nic.br   cgi.br

Núcleo de Informação
e Coordenação do
Ponto BR

Comitê Gestor da
Internet no Brasil

registro.br   cert.br   cetic.br   ceptro.br   ceweb.br   ix.br

Empower the Global Internet Standards

Experience with the testing tool in Brazil

Gilberto Zorello

From Principles to Practice Advancing Digital Public Infrastructure through Open Standards and Multistakeholder Cooperation – New York - USA

25/12/15

nic.br

Our Agenda

- Introduction

- **Safer Internet Program**

- TOP – Test the Standards Project

- **Dissemination Program**

- New actions planned

- **Statistics**

Introduction

- **Gilberto Zorello – Program Manager at NIC.br**

- **Objective: Implementation of Internet.nl in Brazil**

- **Local name: TOP – Test the Standards**

- **TOP is part of the Safer Internet Program**

Safer Internet Program
Objectives

- Act in **support** of the Internet technical Community in Brazil

- Reduction of **Denial of Service** attacks

- Improvement of the **Network Routing Security** (MANRS)

- Spread **DNS security** best practices (KINDNS)

- Disseminate the best security practices for **websites and e-mail** (TOP)

- Encourage the implementation of **IPv6** in final users and Internet services

TOP – Test the Standards
The project

https://top.nic.br

- **Recommendations** of **Internet.nl** is **fully aligned** with the objectives of **Safer Internet Program**

- DNS security

- Recommendations for configuring **websites** and **e-mail** services

- Checking the use and correct configuration of **IPv6**

- **RPKI** and **Security.txt**

- **Web interface in Portuguese**

- Started in **Dec/2021**. Running v.**1.7**, v.**1.10** and dashboard is been tested

TOP – Test the Standards
A NIC.br initiative

- The implementation in Brazil was an initiative of NIC.br and has been **funded by the entity.**

- To **disseminate** across the country:

  - Lectures at **NIC.br** technical events and **ISP** Association fairs

  - Technical training on specific topics recommended: **recursive** and **authoritative DNS** servers, **RPKI** and **IPv6**

