

.br, IPv6, Wi-Fi 6, 5G - De onde vêm os padrões?

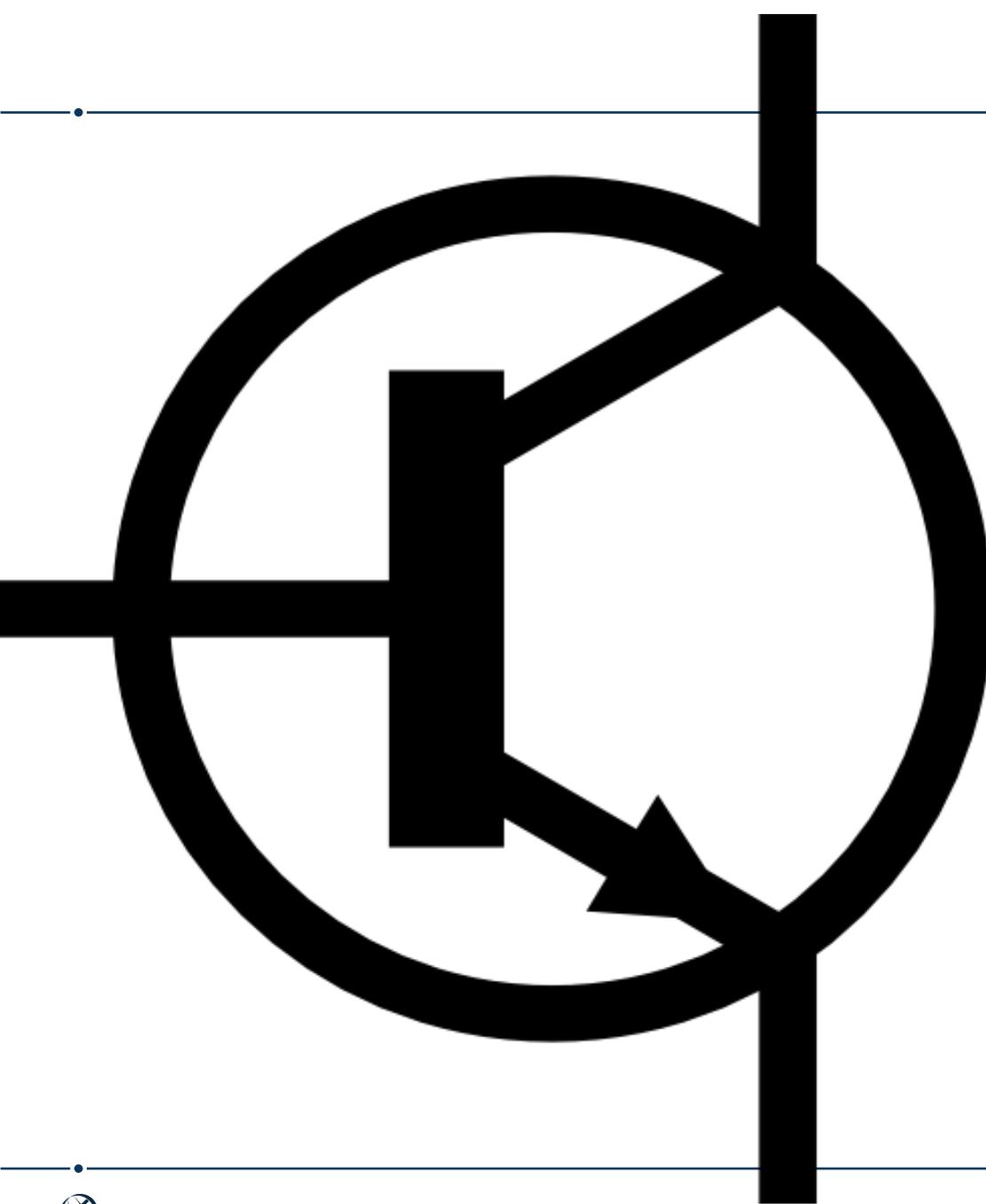
Daniel Fink

daniel.fink@icann.org

Live do IntraRede
22 de Março 2023



**Há muito tempo, em uma galáxia nem
tão distante...**



John Bardeen, William Shockley e Walter Brattain no Bell Labs, 1948.



