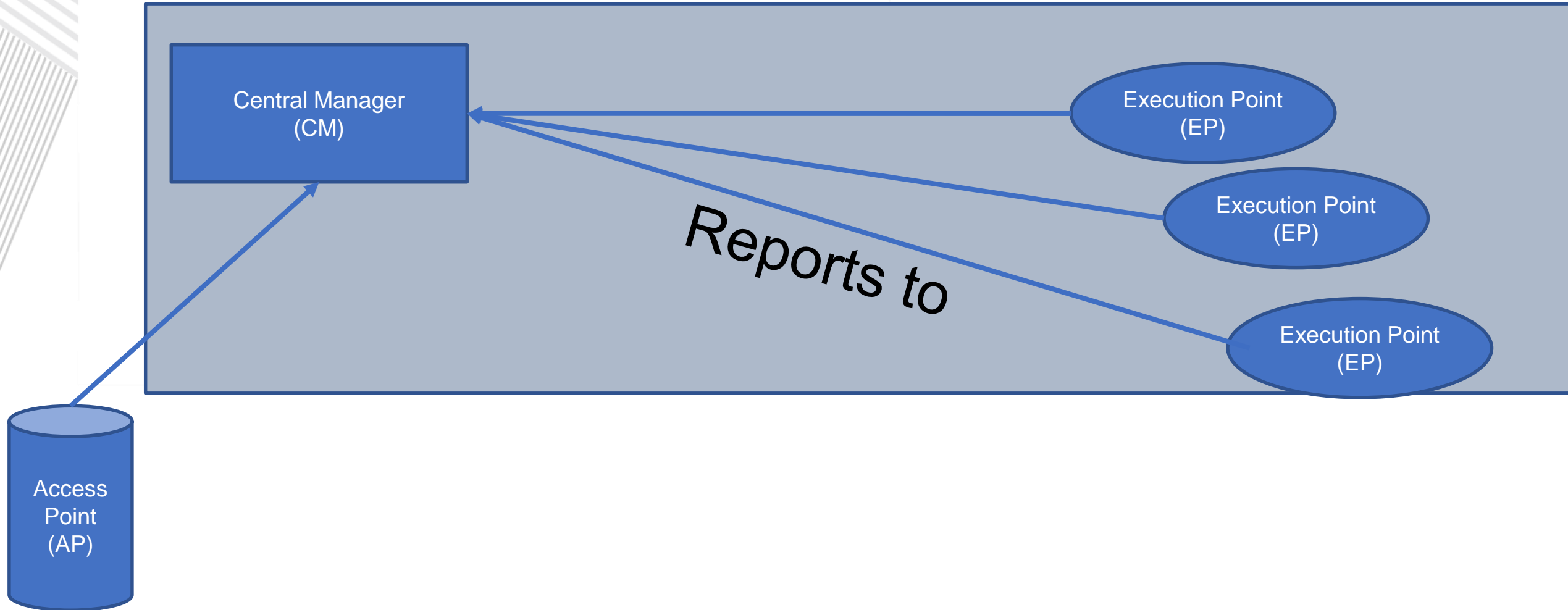
HTCondor Pool =?= CM + EP



This part is a "HTCondor Pool"



Distributed nature of HTCondor

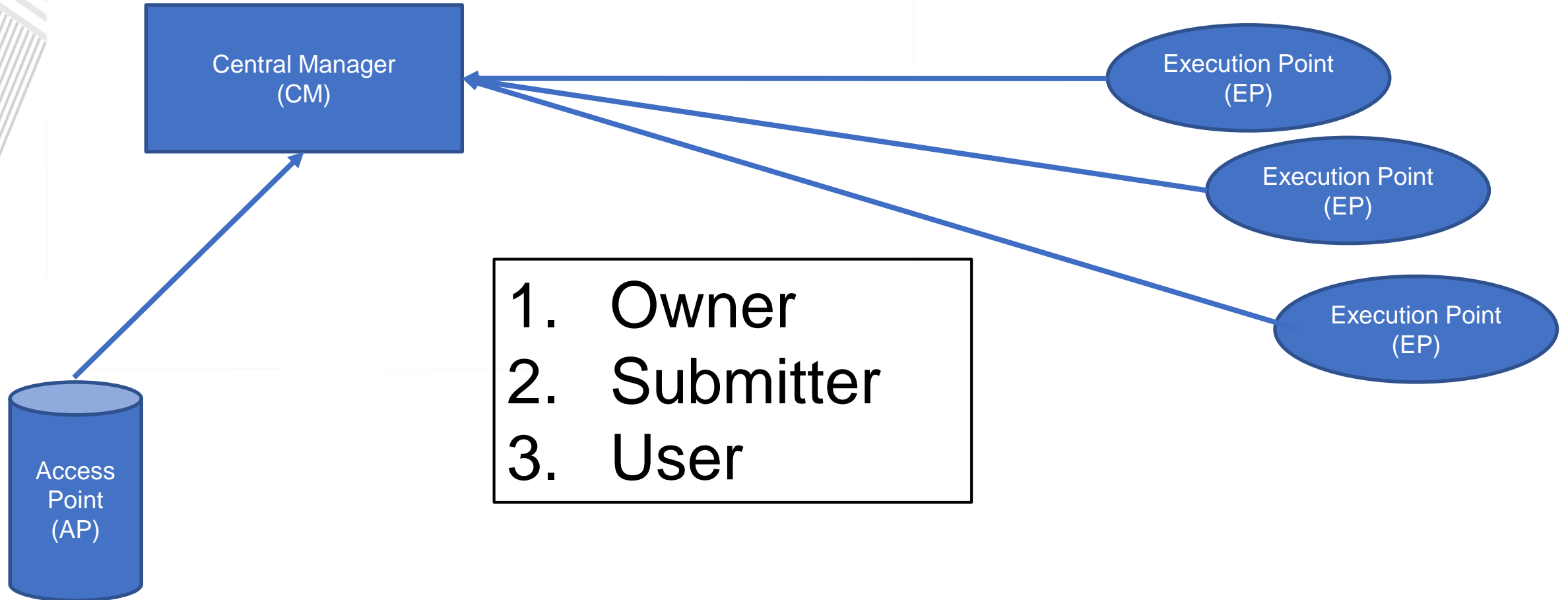


Why distributed?

