

# IDN deployment in Germany

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## Abstract

- Known Facts
- Technical hurdles
- Support hurdles
- Legal issues
- IDN a posteriori

## Facts

- IDN launch under .de took place on 1st March 2004 10:00:00 CET in coordination with NIC.AT and SWITCH.
- Huge media coverage:
  - Over 1,000 press reports
  - 20 radio interviews
  - 5 TV reports (ARD, RTL, n-tv..)

## Facts

- Only digits or letters from Latin-1 Supplement and Latin Extended-A satisfying:  
     $\text{character} = \text{Nameprep}(\text{character})$
- Object of contract is the IDN form, not ACE
- First Come, First Served
- Introduction by means of Big Bang

## Technical hurdles

- It was *not* the IDNA standard, but:
- Big bang setup: Only one TCP connection to DENIC mailer per registrar allowed.
- Our main mailer hardware breaking down on 1<sup>st</sup> March 10:01:04 CET.
- Internationalization of domain name slots in our database, website, DMS..
- Upgrades to software: drivers, fonts, text editors, terminals, browsers, mail clients..
- Updates drive to bugs, bugs drive to more updates
- Reliable testing of the whole testbed

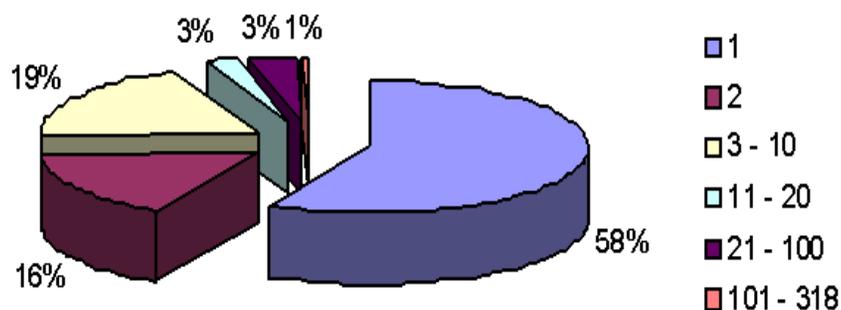
# Support hurdles

- Before launch:
  - How to register IDNs
  - Which characters are allowed
  - Chances for an IDN if transliterated domain exists
- After launch:
  - How to type characters which aren't located at the keyboard
  - IDNs don't work as expected, though we tried to circulate information as much as possible:  
<http://www.denic.de/en/domains/idns/Browser.html>
  - A technical newsletter reporting on 1st April that all IDNs were going to be reassigned:  
<http://tinyurl.com/2gna2>

