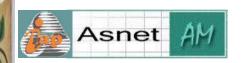
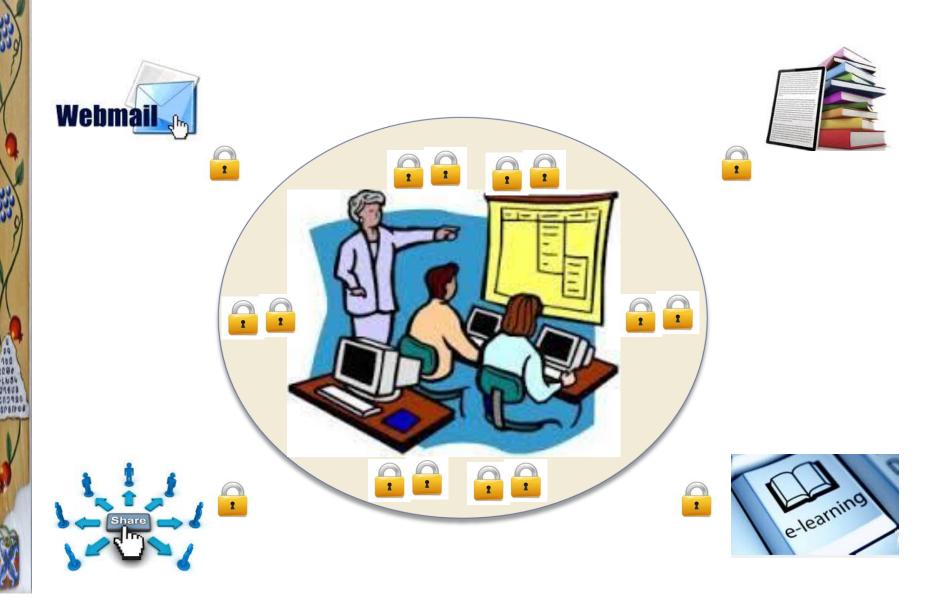
## International Collaboration and New Services of ASNET-AM

Hrachya Astsatryan,
Institute for Informatics and Automation Problem (IIAP),
National Academy of Sciences of Armenia