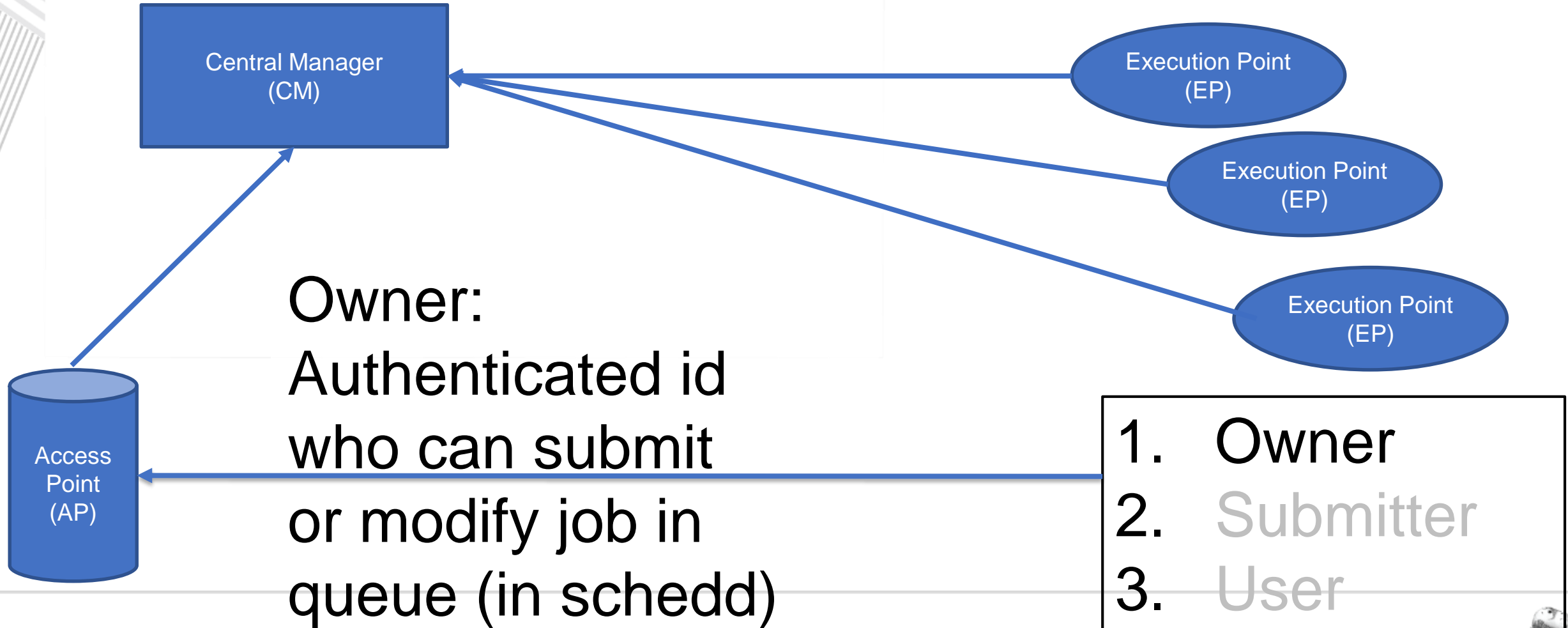
- NOT (necessarily) because of performance
- NOT (necessarily) because of throughput
- But because human organizations are distributed
 - (like this meeting)
- WAN distributed, not just LAN distributed
- To succeed, we need to mirror our human organizations



