



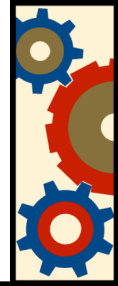
BIND and DNS at ISC

RIPE 53

Amsterdam



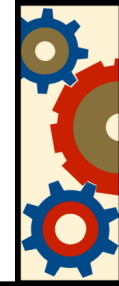
Current BIND versions



- Current versions of BIND are:
 - Releases: 9.3.2, 9.2.6, 8.4.7
 - Testing: 9.2.7rc2, 9.3.3rc2 and 9.4.0b2
- For 9.4, ISC does need field testing and this is a role where BIND users can play a *critical* role.



BIND 9.4



- BIND 9.4 includes a few radical new features and needs exhaustive testing
 - Its performance is **much** better than that of previous BIND 9 releases.
 - Additional cache
 - Architecture dependant lock relief using atomic operation support



Ongoing work



- Stuff we are working on
 - GSS-TSIG
 - NSEC3
 - New hash support (SHA-256)
 - New resolver library
 - Better, more complete stats and new way of fetching them



GSS-TSIG



- Work started 2 years ago but stumbled on implementation incompatibilities and fuzzy standard interpretation
- Thanks to SPARTA, got funding to tackle this development
- Currently finalising details for interoperability with various versions of Microsoft Windows



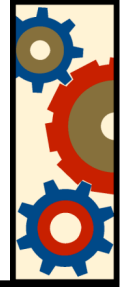
NSEC3



- This is an example of the work ISC does to implement early standards work into BIND to enable analysis of the work in progress
- Work is being sponsored by Verisign and Nominet. Pending final agreement details



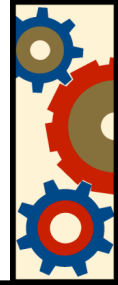
SHA-256



- With the current call on IETF to initiate migration to stronger (than SHA-1) hashes, ISC has implemented SHA-256 in BIND



New resolver library



- Work initially undertaken by Jinmei Tatuya from Toshiba, working at ISC
- Will be used first in conjunction with ISC DHCP
- Current work on integration is ongoing



BIND roadmap



- 9.4 completion as quickly as bugs permit
 - Beta right after IETF
- 9.5 (Beta release at the end of 2006)
 - GSS-TSIG
 - SHA-256
 - Better Statistics



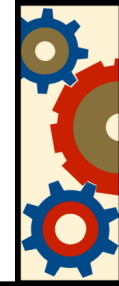
DNS ops - TLD service



- ns-ext/ns-any
 - ns-ext.isc.org == ns-ext.vix.com
- Secondary service for TLDs
- Now going to anycasting.
 - Each zone operator can tell us if they wish to use the anycast or unicast service.



DNS Ops - F root



More, better, faster :)

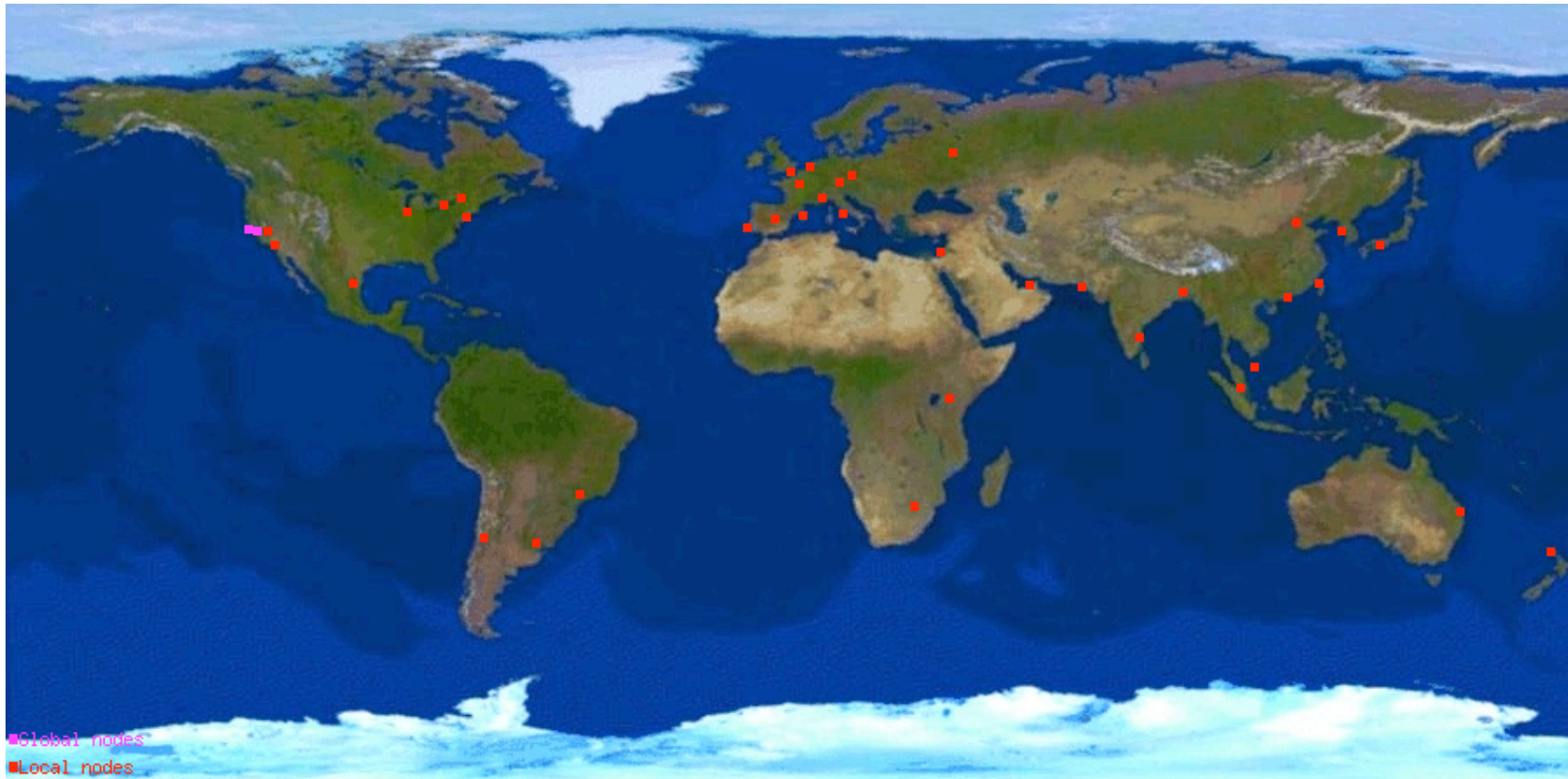
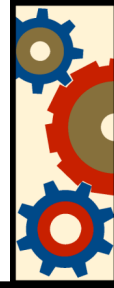
Recent anycast nodes added

- Buenos Aires, Chicago

Focusing on Latin America and trying to reach more African countries.



Nice picture



Misc



- ISC BIND training
 - First in USA, then Europe,...
 - Based on Johan Ihren's training material





Questions?