## Legal issues

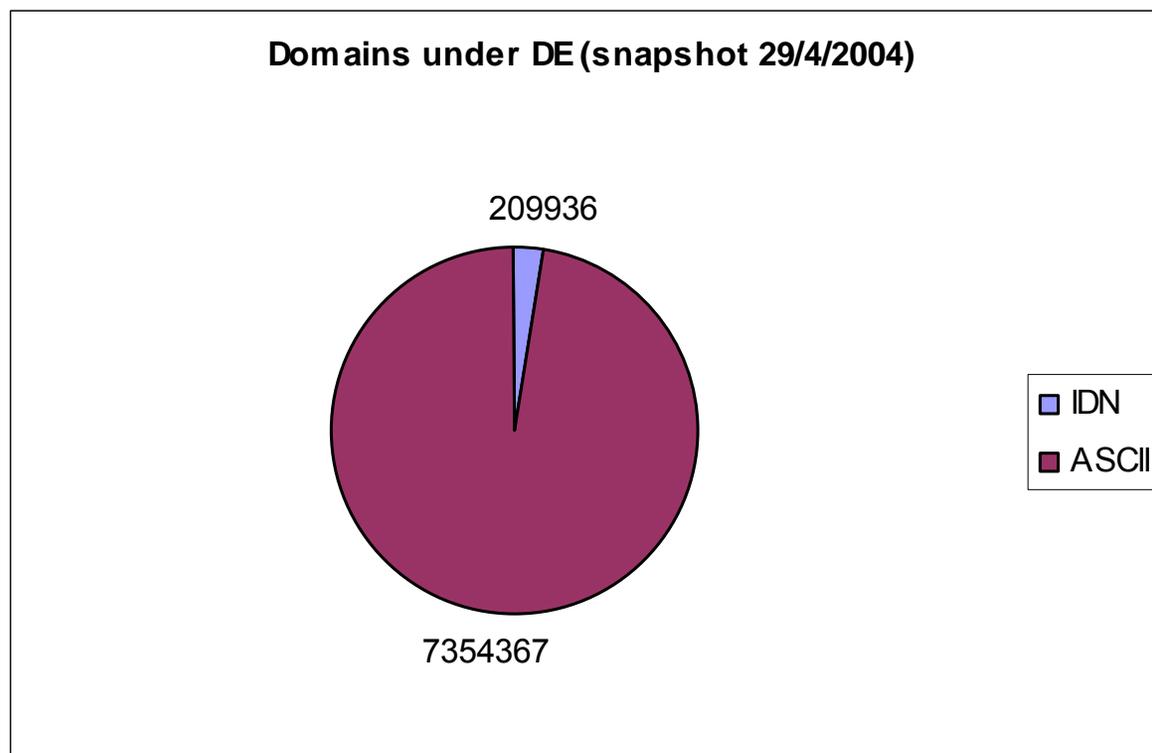
- Before launch:
  - Registrants systematically threatening DENIC members to protect their alleged trade mark rights. They were ignored.
  - One registrant filed for an injunction against DENIC because of 2 domains, which “would lose their economical value after IDN launch”. Injunction got rejected.
- After launch:
  - Increase of dispute resolution forms

