



TECHCARE: MEET LEBANON'S NREN

Joining the global R&E networking community

In 2016, Lebanon established access to international R&E connectivity: with support from GÉANT and the Arab States Research and Education Network (ASREN), the American University of Beirut (AUB) allocated 10 Mbps of its existing internet bandwidth to an ASREN link terminating in London, from

where it interconnected with GÉANT, thus providing AUB with international R&E connectivity. Driven by demand and with support from the EU-funded EUMEDCONNECT3 project, that link has been progressively upgraded to 1.4 Gbps with plans of a further boost to 5 Gbps.

AUB has also been the driving force behind efforts to establish an academic network infrastructure in Lebanon, culminating in five academic institutions recently reaching an agreement on

the creation of a Lebanese NREN. On 28 May, the five universities - AUB, Beirut Arab University (BAU), Lebanese American University (LAU), Holy Spirit University Kaslik (USEK) and University of Saint Joseph (USJ) - signed the Technology Cooperation Agreement for Research and Education (TechCARE), taking a significant step on the rather complex journey towards the creation of an NREN in the country.



Thinking outside the box

The traditional NREN approach of creating first the network and subsequently building in services to create momentum and facilitate cooperation among participating universities proved impractical in Lebanon – not least against the backdrop of prohibitive bandwidth tariffs and competing communal and political interests.

To Yousif Asfour, AUB's chief information officer – the driver of the TechCARE initiative – it was clear that the process needed to be reversed to secure the commitment of a critical mass of institutions across the country. Thus, taking the services development road was the answer, with value-added services such as eduroam and eduGAIN being deployed successfully and at low cost since 2015. Discussions are now underway with GÉANT and ASREN to further expand the services offering to member universities and their researchers and learners.

Picture
TechCARE agreement signatories:
Father Prof. Georges Hobeika, President of Holy Spirit University of Kaslik (USEK);
Dr. Amr El-Adawi, President of Beirut Arab University (BAU);
Dr. Fadlo Khuri, President of the American University of Beirut (AUB);
Prof. Salim Daccache s.j., Rector of Saint Joseph University (USJ);
Roy Majdalani, Vice President for Human Resources and University Services of the Lebanese American University (LAU).

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asrenorg.net/eage18

ASREN

The poster features a background image of ancient stone columns under a blue sky. The ASREN logo, consisting of two overlapping hexagons, is in the bottom right corner.



“Instead of trying to build the physical network so that we can build the services and then collaborate, we decided to start collaborating so that we can build the services, and then we can build the network. We flipped it around.”

Dr. Yousif Asfour, AUB's Chief Information Officer

An NREN in action

Since the agreement signing a network backbone for exchanging data and services between the TechCARE members was established. One of the first collaboration projects is the interconnection of the five universities' libraries and their services, including the development of a shared library catalogue.

A cross-university team is also looking at sharing “expensive research resources” among the universities. Their first task is to explore how the Beirut Arab University telescope can be connected to the NREN so that researchers across TechCARE can utilize this resource. Another focus is providing access to shared HPC resources over the backbone.

TechCARE is also a learning and sharing community. Efforts are underway to build a centre of excellence between the members to pool and share development resources in order to build capacity for missing talent, such as Banner skills.

Last but not least – TechCARE is chasing the rest of the universities in Lebanon, including the Lebanese University - the country's largest and only public university - to join the group, so that it can grow into a truly inclusive NREN.

Securing a place on the global research map

TechCARE has still some mileage ahead before it can effectively support bandwidth-hungry national and international R&E collaborations, such as in astrophysics. However, putting an NREN in place has the potential to enhance Lebanon's academic research standing in the region and the rest of the world and to enable and expose talent among students and researchers.

To deliver on the connectivity front, TechCARE will be able to continue benefitting from the EUMEDCONNECT3 funding support.

Find out more:
www.eumedconnect3.net