



ASREN regional perspective towards enhanced e-infrastructures for research and education

Salem Al-Agtash, Ph.D.
Arab States Research and Education Network

UbuntuNet-Connect 2013, Kigali, 14.11.2013

alagtash@ASRENOrg.net

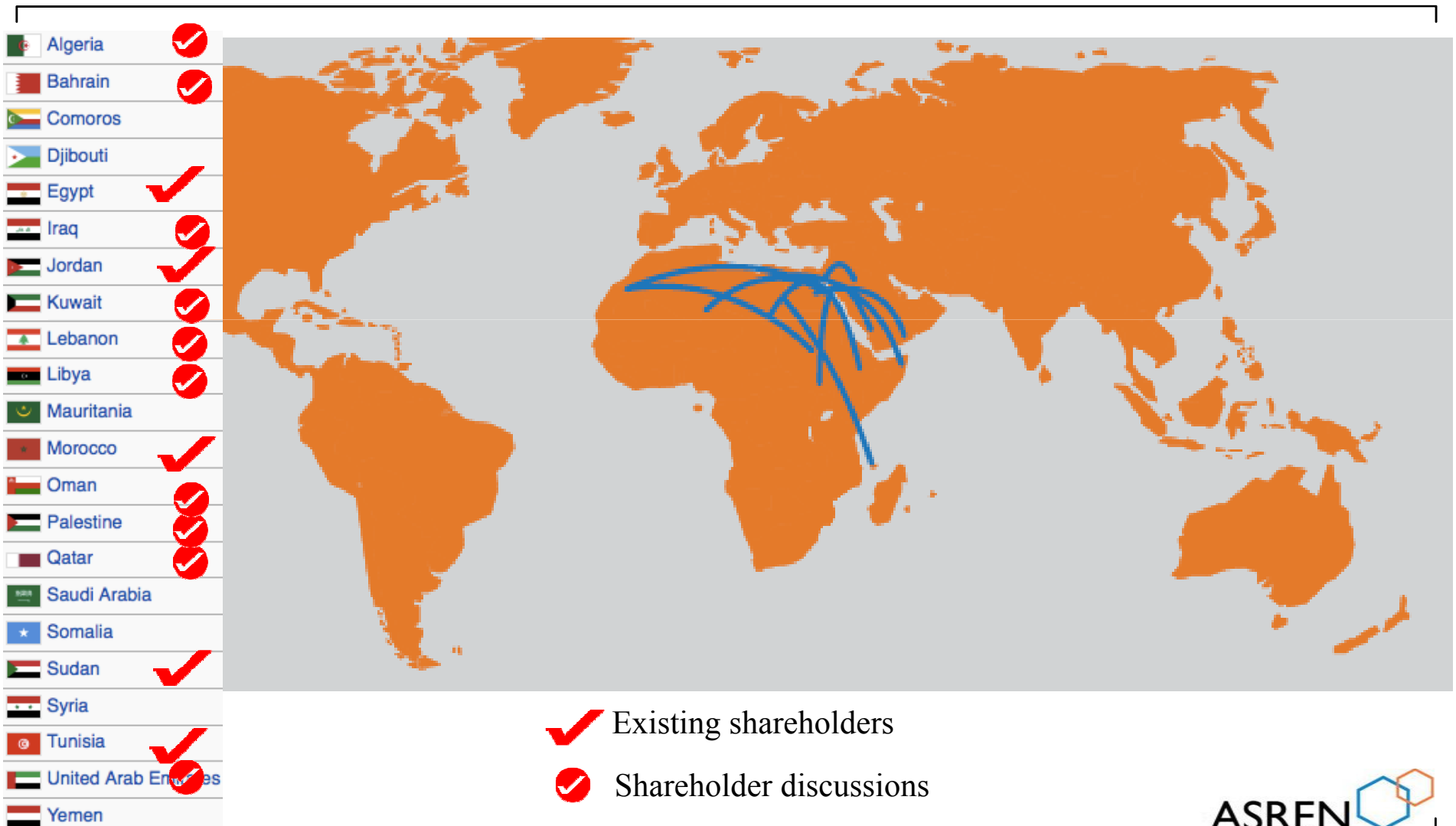
Overview

- EUMEDCONNECT, (1) 2004, (2) 2008, (3) 2011
- PAN Arab Network, 2005
- Rome Declaration 2006 - CAMREN
- NAP, the Network Access Points 2007
- ASREN GmbH - Dusseldorf, June 2011

