

Astronomy ESFRI & Research Infrastructure Cluster ASTERICS - 653477

### **A&A experience at IA2 and SKA**

Sonia Zorba INAF-OATS





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#### IA2 Use Case



#### Program A

**Program B** 









#### In the past

- Username = Program Name
- Custom password for each program
- Shared password between PI and Col

#### Intermediate step

- Users in LDAP
- Grouper for authorization
  - Group Name = Program Name
  - PI can manage Col using Grouper UI
  - Authentication performed by the archive web page

#### Now: SSO

- RAP (Remote Authentication Portal)
  - Multiple authentication methods (SAML 2.0, OAuth2, X.509)
  - Account linking
- Grouper for authorization

# **RAP client application**

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# RAP

#### **Remote Authentication Portal**





Use the eduGAIN Logo to Login or Register to the RAP facility if you belong to an eduGAIN IdP.



Use these Logos to Login or Register to the RAP facility with your social identity

### **x.509**

Use the X.509 Logo to Login with your personal certificate (IGTF and TERENA-TACAR, are allowed).



Image Credits & Copyright

Use the IA2 Logo to Login if you have an account provided by IA2 or self registered

Need help? Please read our <u>User guide</u> and <u>FAQ</u>.

Privacy policy

### **Communication between applications**



### ...and the user is logged in!

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# **Account linking**



The same person, multiple identities, multiple user ID

### **RAP Account Management**



#### Join request

	Search user	*	
	Search text	zorba	]
NN ⊉oats	Select user	Sonia Zorba (LinkedIn)	]
zorba(		Send join request	
Nazis			

Target user will receive an email containing a confirmation link

The URL contains a token associated to join information.

# **Confirmation link**

#### **Confirm join request**



- From 2 User ID to 1 User ID (with 4 Identity ID).
  - One user is deleted, its identities are moved to the other user.
- Grouper works only with User ID, not Identity ID. RAP manages both.
- During the join Grouper needs to be called for merging groups and privileges.

# **RAP + Grouper**

- Grouper is not able to:
  - Understand the concept of "joined identities"
  - Login using all the authentication methods supported by RAP
    - By default: Basic-Auth on realm defined in Tomcat configuration
    - Shibboleth connector available

- So we replaced:
  - Source adapter
  - Authentication filter

#### **RAP + Grouper**



#### **RAP + Grouper**

INTERNET		Search Q
F	Logged in as Sonia Zorba (edu	JGAIN+X.509+Google) · Log out
+ Create new group	Logged in as Sonia Zorba (eduGAIN+X.5     Home > Root > OATS > TNG_GROUPS	09+Google) · Log out
Quick links	- TNG_GROUPS	Edit folder
My groups My folders My favorites My services	More ~       Folder contents     Privileges     More ~	More actions▼
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# SKA

- First version of RAP has been developed by Franco Tinarelli (INAF-IRA) as the A&A prototype for SKA.
- In SKA groups will be used for several applications:
  - Scientific computation
  - Proposals
  - Badge access
- Configuring RAP for using LDAP, Kerberos support will be possible
  - Useful for OpenStack Keystore authentication

#### Try it! :-) https://sso.ia2.inaf.it/

Source code (GPLv3):

- RAP: https://www.ict.inaf.it/gitlab/zorba/rap-ia2
- Grouper customization: https://www.ict.inaf.it/gitlab/zorba/rap-grouper

# Thank you for your attention! Questions?

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