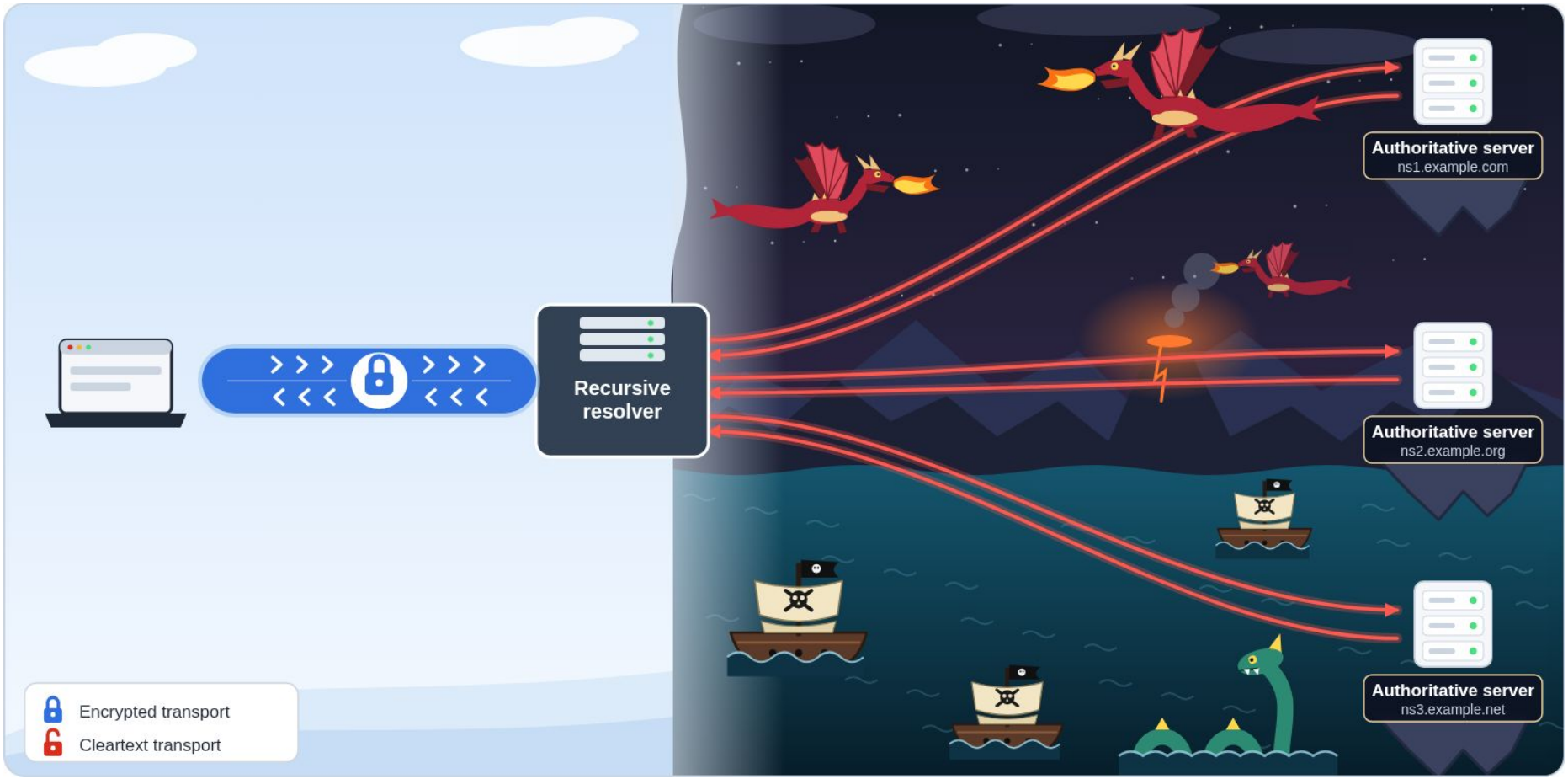
