

Ganeti around the world



ganeti con - sept. 2016, Dublin

Two hats

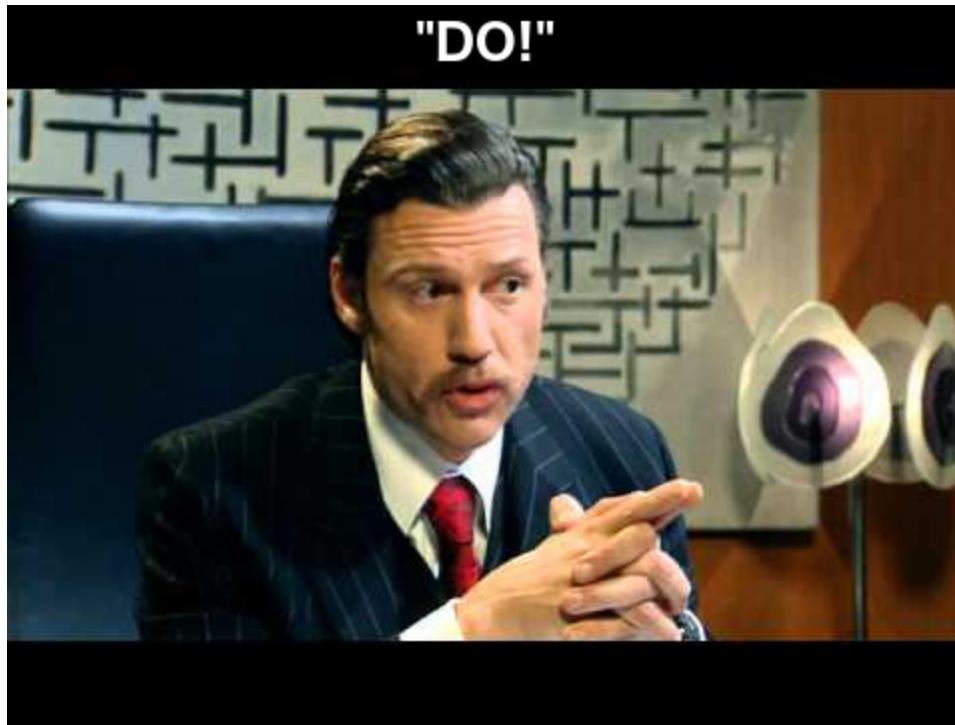
Commercial hat

- Using Ganeti since 2012
- I use Ganeti for production hosting
 - Two clusters in CPH
- Vanilla stuff: DRBD, NFS
- A few totally outsourced customers with all windows backoffice running on Ganeti w/virtualized everything
 - remote locations trunked into VLANs
 - virtual pfSense
 - virtual openVPN

Ganeti value proposition

- Great bang for the buck
- HA which doesn't mean Head Ache
- Failover that doesn't mean it fails, then it's over
- No rocket surgery required
 - I could go on

"DO!"



Non profit hat



About the NSRC...