Thursday Evening, October 5, 1957

(UP)—Means United Press

PRICE FIVE CENTS

Russians Win Race To Launch Earth Satellite

Man On Threshold Of Space Travel

By DANIEL F. GILMORE

United Press Staff Correspondent

LONDON (UP)—The pulsating radio "beep" of the first manmade earth satellite signalled today to the world that man had crossed the threshold into the age of travel through space.

The Soviet Union announced it had won the race into space by launching an earth satellite Friday, a 184-pound, 22-inch globe now orbiting the earth at 18,000 miles an hour, 560 miles up.

Millions of persons throughout the world heard the "beep...beep...beep..." rebroadcast today by local stations and realized that man had taken his first faltering steps into the new era.

Launching of the satellite was a tremendous victory for science. It was a more tremendous victory for Soviet propaganda to be able to trumpet to the world the Russians were the first to break through the frontiers of space.

Bolsters ICBM Claims

— WEATHER —

WEST VIRGINIA—Partly cloudy with highest in the 60s today and Sunday. Lowest tonight 50 west and 40 east portions.

VIRGINIA—Fair with lowest 45 to 50 west and north and 50 to 55 southeast portions tonight, Sunday mostly sunny and a little warmer. Tides on the coast and lower bay will run a foot or two above normal.

How To Spot Satellite

By UNITED PRESS

Here's how to look for the Russian earth satellite which will be whizzing through the sky at 18,000 miles an hour.

The best time to spot it is at dawn or dusk when the sky is semi-dark. There is a chance that it could be seen if it travels across the face of the moon at night.

The best instruments to use are ordinary binoculars or telescopes. Powerful telescopes won't pick it up because of their narrow fields.

Through optical instruments, the satellite will look like the faintest star which can be seen with the naked eye.

Keep a sharp eye out. The satellite travels so fast it may appear on the horizon for only seconds and chances of spotting it have been estimated at one in a hundred.

U. S. May Speed Up Satellite Program

By JOSEPH L. MYLER

United Press Staff Correspondent

WASHINGTON (UP)—American scientists caught flatfooted by Russia's epic launching of the man-made moon, indicated that the United States may speed its own earth satellite program.

Leaders of the U.S. satellite program also said that if Russia rocketed its heavy pound satellite into a globe-doling orbit with a rocket "to" an intercontinental ballistic missile.

That could mean Russia only has beaten this country, frontiers of space, but also it has been called the "ultimate weapon" for modern day war. ICBM. This country has not tested a successful ICBM.

American diplomats on Russia had scored a notable propaganda victory. The milita

Epic-Making



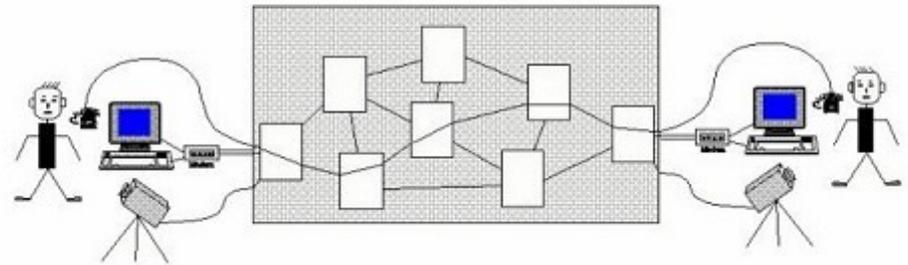
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1959 and 1964. *Sputnik* launched a golden era for military science and technology.