# Analysis: Most wanted domains

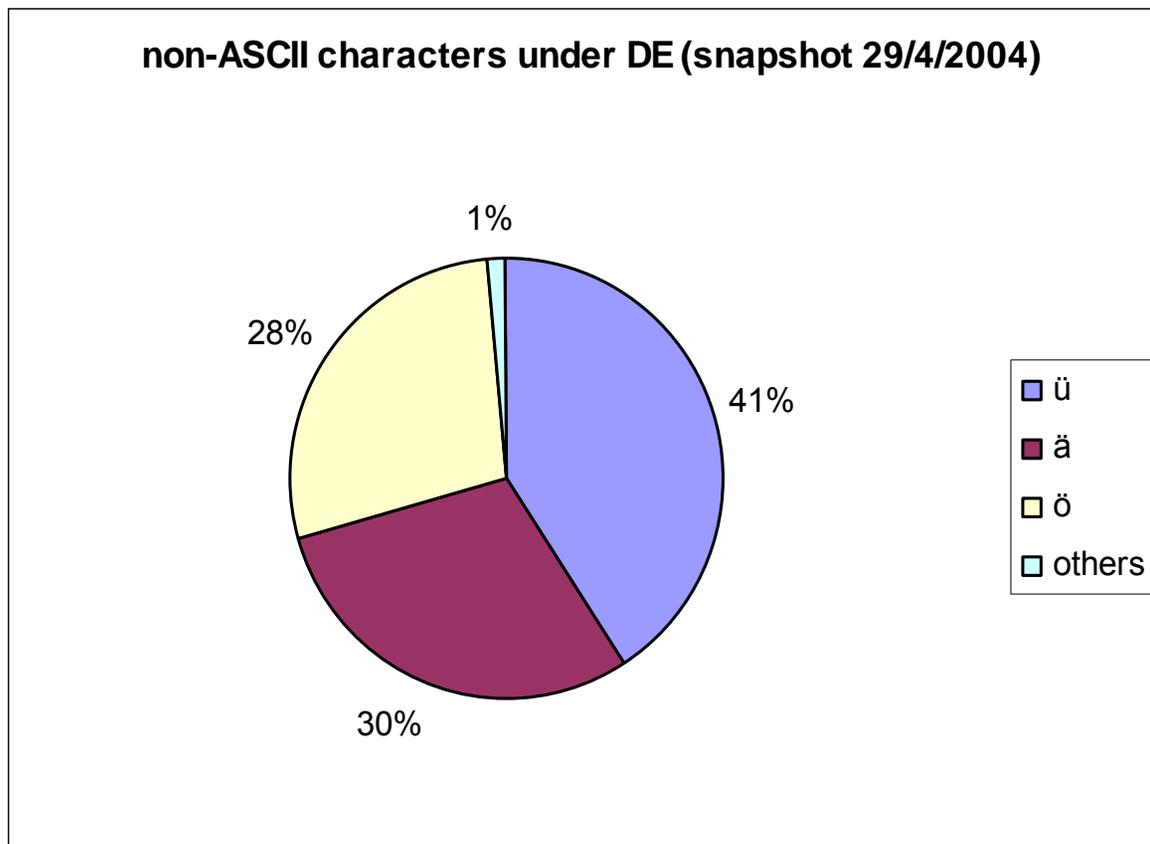


Domain	Number of requests
möbel.de	318
glückwunsch.de	303
bücher.de	302
börse.de	284
küche.de	282
büro.de	282
flüge.de	263
küchen.de	257
ärzte.de	253
reisebüro.de	240

