

Welcome to

Internet Internals

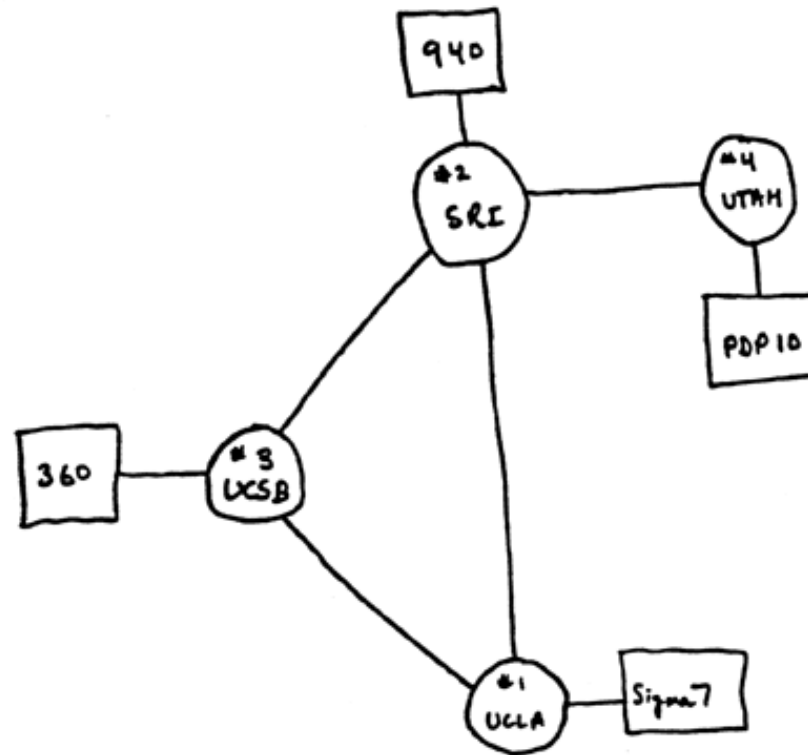
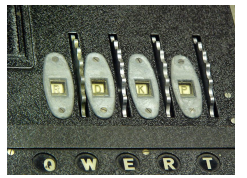
A short story

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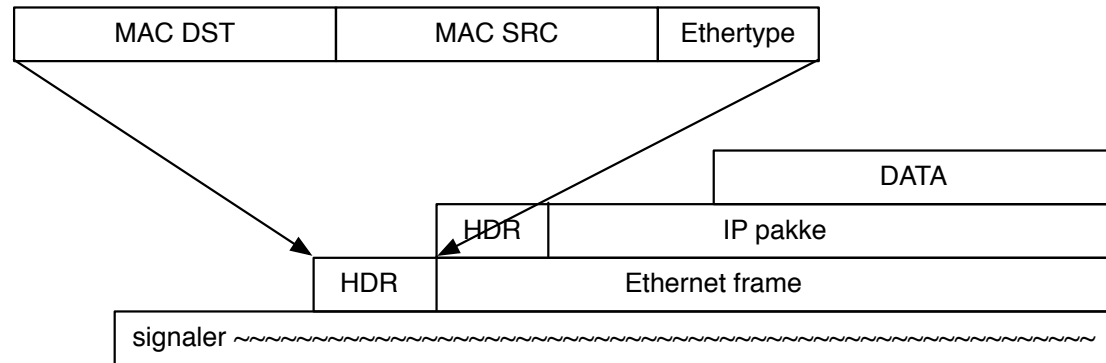
Cryptoparty - Januar 2015 PDF available kramshoej@Github

