

# What Censys Scans

Censys collects and enriches Internet security data about every host and certificate on the Internet.

## Monitor known assets within your network

Censys continuously scans hosts and certificates on the Internet, keeping data refreshed and accurate so that you can secure your organization. Created by the researchers behind [the ZMap Project](#), Censys collects data with ZMap's tools and enriches that data to help organizations:

- ✓ Discover unknown infrastructure connected to their organization
- ✓ Monitor and track known adversaries for threat-hunting purposes
- ✓ Perform risk assessments for third-party vendors and contractors
- ✓ Prevent phishing by finding pre-attack infrastructure and blocking access
- ✓ Analyze operating systems (OS) on hosts to locate software that needs updating and discover IoT devices used in your organization
- ✓ Track changes in hosts and servers over time to locate anomalies and potential security risks

## Depth of Data is Just As Important as Breadth of Coverage

We collect curated, labeled data for each of the following datasets:

### 1. IPv4 Host Deep Scans

The Censys IPv4 dataset provides data about the services (e.g., web, mail, and DNS information) running on all publicly-accessible IPv4 hosts.

This IPv4 Deep Scan dataset is refreshed daily with the most recent information about each host.

Use this more in-depth dataset to analyze information, such as:

- ✓ What ports/protocols are running on this IP address?
- ✓ What certificates are associated with this host?
- ✓ What software is this host running?
- ✓ What is the location of this server?
- ✓ What network was it seen on?

CONTINUED

## Depth of Data is Just As Important as Breadth of Coverage

We collect curated, labeled data for each of the following datasets:

### 2. IPv4 Banners

- ✓ Lightweight banner grabs on 1000+ popular ports across all hosts in the IPv4 address space
- ✓ Use these to get a broad, comprehensive view of the hosts and servers associated with or in use within your organization
- ✓ Most often utilized by threat hunters and pentesters
- ✓ Particularly useful in finding adversary infrastructure hosted on non-standard ports
- ✓ This dataset is also particularly useful for third-party risk assessments and to get a broad understanding of the attack surface of companies they have acquired
- ✓ These lightweight scans are refreshed weekly

### 3. Certificates

- ✓ The Censys Certificates dataset contains parsed data about known X.509 certificates
- ✓ We collect certificates through Internet-wide scans and by synchronizing with public [Certificate Transparency](#) servers
- ✓ We also collect unique certificates and annotate with additional metadata (e.g., browser trust)
- ✓ Perform risk assessments for third-party vendors and contractors
- ✓ Monthly datasets of the full certificates index and daily snapshots of certificates added on that day

### 4. Popular Websites

- ✓ The Censys Websites dataset provides data about the common services (e.g., web, mail, and DNS information) running on the Alexa top million domains
- ✓ For web-related protocols, we perform handshakes with the root domain and www. (using SNI). For SMTP, we perform a handshake wata into site-based records and label with additional metadata (e.g., geographic location, network topology, Alexa rank)
- ✓ We perform all scans daily for the Alexa top million domains

## Fresh Data is Critical

If you can't tell how fresh the data your analyzing is, it's that much harder to rely on it to make critical decisions to secure your organization and reduce your risk. Real-time data is necessary so that you can spot changes and anomalies that raise red flags and mitigate the risk before any damage happens.

**That's why all Censys users have immediate access to refreshed data in real-time via the Censys API and website interface.**

- ✓ IPv4 Banners are updated on a weekly basis
- ✓ This IPv4 Deep Scan dataset is refreshed daily with the most recent information about each host
- ✓ The Censys certificate dataset is refreshed monthly, with daily snapshots of certificates added daily.
- ✓ The Censys popular websites dataset is refreshed daily

Censys Enterprise customers can access and download daily scans when they pinpoint areas of high risk within their organization, track known adversaries, or need to monitor for changes.

---

# Ready to Get Started?

LEARN MORE

[censys.io](https://censys.io)

CONTACT SALES

[sales@censys.io](mailto:sales@censys.io)

SUPPORT

[support.censys.io](https://support.censys.io)