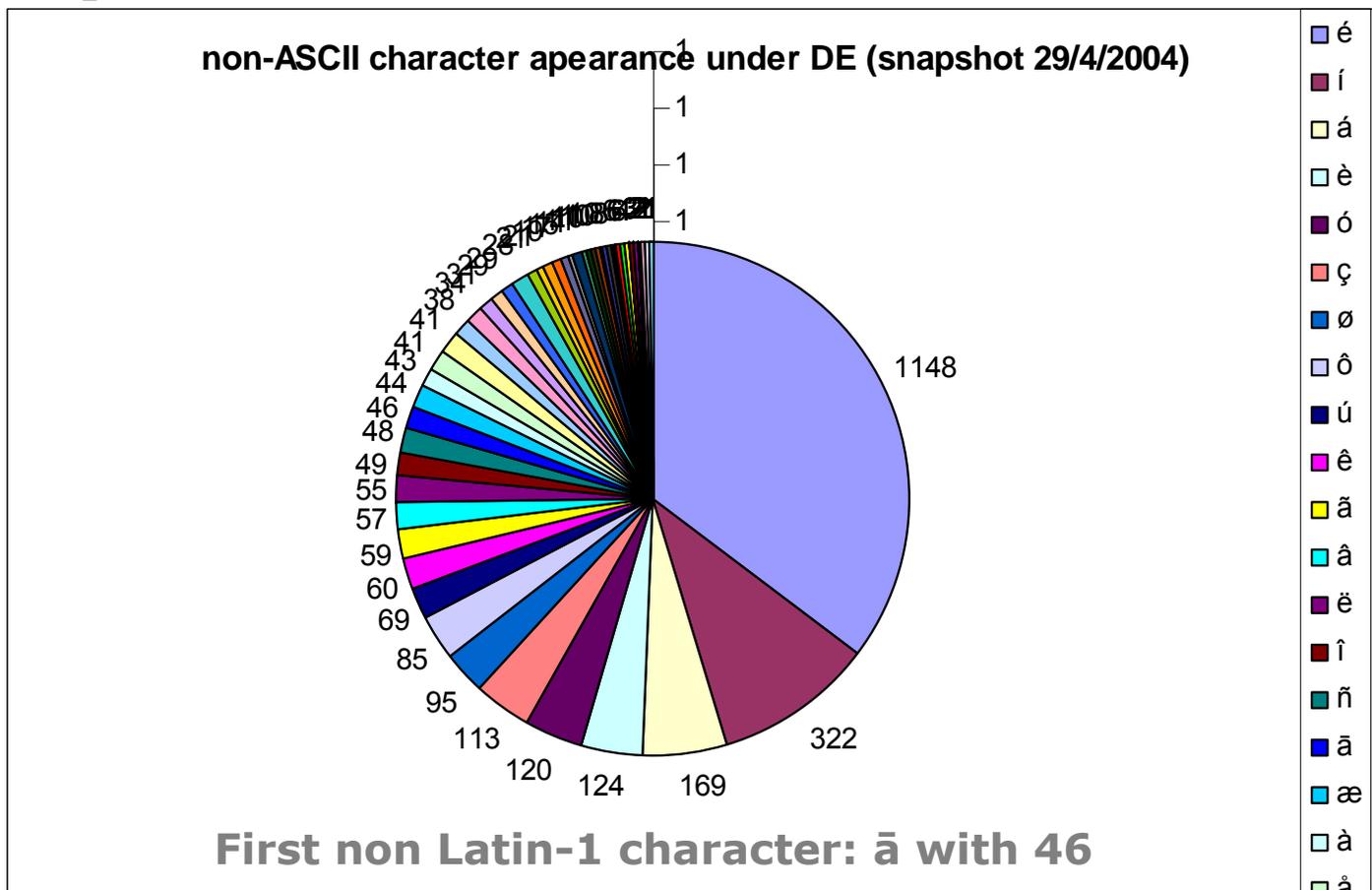
# Analysis: IDNs in DB



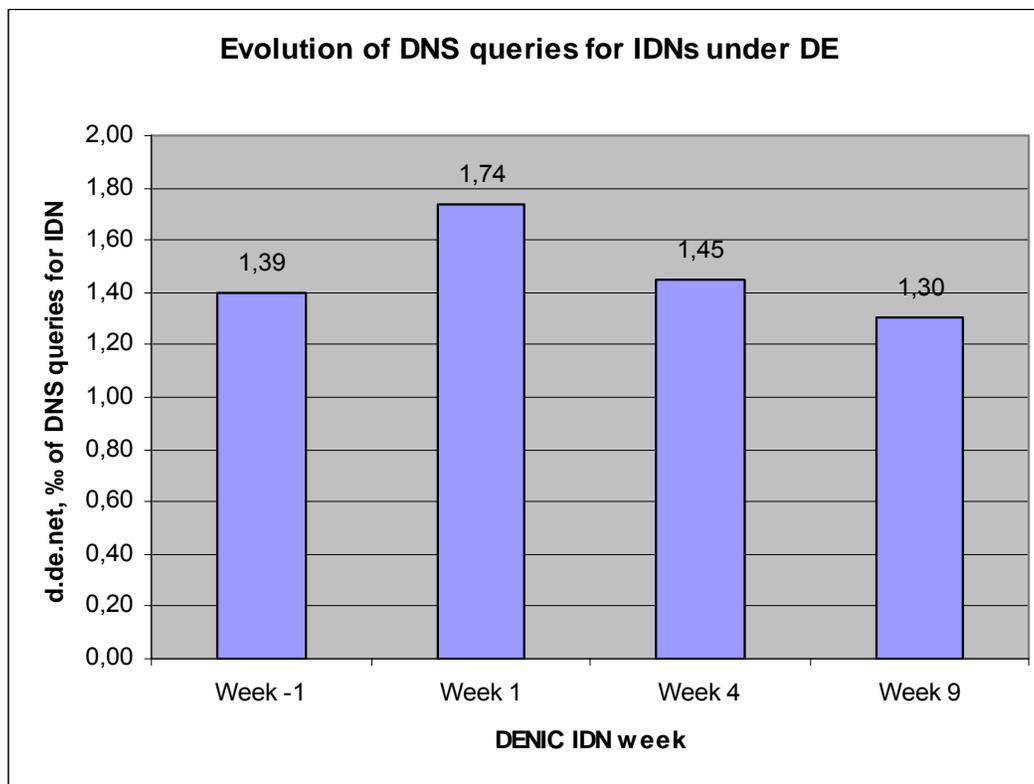