Goal today



1969: ARPANET 4 nodes

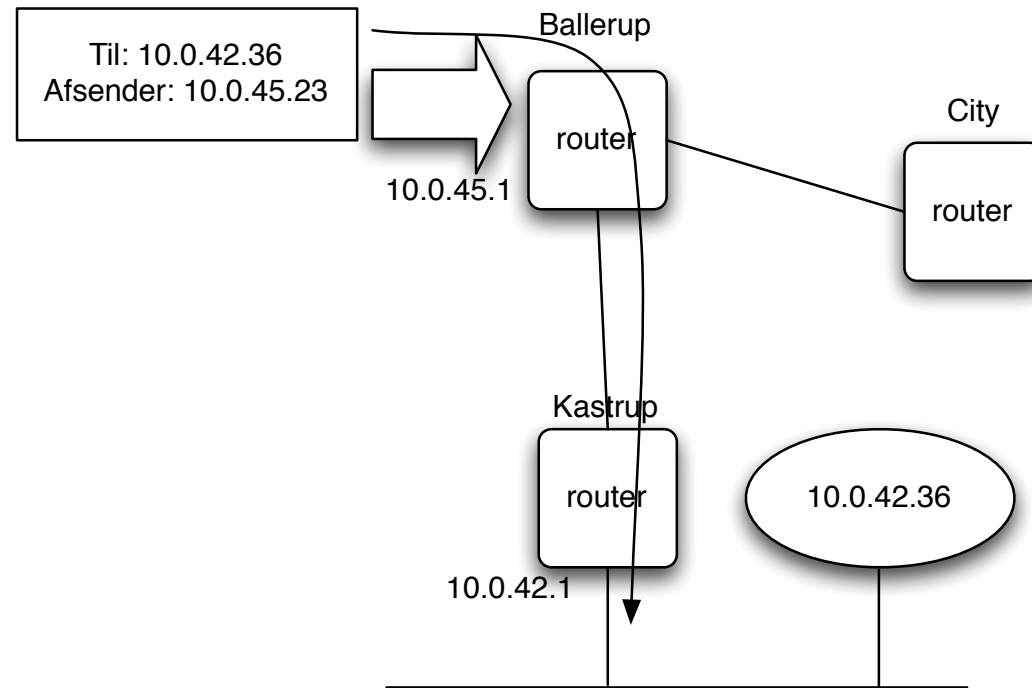
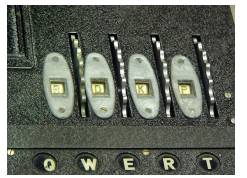
Present some internet internals, what is it?



Example Internet Datagram Header

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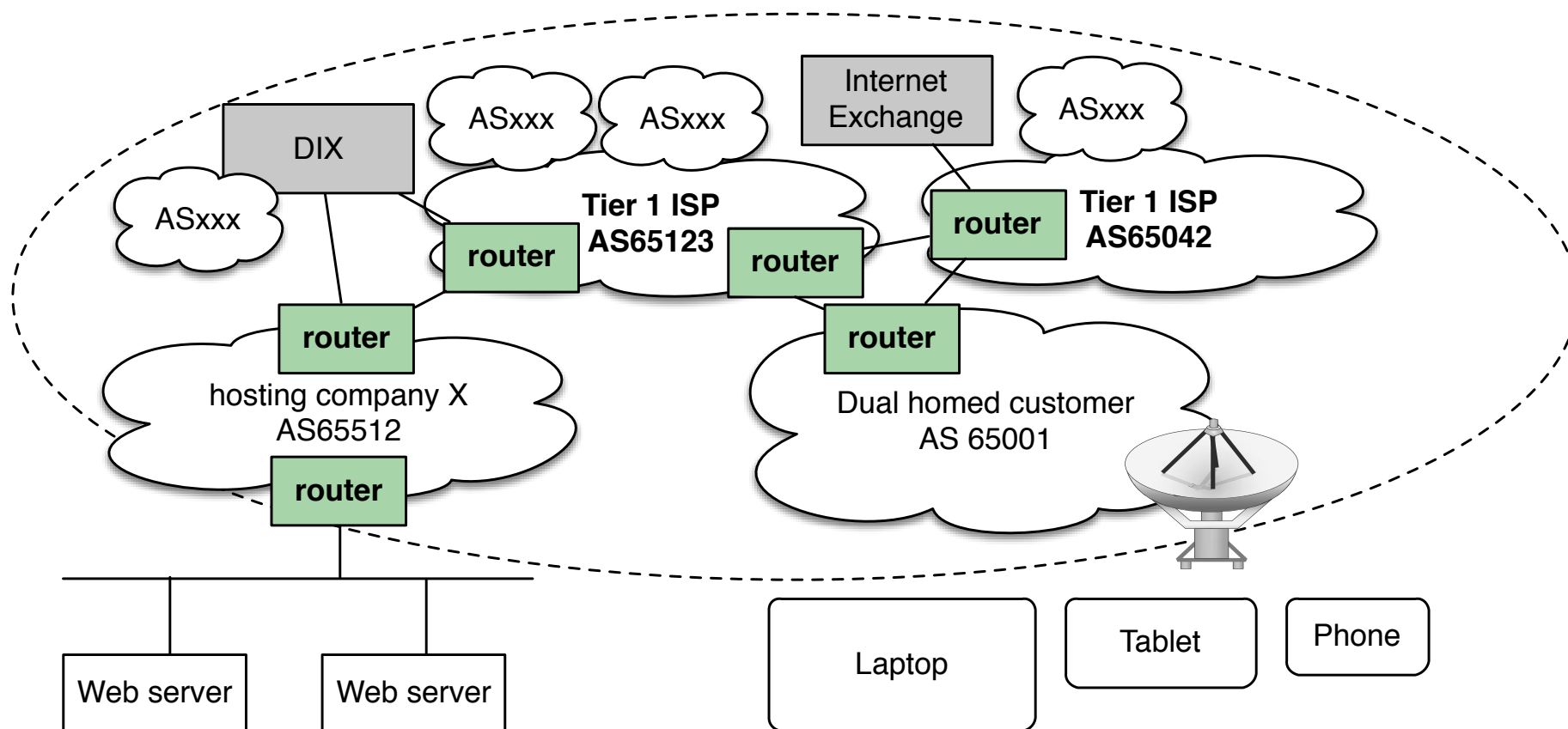
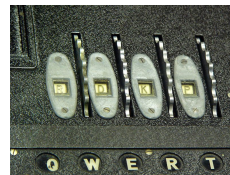
Routing