Paul Baran



Circuit Switched Network



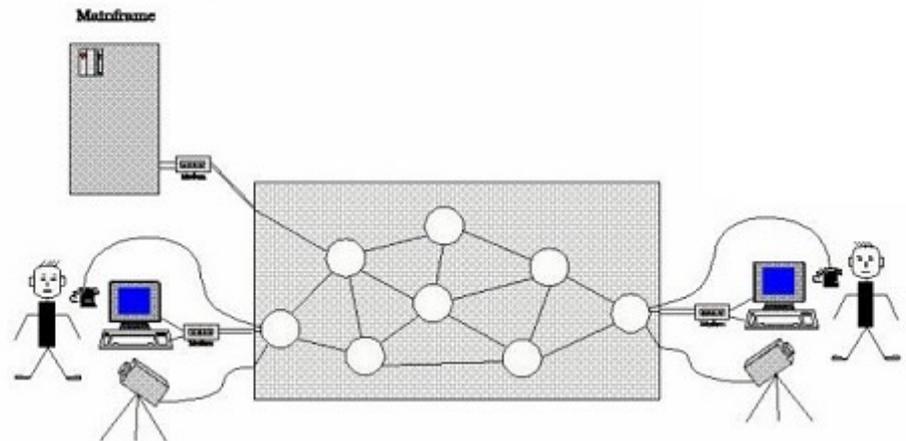
Receiver

Caller

Donald Watts Davies
CBE FRS



Packet Switched Network



Receiver

Caller



sketched out his idea: Leave the host computers out of it as much as possible and instead insert a small computer between each host computer and the network of transmission lines. (This was, by

Network Working Group
Request for Comments: 1

Steve Crocker
UCLA
7 April 1969

Title: Host Software
Author: Steve Crocker
Installation: UCLA
Date: 7 April 1969
Network Working Group Request for Comment: 1

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INTRODUCTION

I. A Summary of the IMP Software

Messages

Links

IMP Transmission and Error Checking

Open Questions on the IMP Software

II. Some Requirements Upon the Host-to-Host Software

... The software for the ARPA Network exists partly in the IMPs and partly in the respective HOSTs. BB&N has specified the software of the IMPs and it is the responsibility of the HOST groups to agree on HOST software...

RFC 349

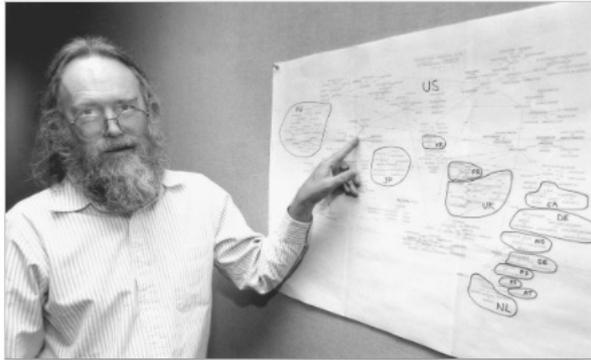


Foto: Irene Fertik, Servicio de Noticias de la USC. Copyright 1994, USC.

Jon Postel

“Sé liberal en lo que aceptas y conservador en lo que envías.”
Dr. Jon Postel (1943-1998)

Network Working Group
Request for Comments : 349

NIC : 10428

Categories : Socket Numbers
References : RFC's 322, 204

Jon Postel
Computer Science
UCLA-NMC
30 May 72

Proposed Standard Socket Numbers

I propose that there be a czar (me ?) who hands out official socket numbers for use by standard protocols. This czar should also keep track of and publish a list of those socket numbers where host specific services can be obtained. I further suggest that the initial allocation be as follows:

| Sockets | Assignment |
|---------|---------------------------------|
| 0-63 | Network wide standard functions |
| 64-127 | Host specific functions |
| 128-239 | Reserved for future use |
| 240-255 | Any experimental function |

and within the network wide standard functions the following particular assignment be made:

| Socket | Assignment |
|--------|------------------|
| 1 | Telnet |
| 3 | File Transfer |
| 5 | Remote Job Entry |
| 7 | Echo |
| 9 | Discard |

these socket numbers (decimal) are to be used for the socket called "L" in the official Initial Connection protocol (ICP) as specified in NIC 7104 the "Current Network Protocols" notebook.

Network Working Group
Request for Comments: 805

J. Postel
ISI
8 February 1982

Computer Mail Meeting Notes

Introduction

A meeting was held on the 11th of January 1982 at USC Information Sciences Institute to discuss addressing issues in computer mail. The attendees are listed at the end of this memo. The major conclusion reached at the meeting is to extend the "username@hostname" mailbox format to "username@host.domain", where the domain itself can be further structured.