# Analysis: Characters in DB



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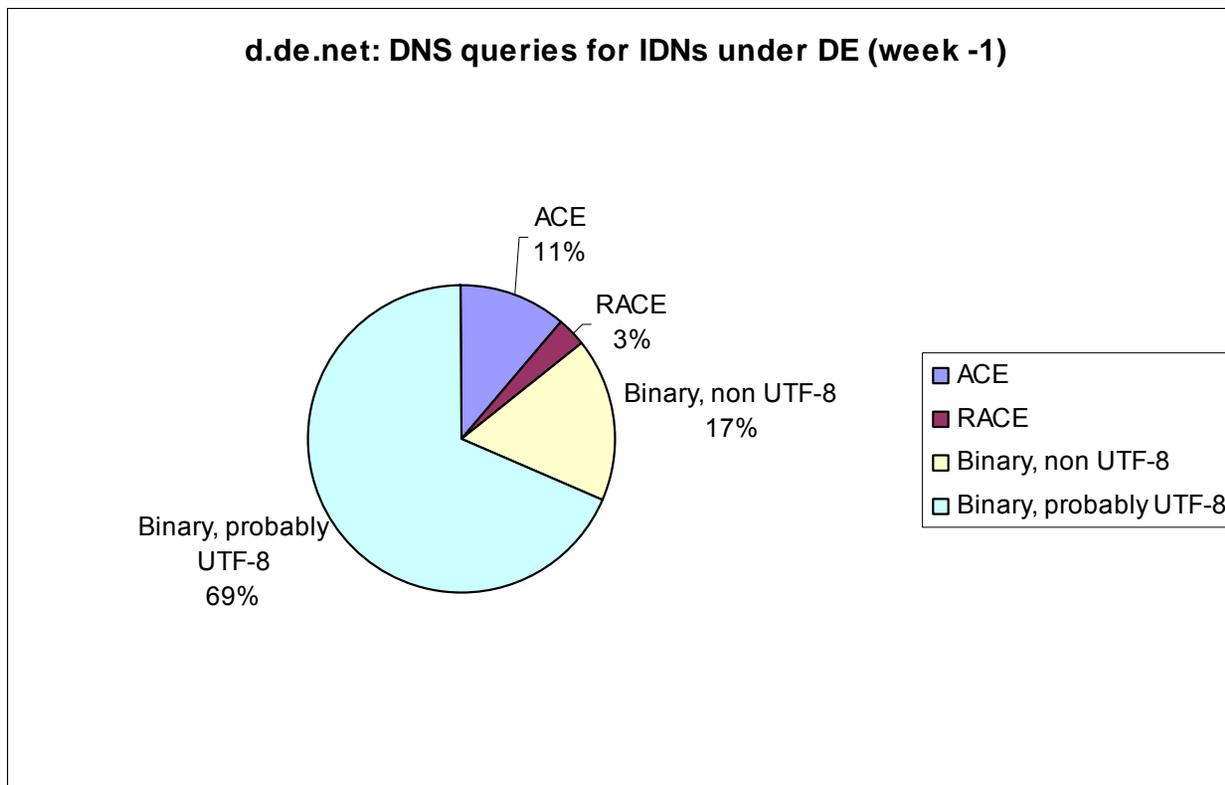


