



Privacy Policy

Just-In-Time Transmitted Exception Report (JITTER) pilot

Date	Classification	Page	Contact
04 January 2021	Public	1/3	T +31 (0)26 352 5500
	Author		support@sidn.nl
	SIDN Labs		www.sidn.nl

Offices
Meander 501
6825 MD Arnhem
The Netherlands

Mailing address
PO Box 5022
6802 EA Arnhem
The Netherlands

Title of application/study Just-In-Time Transmitted Exception Report (JITTER) pilot

Policy start date 4 January 2021

Purpose of application/study JITTER is a prototype system that uses machine learning to generate warnings regarding domain names that may have been compromised, enabling the placement of malicious content (e.g. phishing content). As such, JITTER supports the identification of abuse before the relevant domain names appear in abuse lists.

JITTER warnings are generated on the basis of abnormal DNS, infra and content characteristics exhibited by second-level domain names. SIDN Labs is unable to fully evaluate and process the generated warnings itself, since that would require additional information (e.g. regarding URL-level changes).

As a registrar, Realtime Register (RTR) is in a better position to assess JITTER warnings, possibly through its resellers or hosters. SIDN Labs and Realtime Register will therefore run a joint pilot in order to evaluate the JITTER prototype.

Personal data The following types of data processed by JITTER may include PII:

DRS (Domain Registration System)

- Registration date
- Domain name
- Name servers linked to a domain name

DMAP (Domain name Ecosystem Mapper)



- IP address where the website linked to a domain name is hosted (A/AAAA record).
- Mail server linked to a domain name (MX record).

ENTRADA (ENhanced Top-level domain Resilience through Advanced Data Analysis)

- Domain name

Feedy (aggregation of abuse feeds)

- IP addresses of web servers that have hosted abusive content in the past. This information is used as ground truth.
- URLs at which abusive content has been hosted in the past. This information is used as ground truth.

Legitimate basis

JITTER supports efforts to proactively tackle domain name abuse and thus contributes to the security of the .nl domain.

Filters

JITTER uses mainly aggregated data. Where ENTRADA data is concerned, for example, the system focuses on networks (ASs) that have looked up domain names, rather than unique resolvers (IP addresses).

Retention

We retain the data for up to two years, with a view to evaluating and improving JITTER on the basis of new training examples and research into long-term impacts.

Access

The data is accessible only by authorised users within SIDN Labs, by means of a user name and password. Users can access the machine on which the data is stored only from the SIDN network, by means of SSH or via a system console.

Publication/sharing

Is data shared with anyone outside SIDN?

Yes, warnings generated by JITTER are shared with Realtime Register, in order to improve Realtime Register's ability to address domain name-related abuse associated with its portfolio.

A warning consists of a .nl domain name associated with abnormal and possibly suspect behaviour that our scans have detected, possibly accompanied by a brief explanation of the background to the warning.

Realtime Register provides SIDN with feedback regarding the quality and added value of the warnings.

If so, is personal data removed properly from the shared data? If not, or if that is not possible, has a data processing agreement been made with the party with whom data is shared?

No personal data will be shared. However, a domain name may contain pointers to a natural person (as in janjansen.nl).

Also, as a registrar, Realttime Register has the ability to look up the registrant data associated with a shared domain name.

SIDN and Realttime Register have signed an agreement covering the processing of personal data.

2) Is the party with whom data is shared based outside the EU? (If so, consider seeking the Privacy Board's advice)

Not applicable.

Type Research and development

Other security measures Not applicable.