Administration Descriptions

# WHOIS

# **Service Description**

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## 1 Introduction

### 1.1 This document

This document describes the WHOIS service from the Internet Infrastructure Foundation, .SE.

### **1.2** Abbreviations & definitions

.SE Registrar	Business operator who has entered into an agreement with .SE that gives the business operator the right to submit applications for domain names under the top level domain .se.			
ccTLD	Country Code Top Level Domain			
CENTR	Council of European National Top-Level Domain Registries			
Domain Registry				
	The body responsible for managing a national top-level domain.			
Domain Manager	Web-based user interface with .SE's domain name register.			
gTLD	Generic Top Level Domain.			
ICANN	The Internet Corporation for Assigned Names and Numbers.			
Contact	A contact may be a domain name holder, administrative contact (admin-c), billing contact (billing-c), or technical contact (tech-c). These contacts are linked to one or more domains. Every contact is identified with a unique Contact ID.			
Contact ID	The contact's identifier. Contains 6 letters and 9 digits. The Contact ID is unique so that cannot be mixed up, which means that if a contact is taken out of use, the ID cannot be reused. A Contact ID is assigned to the user when a new contact is created. The user cannot choose his or her own Contact ID.			
PuL	The Swedish Personal Data Act (SFS 1998:204).			
Personal data	All kinds of information that may be connected directly or indirectly to a physical person. Examples of such information are name, national registration number, and address.			
RFC	Request for Comments. A series of documents containing Internet standards and other documents concerning the Internet issued by the Internet Engineering Task Force (IETF).			
TLD	Top level domain			
Top Level Domains Act				
	The National Top Level Domains for Sweden on the Internet Act (SFS 2006:24).			
WHOIS	WHOIS is a TCP-based protocol that is used to permit register searches, e.g., for domain names or IP addresses.			
Whois protocol	See WHOIS			
Web Whois	See WHOIS. The difference here is that searches are performed via a website to make it easier to use than a command-based interface, which is more common when the Whois protocol is used.			

### 1.3 References

- [1] .SE's privacy policy
- [2] National Top Level Domains for Sweden on the Internet Act (SFS 2006:24)
- **[3]** WHOIS recommendations
- http://www.icann.org/committees/security/whois-recommendation-01dec02.pdf
- [4] RFC 812 and RFC 954
- [5] CENTR report WHOIS Requirements
- https://www.centr.org/docs/2004/02/centr-ga21-whois.pdf

#### 1.4 Font

The following fonts are used in this document:

Lower case bold	Used for library structure, file names, inputs and outputs.
UPPER CASE	Computer names are always written in capital letters.

### 1.5 About .SE

.SE (The Internet Infrastructure Foundation) is responsible for the Internet top-level domain for Sweden. As the central registry, .SE manages domain name registrations and the administrative and technical operation of the national domain name system for .SE.

.SE is an independent non-profit organisation, supporting the positive development of the Internet in Sweden. Through .SE's Internet Fund, the Foundation annually donates means to projects supporting the development and utilisation of the Internet.

For more information, visit <u>www.iis.se</u>.

## 2 Introduction

.SE has been subject to the National Top Level Domains for Sweden on the Internet Act (SFS 2006:24), (the Top Level Domains Act) since 1 July 2006. The Swedish National Post and Telecom Agency (PTS) is the supervisory authority. The purpose of the law is to enable the Swedish state to audit and supervise domain management.

According to the Top Level Domains Act, the domain Registry, in this case .SE, is required to keep a register over assigned domain names under the top level domain. It must be possible to obtain the information specified in the law via the Internet, at no cost. But the domain Registry is considered a "personal data controller" under the Swedish Personal Data Act (PuL) and must comply with PuL.



## 3 About WHOIS

WHOIS is a TCP-based protocol used to permit register searches, e.g. for domain names or IP addresses.

The Whois protocol<sup>1</sup> and the databases it generates, which contain registered information on everyone who has registered a domain name, was originally intended to give system administrators and domain name holders a means to quickly and efficiently establish contact in order to ensure Internet function and security and thus maintain the stability of the Internet.<sup>2</sup>

### 3.1 Purpose

.SE's main purpose for WHOIS is to provide information about technical and administrative contacts for managing domain names under the top level domain while protecting personal privacy. .SE is also required by the Top Level Domains Act to keep a register over assigned domain names as well as information about the holder and technical administrator of the domain name. The law requires that this information must be made available at no cost via the Internet.