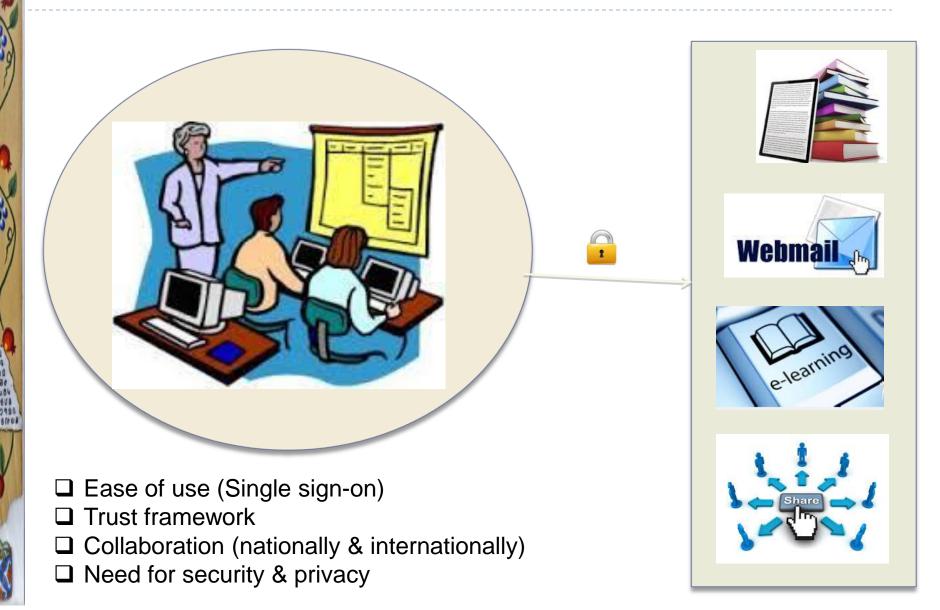


### Online Services: Research and Education





#### Online Services: Federations benefits

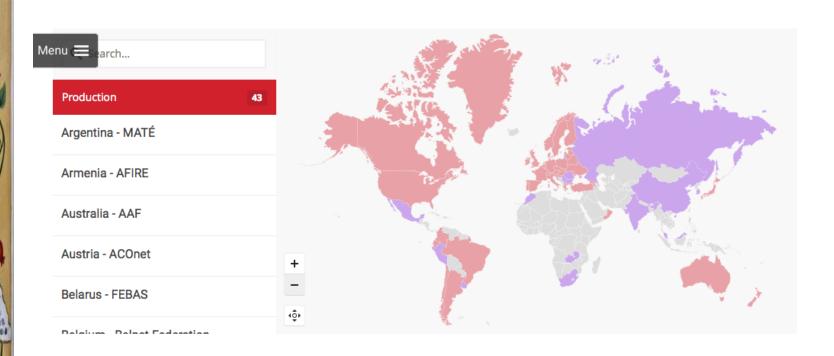




#### Online Services: Federations Collaborations

Q

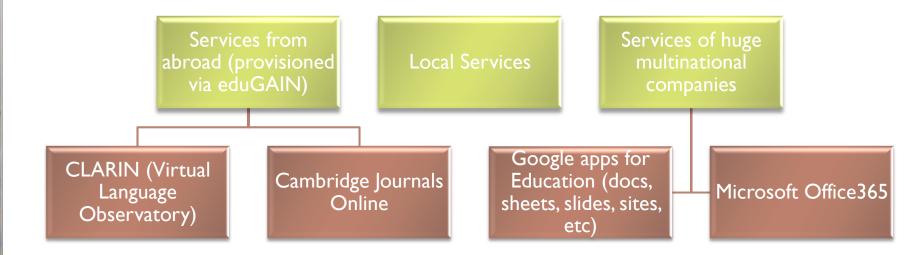




- □ REFEDS (the Research and Education FEDerations group) is to be the voice that articulates the mutual needs of research and education identity federations worldwide.
- eduGAIN interconnects federations worldwide: interfederation: 2001 Identity Providers, 1141 Service Providers



### Online Services: possible ways



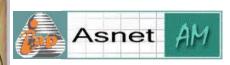


#### AFIRE IsP: File Sender



You need to send a file larger than a couple of megabytes to someone and the email comes back: attachment too big (unfortunately due to security and other reasons the mail servers (both incoming and outgoing) restrict attachment sizes to a maximum of a few megabytes).



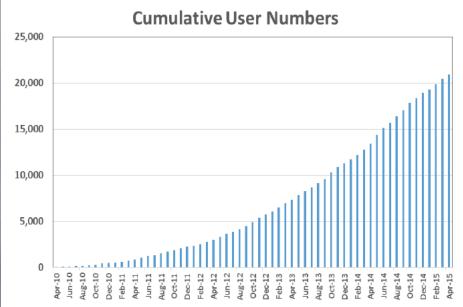


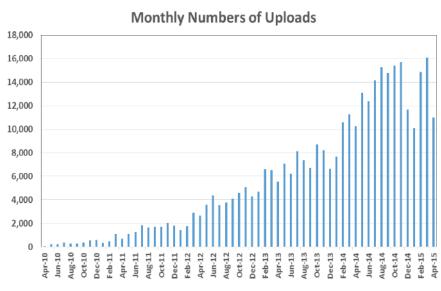


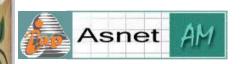




#### **Australian Statistics**



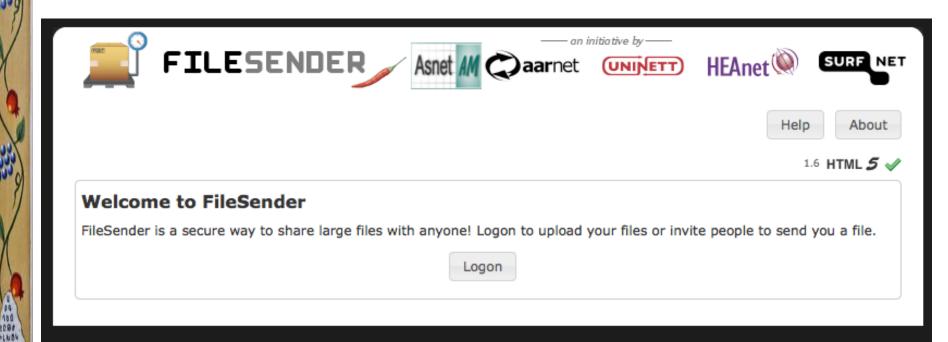








#### AFIRE IsP: File Sender









	OneDrive	Dropbox	Google Drive	Вох	Amazon Cloud Drive
File size restrictions?	10GB	10GB with website, none with Dropbox apps	5TB	250MB for free plan, 5GB for paid personal plan	2GB*
Free storage?	5GB**	2GB	15GB	10GB	No***
Can I earn extra free storage?	No**	Yes	No	No	No