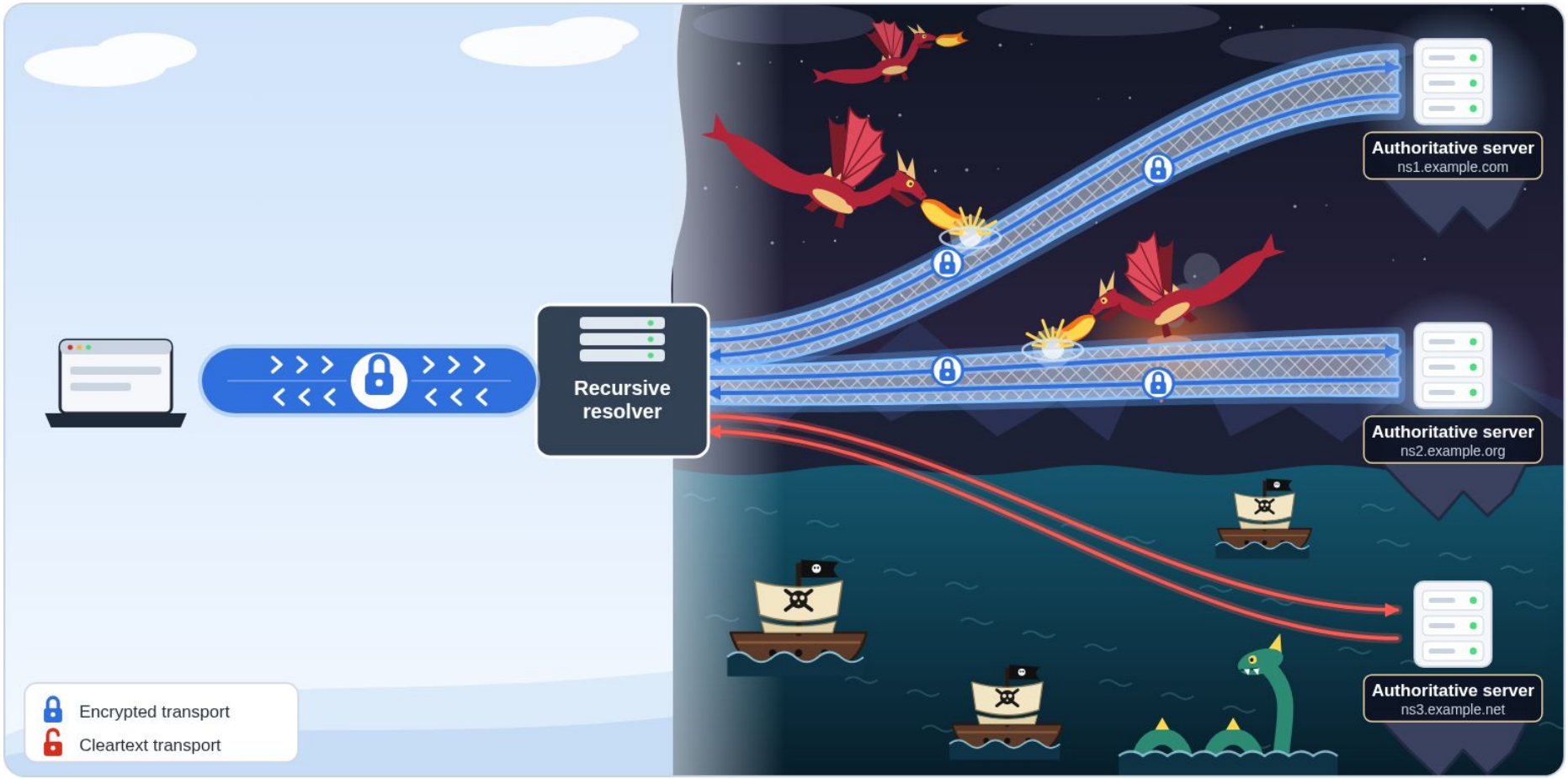