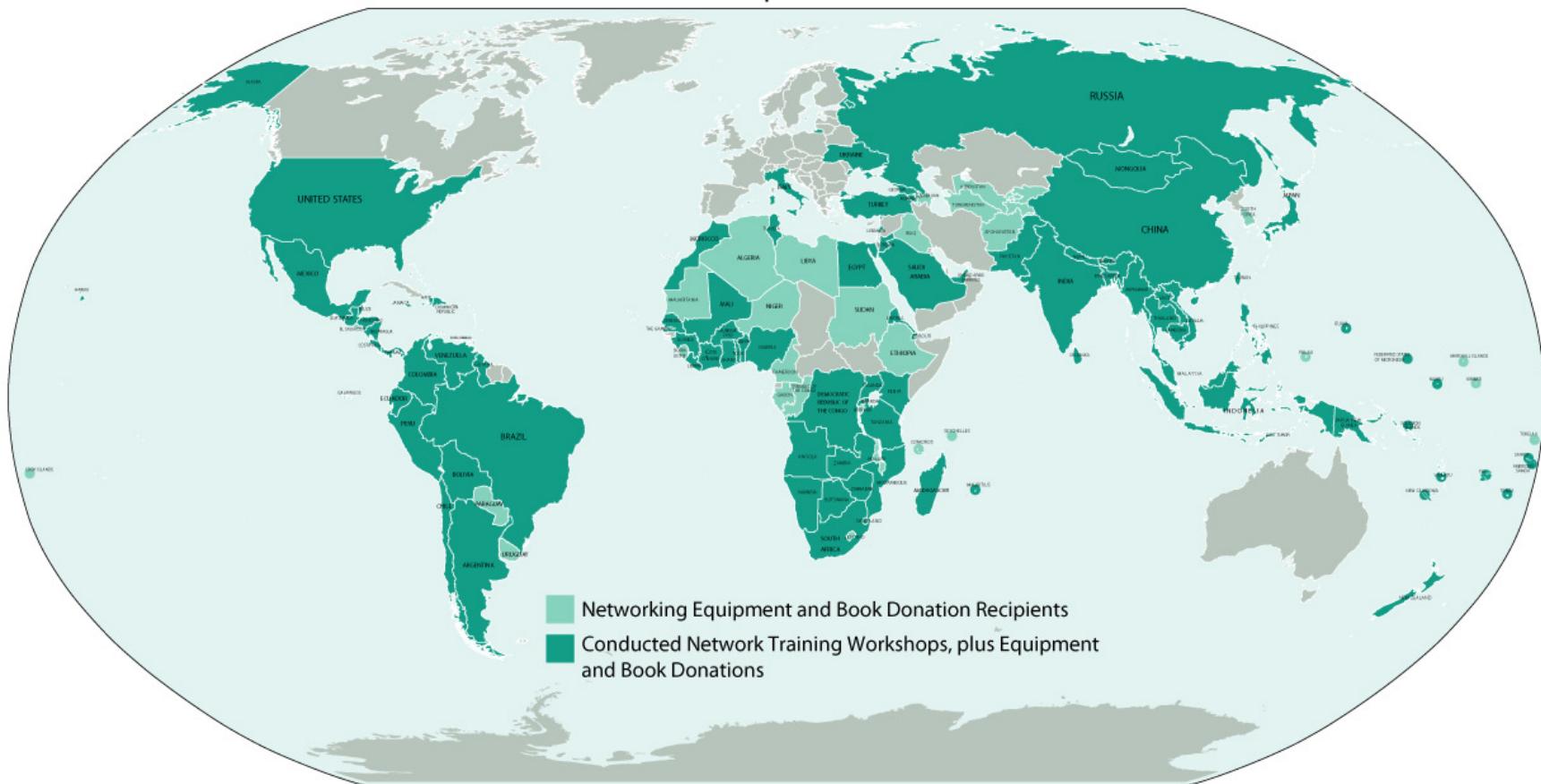
Ganeti and NSRC

- We use Ganeti at NSRC (eat own dogfood :)
- Been setting up Ganeti clusters in different places around the world, for R&E Networks (RENs), ccTLDs, ...
- NSRC's approach is, as much as possible, try to train folks to do the work (DEA)
 - ... rather than act as a consultant (not scalable)
- Co-authored training materials on cloud/virtualization and Ganeti
 - It seems people have been using our labs :)

Where have we been ?