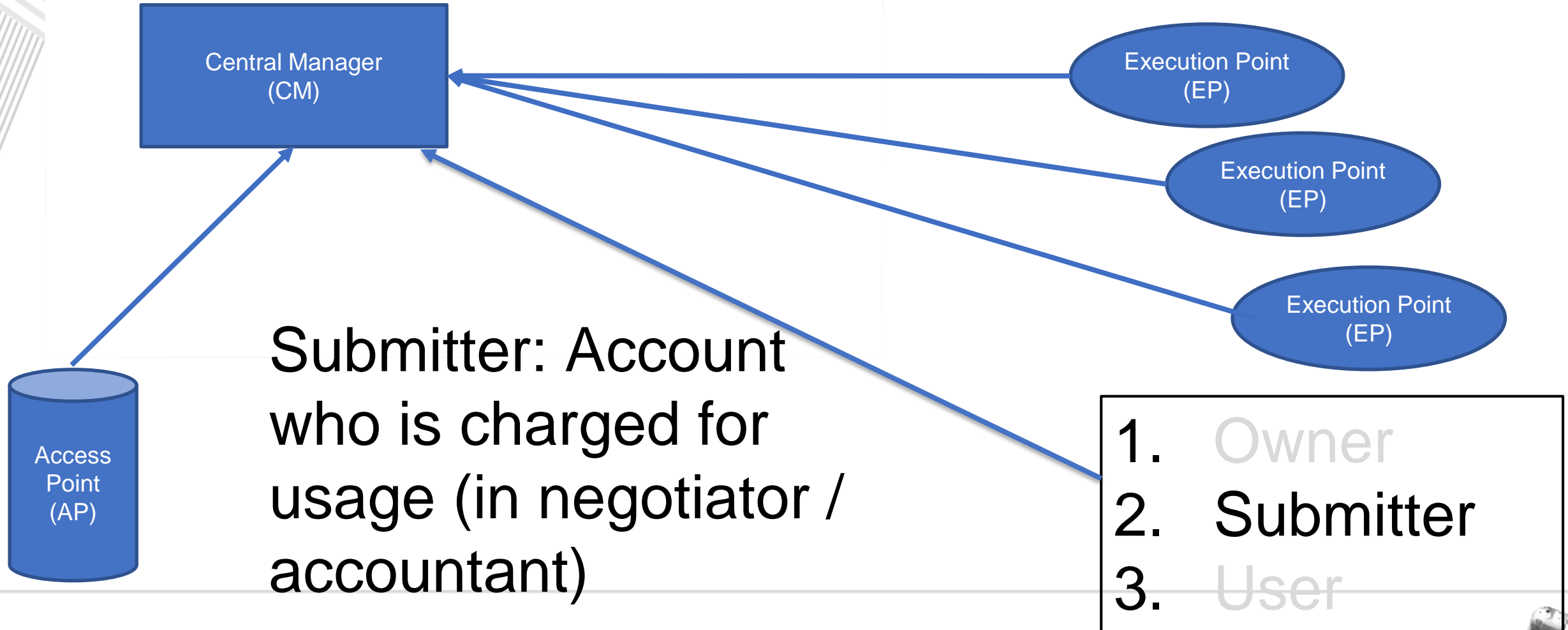
Triune Identifiers of a HTC Condor Job



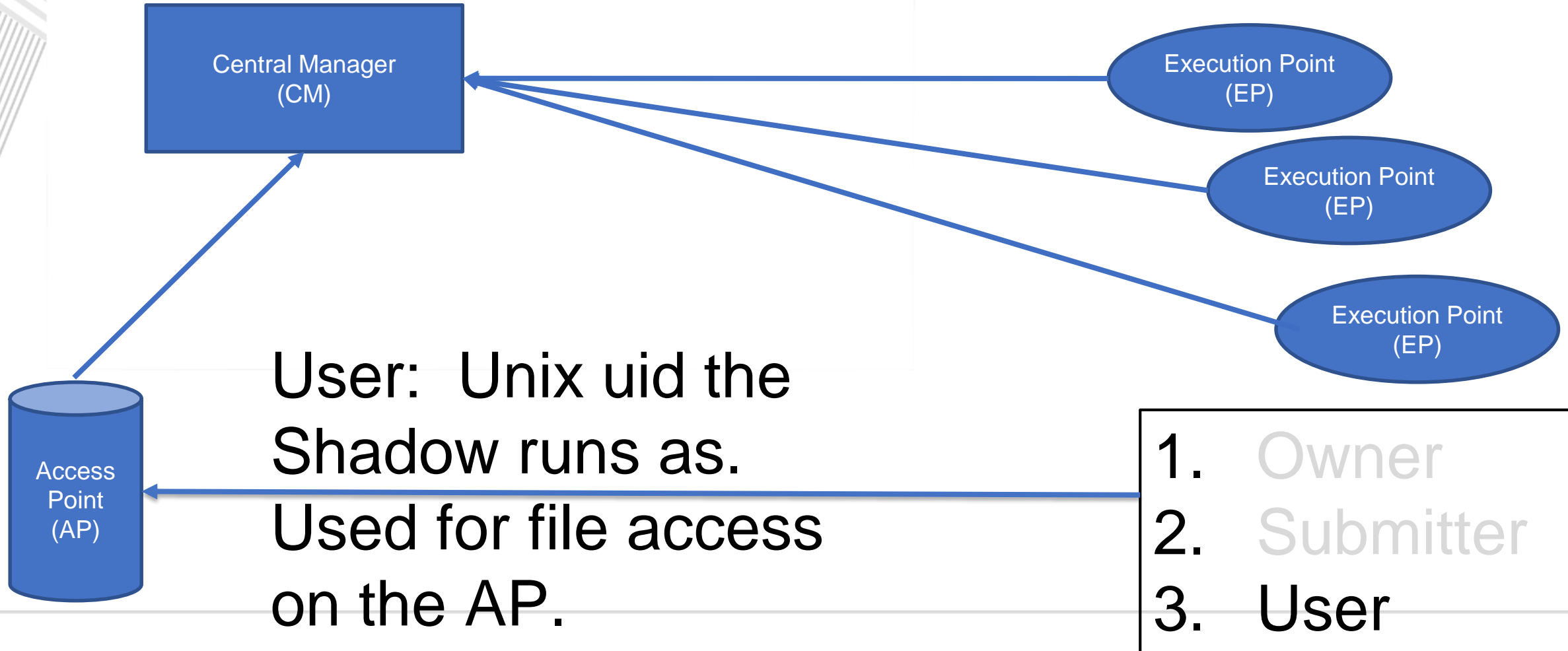
The Owner of a HTCondor Job