Association of Arab NRENs
League of Arab States



Shareholders

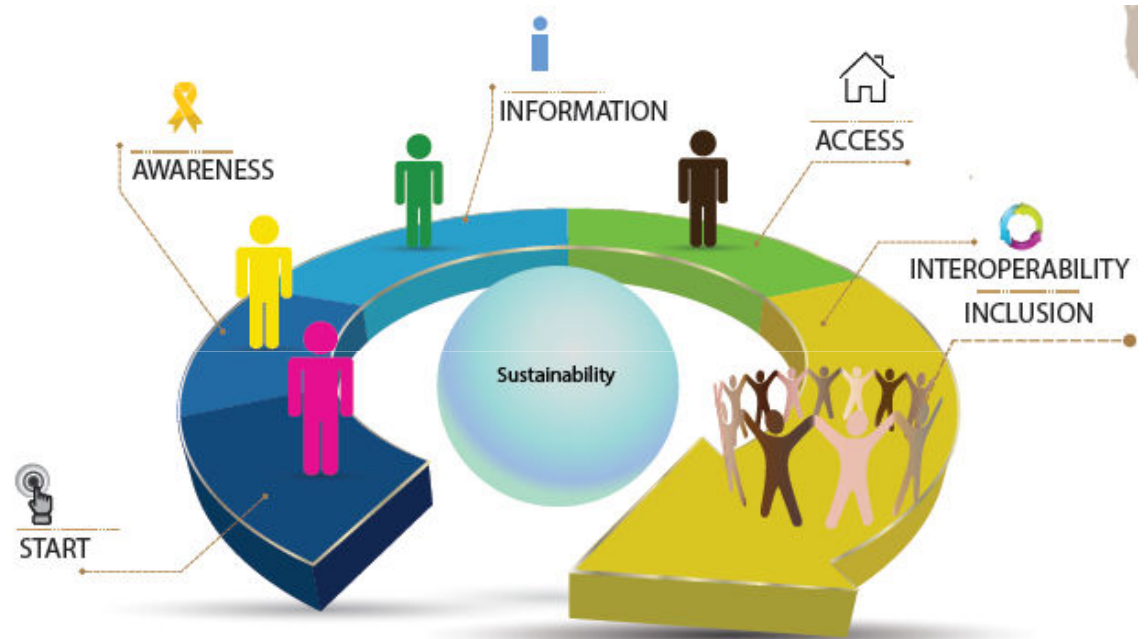


Inspiration

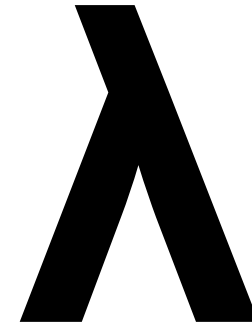
- Serve about 1000 Arab institutions hosting over 20 million students and 1 million faculty
- Better utilize R&D spending of 0.5% GDP through collaboration
- Support ever increasing 1,176.8% growth of online education through access
- Unlock the potential of Arab youth, estimated at 200 million people, and give them opportunities for a better future