# Analysis: DNS queries



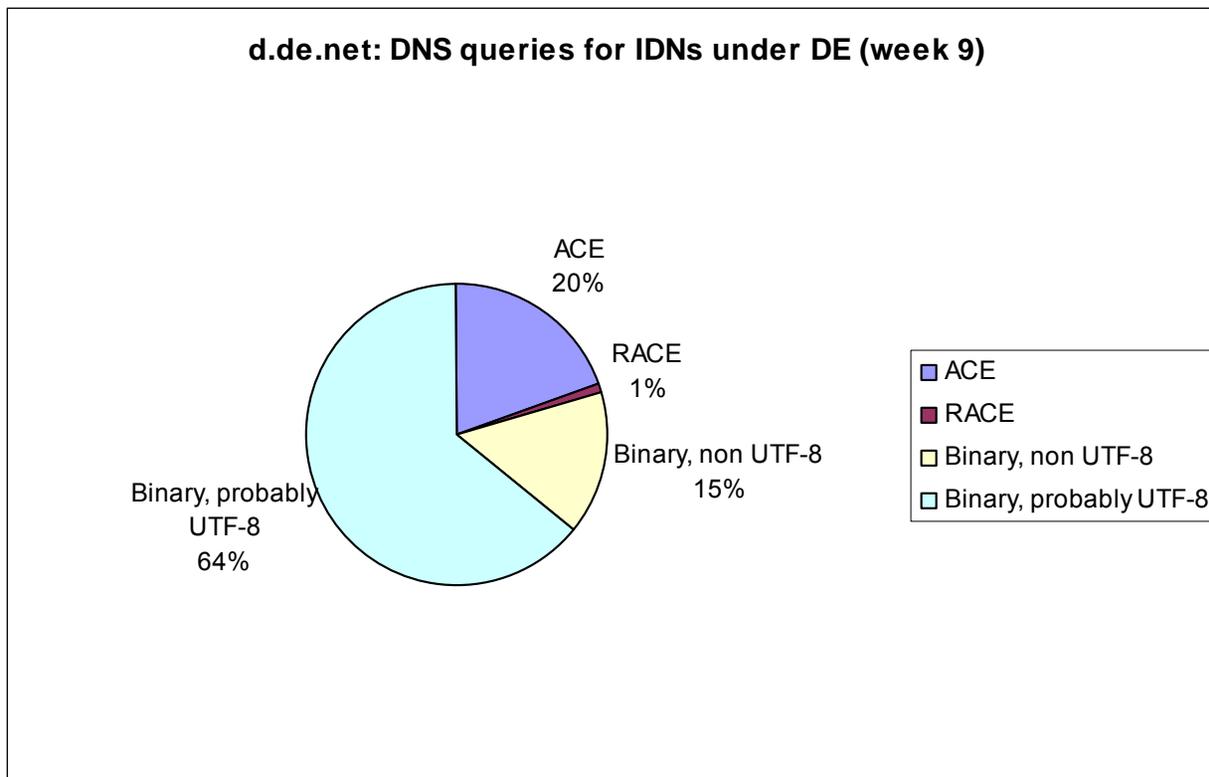
Only from one primary, week mean values, discontinuous periodical samples, not cleaned statistically

# Analysis: DNS queries



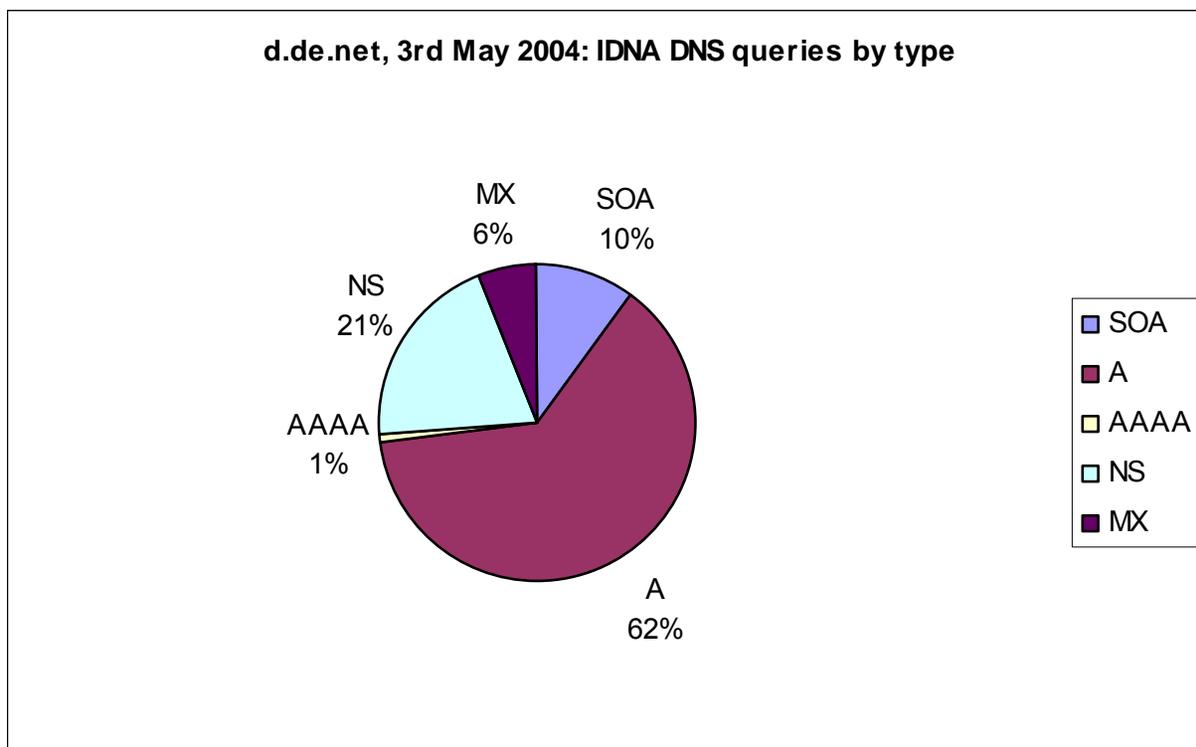
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# Analysis: DNS queries



