



2nd CRISP Annual Meeting

18/03/2013

Bridging Umbrella to other Federations



Outline

- Bridging
- Development Guidelines
- Where to bridge? Review of the new use cases
- How to do it: Architecture
- In action



Bridging



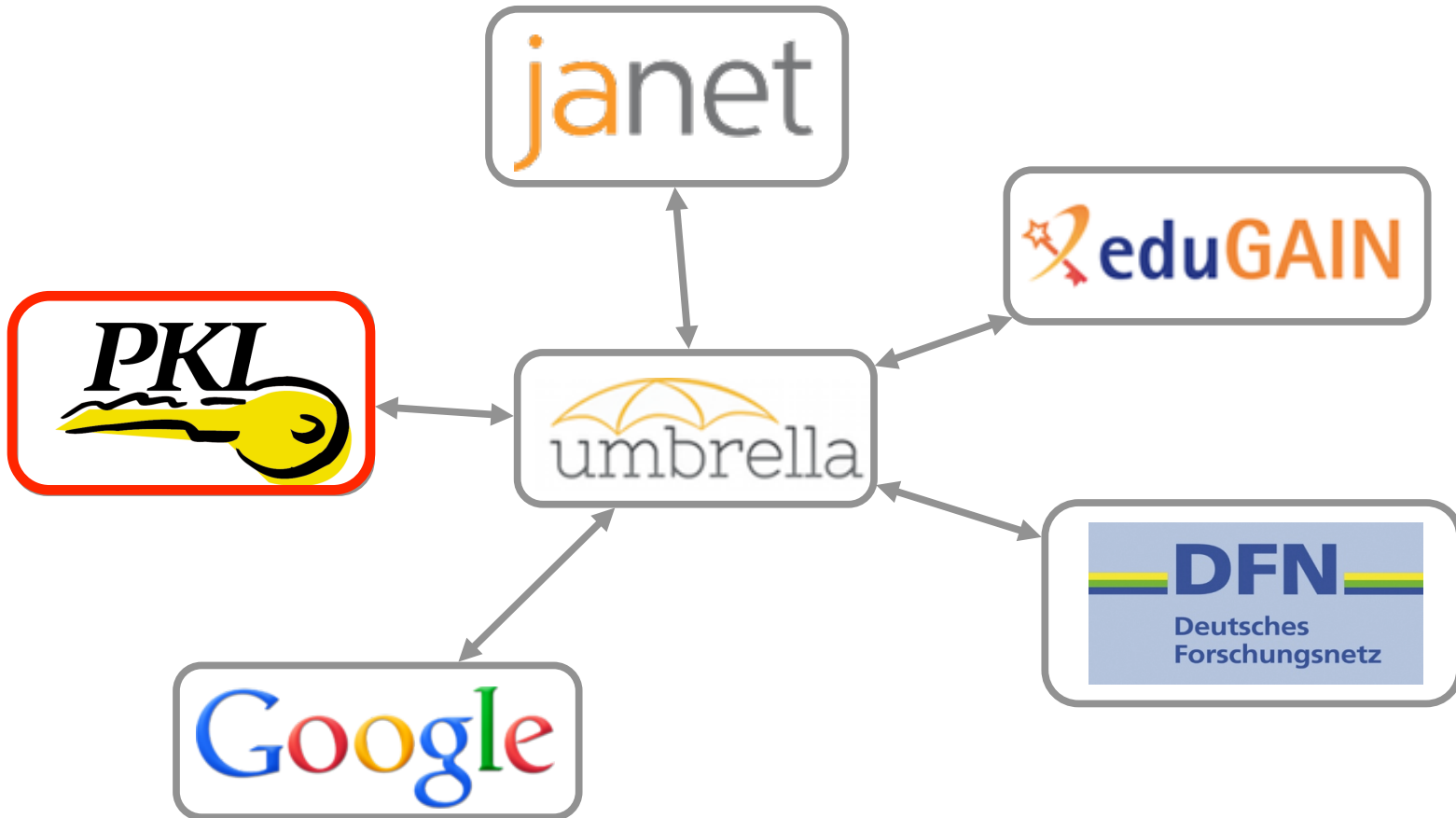