To send an email to someone, you had to first be a human [router](#) and specify a valid path to the destination as part of the address. If you didn't know a valid route, the software couldn't help you. In order to solve this problem, [domain names](#) were created to provide each person with one address regardless of where email was sent from. As RFC 805 put it, "The hierarchical domain type naming differs from source routing in that the former gives absolute addressing while the latter gives relative addressing".

In the Domain Name System... there is a hierarchy of names. The root of system is unnamed. There are a set of what are called “top-level domain names” (TLDs). These are the generic TLDs (EDU, COM, NET, ORG, GOV, MIL, and INT), and the two letter country codes from ISO-3166. It is extremely unlikely that any other TLDs will be created.

– [Jon Postel](#); Domain Name System Structure and Delegation ; [RFC 1591](#);

CERN

Tim Berners-Lee, a British scientist, invented the [World Wide Web](#) (WWW) in 1989, while working at CERN.



CERN

<https://www.home.cern> > science > computing > birth-web

[The birth of the Web | CERN](#)

1985



1986



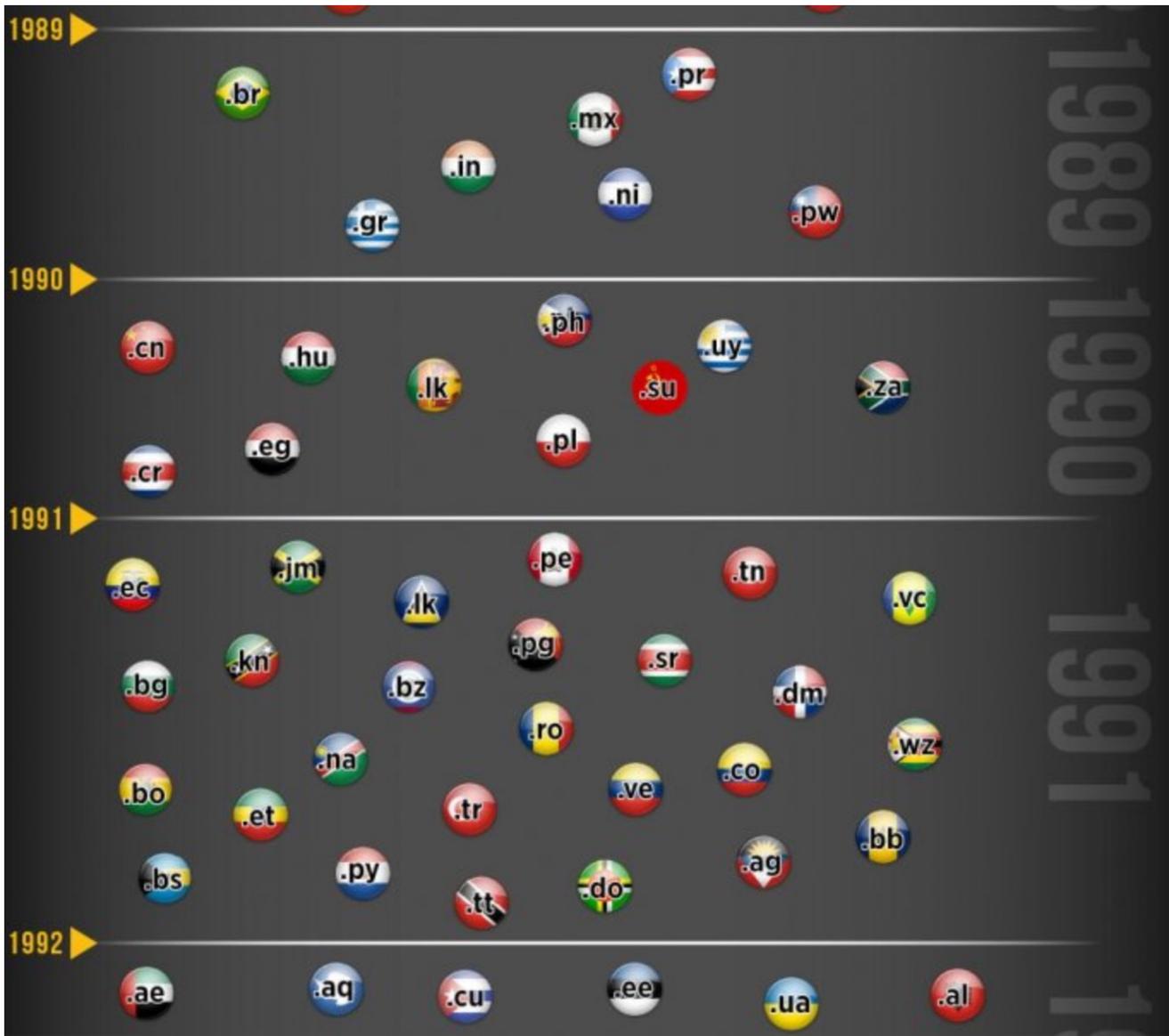
1987



1988



1985 1986 1987 1988



Histórico

Criado e delegado ao [Brasil](#) em [18 de abril](#) de [1989](#)^[2] por [Jon Postel](#),^[3] o domínio era, inicialmente, operado de forma manual pelo [Registro.br](#) e administrado pela [Fundação de Amparo à Pesquisa do Estado de São Paulo](#) (FAPESP). Essencialmente, apenas pesquisadores e as instituições às quais eles pertenciam tinham interesse e condições em se integrar à nova [rede](#) e, portanto, em registrar um [domínio](#) sob o [.br](#).