<sup>&</sup>lt;sup>1</sup> Specified in RFC 812 and RFC 954

<sup>&</sup>lt;sup>2</sup> See e.g. http://www.icann.org/committees/security/whois-recommendation-01dec02.pdf

## 4 .SE's WHOIS service

## 4.1 Introduction

The WHOIS service can be accessed via the Whois protocol or a web-based service on .SE's website (the "Web Whois"). The design of the service for these views is essentially the same, with one exception. The exception is specified in the first clause, third paragraph of section 4.2.3.

.SE's main purpose for WHOIS is to provide information about the technical and administrative contacts for managing domain names under the top level domain while protecting personal privacy.

Naturally, WHOIS may be used to find out whether or not a domain name is available, but that is not the primary purpose. "Free" is a more suitable tool for checking domain name availability (http://free.iis.se/free?q=example.se).

## 4.2 Design of .SE's WHOIS service

There are no set standards for how information should be presented in WHOIS or which search variables should be used. There are certain recommendations, however, which are covered in the CENTR report on WHOIS [5].

#### 4.2.1 SEARCHABILITY

Many existing WHOIS services only provide access to the register through a single search variable - domain name. But there is nothing in the Whois protocol that limits access to domain names only. Based on the data in the database, several different search variables can be used, depending on how WHOIS was implemented.

A common addition beyond domain names is the option to search for "NIC handles" or "Contact IDs". This approach is used at .SE and WHOIS was accordingly structured in a way that allows the user to search for domain names or Contact IDs. A Contact ID search returns the contact details for the registered subject.

When a domain name search is performed, there is no assessment of whether the holder of the domain name is a legal or physical person; this is done only if the search involves a Contact ID.

See section 5.1 regarding the information displayed in connection with domain name searches and Contact ID searches.

#### 4.2.2 OPT-IN/OPT-OUT

Registered subjects may choose to show or hide certain information through the opt-in/opt-out procedure.

Under its current design, .SE has chosen to apply a simplified opt-in/opt-out procedure. The registered subject may choose only to show all contact information or no contact information at all. The registered subject cannot make individual selections in each field.

Opt-in/Opt-out is available only to physical persons. This is based on .SE's interpretation of the Top Level Domains Act to mean that contact information for legal persons must always be shown. Registered subjects who are physical persons may opt-in or opt-out via their Domain Manager accounts.



It should also be mentioned that as currently designed, contact details are hidden by default if the registered subject is a physical person. .SE believes this is a more suitable approach than the reverse with regard to personal privacy and the importance of protecting personal data.

#### 4.2.3 IMPEDING DATA HARVESTING

The Whois protocol makes it possible to structure output data in a machine-readable way. This also means it is relatively easy to automatically harvest large quantities of data from the register. According to the CENTR report about WHOIS **[5]** TLDs are recommended to implement mechanisms and procedures that impede data harvesting.

.SE has implemented the following measures to impede data harvesting and prevent improper use of information published in WHOIS:

• Everyone who performs a Contact ID search using SE's Web Whois is assigned a random code that must be entered before they can access contact details. But contact details will not be shown if the registered subject is a physical person who has opted out (chosen not to display contact details).

The random code is not used for domain name searches. The random code is used only when searches are performed via Web Whois and if the user performs a Contact-ID search.

The random code solution cannot be used with a command-based interface (the Whois protocol) and thus cannot impede data harvesting. For that reason, .SE has chosen not to allow Contact ID searches via the Whois protocol. Users who attempt to perform Contact ID searches will be referred to our website. Naturally, it is entirely possible to perform a domain name search via the Whois protocol.