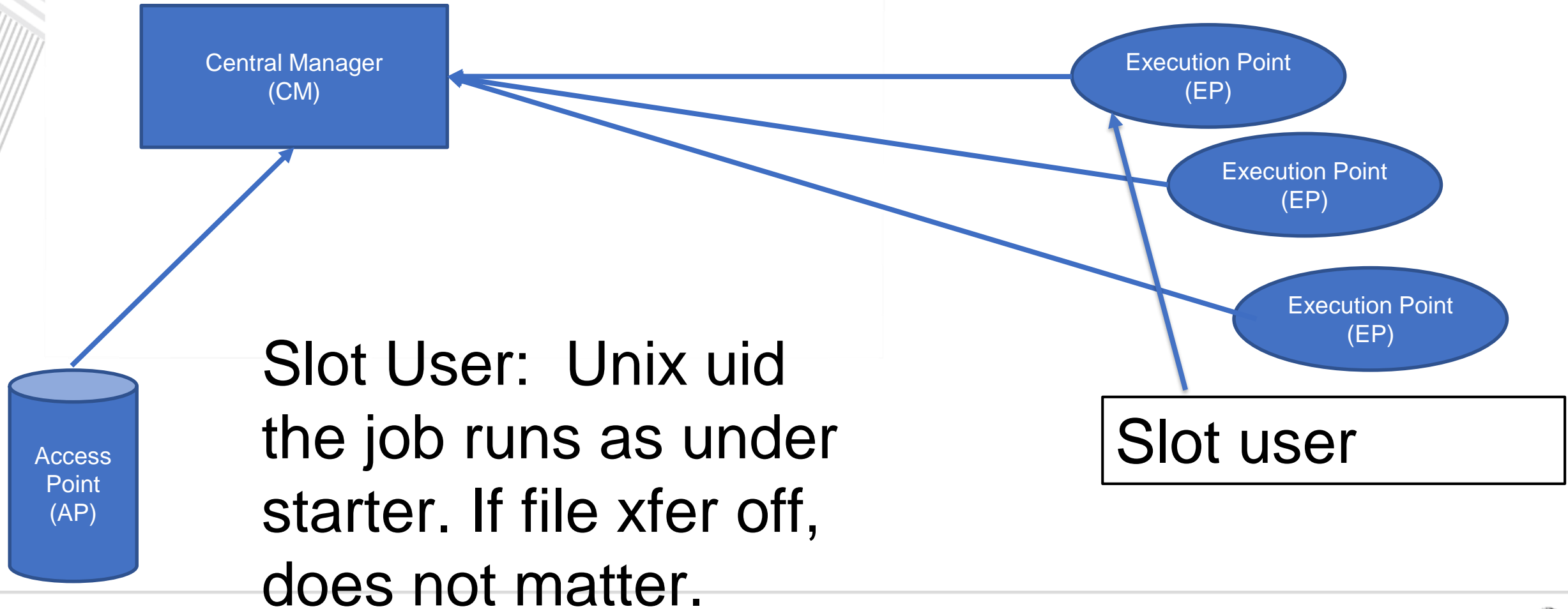
The Submitter of a HTCondor Job



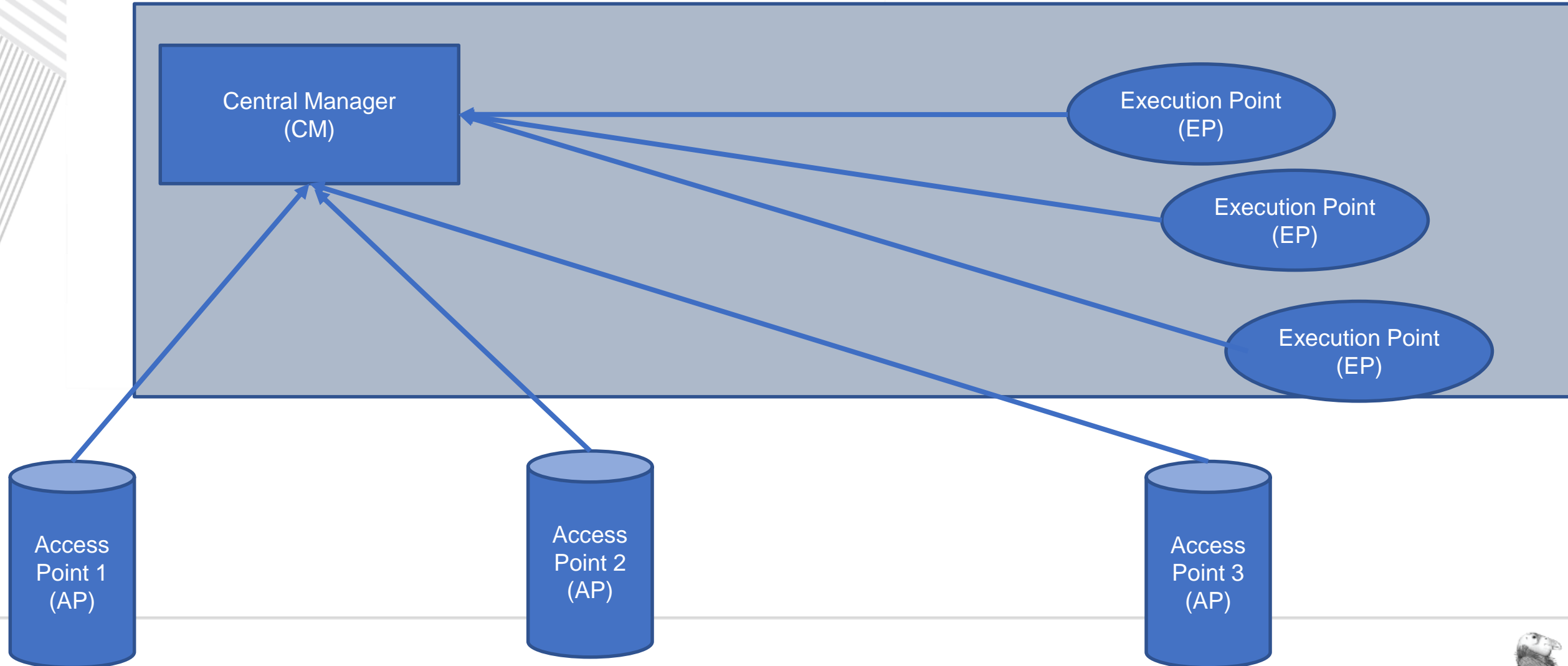
The User of a HTCondor Job



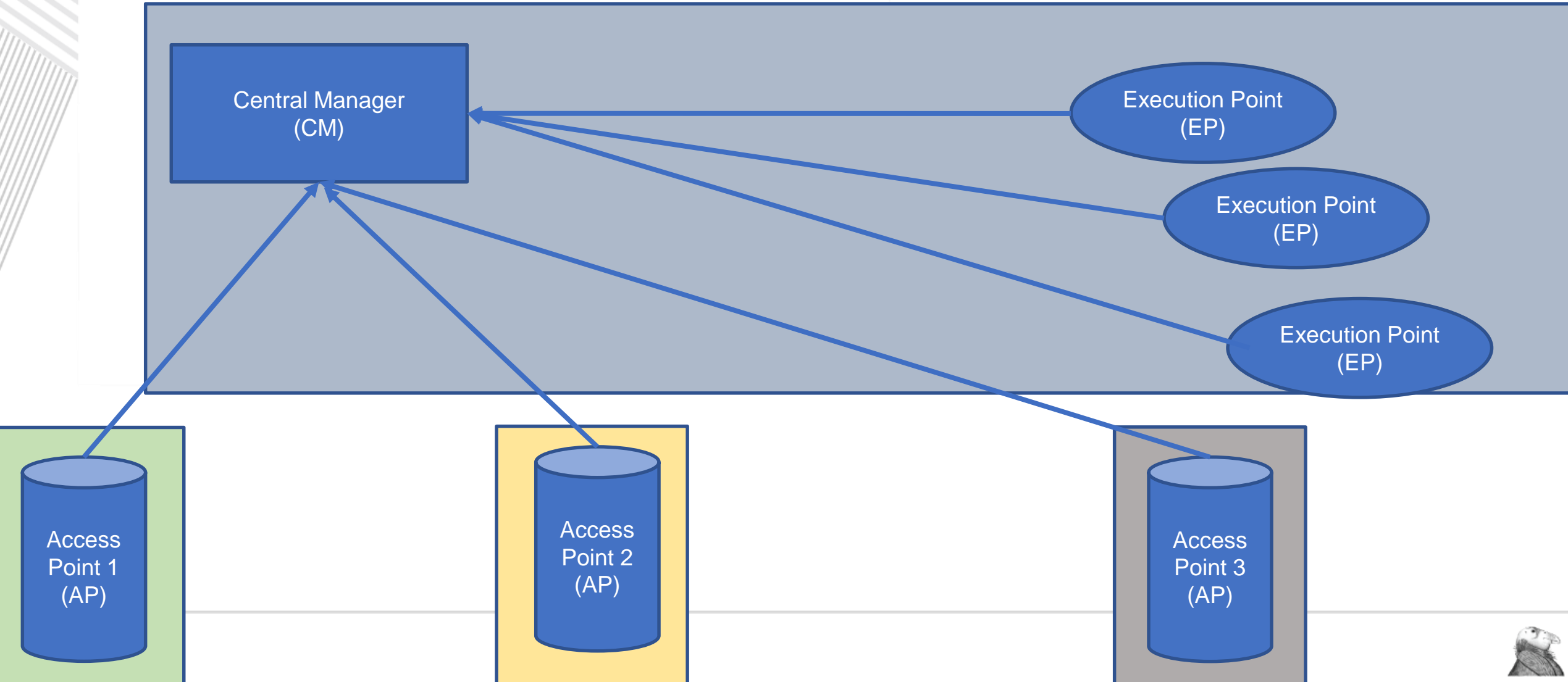
