

# **WEIRDS interop report**

**IETF 88, Vancouver  
WEIRDS  
2013-11-07**

{simon.perreault, guillaume.leclanche, marc.blanchet}  
@viagenie.ca

# Attendance

- 5 servers
  - 2 number servers
  - 2 name servers
  - 1 number+name server
- 1 test suite (acting as a client) targeting servers

# What's new

- Added autnum tests
- Added domain search tests
- Added IDN tests
  - Found bug in libidn, \*sigh\*
- Added test for /help
  - Turns out it's really hard to get right
- General improvement of the previous tests and core logic

# Results

- Discovered 32 issues in implementations
- A few questions about the specs...

# Question #1: Domain search in A- and U-label

- /domains?name=xn\*
  - Does this return A-labels?
  - Does this return U-labels starting with “xn”?
  - Does this return U-labels starting with “xn” both in their U-label form and in their A-label form?
- (see next slide before answering)

# Question #2: A|U-labels

- Allowing U-labels in queries (both search and normal) opens the door to many potential bugs. Increases complexity and code paths to be tested.
- Clients (browsers) already have IDNA code to convert from U-label to A-label which they use for the hostname part of any HTTP request.
- Only use-case for U-labels in queries: curl
  - But if you're hacker enough to use “curl”, then you're hacker enough to use “idn” beforehand.
- Proposal:
  - Client MUST NOT send U-label queries.
  - Say nothing about server side. Implicitly, the server is free to do whatever it wants with U-label queries.

# Question #3: Disallowing certain search patterns

- E.g., query string must specify TLD
- Seems like this should return 403.
- How to let the user know what is acceptable?
  - Reason-Phrase?
  - In the body?

# Next steps

- Do it again at IETF 89 in London?