From 1985 to 1993, Postel delegated ccTLDs on a first-come, first-served basis. Using the notion of a “responsible person,” Postel required very limited basic administrative criteria before he delegated a ccTLD. As he wrote, the person in charge of assigning second-level domain names “is generally the first person that asks for the job (and is somehow considered a ‘responsible person’).”¹⁰

To avoid political problems, Postel used the ISO 3166-1 country codes to define what entity would warrant a ccTLD.¹¹ Because these codes were provided by the International Organization for Standardization, an international association of national standard-

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CERN

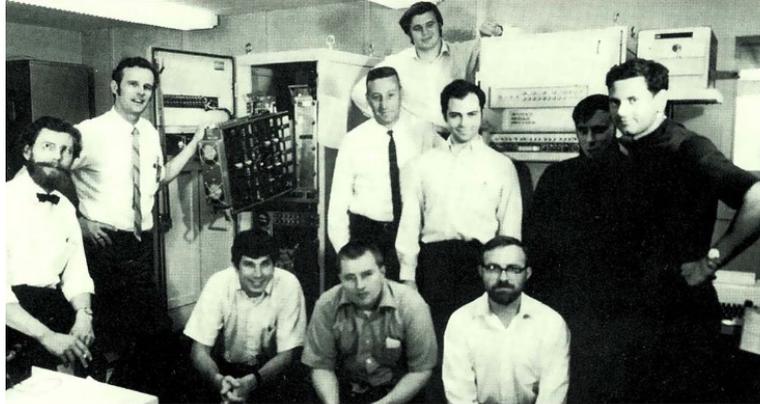
<https://www.home.cern> › science › computing › birth-web ⋮

The birth of the Web | CERN

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– [Jon Postel](#); Domain Name System Structure and Delegation ; [RFC 1591](#); March 1994.

• THE NATIONAL BESTSELLER •



where wizards
stay up late

THE ORIGINS OF THE INTERNET

katie hafner
and
matthew lyon





The global coordination of the DNS Root, IP addressing, and other Internet protocol resources is performed as the Internet Assigned Numbers Authority (IANA) functions. [Learn more.](#)

Domain Names

Management of the DNS Root Zone (assignments of ccTLDs and gTLDs) along with other functions such as the .int and .arpa zones.