Development Guidelines

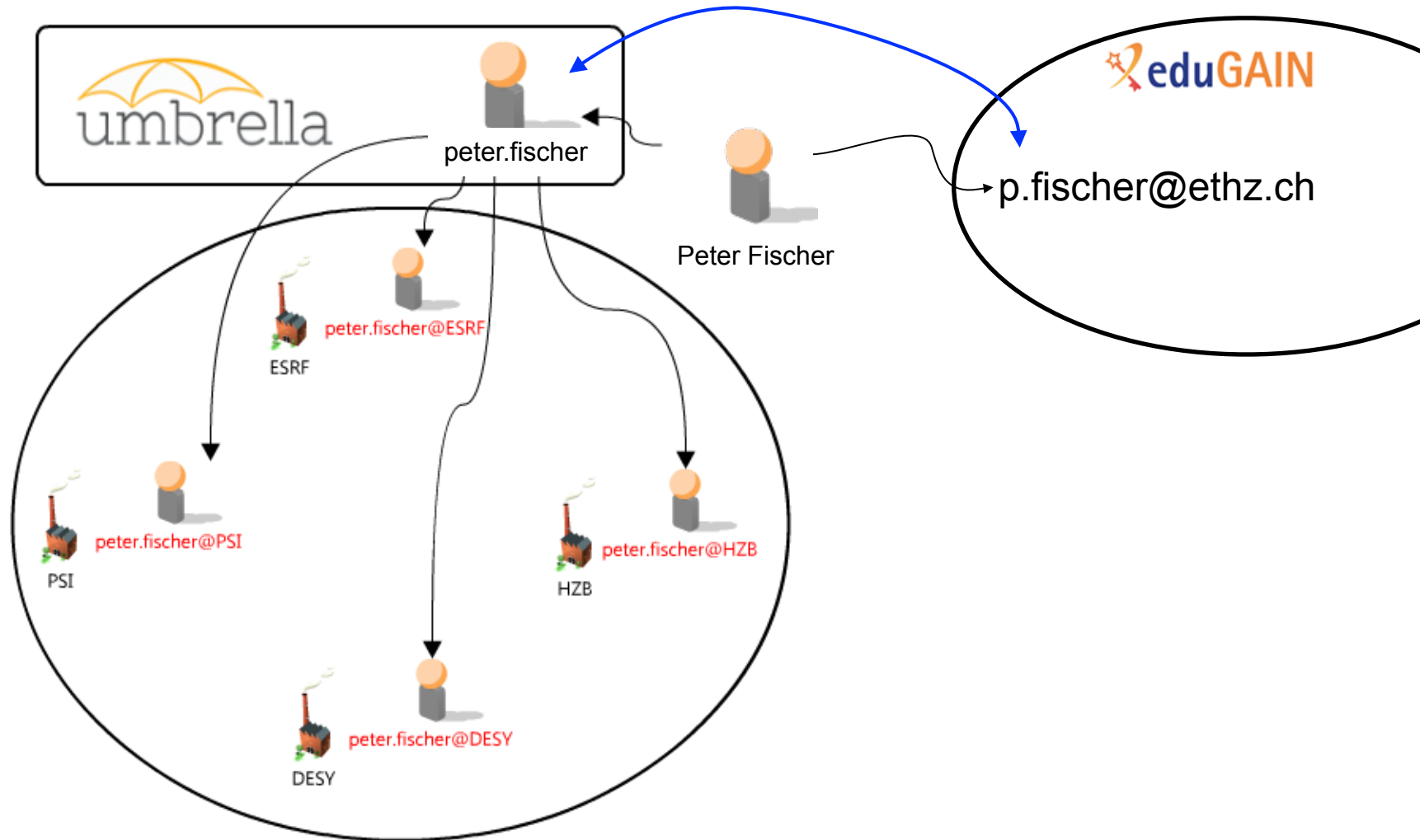
- Bridge different federations implementing different technologies.
- Deal with mapping of attributes as handled by each federation.
- User initiated.
- No automatic cross federation exchange of user attributes.