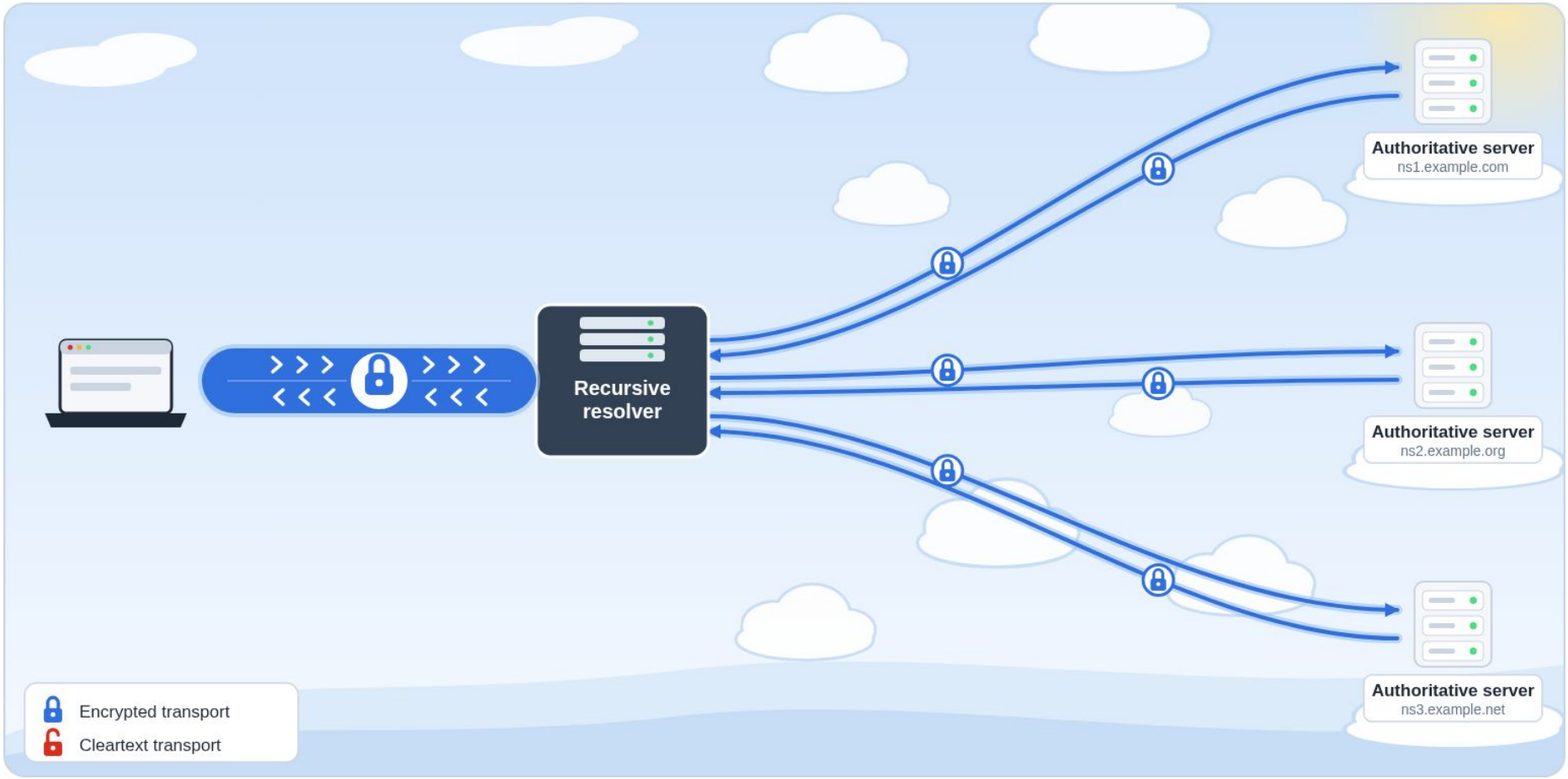
