RCauth.eu / MasterPortal update

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 5^{th} AARC face-to-face meeting, $A\theta\eta\nu\alpha$

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- Access to X.509 resources made easy¹
- Science Gateway scenario (browser-central) need simple api to get user certificates
- Compared to US Europe decentralized/multi-federated: need layered setup
- → intermediaries: MasterPortals
 - between central CA and O(many) science gateways
 - similar position as IdP/SP proxies in elnfras/ResearchInfras

Introduction Mischa Sallé (Nikhef) 2 / 11

¹ https://aarc-project.eu/digital-certificates-behind-the-scenes-the-aarc-cilogon-pilot/



Single RCauth.eu

- single, fully IGTF accredited online CA
- eduGAIN + R&S + Sirtfi

Few Master Portals

- Scalable trust model
- Handling the complexity (end-entity-cert to proxy-cert)
- Caches the credentials
- VOMS integration

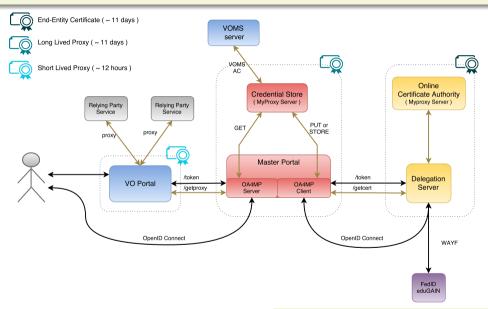
Many Science gateways / VO portals

Easy integration using OIDC authZ flows access



Architecture







- Use new upstream code, now (also) on github (used both in MasterPortal and RCauth.eu itself)
- Upstream has improved OIDC support (towards Cllogon-2)
 signed id_token

/.well-known/openid-configuration

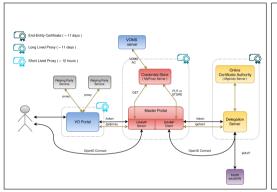
- Generic MasterPortal ansible scripts now also on github
- → https://github.com/rcauth-eu/

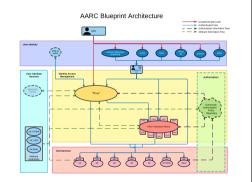


- Software support: Try to push back our patches
- joint RCauth proposal (EGI, EUDAT, GÉANT...?): e.g. HA setups
- Integration Master Portals (next slides)
- Training in AARC2?











MasterPortal \approx TTS, close to or inside IdP/SP proxy

- Infra Integrations (order of appearance):
 - ELIXIR is running our implementation of a MasterPortal
 - EGI is also running our implementation: next to CheckIn, looking e.g. at HA
 - INDIGO is integrating MasterPortal within WaTTS²
 - EUDAT is testing our implementation, considering integration within Unity-IdM³
 - PRACE: ongoing discussions, need to look at the use-cases.

²Demo/talk Uros

³Demo from Shiraz/Nicolas

VOMS integration



- MasterPortal can already return VOMS proxies, but user must be provisioned
- Need user attributes, but also DN
 - IdP/SP proxy is ideal location
 - acting as OIDC client to RCauth (like a MasterPortal) → get cert_subject_dn
- VOMS provisioning @IdP/SP proxy: create e.g. a COmanage plugin
 - useful discussions and planning with Benn, Peter, Nicolas at plugfest
 - basic provisioning/deprovisioning plugin planned soon (before end AARC1?)
 - no changes needed to existing VOMS servers, but do need VO-admin
 - mapping of e.g. Role is not yet fully clear

Open issue: account linking



How to deal with multiple identities in RCauth? (Different IdP gives different DN: "ePUId" ↔ DN token translation)

- could link DNs at every SP (bad)
- could link DNs inside VOMS (ok but depends on how)
- could link all ePUlds (or similar) in central IdP/SP proxy:
 - use preferred IdP as default idphint for RCauth
 - can do VOMS provisioning for all identities
- alternative: linking in MasterPortal: 'idphint-per-user' list
 - multiple identities are known and sufficient for returning proxy cert
 - but one is preferred and used for end-entity cert creation





- Demos: https://rcdemo.nikhef.nl/
 → email me your RCauth DN for provisioning into rcdemo.aarc-project.eu test VO
- Blog post: https://aarc-project.eu/digital-certificates-behind-the-scenes-the-aarc-cilogon-pilot/
- Our setup: https://wiki.nikhef.nl/grid/AARC_Pilot
 → also contains links to Cllogon code, MyProxy protocol etc.
- Pilot ICA 1 (e.g. CP/CPS): https://rcauth.eu/
- VOMS: e.g. http://italiangrid.github.io/voms/



- Need IOTA support on production X.509 resources:
 - compute: EMI: LCMAPS ok, Argus unofficially ok, ARC: needs to implement
 - storage: dCache partially, DPM needs to implement
- Might need support for OIDC IdPs at central RCauth CA