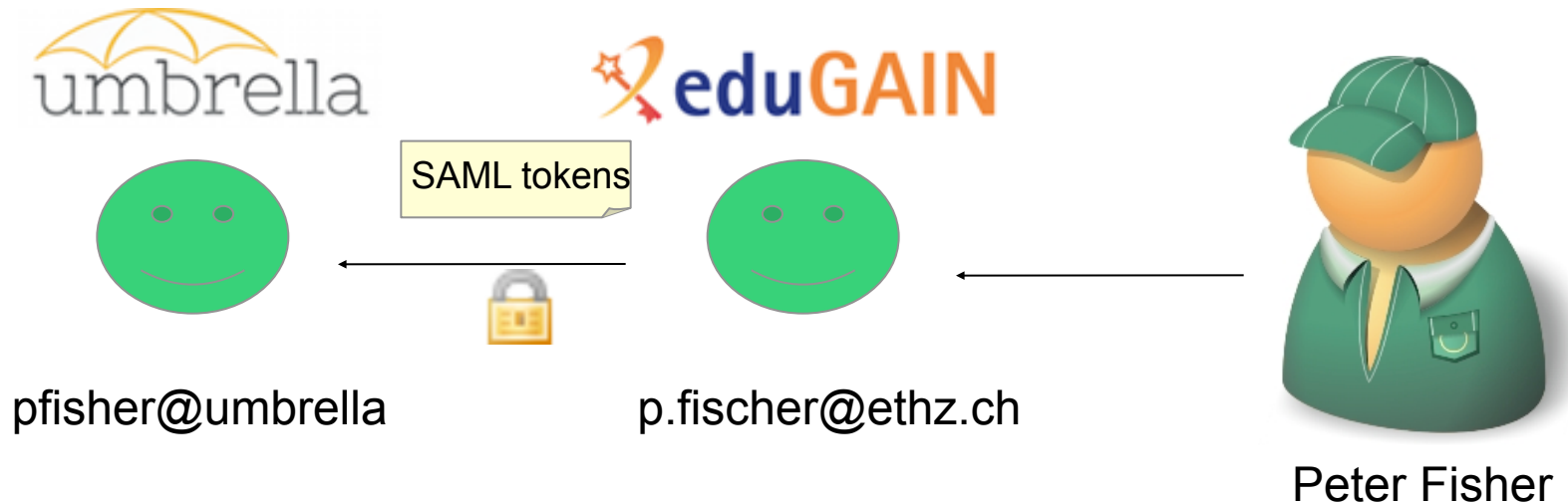
Where to bridge



Where to bridge



How to do it: Architecture



FederationID	UmbrellaID	FederationSrc
p.fischer@ethz.ch@eduGAIN	pfischer	eduGAIN
p.fischer@DIAMOND@Janet	pfischer	Janet
CN=pfischer,dc=gsi,dc=de@PANDA	pfischer	GridKaCA

Architecture

- An AccountLinking table on the Umbrella keeps track of linked accounts:

FederationID	<ul style="list-style-type: none">• A cross federation unique identifier of an account• E.g. p.fischer@ethz.ch@Switch
UmbrellaID	<ul style="list-style-type: none">• A unique Umbrella identifier• E.g. pfischer
FederationSrc	<ul style="list-style-type: none">• The name of the federation of the source account• E.g. eduGAIN