Success

1. Interconnection
2. Services
3. Collaboration



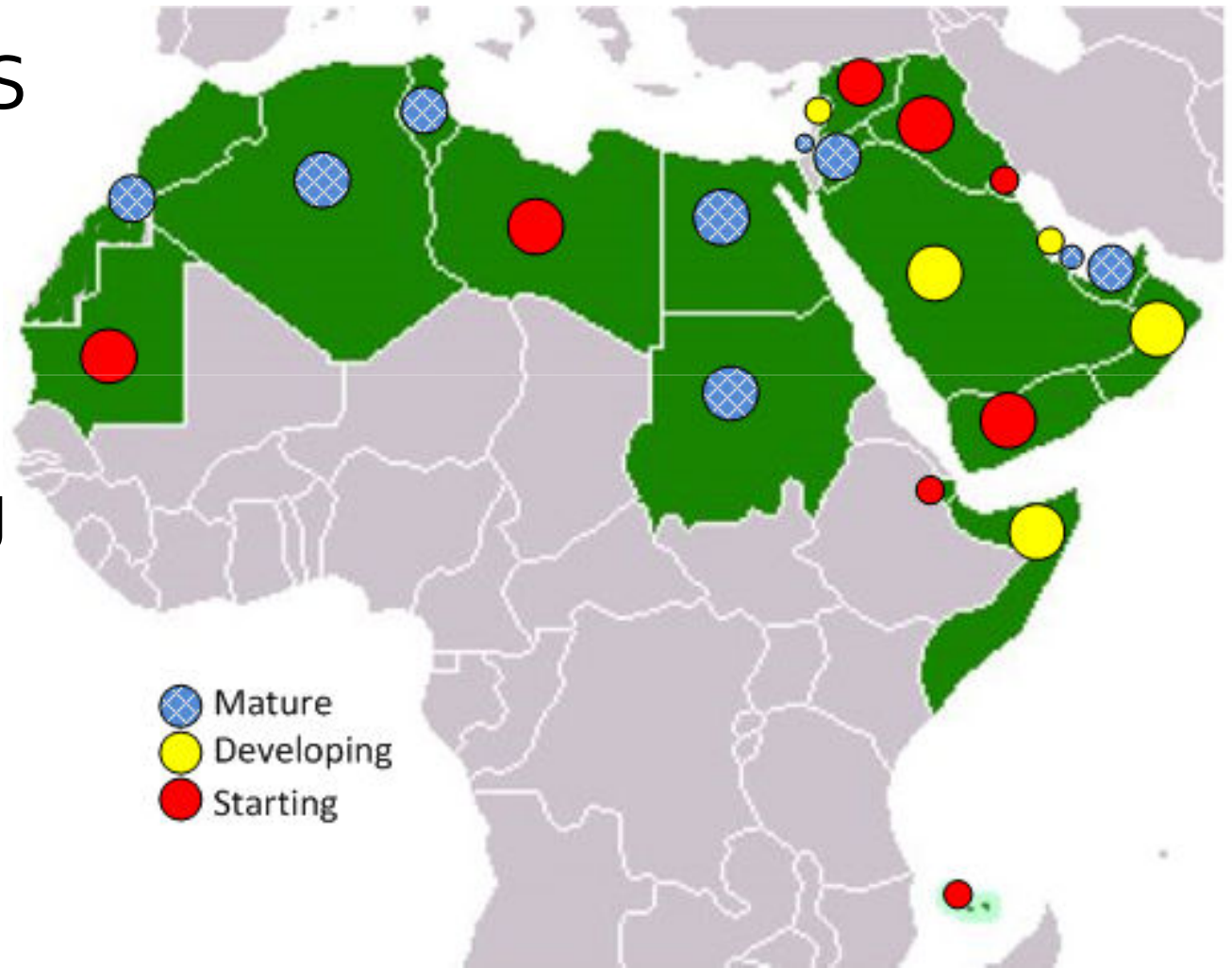
INTERCONNECTION



Status

Of Arab NRENS

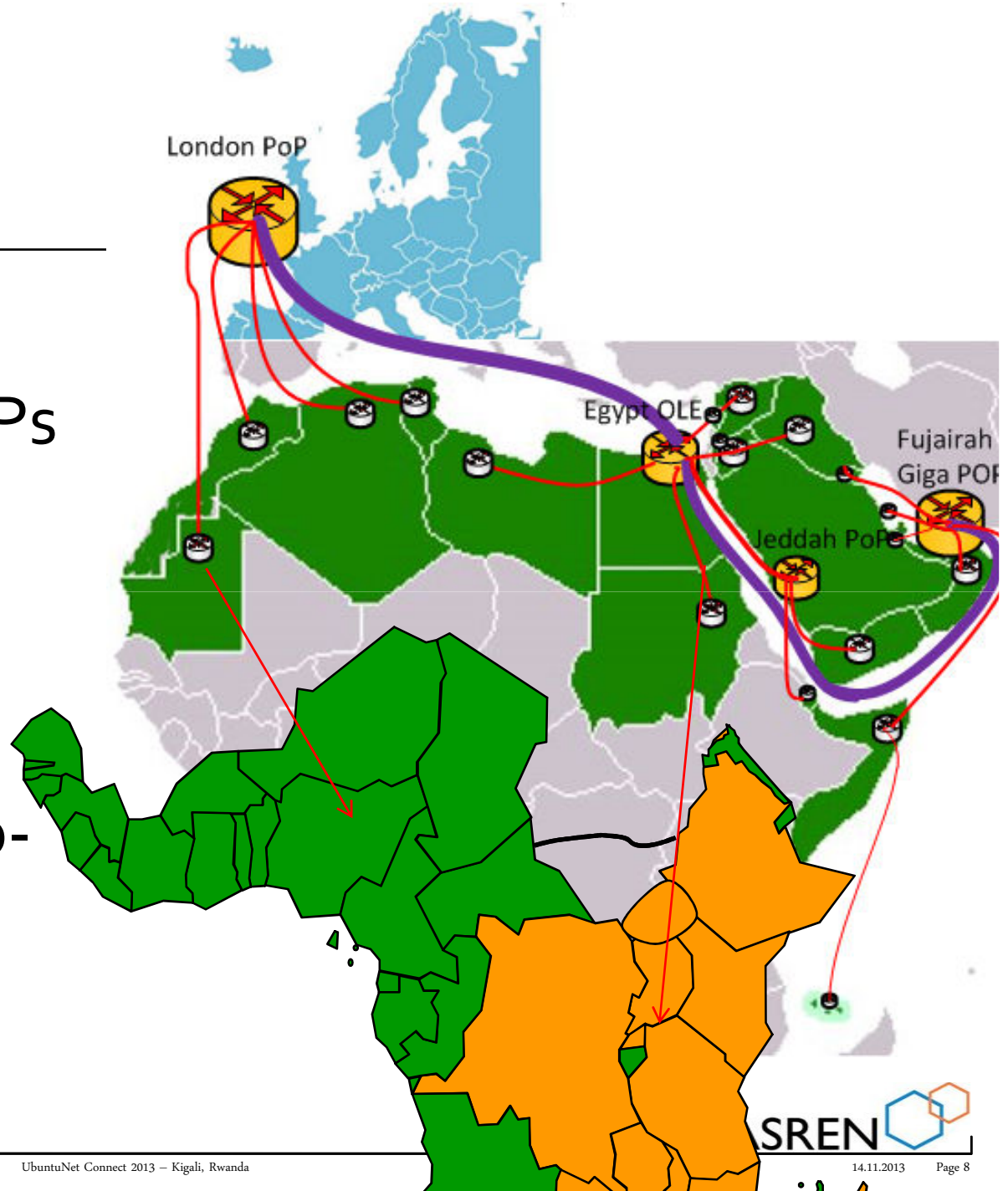
- 9 Mature
- 5 Developing
- 8 Starting



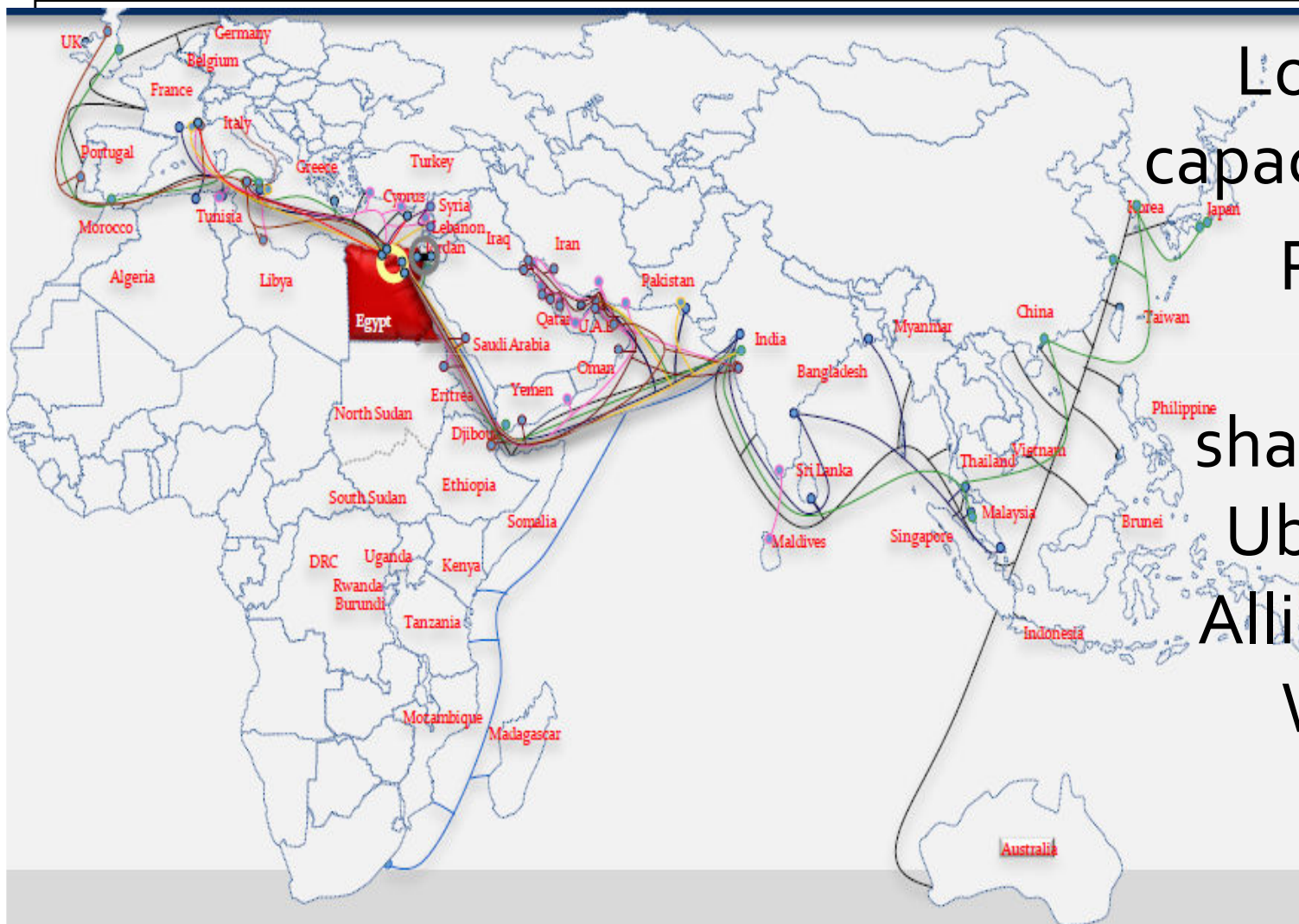
Topology

Foreseen network

- 3 main logical PoPs
 - Fujairah
 - Alexandria
 - Jeddah
- London PoP in co-location with WACREN



Cabling



Long term capacity lease •
Potential capacity sharing with UbuntuNet Alliance and WACREN •

SERVICES

■ ASTRA



■ CLUSTALW



■ De ROBERTO DR



■ GROMACS



■ MERIS



■ GNU OCTAVE



■ R



■ SONIFICATION



■ WRF



Consolidation

1 → Get to know the service
Visit <http://sgw.asrenorg.net>

2 → Register

The screenshot shows the Science Gateway website. At the top, the title "Science Gateway" is displayed with the subtitle "Portal of advanced applications for research in the Arab region". The ASREN logo is in the top right corner. A blue navigation bar contains links for "Home", "About us", "Applications", and "Contact us". Below this, a grey bar features "Sign in" and "Register" buttons, along with user and application icons. The main content area has a heading "WHAT IS THE SCIENCE GATEWAY?" followed by a descriptive paragraph. A carousel of four circular icons represents different fields: Chemistry (flasks), Mathematics (bead string), Environment (sunflower), and Engineering (mechanical part). The footer includes logos for ASREN, Consortium GARR, chain reds, INFN, and the Arab Science Research and Education Network, along with a copyright notice for 2013 ASREN.

