

UbuntuNet CONNECT | 2018

Contribution ID: 57

Type: **Presentation**

Moving more data, faster –the science DMZ as enabler

Moving masses of data is a challenge. In most cases networks optimized for business operations are neither designed for nor capable of supporting the data movement requirements of data intensive research. When scientists attempt to run data intensive applications over these so called “general purpose”/enterprise networks, the result is often poor performance –in many cases poor enough that the science mission is significantly impacted. At its worst this means either not getting the data, getting it too late or resorting to “desperate” measures such as shipping disks around. The South African National Research Network (SANReN) is currently piloting a data transfer service with the goal of changing this for our researchers/scientists and optimising the transfer of datasets across the network. The service makes use of data transfer nodes configured in a science DMZ architecture using specially designed data transfer tools to efficiently and securely move data. This presentation will present an overview of the science DMZ, data transfer nodes, tools and services that we have implemented as part of the SANReN Data Transfer Pilot project as well as preliminary results we’ve achieved.

Keywords: Science DMZ, data transfer nodes, optimising data transfer

Summary

Sharing our learnings on implementation of the SANReN Data Transfer Pilot so that this can be implemented at other African NRENS

Sub-Theme

SMART Research: Services and tools

Primary author: Ms PILLAY, Kasandra (SANReN)

Co-authors: Mr HUGO, Johann (SANReN); Mr HADEBE, Sakhi (SANReN); Mr MOOI, Roderick (SANReN); Mr VAN HEERDEN, Renier (SANReN)

Presenter: Ms PILLAY, Kasandra (SANReN)

Session Classification: UbuntuNet-Connect