Operation of Anycast Services

draft-ietf-grow-anycast-00

Draft History

- Individual submission, draft-kurtis-anycast-bcp-01.tx
- Present on the IETF 61 grow agenda
- Consensus to adopt as wg document
- draft-ietf-grow-anycast-00 submitted in February

Anycast Deployment

- AS112
- Various DNS Root (and other) services
- Intra-AS service distribution (SMTP, RADIUS, DNS Resolvers, others)
- Regional content delivery (HTTP, FTP)

Primary Authors

- Joe Abley <jabley@isc.org>
- Kurtis Lindqvist <kurtis@kurtis.pp.se>

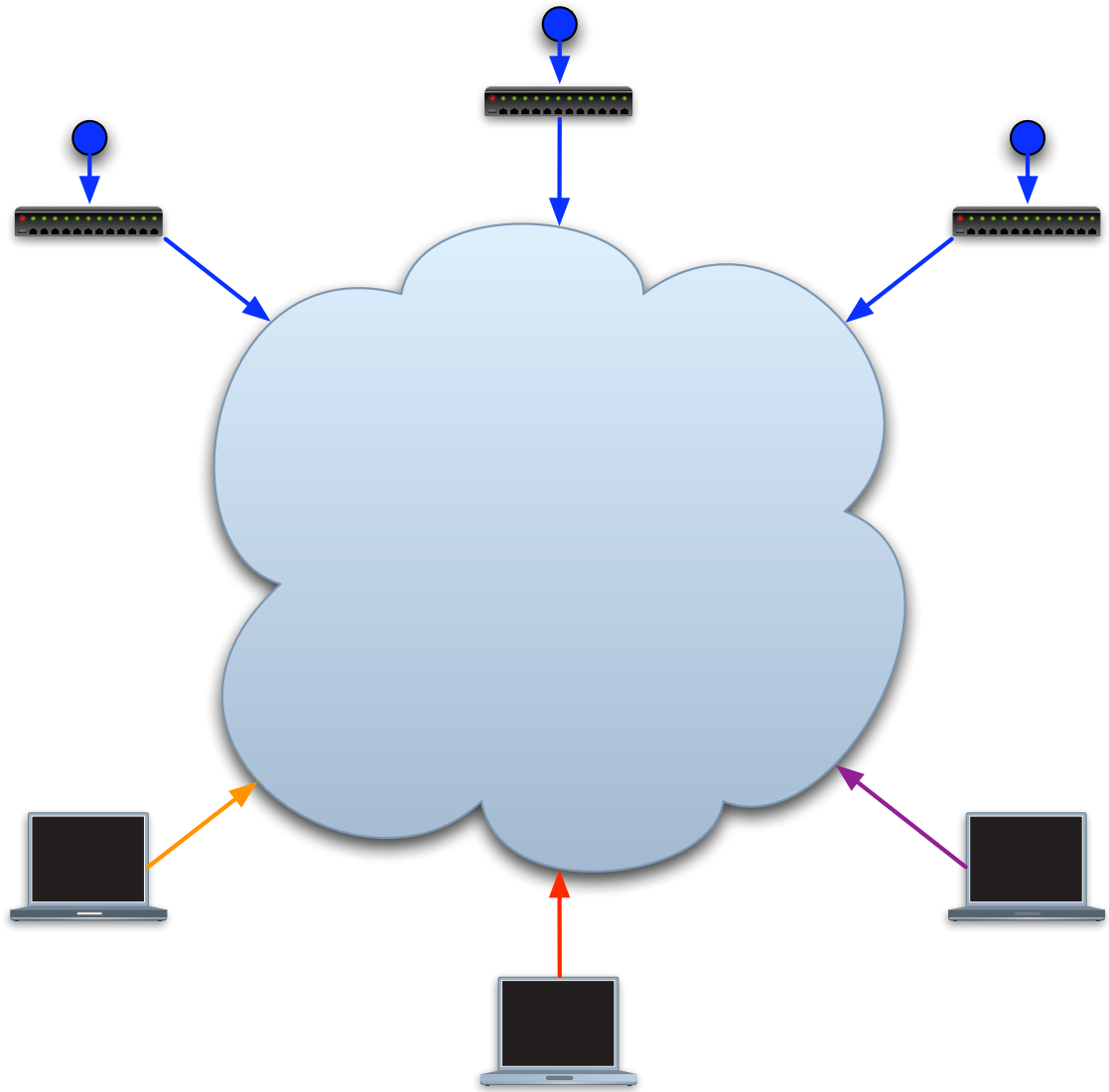
Motivations

- There is increasing anycast deployment for all kinds of services, and no good reference for service architects
  - not just DNS – lots of other services
  - what documentation does exist is very DNS-specific
- There is little consistency in nomenclature or taxonomy

Abridged Bibliography

- Hierarchical Anycast for Global Service Distribution (ISC technical note)
- A Software Approach to Distributing Requests for DNS Service (ISC technical note)
- Operational experience of distributing F-Root and I-Root

ObTutorial Slide



Taxonomy

- Service Address
- Anycast, Anycast Node
- Local Nodes, Global Nodes

Design

- Goals of service distribution
- Protocol Suitability
- Node Placement
- Routing Considerations
- Addressing Considerations

Design

- Data Synchronisation
- Node Autonomy
- Multi-Service Nodes

Operation

- Monitoring

Contentious Issues

- Multi-Service Nodes
- IPv6 Scoped Anycast Addresses
- Allegations of DNS-Centricity (who, us?)

Next Steps

- Further refinement to WG last-call
- With the WG's support, request that the document be published as a BCP