

TNC17 – Art of creative networking

The Art of creative networking

TNC17, its 33rd edition, was hosted by the Austrian NREN, Austrian Academic Computer Network (ACONET) and held in Linz, Austria between May 29th to June 2nd 2017. The conference provided an opportunity for researchers, operators and suppliers of research and education networks in Europe and beyond to meet, present and discuss their latest results and requirements in an ideal environment for promoting collaboration.

This year's conference theme was "The Art of Creative Networking". The theme has 2 meanings, both concerning the need to constantly evolve the service delivery whilst remaining agile in dialogue with customers. It is also aware of the fact that services provided by the NRENs are important to our artistic and cultural environment. There are many examples where high-speed connectivity has been paramount in securing a fully immersive experience of cultural expressions. This is something that is apparent in many of the presentations and papers coming from the conference.

Conference summary

The conference series that has led to TNC17 has been at the heart of developments in research and education networking for around three decades. An ever-growing global network of people, from a vast number of professional disciplines, meet to share views and experiences on how to provide the internet of people.

"The Art of creative networking" is not only the theme of this year's conference but it is also at the core to why TNC and the NREN community has been able to walk alongside world leading research and education. The fact that the conference was held in Linz was not by chance. For several decades the artistic and cultural scene in Linz has been strong, in particular through Ars Electronica. The conference also provided an opportunity to showcase the many ways in which technology is being used to inform and transform the arts world, from the Ars Electronica Deep Space 8K exhibition to a multi-site sound and dance event where performing arts and technology worked hand in hand.

All elements of the conference programme worked to support and promote the many ways in which we engage in creative networking. The conference plenary speakers took the theme of the conference to heart, as we explored Bringing Data to Life Through Story with Cole [Nussbaumer Knaflie](#) and the importance of Living Labs and Creativity at the i2cat Foundation. Other speakers helped us focus on the complexity and need to be creative with large data sets and our increasingly interconnected spaces. Many of these thoughts were brought together in a final keynote for the meeting from Seb Chan on the Intersection between Museums, Libraries and Digital Technology.

Selected Papers Summary

5 papers presented in parallel sessions were selected for this publication. These papers cover both research and practical approaches to some of the challenges faced by today's research and education networks. In keeping with the conference theme, one thing they have in common looking at the connection between the providing of high quality services to an ever-demanding field of humanities and onward.

The first of these papers, "*C-theatre: light speed connected geo-distributed performances*" by **Alex Barchiesi**, describes how the pervasiveness of broadband connections and high capacity telecommunications networks will make William Shakespeare's "all the world's a stage" a feasible scenario also for real-time performances.

Laura Paglione's paper on the REFEDS ORCID working group report, written together with the ORCID Working group, describes how ORCID can and is evolving its relationship to the Federated Identity Management (FIM) community.

The paper “*Empowering GÉANT deployments with ONOS brigades*” follows the concept of extending the infrastructure and reach of services. The paper describes the aim to create a SDN open-source software stack based on ONOS.

The paper “*How to use cyber kill chain model to build cybersecurity?*” by **Ireneusz Tarnowski** provides information how to understand kill chain model, how implement security policy to could respond on incident and how should look incident response procedures. All of which is important to build cybersecurity in data center.

Finally, the paper “*An Extended Analysis of an IoT malware from a blackhole network*” by **Cynthia Wagner et al**, describes how the ever growing IoT adhere the obvious threats.

Archives of live-streamed speeches, speakers’ slides and other TNC17 information are all available via the conference website: tnc17.geant.org. We look forward to very warmly welcoming you to TNC18, which will be held on 10 - 14 June 2018, Trondheim, Norway and at tnc18.geant.org.

SELECTED PAPERS

(alphabetically by presenting author)

C-theatre: light speed connected geo-distributed performances
Alex Barchiesi

REFEDS ORCID Working Group best practices & recommendations
Laura Paglione

Empowering GÉANT deployments with ONOS brigades
Luca Prete

How to use cyber kill chain model to build cybersecurity?
Ireneusz Tarnowski

An extended analysis of an Internet of Things malware from a blackhole network
Cynthia Wagner