  - Meetings with ISP to provide guidance on how to implement the best security practices in their networks and how to use the TOP testing tool.
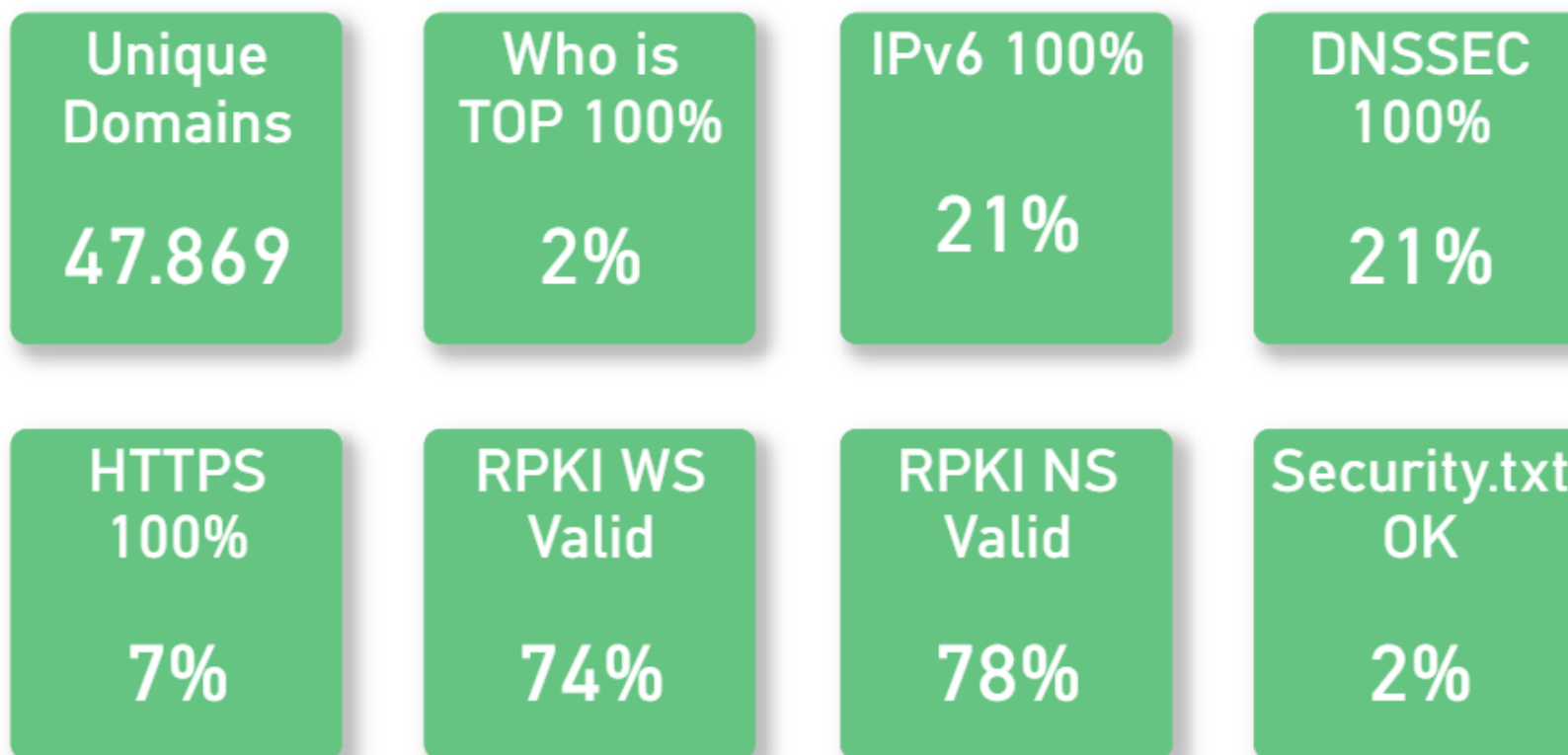
TOP – Test the Standards
Aditional actions

- **BCOP NIC.br Award**: rewards institutions that implement continuous improvement in their networks. Companies that configure their websites following TOP's recommendations are awarded.

- **CETIC.br** monitors the adoption of information and communication technologies (ICT) in Brazil every two years. The next survey will verify the readiness of these companies to meet best practices for website security using TOP.

- A **new project** is being developed by NIC.br to boost the use of IPv6 among end users and in network services, such as websites and email. TOP will be used to perform measurements.

TOP – Test the Standards
Statistics

TOP Test - Site

TOP
TESTE OS PADRÕES

Unique Domains	Who is TOP 100%	IPv6 100%	DNSSEC 100%
47.869	2%	21%	21%

HTTPS 100%	RPKI WS Valid	RPKI NS Valid	Security.txt OK
7%	74%	78%	2%

TOP – Test the Standards
Statistics

TOP Test - E-mail

Unique Domains	Who is TOP 100%	IPv6 100%	DNSSEC 100%
19.141	1%	16%	11%

DMARC DKIN SPF 100%	STARTTLS 100%	RPKI MX Valid	RPKI NS Valid
18%	2%	78%	77%

TOP – Test the Standards
Statistics

User Connection - IPv6 e DNSSEC

TOP
TESTE OS PADRÕES

Autonomous System	Recursive DNS Validates DNSSEC	IPV6 Users
8.297	72%	67%

Ano

2021	2023	2025
2022	2024	

nic.br cgi.br
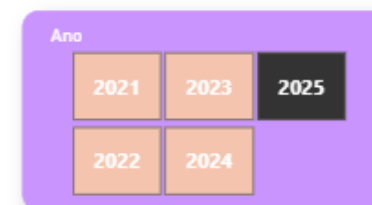
Thank you

https://top.nic.br

@ yanai@nic.br

@ gzorello@nic.br

2025 June 24th

nic.br cgi.br

www.nic.br | www.cgi.br