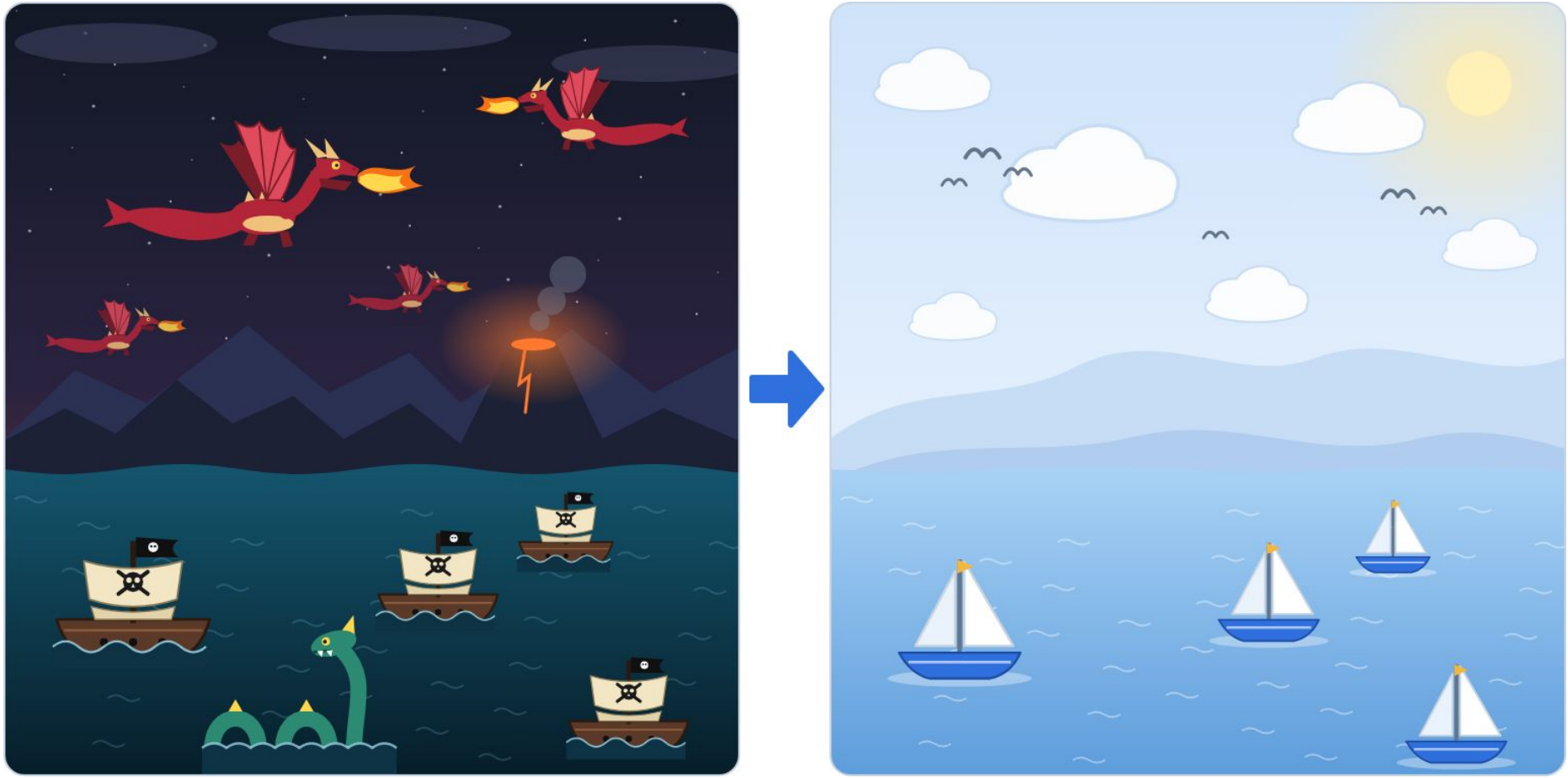