Network Startup Resource Center (NSRC)
University of Oregon

Internet Infrastructure Development and Technical Assistance



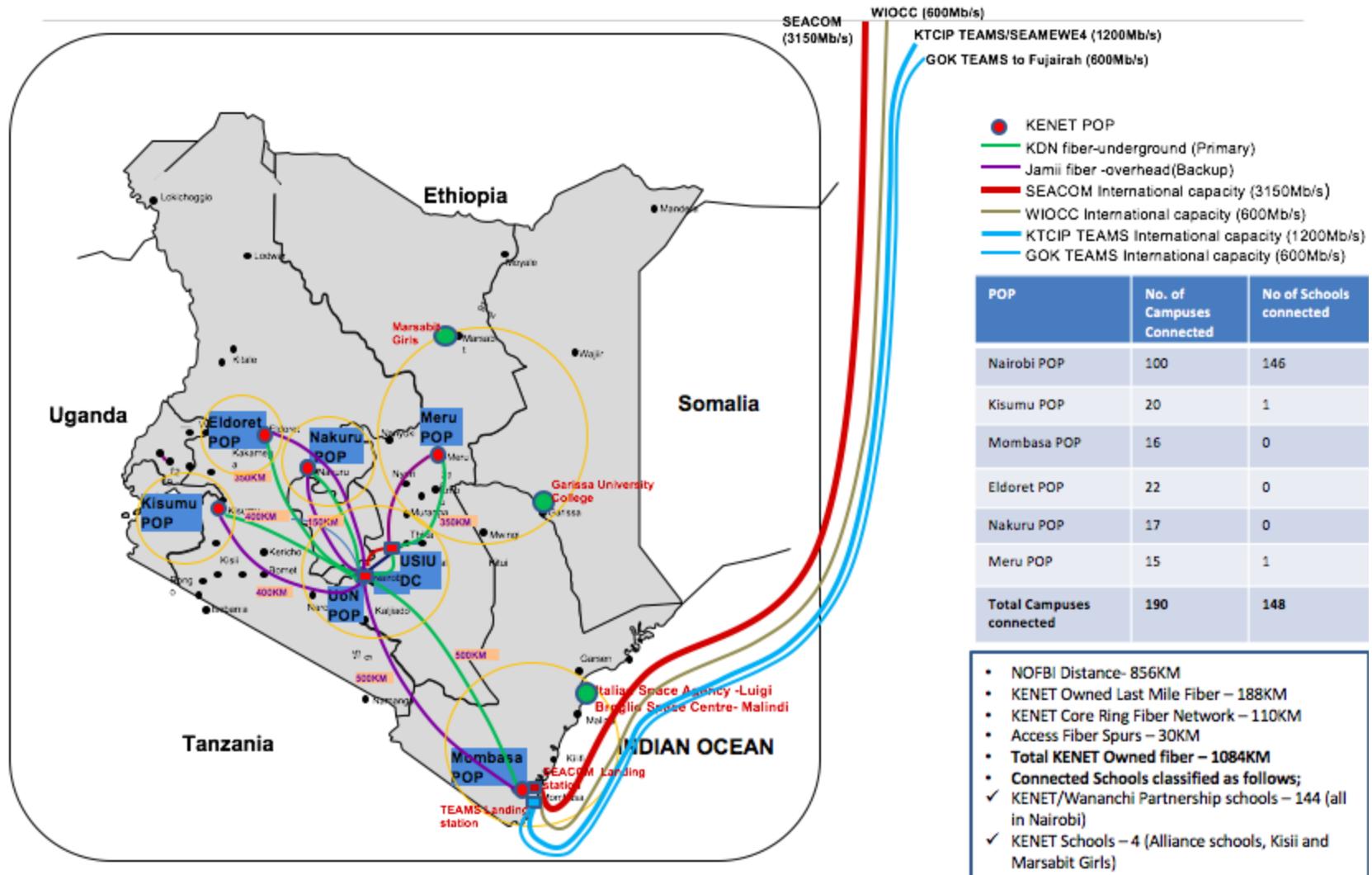
*From 1992 to July 2016, the NSRC has facilitated the distribution of more than 600 tons of network equipment and technical reference books to engineering and computer science departments, university libraries, teaching hospitals, research facilities, non-governmental organizations (NGOs), and Internet training facilities in more than one hundred countries around the world. Contributing sponsors and supporters are acknowledged at <https://nsrc.org/sponsors>

Kenya

- KeNET - Kenya Research and Education Network
- 100+ institutions

Kenya

KENET National Broadband Network Coverage



KeNET

- KeNET manages REN + provides services
- Cloud/virtualization services growing fast
- At this stage single cluster, 17 nodes for all REN related services (and some public ones)
- Plan to migrate away from VMware
- Spent some time on an external Storage Provider for EMC/Clariion (WIP)







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Bhutan



Bhutan

- NSRC contact goes back to late 90s when the king decided that Bhutan should have the Internet
- Prosperity measured using GNH, not GNP
- Initial contact with Ganeti during an NSRC training in 2012
- Bhutan Telecom adopted Ganeti shortly after (two clusters currently, one Debian, one Ubuntu)
- This past August, new installations for
 - DrukREN (Bhutanese REN)
 - DrukIXP - first exchange point

On the way to work (Mt. Everest behind to the left)





















Nauru

This is quite a special place...

