

# **SECONDARY NAME SERVICE (SNS@ISC)**

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Internet Systems Consortium



# About the Presenter



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# Logistics

- Webinar will run for 25 minutes before Q&A.
- All participants are automatically muted upon entry.
- Webinar is being recorded and will be posted on <http://www.isc.org/webinars> within 3 business days.
- Questions about Webex logistics? Please type into the CHAT area for HOST to respond.
- Questions about webinar content? Type into Q&A area for PRESENTER to respond OR click on the “RAISE HAND” or “Request” button to be unmuted.



# ISC in a Nutshell

## Forum

- BIND
- BIND 10 Working Group
- DHCP
- AFTR / PCP
- SRF
- Open Source Routing

... and more to come.

## Professional Services

- Consulting
- Training
- Software Support Services
- Custom Software Development
- F-Root Corporate Node
- DNS SNS-Com
- Full version of Domain Survey

## Public Benefit Services

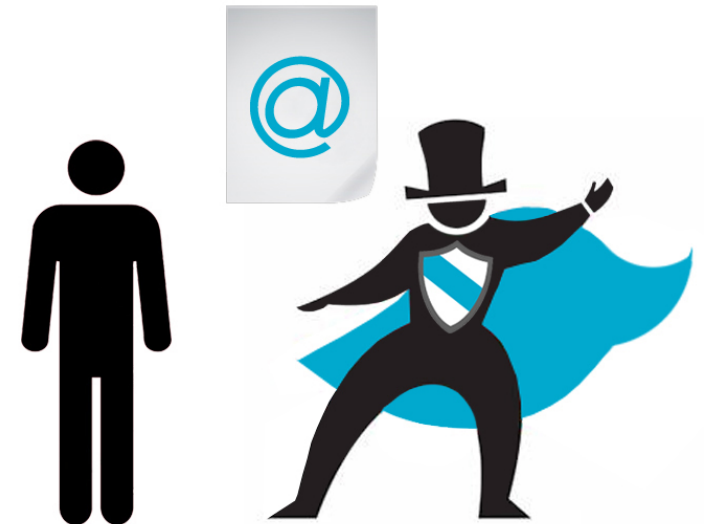
- DNS F-Root
- DNS Secondary Server Resiliency (SNS-PB)
- Hosted@ - hosting a range of open source projects
- Free Domain Survey Report
- Participation in IETF, RIPE WG, ICANN, ARIN, ISOC, UKNOF, etc

## Empowerment

- Standards Driver - with first implementation of standards based code.
- Policy Meetings - Empowering Spheres of Influence
- Operational Security - Pioneering new approaches to safe guard the Internet (OPSEC-Trust)
- Operations Meetings Empowerment (APRICOT, AFNOG, NANOG, etc)
- Research (DNS OARC)

# Agenda

- Introduction and Logistics
- ISC Overview
- DNS as Critical Internet Infrastructure.
- What are the issues in building a robust DNS service?
- What is SNS@ISC?
- What is Cloud DNS / Anycast?
- Feature Set
- ISC's Experience
- Tour of Web User Interface
- Q&A Session





# DNS as Critical Internet Infrastructure

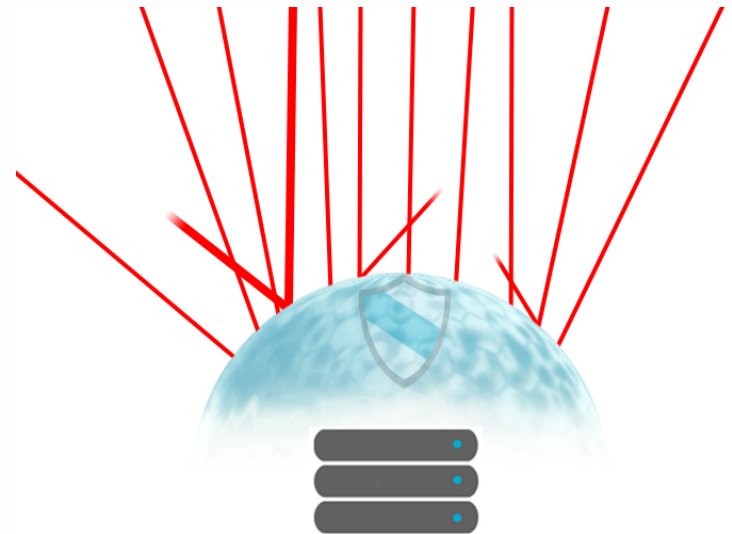
- **DNS** is what helps power the Internet.
- **DNS** is what helps power online business.
- **DNS** is what helps power mobile applications.