OOTS!
C-OOTS


Recursive resolver
Authoritative server
ns1.example.com
Authoritative server
ns2.example.org
Authoritative server
ns3.example.net
Encrypted transport
Cleartext transport


Recursive resolver
Authoritative server
ns1.example.com
Authoritative server
ns2.example.org
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Cleartext transport



Internet Engineering Task Force (IETF)
Request for Comments: 9539
Category: Experimental
ISSN: 2070-1721

D. K. Gillmor, Ed.
ACLU
J. Salazar, Ed.

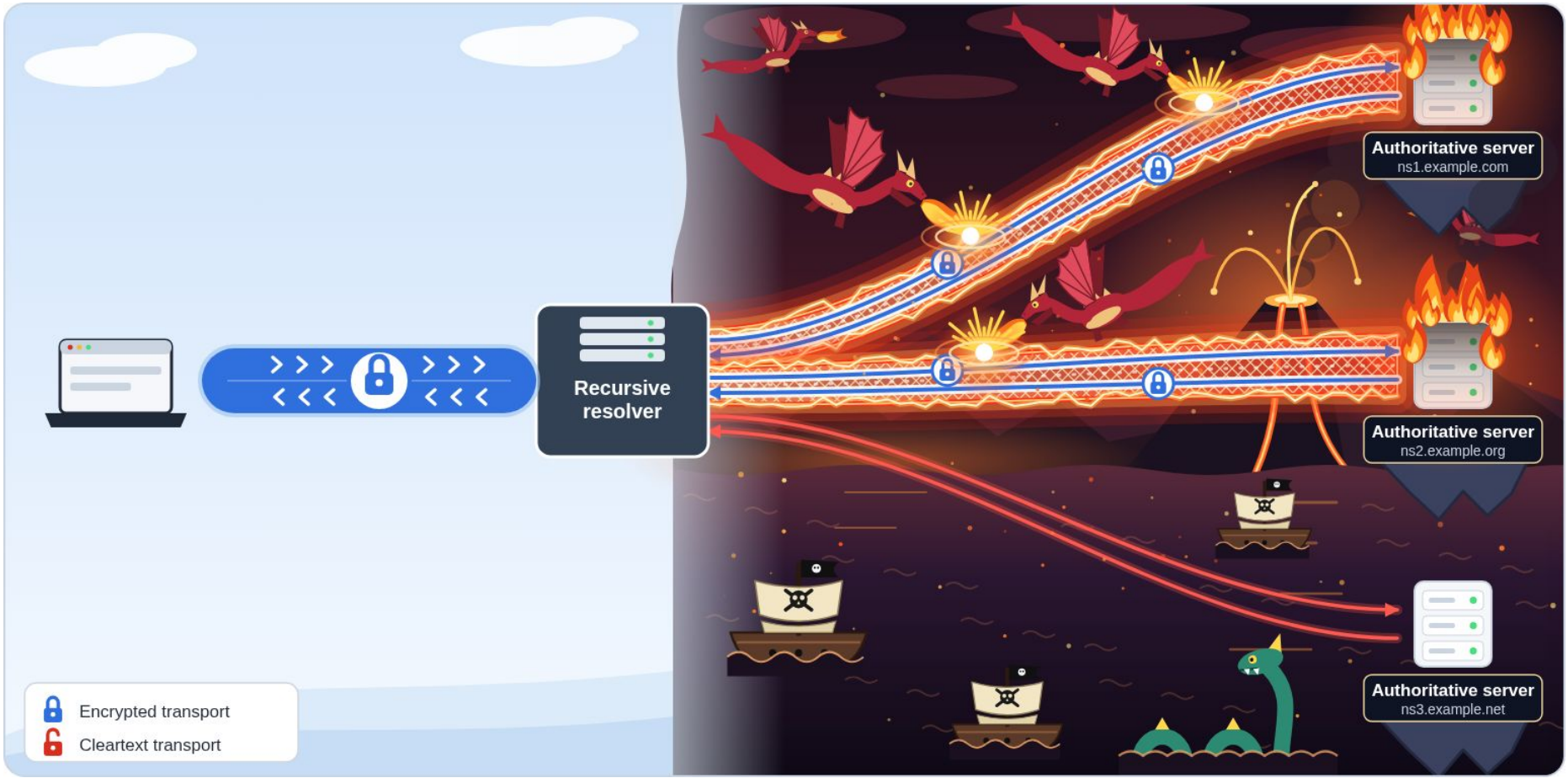
P. Hoffman, Ed.
ICANN

February 2024

Unilateral Opportunistic Deployment of Encrypted Recursive-to-Authoritative DNS

Abstract

This document sets out steps that DNS servers (recursive resolvers and authoritative servers) can take unilaterally (without any coordination with other peers) to defend DNS query privacy against a passive network monitor. The protections provided by the guidance in this document can be defeated by an active attacker, but they should be simpler and less risky to deploy than more powerful defenses.


Recursive resolver
Authoritative server
ns1.example.com
Authoritative server
ns2.example.org
Authoritative server
ns3.example.net
Encrypted transport
Cleartext transport

Network Working Group
Internet-Draft
Intended status: Standards Track
Expires: 27 November 2026