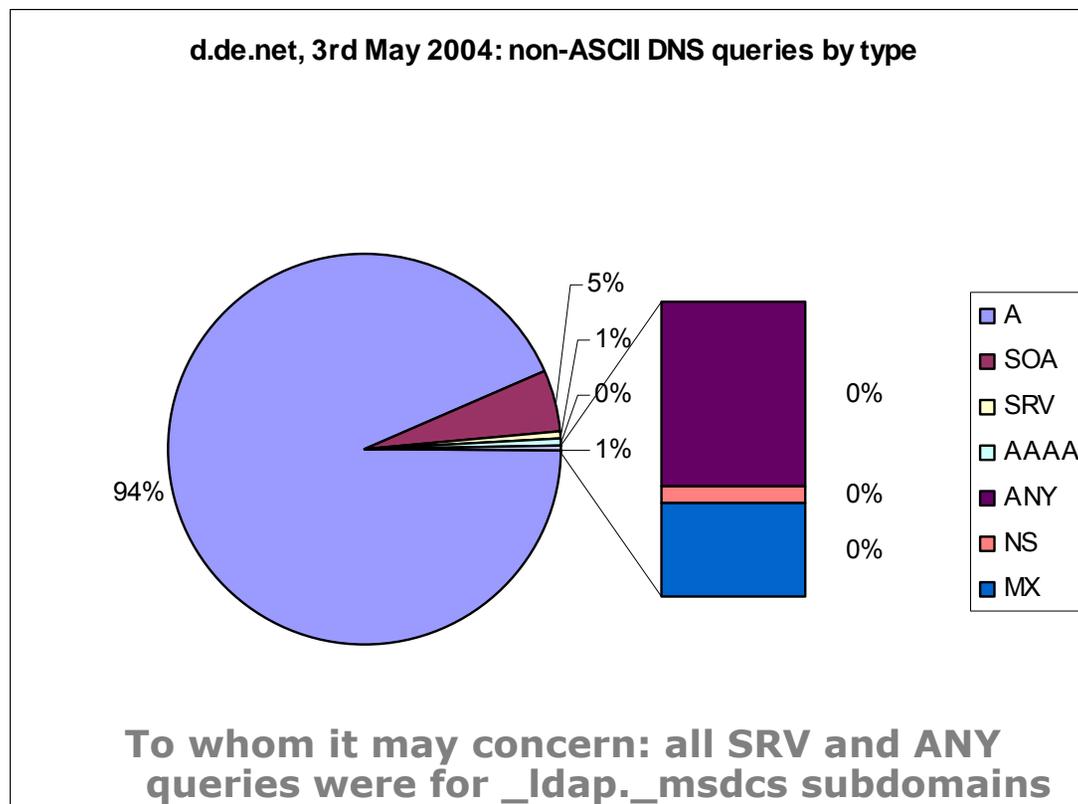
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## If we could turn back time..

- Launch taking place AFTER April Fools Day
- But remember:  
    “After All Fools Day is Before All Fools Day”

**Thanks for your attention**  
**Any questions?**