

Open Cloud Mesh - Recent Developments

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Protocol updates, GitHub PRs, and open work items



OCM in one minute

What is OCM

Server-to-server federation across administrative domains.

A user on System A can share with a user on System B without moving the resource or requiring a login on System A.

- OCM stops at the coordination layer; actual access is delegated to protocols such as WebDAV.

WG status

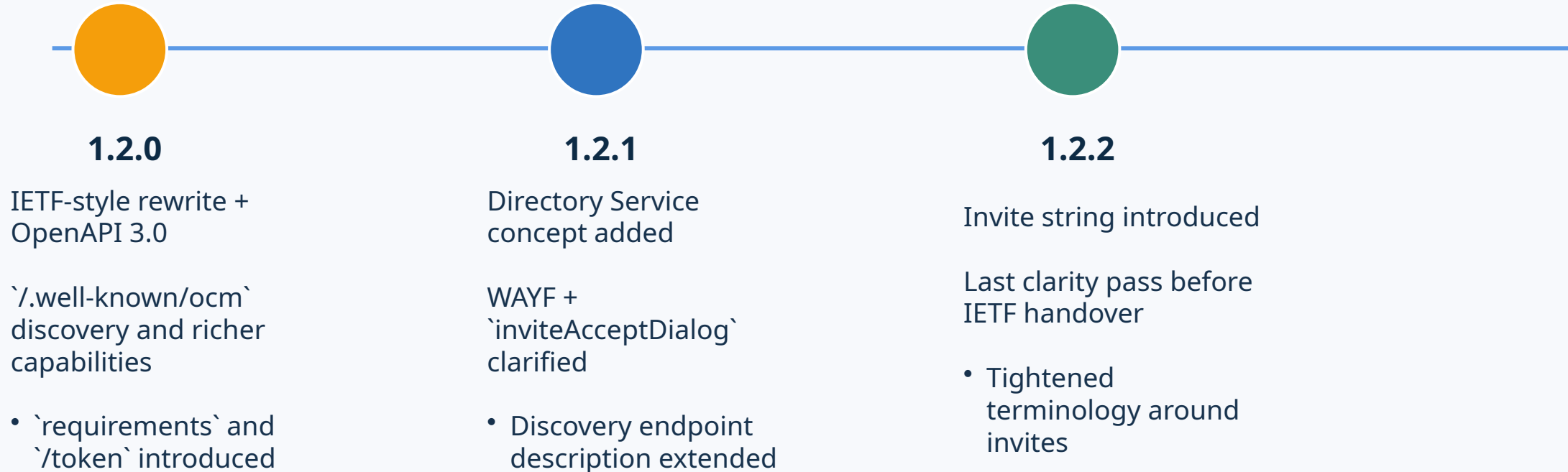
Adopted by the IETF OCM working group in Nov 2025; current active WG draft is -03, published 17 Feb 2026.



OCM coordinates trust, discovery and share exchange; it does not replace the data protocol itself.

What changed in the 1.2.x series

The bridge from deployed protocol to IETF-ready specification



Result: 1.2.x formalized discovery, federation support, and invite handling enough to make the WG draft possible.

1.3.0 / current WG draft: main deltas

Abstract items mapped to merged GitHub work

Spec changes

Functions, roles, and object models make the architecture easier to read and implement.

SSH is now a share access method alongside web-oriented access patterns.

A cleaner `accessType` model replaces the older, data-transfer protocol.

Token exchange is more explicit, including the `/token` request payload and access flow.

HTTP Message Signatures are aligned with RFC 9421, with JWKS/JWS cleanup around key discovery and the Directory Service.

- Capabilities were homogenized and IANA considerations extended.

Relevant closed PRs

#307 / #314 accessType model cleanup
#308 / #312 SSH share access
#320 / #321 /token payload + access flow
#292 / #295 token endpoint alignment / simplification
#305 / #319 HTTP signatures + JWKS/JWS changes
#309 Directory Service via signed JWS
#282 invite format clarification

Open work and where review is most useful

What to look at next

Open items

ResourceDiscovery — open PR #196.

RequestShare — open PR #194.

Mailing list:

<https://mailman3.ietf.org/mailman3/lists/ocm.ietf.org/>

GitHub:

<https://github.com/cs3org/OCM-API>

Datatracker:

<https://datatracker.ietf.org/doc/draft-ietf-ocm-open-cloud-mesh/>

Looking for: draft reviewers, especially security oriented, and anyone working on federated storage or cross-platform file sharing.