Soo simple 😊

Dont forget IP routing is based on longest match in the routing table

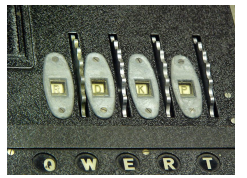
Internet core today AS numbers



Also pretty pictures in *Intercountry BGP As Topology* Martin J. Levy

<http://oldwww.dknog.dk/dknog3/agenda>

BGP changes



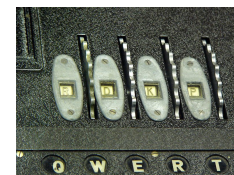
Constant change 515.000 routes/prefixes

A good analogy for the development of the Internet is that of constantly renewing the individual streets and buildings of a city, rather than razing the city and rebuilding it. The architectural principles therefore aim to provide a framework for creating cooperation and standards, as a small "spanning set" of rules that generates a large, varied and evolving space of technology.

Source: RFC-1958

Movietime <https://stat.ripe.net/94.126.176.0/21#tabId=routing>

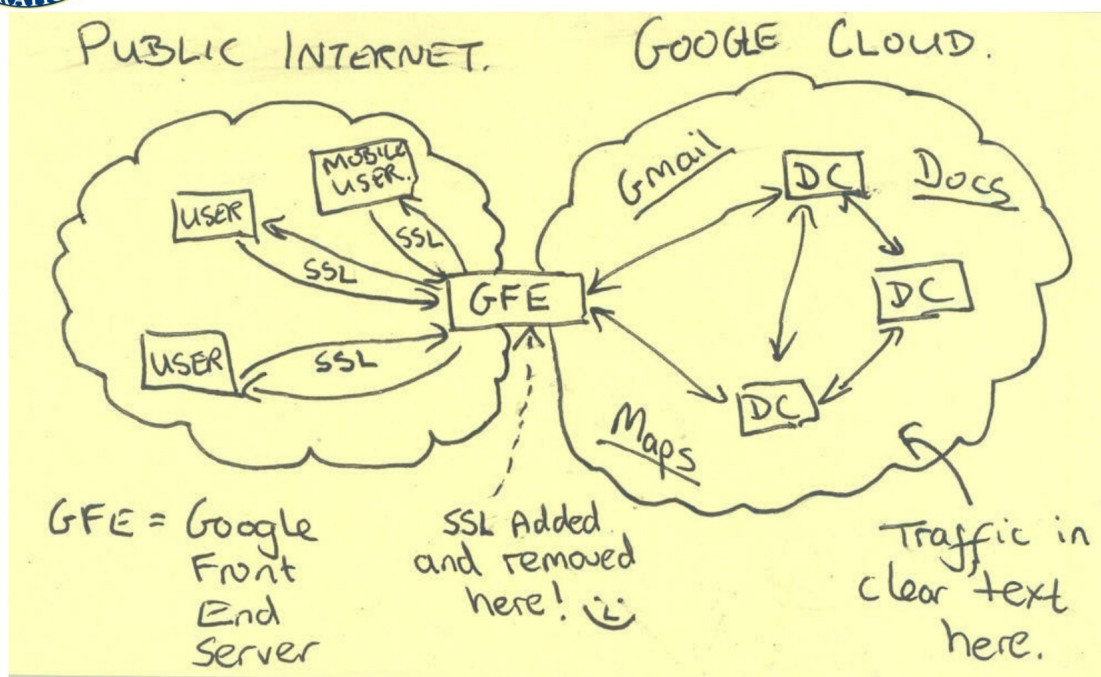
NSA infiltrates links to Yahoo, Google data centers



TOP SECRET//SI//NOFORN



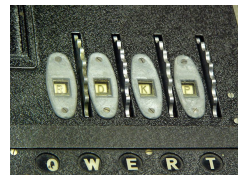
Current Efforts - Google



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SSL (encryption) added and removed here

Comments and questions



You are always welcome to send me questions later via email

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