### AFIRE IsP: File Storage (Drive)







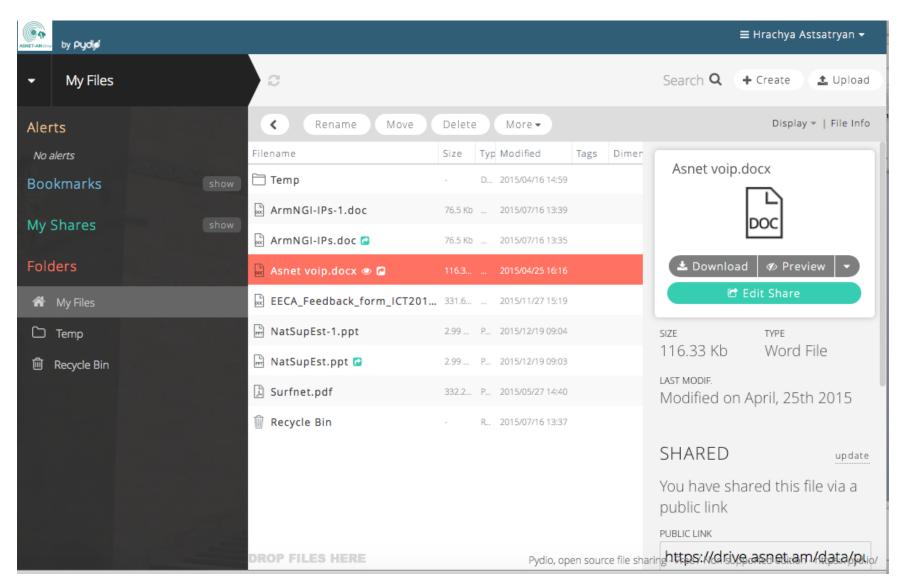
- ☐ User friendly, Personal Storage in the Cloud.
- ☐ All your research data stored safely in Armenia.
- ☐ Access file anywhere and anytime.













### AFIRE IsP: eLearning

















#### EduRoam Concept



 EduRoam is a federated authentication trust framework for wireless networks, which allows roving researchers to login with their standard user name and password



Andorra, Argentina, Armenia, Australia, Austria, Azerbaijan, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, People's Republic of China, Colombia, Costa Rica, Croatia, Cyprus, Czech Republic, Denmark, Ecuador, Estonia, Finland, France, Germany, Greece, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, Japan, Kazakhstan, Kenya, Korea, Kyrgyzstan, Latvia, Lebanon, Lithuania, Luxembourg, Macau, Macedonia, Malta, Mexico, Moldova, Montenegro, Morocco, The Netherlands, New Zealand, Norway, Peru, The Philippines, Poland, Portugal, Qatar, Taiwan (ROC), Romania, Russia, Saudi Arabia, Serbia, Singapore, Slovenia, Slovakia, South Africa, Spain, Sweden, Switzerland, Thailand, Trinidad & Tobago, Turkey, Uganda, United Arab Emirates, United Kingdom, United States of America and Zambia