The Identifier we shall not speak



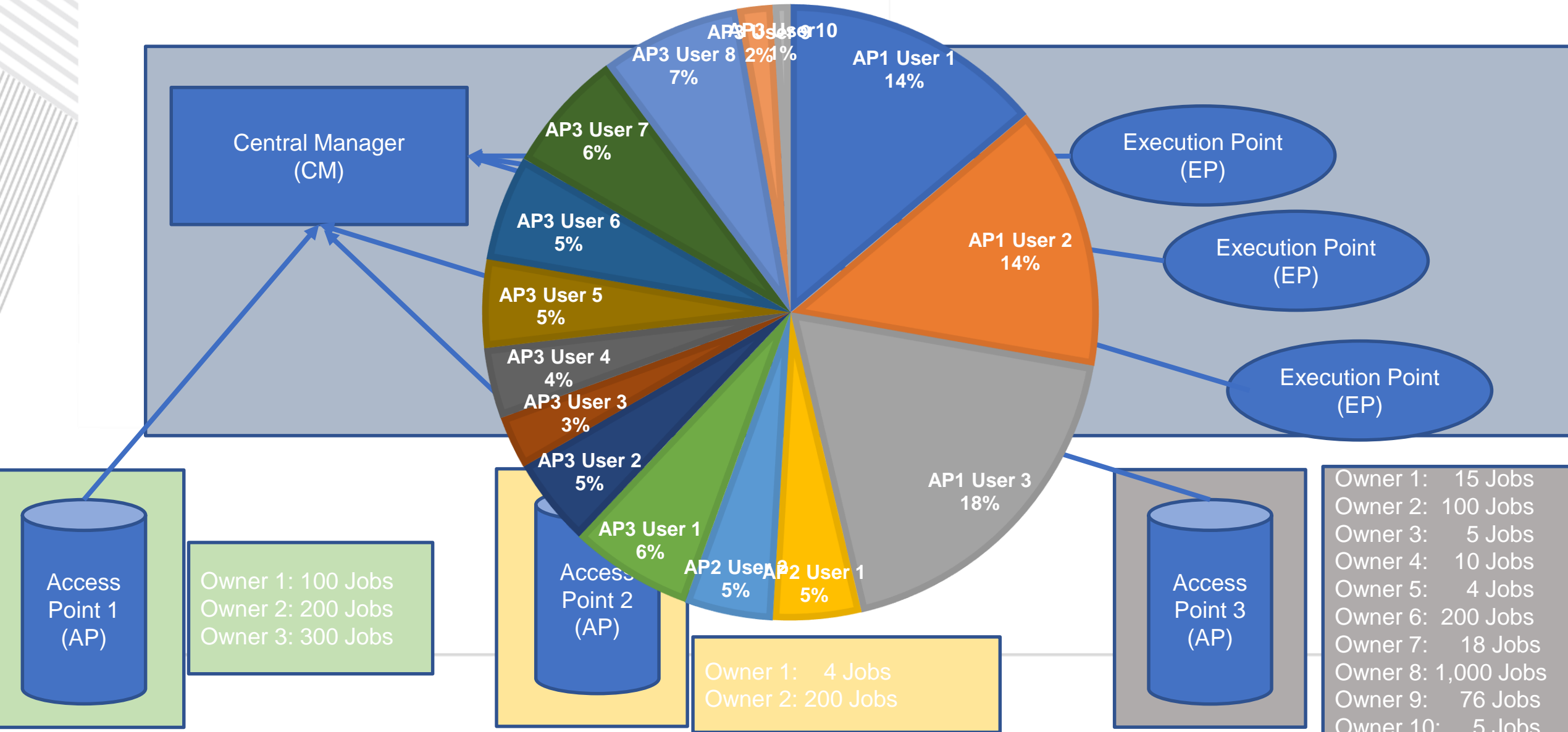
Review: Distributed nature of HTCondor



What if AP1,2,3 are distributed (wrt each)

