Contribution ID: **475**   Type: **Poster**

Deployment of 464XLAT (RFC6877) alongside IPv6-only CPU resources at WLCG sites

Tuesday, 11 October 2016 16:30 (15 minutes)

With many parts of the world having run out of IPv4 address space and the Internet Engineering Task Force (IETF) depreciating IPv4 the use of and migration to IPv6 is becoming a pressing issue. A significant amount of effort has already been expended by the HEPiX IPv6 Working Group (http://hepix-ipv6.web.cern.ch/) on testing dual-stacked hosts and IPv6-only CPU resources. The Queen Mary grid site has been at the forefront of adopting IPV6 throughout its cluster and it use within the WLCG. A process to migrate world accessible grid services, such as CREAM, Storm and ARGUS, to be accessible via dual stack IPv4/IPv6 is presented. However, dual stack adds complexity and administrative overhead to sites that may already be starved of resource. This has resulted in a very slow uptake of IPv6 from WLCG sites. 464XLAT (RFC6877) is intended for IPv6 single-stack environments that require the ability to communicate with IPv4-only endpoints, similar to the way IPv4 Network Address Translation (NAT) allows private IPv4 addresses to route communications to public IPv4 addresses around the world. This paper will present a deployment strategy for 464XLAT, operational experiences of using 464XLAT in production at a WLCG site and important information to consider prior to deploying 464XLAT.

Tertiary Keyword (Optional)

Secondary Keyword (Optional)

Primary Keyword (Mandatory)

Network systems and solutions

Primary author: Mr FROY, Terry (Queen Mary, University of London)

Co-authors: WALKER, Christopher John (University of London (GB)); TRAYNOR, Daniel Peter (University of London (GB))

Presenter: Mr FROY, Terry (Queen Mary, University of London)

Session Classification: Posters A / Break

Track Classification: Track 6: Infrastructures