P. Hoffman
ICANN
R. Weber
Akamai Technologies

26 May 2026

DELEG Extensions for Secure Transports

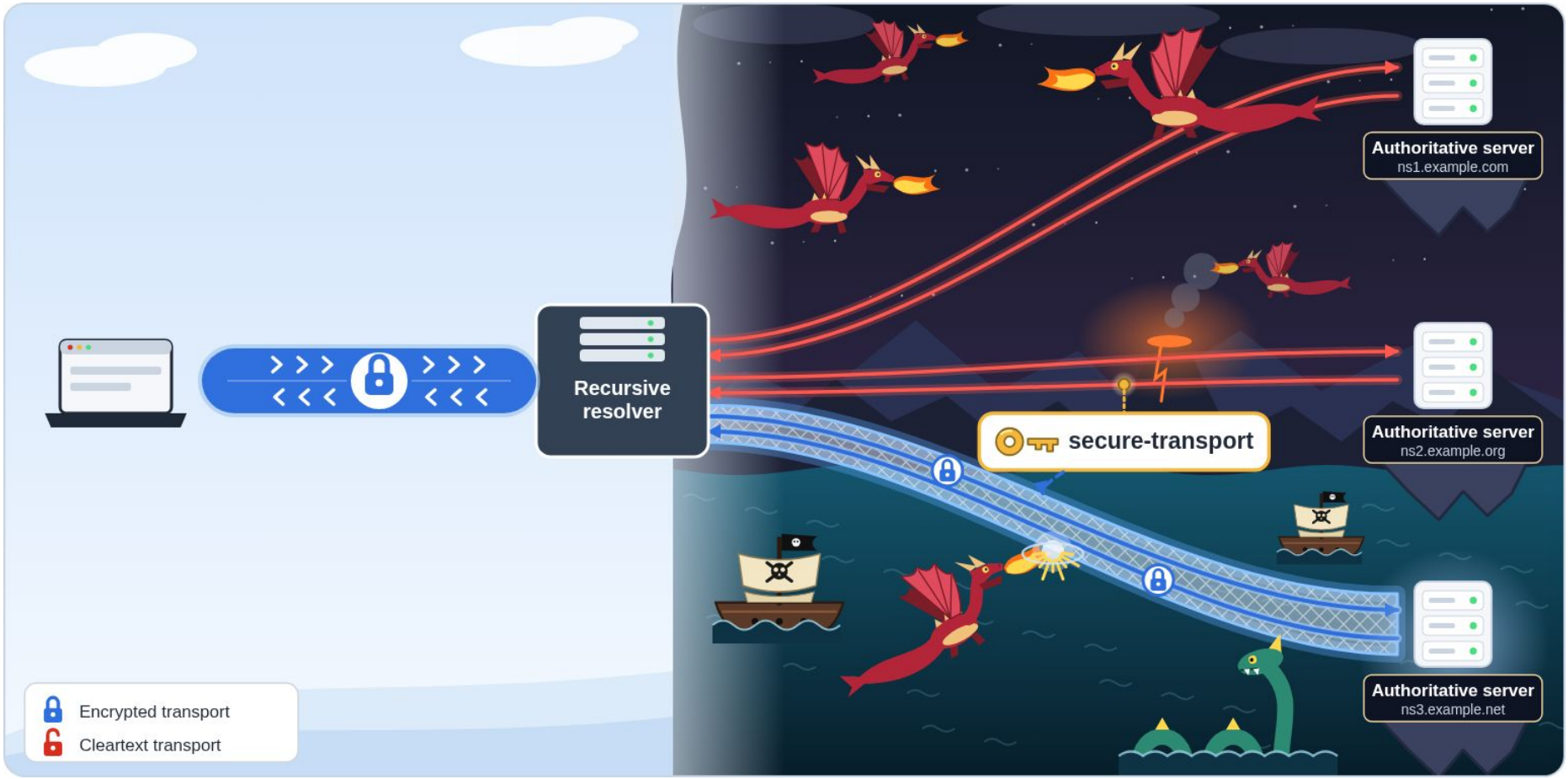
draft-hoffman-deleg-secure-transports-00

Abstract

The DELEG base protocol allows a DNS zone operator to specify servers to be used when delegating zones to other DNS nameservers. This document extends the base protocol to allow zone operators to specify secure transports for those delegations.

Status of This Memo

This Internet-Draft is submitted in full conformance with the


Recursive resolver
secure-transport
Authoritative server
ns1.example.com
Authoritative server
ns2.example.org
Authoritative server
ns3.example.net
Encrypted transport
Cleartext transport

DNSOP Working Group
Internet-Draft
Intended status: Standards Track
Expires: 17 December 2026