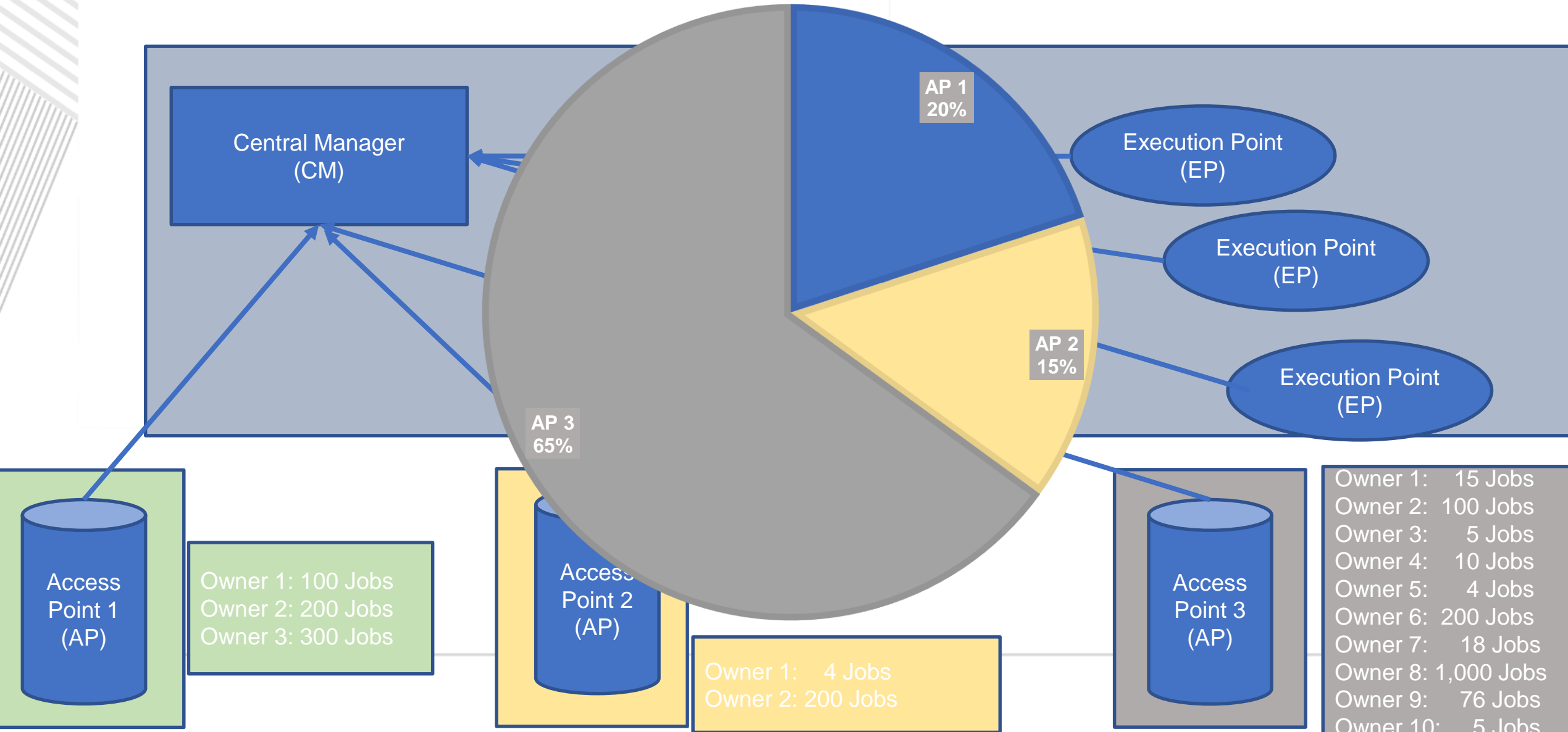


What if AP1,2,3 are distributed (wrt each)