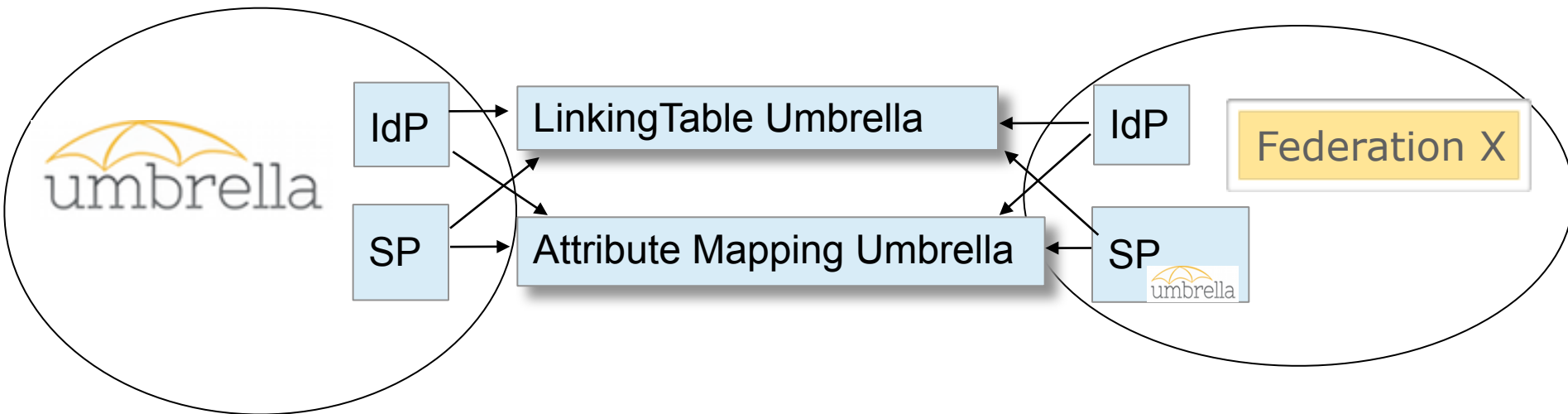
Architecture

- An AttributeMapping table translates attributes from one federation to another federation.

sourceAttribute	<ul style="list-style-type: none">• An exact attribute name from an incoming federation• E.g. mail
destinationAttribute	<ul style="list-style-type: none">• The attribute name for an outgoing attribute name• E.g. email

Architecture

- To get user information from a federation one has to be a service provider in it.



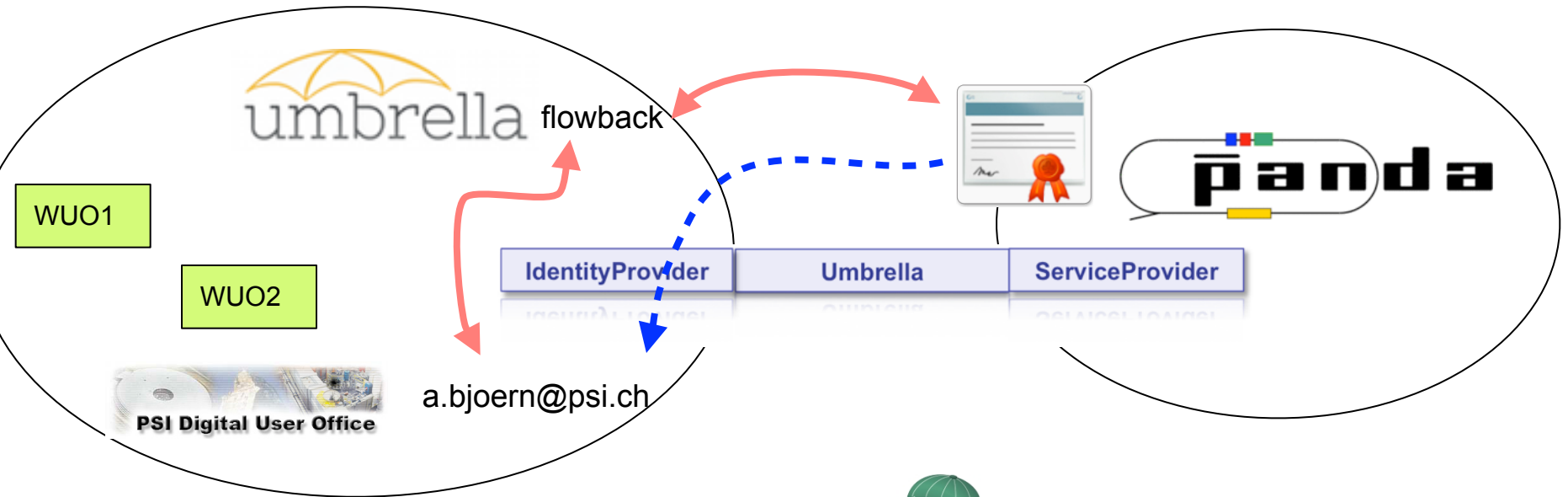


In action

- FAIR-GSI has presumably a big High Energy Physics (HEP) community.
- Users hold a x509 certificate.
- Proof of concept:
 - A user holding a x509 certificate can link to his umbrella account.
 - The user has an account in a local WUO system.
 - Such account is linked to Umbrella account.
 - A user logged in with the x509 certificate can access the WUO.



In action



Bjoern Erik Abt



Summary

- To bridge federations we do it persistent:
 - Keep linking of accounts in LinkingTable.
 - Matching of attributes in MappingTable.
- Proof of concept achieved with x509 certificates.
- Next steps: bridge to other federations.



Thank you for your attention!

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