SELECT YOUR IDENTITY FEDERATION

Select Identity Federation

Select Identity Provider

- Catch-all GrIDP-test GrIDP
- Catch-all GrIDP GrIDP
- Greece GRNET-AAI grnet
- Worldwide eduGAIN eduGAIN
- Italy IDEM idem garr

Not Sure? [Click Here](#)

SELECT YOUR IDENTITY PROVIDER

- Catch-all IDPOPEN GARR IDPOPEN
- Jordan ASREN IDP ASREN
- Austria EOx IdP EOx
- Nigeria NgREN IDP NgREN
- Tanzania TERNET IDP TERNET
- Mexico FIdMex IdP FIdMex

Arab States Research and Education Network

The web site described to the right has asked you to log in and you have chosen <ASREN> as your home institution.

Username:

Password:

EUMEDGRID Science Gateway

This service provides information for Grid users, Application developers and Grid site administrators. It is mainly devoted to people involved in the EUMEDGRID-Support project but many pages are of general interest

Shibboleth

3 Use it!

ASREN Arab States Research and Education Network

Welcome My Workspace Private Page Applications

ASREN Science Gateway My Jobs

MyWork

- Jobs
- JobsMap
- Data
- Help

MyJobs

Active Jobs List Done Jobs List

The table below shows the status of your jobs. Statuses are automatically updated every 15 minutes so there is no need to reload this page more frequently. However, if you don't see your jobs in the table within a reasonable amount of time (a couple of hours at most), click on Help in the MyWorkspace portlet and notify us the problem. Once your jobs have finished, you have 96 hours to retrieve their output. Beyond that time, the output of your jobs will automatically be deleted from the Science Gateway in order not to fill its storage with undesired stuff.

Copy Print Save Download Job output Search:

Show 10 entries

Application Name	User Description	Started on (UTC)	Status
Sequential	89	2013-11-04 11:39:37.0	SUBMITTED



https://applications.eumedgrid.eu

Ola Samara | Sign Out

HOME ABOUT APPLICATIONS SCIENCE GATEWAY INFRASTRUCTURE VIRTUAL MEETINGS PROJECT HOME

Supporting technical application developments and users

Welcome to the EUMEDGRID Support WP3 website. This Work-Package has the important responsibility to support existing user's applications and assist new applications that will run on the Mediterranean e-Infrastructure. This activity is also committed to study and deliver a strategy for the long-term sustainability of the support system that will be put in place during the project lifetime. [Learn more...](#)

Contents

The WP3 Web Portal provides precious information for: Grid users, Application developers and Grid site administrators. Below a summary of the most important available resources provided by this site:

Supported Applications

EUMEDGRID-Support project offers a production quality [Grid Infrastructure](#) to both student and researchers. The term 'support' means that application developers will be helped by a team of experts to execute Grid applications while performing their own scientific experiments. Beside the infrastructure this project offers also a [support system](#) and when possible the financial support to participate to the [training events](#) jointly organized with the [EPIKH](#) project.

[Application portfolio](#)

Add your Application to the EUMEDGRID-Support Science Gateway!

Do you want to improve your scientific results exploiting the EUMEDGRID-Support e-Infrastructure in a easy and modern way? Fill out the following survey with your application information! You will be contacted to start the integration of your application in the innovative EUMEDGRID-Support Science Gateway:

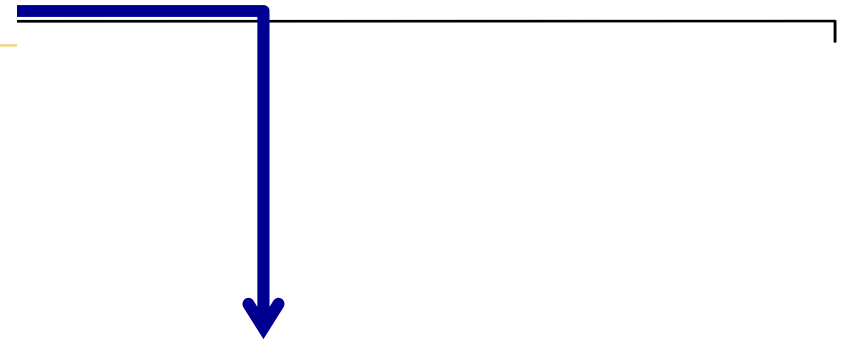
- <http://applications.epikh.eu/survey4sciencegateways>