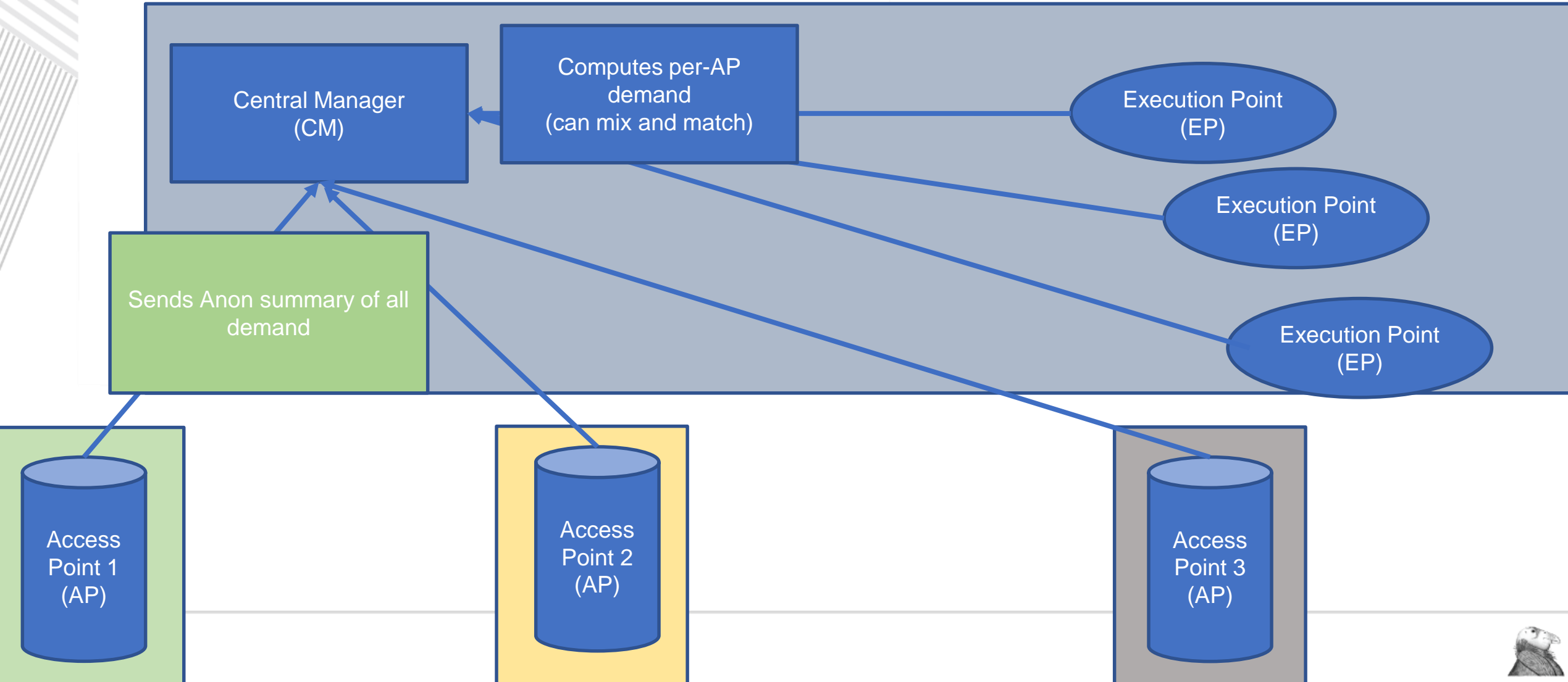


What we want

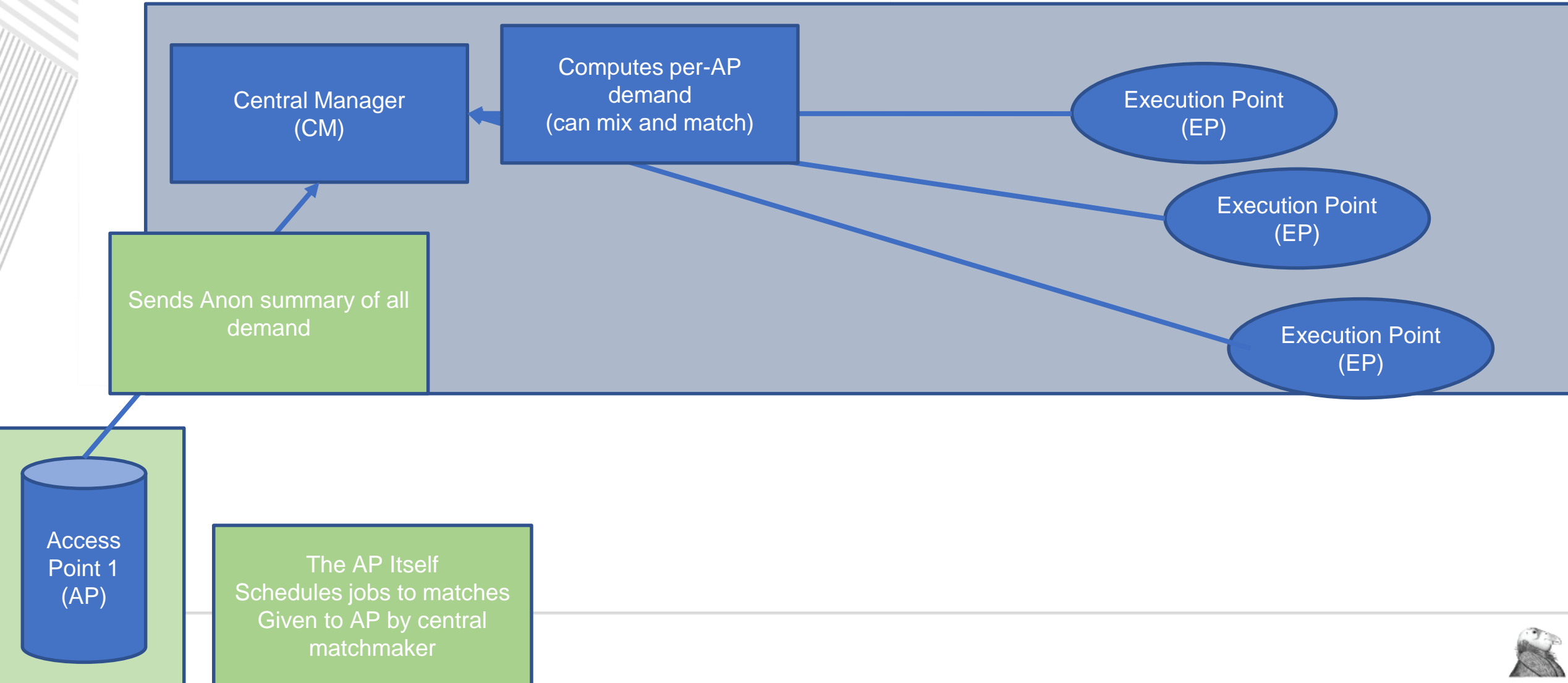
FAIR SHARE



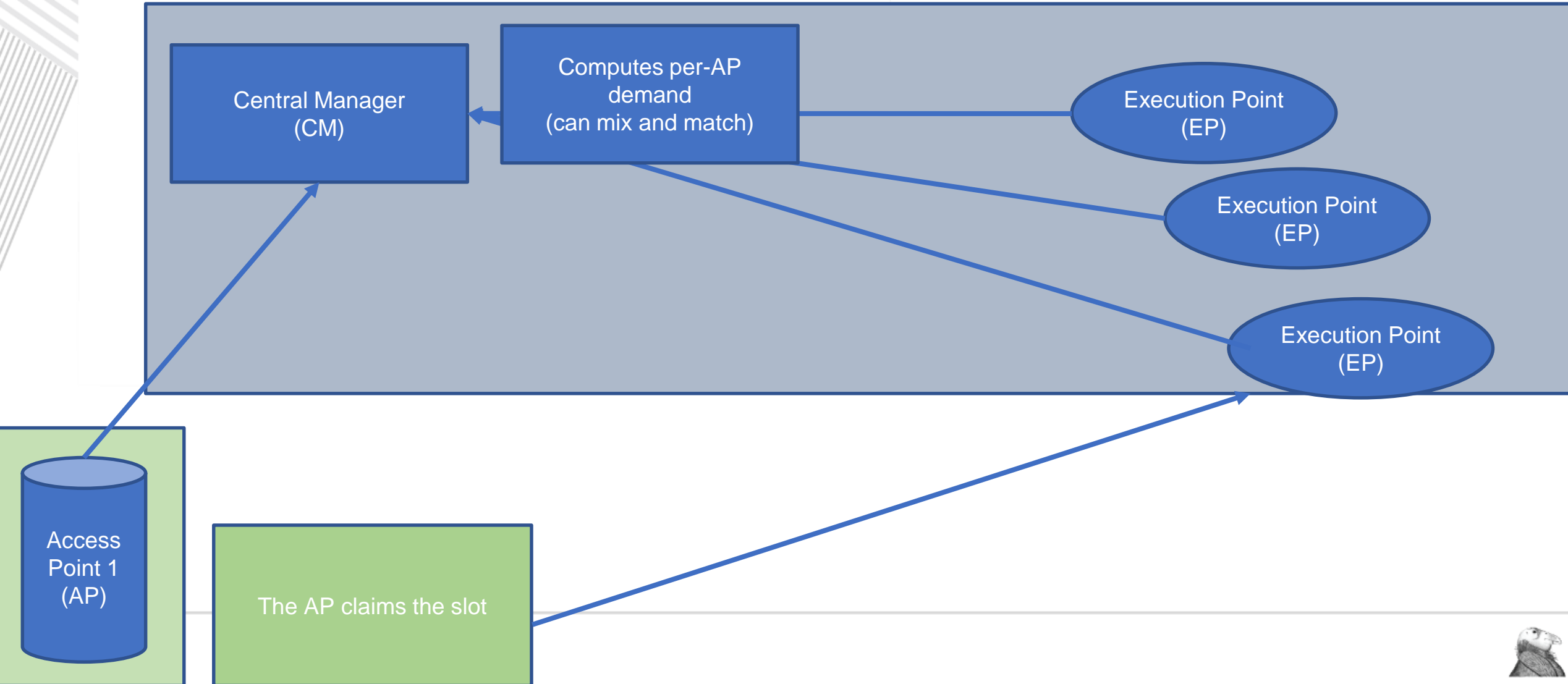
Where we are going... (with per AP knob)



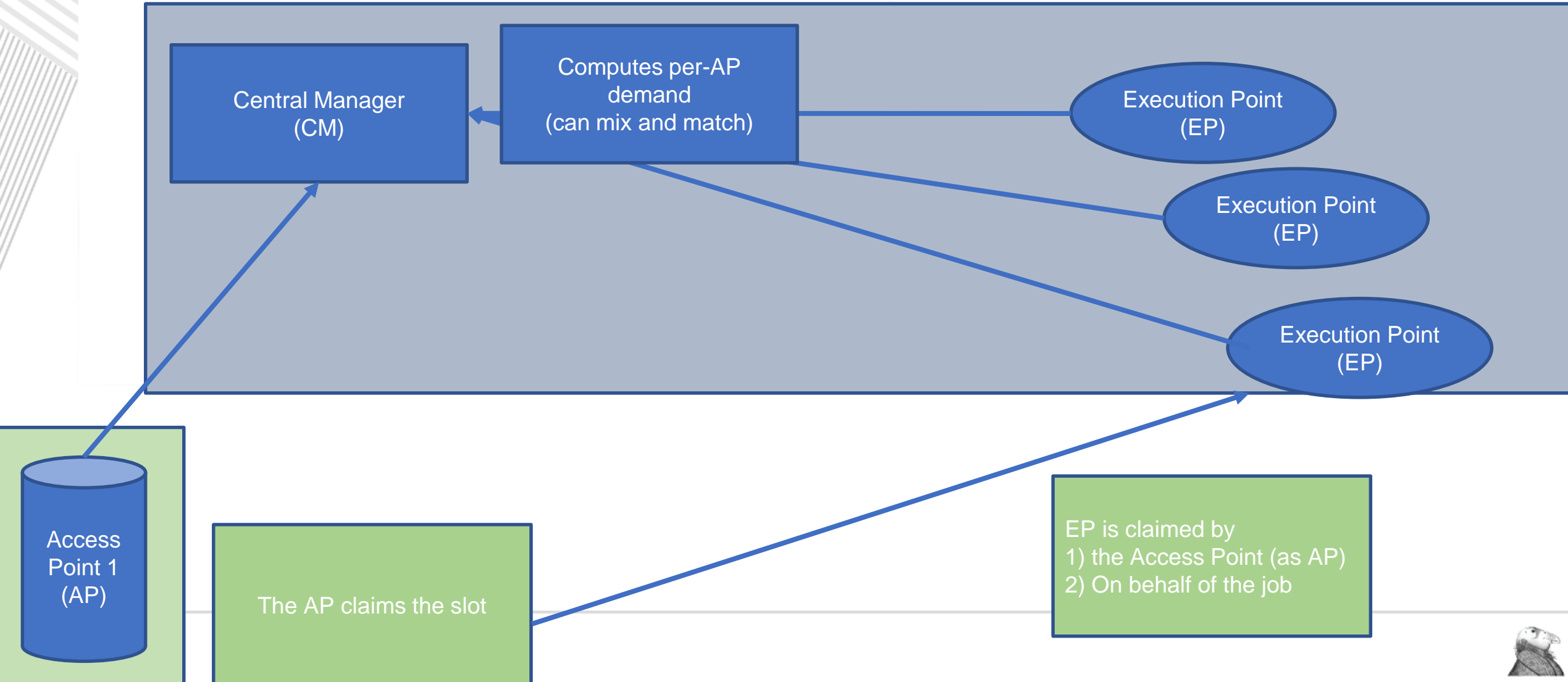
Where we are going... (with per AP knob)



Who claims the EP?



Answer: BOTH!



Summary

- Distributed nature of HTCondor requires distribute identifiers
 - We don't support that well today
 - But we are working on it
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- Where else do we need to break non-distributed assumption



Thank you and questions

Thank you – Questions?

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