- [Root Zone Management](#)
- [Database of Top Level Domains](#)
- [.int Registry](#)
- [.arpa Registry](#)
- [IDN Practices Repository](#)

Number Resources

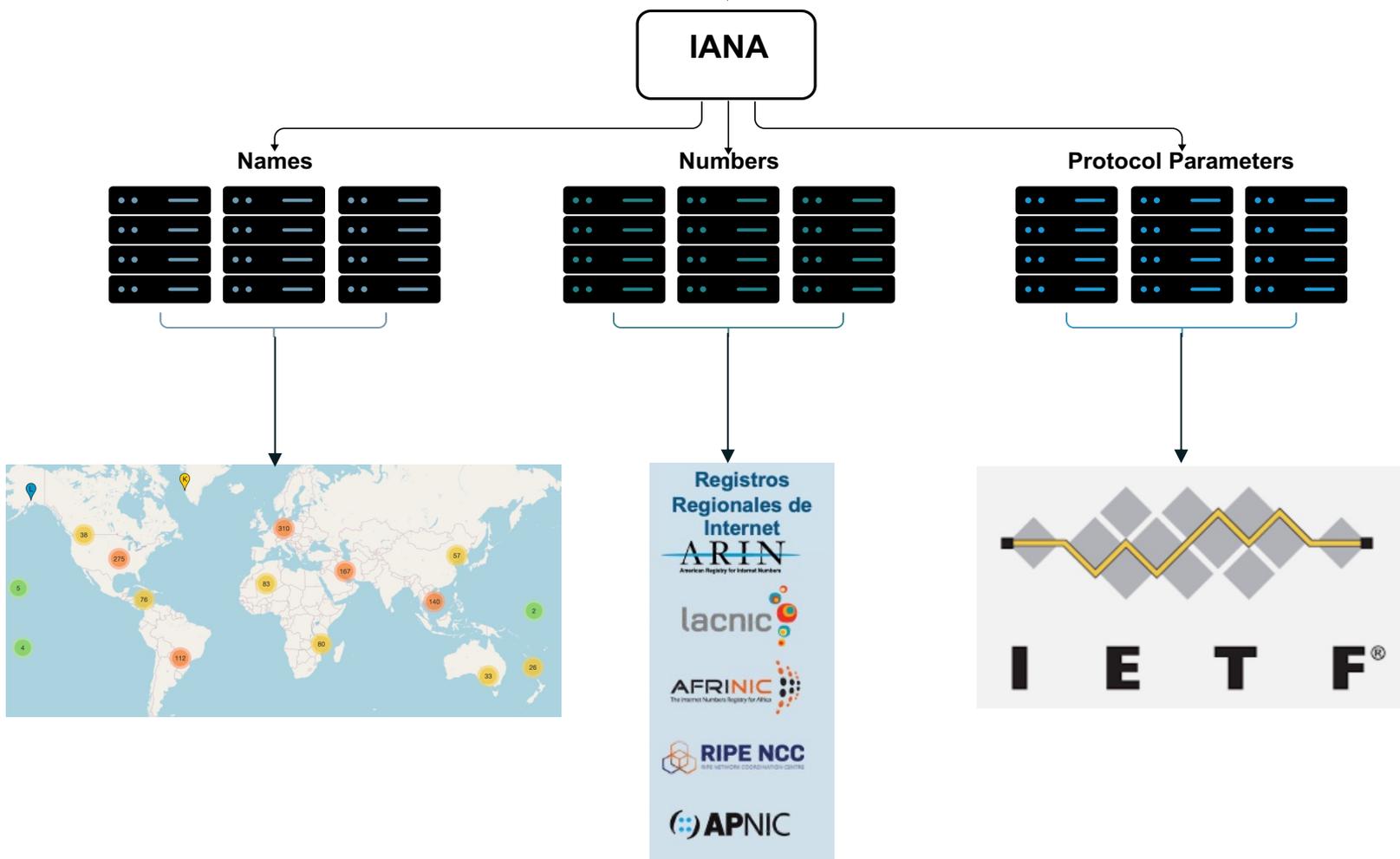
Coordination of the global IP and AS number spaces, such as allocations made to Regional Internet Registries.

- [IP Addresses & AS Numbers](#)
- [Network abuse information](#)

Protocol Assignments

The central repository for protocol name and number registries used in many Internet protocols.

- [Protocol Registries](#)
- [Apply for an assignment](#)
- [Time Zone Database](#)



Muito obrigado !



One World, One Internet

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