J. Stenstam
The Swedish Internet Foundation
P. Homburg
NLnet Labs

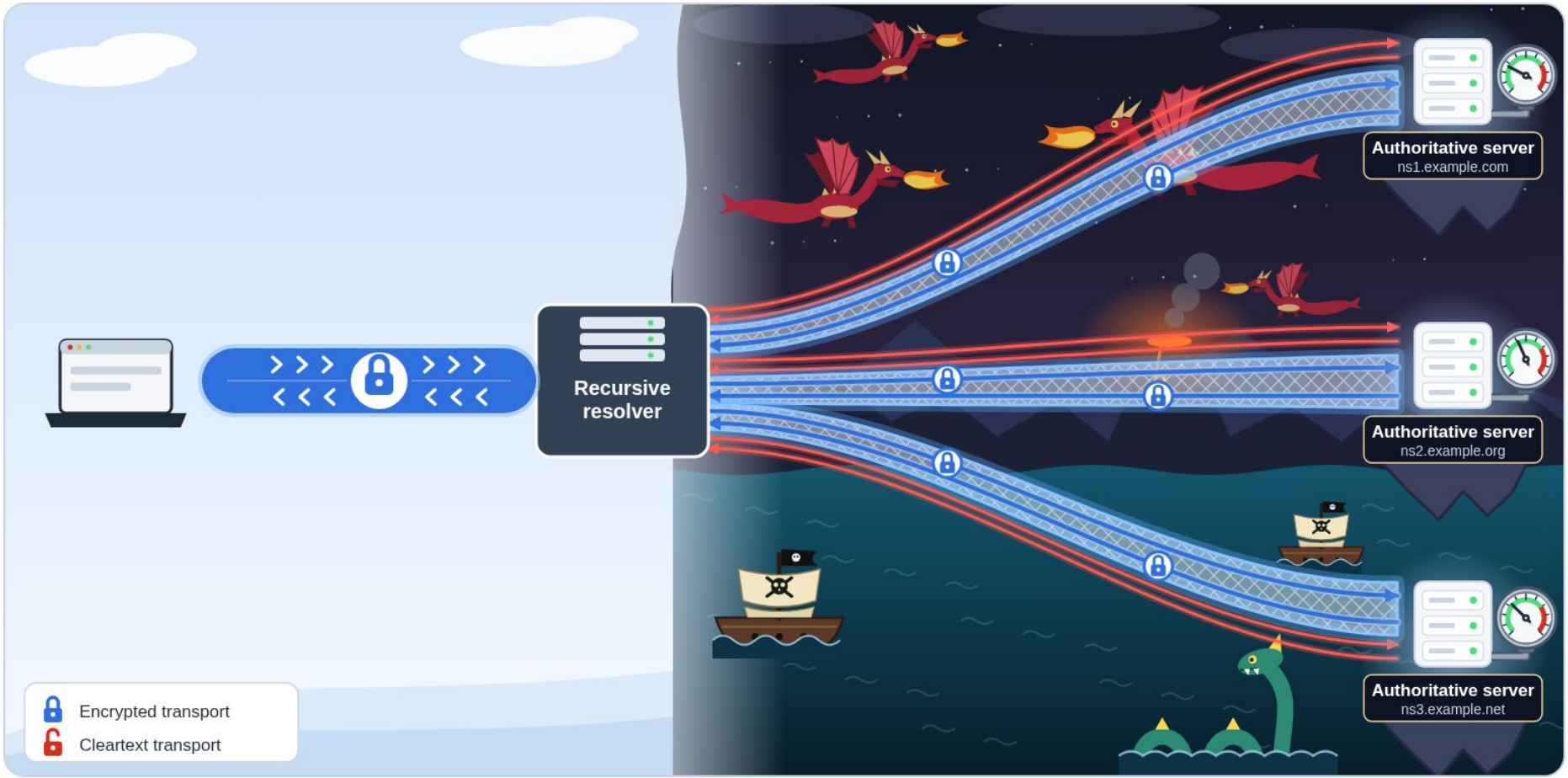
15 June 2026

An SVCB Service Parameter for Opportunistic Operator-led Transport Signaling (oots)