**DNS is critical to you and your business.**



# What are the issues in building a robust DNS service?

- Scaling & Redundancy
- Global Coverage
- Handling Online Threats





# What is SNS@ISC?

**SNS@ISC** is a cloud DNS service designed to make sure that your customers can find your network and connect to it.

It will enhance your customers' experience by optimizing their access to your online content, when it matters most, enhancing your network's brand name and revenue.



## Who is SNS@ISC for?

- For businesses/organizations that operate their own DNS infrastructure that need a global platform to publish their DNS data.
- For businesses/organizations that need additional resiliency in their DNS infrastructure
  - Either standalone or as part of a wider resiliency design



# What is Cloud DNS / Anycast?

Anycast is a network addressing and routing methodology in which servers from a single sender are routed to the nearest node in a group of potential receivers all identified by the same destination address.

This is a *one-to-one-of-many* association.



# Unicast



# Anycast



## SNS@ISC's use of Anycast

- ISC has partnered with three global backbone providers.
- ISC has nodes located at multiple locations inside those networks near major exchange points.
- Located at least East/West in North America as well as in Europe and/or Asia.
- With our partners aggressive peering, most traffic stays in region, keeping response times short.



# SNS@ISC Nodes



# Questions



# SNS@ISC Feature List (1)

- Built using ISC BIND.
- Fully Supports both IPv4 and IPv6.
- Fully Supports DNS Security Extensions (DNSSEC).
- Service Levels Agreements (SLA)
- Managed via Web Interface
- BulkAPI Support for larger installs
- Passive DNS Collaboration





## SNS@ISC Feature List (2)

- Per zone statistics.
- Supports TSIG (Transaction SIGnatures)
- Supports AXFR/IXFR
- Serial Number Checks
- Activity Logs
- Threshold monitoring and alerts.



# ISC's Experience

- ISC has operated critical DNS infrastructure for over 18+ years.
- This includes F.ROOT-SERVERS.NET, served at 60+ sites worldwide.
- Previous DNS architecture served over 30+ ccTLD's.



# DNS@ISC

## F-Root



# Conclusion

- DNS is a critical part of the Internet.
- To protect your DNS infrastructure protects your brand/online presence.
- SNS@ISC is a cost-effective way to get your DNS zone data published globally, which improves resiliency and performance.
- ISC is a trusted partner in the DNS services field.

**Contact us for more information  
on how we can help you.**



# Questions



# SNS@ISC Web Demo



# Events & Trainings

21 March 2012 @ Online

Webinar “Secondary Name Server (SNS)” Spanish Version

<http://www.isc.org/webinars>

16 – 18 April 2012 @ Arlington, Virginia, USA

Training “3-Day DNSSEC Technical Workshop - Implementation and Deployment”

<http://www.isc.org/support/training>

18 April 2012 @ Online

Webinar “ISC Product Update”

Details coming soon!



## Events & Trainings (Cont.)

19 – 20 April 2012 @ Arlington, Virginia, USA

Training “2-Day IPv6 Fundamentals Workshop”

<http://www.isc.org/support/training>

15 – 17 May 2012 @ Baskingstoke, UK

Training “3-Day IPv6 Fundamentals Workshop”

<http://www.isc.org/support/training>

17 May 2012 @ Online

Webinar “Cyber Crime”

Details coming soon!

Please visit <http://www.isc.org> for more listings





# Keeping In Touch

SNS Specific Questions [sns@isc.org](mailto:sns@isc.org)

General Questions [inbounds@isc.org](mailto:inbounds@isc.org)



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<http://twitter.com/ISCdotORG>



# ISC Resources

ISC Knowledge Base

<https://deephought.isc.org/>

SNS@ISC Website

<http://dns.isc.org/sns/>





**For more information, visit:  
[dns.isc.org/sns](https://dns.isc.org/sns)**

**Q&A**



**Thank you for attending!**

**[www.isc.org](http://www.isc.org)**

