About HEAnet

Irish NREN – founded in 1983

Schools, Universities, Colleges

Many other smaller organisations

Work directly with IT staff

Visit [www.heanet.ie](http://www.heanet.ie) to learn more.
Systems

• Puppet
  • Managing several hundred VMs
  • Some HEAnet-written modules

• Terraform
  • Cloud provisioning

• 6connect
  • IPAM with API
  • Used to provision DNS for network
Networks

- Ansible
  - Juniper MPLS WAN
  - Arista leaf & spine networks in data centres

- CSD – Connectivity Services Director
  - Used to build all circuits
  - Single source of truth for all non-Data Centre equipment
  - Backs up all configurations
  - Cesnet OpenNSA integration

- Capirca for ACL generation
  - Git CI/CD
# HEANET: Overview

## Link status

<table>
<thead>
<tr>
<th>HEAnet GD5</th>
<th>Blanchardstown</th>
<th>DRT</th>
<th>Parkwest</th>
<th>Interxion</th>
<th>Citywest</th>
<th>BT Applications Hosting</th>
<th>Telecity Kilcarbery</th>
<th>Government Networks KP</th>
<th>HEAnet Test Lab</th>
<th>UCC Digital Depot</th>
<th>RTÉ</th>
<th>Cork Internet Exchange</th>
<th>Revenue Data Centre</th>
<th>Govt Networks KP</th>
<th>CLISIX</th>
<th>Equinix DB1</th>
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## Smokeping graphs

No smokeping graph files found
Automation

![Diagram showing automation tools: 6connect, Junos Space, SHIBA, CACTI, Icinga, BIND]
Virtualisation

- VMWare ESXi
  - Dell servers
  - Recent refresh
    - NFV
Thank you!

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www.geant.org