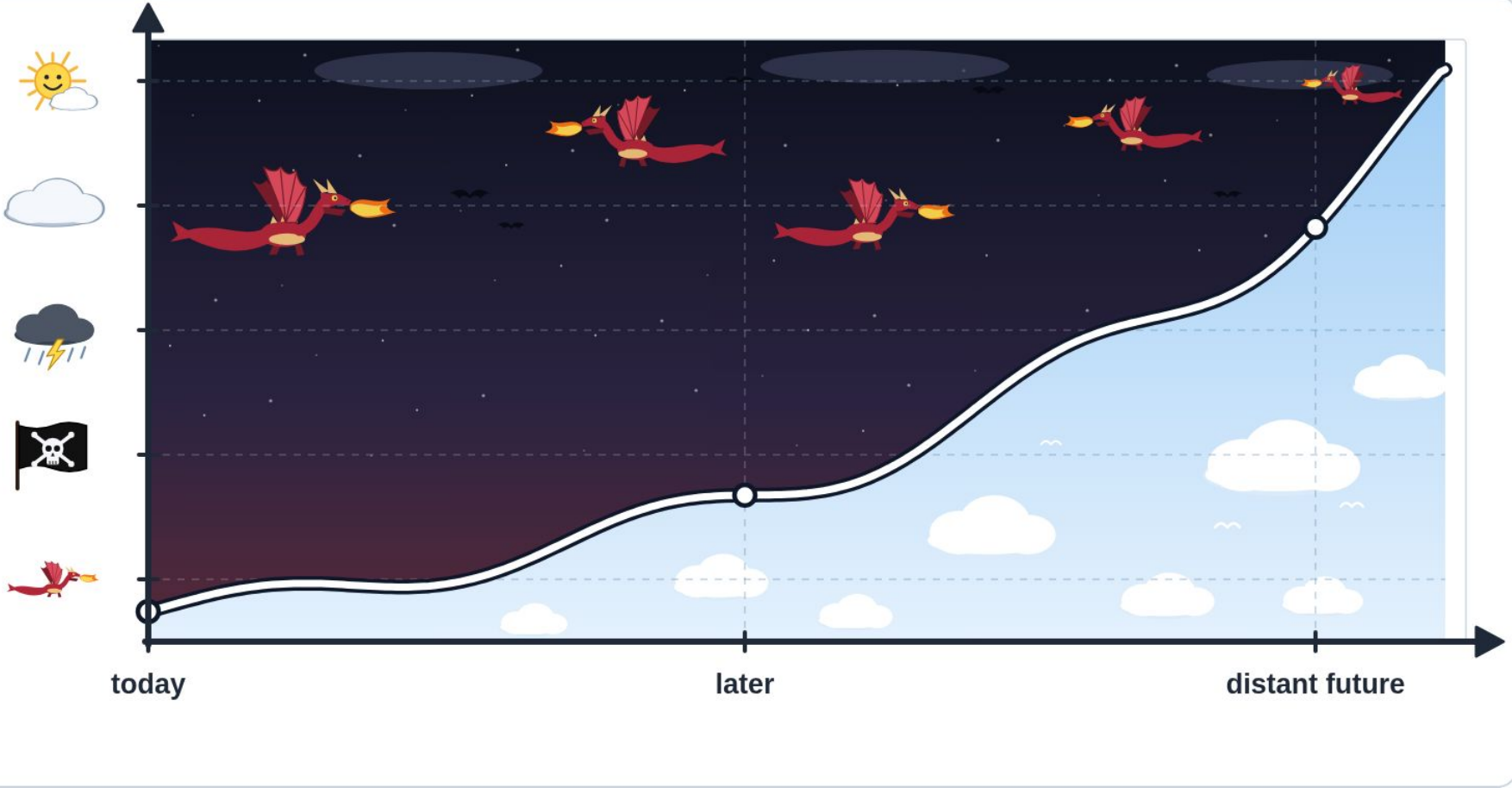
draft-johani-dnsop-svcb-oots-00

Abstract

This document defines a new Service Parameter Key (SvcParamKey), "oots" ("Opportunistic Operator-led Transport Signal"), for use in Service Binding (SVCB) and HTTPS resource records as defined in RFC 9460. The "oots" parameter allows the operator of an authoritative DNS nameserver to advertise, per DNS transport protocol (such as DNS over UDP/TCP, DNS over TLS, DNS over HTTPS, and DNS over QUIC), the


Recursive resolver
Authoritative server
ns1.example.com
Authoritative server
ns2.example.org
Authoritative server
ns3.example.net
Encrypted transport
Cleartext transport


_dns.ns1.example.com. 300 IN SVCB 1 .
oots="do53:100,dot:25"
Recursive resolver
Authoritative server
ns1.example.com
Encrypted transport
Cleartext transport


today
later
distant future


INTERNET-DRAFT
draft-johani-dnsop-transport-signaling-03
INTERNET-DRAFT
draft-fernandez-dnsop-client-side-adox-signal-00
OOTS in NSD
github.com/NLnetLabs/nsd
branch draft-johani-dnsop-transport-signaling
OOTS in Johan's sandbox
github.com/johanix/tdns
OOTS in Leon's sandbox
codeberg.org/zluudg/spoink
OOTS in Firefox
gist.github.com/valenting/118656da34abb255fe01bf1e6cae3dec

THANK YOU



OOTS CREW

Johan Stenstam
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Valentin Gosu
Leon Fernandez
Sara Dickinson
Erik Bergström
Joe Abley