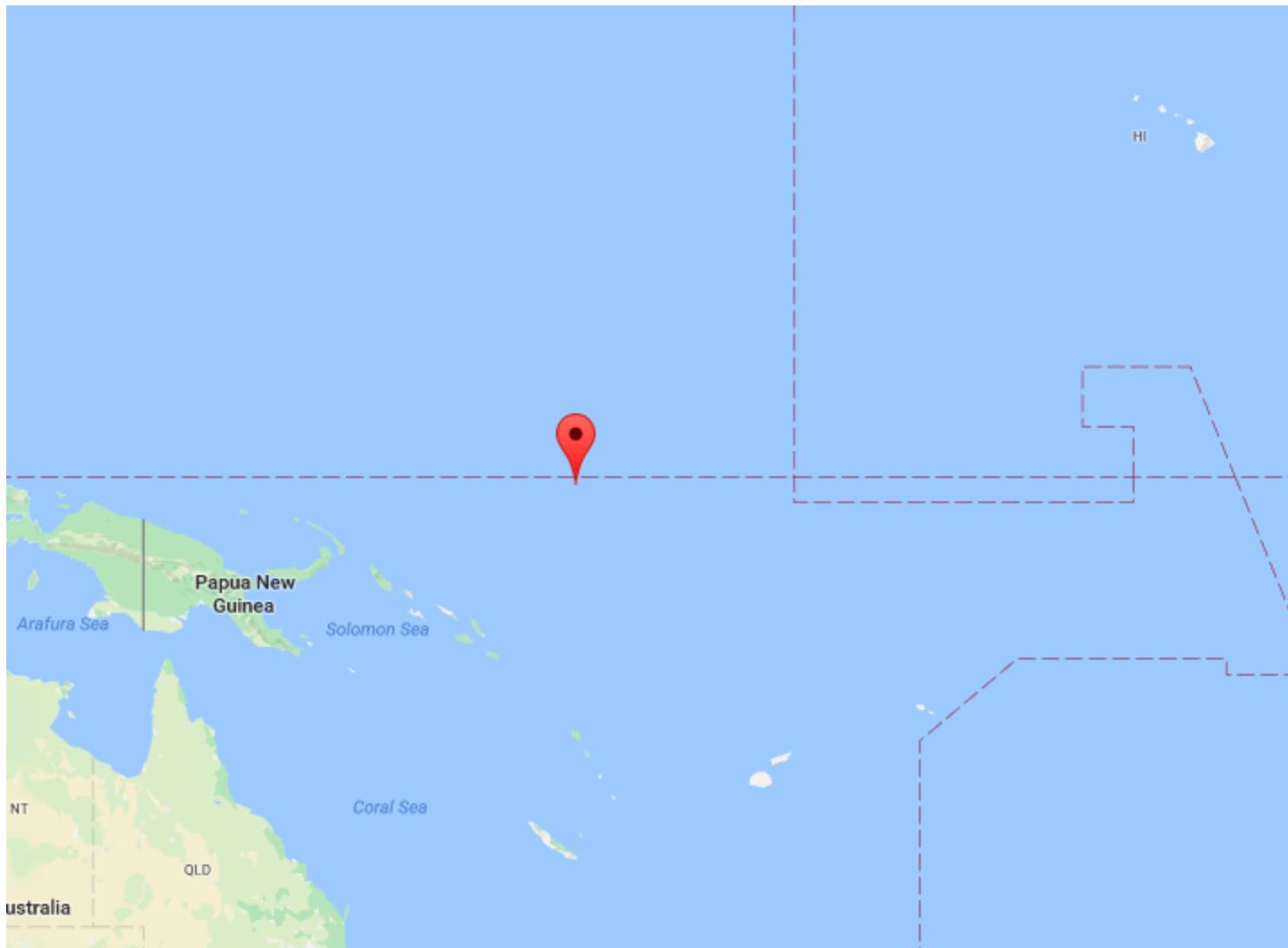


Nauru



Nauru

Tapiwa
o



Prize for most remote cluster ?



Ganeti at CENPAC

- CENPAC (Nauru Internet Center) provide[s/d] Internet for Nauru



CENPAC cluster

- 3 Nodes
- DNS, monitoring, ccTLD, email
- Try and ping virtual.cenpac.net.nr !













Future places ?

The ganeti value proposition is still awesome in regions where ripoff^H^H^H expensive vendors don't have a big presence, and/or HW choice is limited.

This is true for both commercial and non-commercial environments.

- Near-linear scaling
- Commodity servers
- No big up-front investments

... makes people happy and helps us focus on building the Internet where it needs it.

Thanks!