After that, you should provide WP3 team with the following materials about your application:

- the source code and all additional third party software;
- the instructions to build the executable on Linux;
- an example of input and the corresponding output;
- a short high level description of the application;

RSS EUMEDGrid Support

◆ EUMEDGRID Applications



4 Use Propose new applications

https://applications.eumedgrid.eu/application-list

Ola Samara | Sign Out

HOME ABOUT APPLICATIONS SCIENCE GATEWAY INFRASTRUCTURE VIRTUAL MEETINGS PROJECT HOME

Applications

Status Domain Country

Copy Print Save Search:

Show 10 entries First Previous 1 2 3 Next Last

NAME	RUN PAGE	DOMAIN	MIDDLEWARE	INSTITUTION
3D_Simulps		Earth Sciences	EMI-gLite	CNRST
AFP3DFace		Computer Science and Mathematics	EMI-gLite	CCK
BPFS		Computer Science and Mathematics	EMI-gLite	CERIST
CLUSTALW		Life Sciences	EMI-gLite	SARA
CMSquares		Computer Science and Mathematics	EMI-gLite	AABU - Alalbayt university
FLEXPART		Earth Sciences	EMI-gLite	INFN-Roma3

Application Registry

- [How to get support](#)
- [Status Classification](#)
- [HEP Applications](#)
- [Tools Portfolio](#)
- [Submit an Application](#)
- [Support System](#)

COLLABORATION



VRCs

Virtual research communities

- High Energy Physics
- Life sciences
- Earth sciences
- Mathematics and Engineering

Opportunities

- Consolidate efforts towards Africa interconnect
 - UbuntuNet Alliance
 - ASREN
 - WACREN
- Ideas for collaboration
 - Wealth creation through innovation
 - Innovation through empowerment
 - Empowerment through access to information

Challenges

- Political unrest
- Low RD spending
- Diversified economies
- High cost of access
- Lack of skillful workforce

Acknowledgement



EUMEDCONNECT^{1, 2, 3} •



Coordination and Harmonization of Advanced e-
Infrastructures for Research and Education data
infrastructures •



The EUMEDGRID Support Project •



Coordination and Harmonization of Advanced e-
Infrastructures •



Exchange Programme to advance e-
Infrastructure Know-How •

ASRENOrg.net

Site Map

Arab States Research and Education Network

Home About ASREN Media Events Presentations Contact us

“Advancing Research and Enhancing Education Through Pan-Arab e-Infrastructure”

Latest News

- U.S. Ambassador Commends Human Development ...**
Press Release Public Affairs Section - Press Office
Embassy of the United States of America - Amman Tel: +962-6-590 ...
- Meeting with the Secretary General of the ...**
Meeting with the Secretary General of the Higher Education Committee toward building the Bahrani ...
- ASREN Hosts 3rd EUMEDCONNECT3 ...**
AMMAN----- June 16, 2013----- Under the patronage of HE Dr. Talal Abu-Ghazaleh, Chairman of the Arab States ...

About ASREN

Arab States Research and Education Network (ASREN) is the association of the Arab region National Research and Education Networks (NRENs) and strategic partners, that aim to implement, manage and extend sustainable Pan-Arab e-Infrastructures dedicated for the Research and Education communities and to boost scientific research and cooperation in member countries through the provision of world-class e-Infrastructures and E-services. [Read More](#)

Vision

ASREN vision is to support pan-Arab collaborative research and education projects and activities through high-speed networks, and to contribute to boosting scientific research, innovation and education across the Arab world by increasing efficiency and productivity of research and education communities.....

[Read More](#)

Publications

Brochures

- Join ASREN
- eAGE2012 Conference Booklet
- Empowering Research & Education across

ASREN 3rd Annual Conference e-AGE 2013
Connect Access Innovate
12 - 13 December, 2013, Tunis, Tunisia

Co-ordination & harmonization of Advanced e-Infrastructures for Research & Education
Data Sharing

EUMED connect 3
Connecting the Research & Education Communities across the Southern & Eastern Mediterranean

TERENA NETWORKING CONFERENCE 2014
19 - 22 May 2014, Dublin, Ireland

ASREN