- .SE allows only a limited number of Contact ID searches per day, week and month.
- Multi-criteria searches and other search functions that search for names, e-mail addresses, fax numbers, phone numbers and company registration or national registration numbers are not allowed. See also section 4.2.4.
- Everyone who performs a WHOIS search is asked to read and accept the general terms and conditions that apply to WHOIS. The terms and conditions state the following:
- The WHOIS service is provided for information purposes only and may not be used for commercial purposes.
- Users may not use the information to create their own databases.
- The information is protected under the Swedish Copyright Act (1960:729) and the catalogue protection provided by the Swedish Copyright Act (1960:729)

#### 4.2.4 BULK ACCESS

In the report from CENTR about WHOIS requirements **[5]** TLDs are advised not to allow bulk access to WHOIS. Bulk access may for instance involve allowing users to access information about several domain names at the same time in a single search. This is not advised due to the responsibility of all Registries to protect data, but also with respect to direct marketing and the original purpose of WHOIS.

As currently designed, .SE does not permit bulk access to WHOIS.



## 5 Identification of physical and legal persons

Persons who apply to register a domain name under the top level domain .se are asked to provide certain information through an .SE registrar, including a company registration number or national registration number, name and/or company name.

There are two fields for the applicant's name. The first is "Name" and the second is "Company." Both fields may be completed or only the "Name" field.

If the applicant has entered a Swedish national registration number and completed only the "Name" field, the system presumes that the registration refers to a private person (physical person). If the applicant has entered a Swedish national registration number and completed both the "Name" and "Company" fields, the system presumes the registration refers to a sole trader (sole proprietorship). With regard to personal data, .SE treats sole traders as physical persons.

If the applicant enters a Swedish company registration number, the "Company" field is required. In these cases, the system presumes the applicant is a company (a legal person).

### 5.1 Information published in WHOIS

In connection with registration, all holders are asked to accept SE's general terms and conditions. The terms and conditions allow .SE to publish personal data in WHOIS. But in order to protect personal privacy, .SE has chosen not to publish personal data if the registered subject is a physical person. However, registered subjects may opt to show the information if they wish.

#### 5.1.1 DOMAIN NAME SEARCHES IN WHOIS

When the user searches for a domain name under .se, the information below is shown in WHOIS. Information that is not stated is indicated by a dash in a WHOIS.

- Domain name (domain) the relevant domain name
- Holder (holder) Contact ID for the holder
- Administrative contact (admin-c) Contact ID for the administrative contact, if any
- Technical contact (tech-c) Contact ID for the technical contact, if any
- Billing contact (billing-c) Contact ID for the billing contact, if other than the holder
- Domain state (state) The state of the domain name
- Created (created) Registration date
- Last modified (modified) Date of the last modification of the domain name
- Expire date (expire date) Date when the domain name expires
- Name servers (nserver) The name servers for the domain name
- Name server status (status) "ok" or "inactive" This shows whether or not the domain name has specified name servers



#### 5.1.2 WHEN THE REGISTERED SUBJECT IS A LEGAL PERSON

.SE usually publishes the following information in WHOIS when the user performs a Contact ID search and the system presumes the registered subject is a legal person. Information that is not stated is indicated by a dash in WHOIS.

If the user attempts to search via the Whois protocol, the user is instead referred to SE's Web Whois.

- Contact ID (contact-ID) The identifier for the contact
- Name or department (name)
- Company name (org)
- Company registration number (orgno)
- E-mail address (email)
- Address 1-3 (street 1-3)
- Postal code (postalcode)
- State/province (state/province)
- City (city)
- Country/country code (country)
- Phone (phone)
- Fax (fax)
- Created (created) Date when the contact was created
- Last modified (modified) Date of the last modification of the contact
- Status "ok" or "inactive" Whether or not the contact is linked to a domain

#### 5.1.3 WHEN THE REGISTERED SUBJECT IS A PHYSICAL PERSON

When the registered subject is a physical person (including sole traders/proprietorships) and the user performs a Contact ID search, contact details are not shown in WHOIS unless the registered subject has actively requested display of the information (opted in).

If the user performs a Contact ID search via Web Whois, the remark "not shown" is displayed after every field instead. If the search is performed via the Whois protocol, the user is referred to .SE's Web Whois.



## 6 Privacy policy

SE's privacy policy applies to this document. The privacy policy is also posted on our website.