

# PRESS RELEASE

## History Made: IP-over-ICN-over-SDN

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A team of academic and industrial researchers from University of Essex and InterDigital Europe, Ltd., have demonstrated a first IP-over-ICN-over-SDN implementation. It was based on the ICN core implementation Blackadder which was developed in the award-winning FP7 project, PURSUIT. The breakthrough was made at the second plenary of the POINT project held at Rhine-Westphalia Institute of Technology, Aachen, Germany.

The demo set-up depicted in the figure below provides IP access to two ICN networks which are interconnected via SDN switches. The Network Attachment Points (NAPs) offer standard IP access via Ethernet (server) and WiFi (clients). The server to the very left in Figure 1 hosts a standard Apache web-server and is connected to a NAP which performs the IP-to-ICN translation via an IP-over-ICN abstraction.

During the demonstration, all plenary participants connected to the NAP to the right in Figure 1 via WiFi using their preferred end devices (i.e., laptops, mobile phones, and tablets) and accessed a web-site hosted on the server.

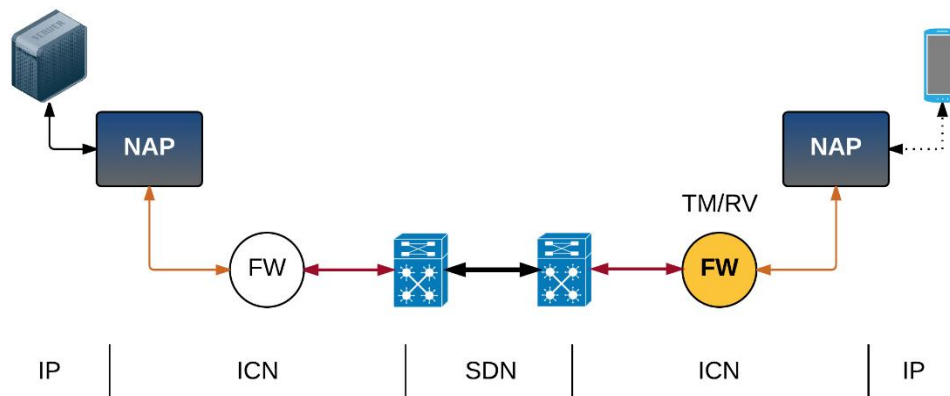


Figure 1: IP-over-ICN-over-SDN demonstration set-up

Dirk Trossen, Principal Scientist at InterDigital and POINT’s Technical Manager said “This breakthrough is very exciting for us. In just six months we have developed a truly unique demonstration which is able to use standard IP end-points and translate the IP flow into an IP-over-ICN abstraction (publish/subscribe model,) where a single hop within the ICN network uses SDN switches with pre-installed forwarding rules for the ICN flows.”

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POINT is a research project funded by the European Union’s Horizon 2020 research and innovation programme under grant agreement No 643990. The goal of POINT (iP Over ICN– the betTer IP) is to develop technology, innovations, and business value chains for commercially viable IP-over-ICN deployment, based on the hypothesis that many current IP-based applications can run ‘better’ on an ICN-based network than on current IP networks.

For more information, visit our website [www.point-h2020.eu](http://www.point-h2020.eu) or contact Stuart Porter [stuart.porter@ctvc.co.uk](mailto:stuart.porter@ctvc.co.uk) or Dirk Trossen [dirk.trossen@interdigital.com](mailto:dirk.trossen@interdigital.com)