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Connecting European Data



Science Mesh – Invitation Workflow

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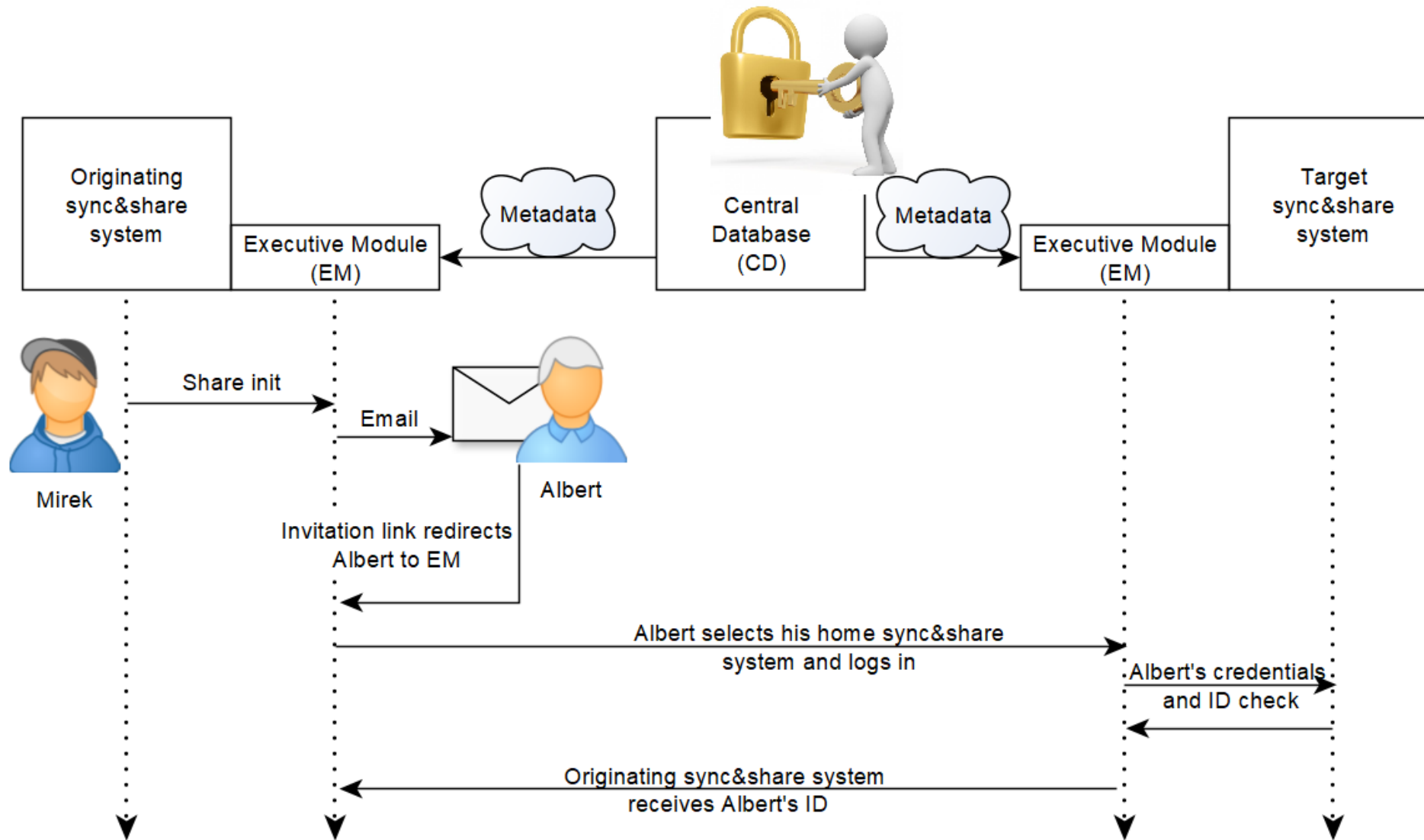


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- # OCM supports sharing resources between users
 - # The sites must be configured peer-to-peer to enable sharing
 - # Which is not scalable
 - # The user needs to know other user's target system and identity there
 - # Which is not realistic
- # The Science Mesh targets both issues
 - # Introduces centrally maintained metadata
 - # Covering end systems, services running there, administrative contacts, ...
 - # Similar to identity federations
 - # Introduces a discovery service for end users (the invitation workflow)

- # Metadata maintained in a central database
- # Structure similar to identity federations
- # Covering Sites in the mesh, their service endpoints, contacts, ...
- # Used in the invitation workflow for the users to reveal their target systems
 - # Similar to WAYF in identity federation
- # Adding a site to the mesh means including its metadata
 - # While access management is controlled by each site

- # In ideal world, such mechanism wouldn't be necessary
 - # We would have fully interoperable unified user and group management
- # We have studied sources of user identities and group membership in systems expected to join the Science Mesh
 - # Extremely diverse:
 - # From special national e-infrastructure solutions for user management
 - # To local accounts in the sync'n'share system
- # Sync'n'share systems themselves as common ground
- # Design requirement: use as little personal information as possible
- # The task: originating user wants to share a folder to a target user
 - # Knowing just target user's email address (personal email address, e.g. Gmail)
 - # Having no idea about target user's sync'n'share system, neither user identity in it



Key features of the invitation workflow

Handling personal information

- # Pairing of target user's email address and identity in the target system is valid just for the originating user
- # Can be used for the one and only operation (establishing the sharing)
- # Or can be cached (based on target user's consent obtained during the process)
 - # Mechanism to destroy this information on request will be necessary

We were describing sharing a folder. Identical mechanisms can be used for accessing any other resource, e.g. applications...

... and/or data transfers

- # This is a bit more tricky: transfer management is necessary. More about it in the next talk.



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