## EduRoam in Europe

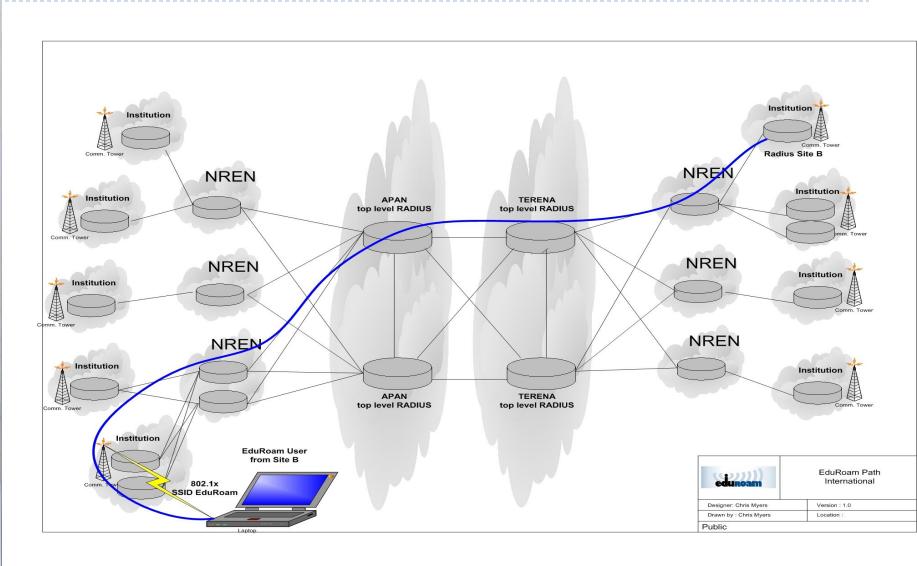


Europe	Africa	APAN	SOAM NOAM	
Country		NREN/NRO		Number of service locations
Algeria			ARN	N/A
Andorra			U.Andorra	1
Armenia ASNET-AM		ASNET-AM	5	
Austria ACOnet		ACOnet	68	
Azerbaijan			AzScienceNet/ANAS	N/A
Belarus			BASNET	1
Belgium			BELNET	130
Bulgaria			BREN	26
Croatia			CARNet/Srce	191
Cyprus			CYNET	N/A
Czech Rep	ublic		CESNET	780
Denmark			DelC	631
Estonia			EENet	66
Finland			FUNET	350
France			RENATER/CRU	694
Germany			DFN	1104



# eduroam

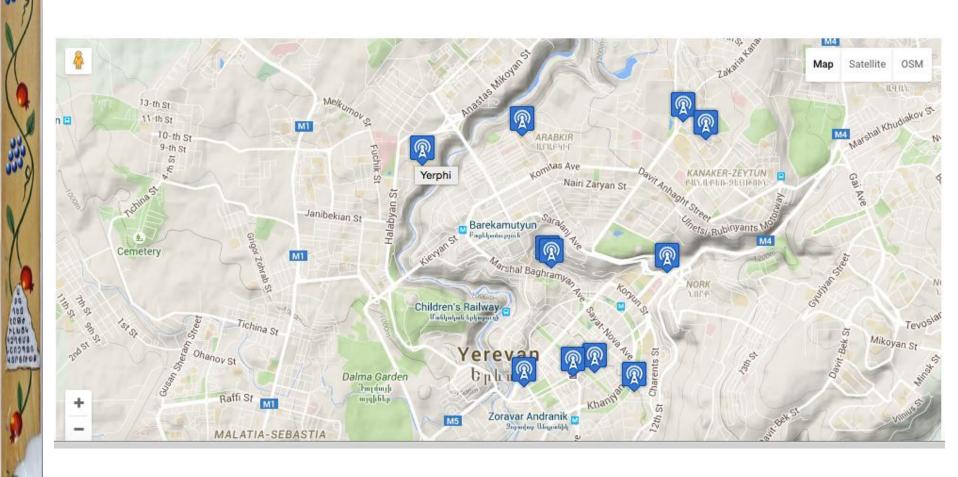
## EduRoam Topology





#### EduRoam Portal







#### Further Activities



#### **About**

#### About the Enlighten Your Research Global Program

Due to its increasingly collaborative nature, large-scale science is rapidly becoming completely dependent on a complex ecosystem of global research and education (R&E) networks. This is because unique, geographically dispersed scientific instruments and facilities need to be accessed and used remotely by thousands of researchers worldwide. Furthermore, these facilities create massive data sets – which for some experiments can reach terabytes to hundreds of petabytes – that have to be archived, catalogued, and analyzed using large-scale infrastructure resources. The ability to reliably manage the round-the-clock data flows from these computing centers and



ASNET-AM, <a href="http://www.asnet.am">http://www.asnet.am</a>

Eduroam, <a href="http://www.eduroam.am">http://www.eduroam.am</a>

AFIRE Federation, <a href="http://www.afire.asnet.am">http://www.afire.asnet.am</a>

Cloud storage, <a href="http://drive.asnet.am">http://drive.asnet.am</a>

FileSender Service, <a href="http://filesender.asnet.am">http://filesender.asnet.am</a>

AFIRE Registration, https://afire.asnet.am/index.php/registration