Registration Guidelines

for .be

Part III:

Registrar site

6 december 2018



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Part III: WEB interface

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My registrations

'My registrations' is the web-based interface to access the DNS Belgium database, either to create, update or delete a domain name, a contact or registrar information.

Although 'My registrations' basically offers the same functionalities as the EPP interface, it has some extra possibilities that are related to the nature of an interactive application. It is e.g. possible to navigate through the application as each object in the system is in itself a pointer to the detailed information of that object. The web interface also offers many more query possibilities. When searching for an object in the web interface, you can use wildcards: '_' for a single character, '%' for multiple characters.

'My registrations' also allows you to configure specific options such as the IP addresses that can be used to access the EPP interface and access different campaign parameters to be set to reflect your specific needs.

To make sure that the .be domain name zone is properly administered there is an interface to a domain quality project. It shows the detailed and overall results of the quality of the name servers that are used to serve the domains in your portfolio.

Depending on the permissions granted to your user ID, some of the menu items below will (not) be available to you.

You will find 'My registrations' on www.registry.be. We recommend having this site open while reading this documentation.

LOG IN

The first time, enter your registrar ID and the user ID in the corresponding fields, together with the password. By default, the administrator user has a user ID equal to the registrar ID. The password is a string that you created yourself when you activated your account. You will also need to set up 2-step verification. More information on the set-up process can be found here:

http://www.dnsbelgium.be/en/help-page-2-step-verification

The first page of the registrar website is a news page. To start the web interface, click on the item 'My registrations' in the top menu.

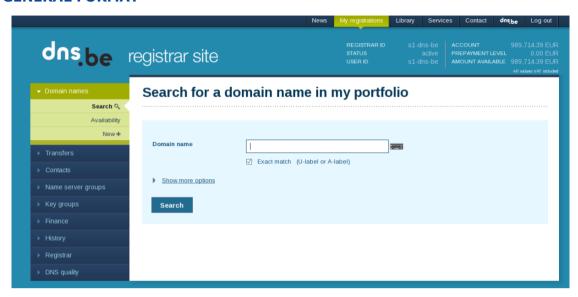
We advise you to lock your screen or log out especially if your password/passphrase is remembered by your browser.

Although nobody will be able to register new domain names or update existing information without your secret passphrase, it is still possible to search domain names and see financial information.

Be careful with browsers that remember your password or passphrase.



GENERAL FORMAT



A typical screen is divided in three parts:

Top:

Here you will find your registrar ID, the user ID, the current status of your account and your prepayment level. The prepayment level is the amount you indicated as an advance for future registrations and for which you received an invoice.

If part of the information is not shown, this means that you do not have the privilege to see the financial information (See 'Registrar/Users' for more information).

The account status reflects the running total of unpaid invoices plus new registrations since the last invoice. It will not be possible to register domain names when the sum of the account status and the prepayment is negative (account + prepayment < 0).

(For an overview of how the account status is affected by different transactions, please refer to the general part of these Registration Guidelines).

Left:

The menu with the list of objects and their available transactions.

Centre:

- At the top of the screen, the title describes the functionality available on the current page.
 e.g. A transaction such as 'Search for a domain name in your portfolio' or a view such as 'Domain name details'.
- A transaction consists of a screen that must be filled in to obtain the desired result. An asterisk (*) marks a required field. Not providing any data in such a field will generate an error. You can only enter as many characters in a field as provided for by that field. See also the EPP part for the length of the specific fields.
- A view consists of an information screen where you have buttons to execute a transaction on the object or view more specifics about the object.

While reading this documentation, it's a good idea to log in to the registrar site and follow the instructions.

PROFILE MANAGEMENT AND DOMAIN MANAGEMENT

The following tables show the actions that can be performed via the web interface.



Registrar profile management

Quota check	View your current quota and check whether you will be able to reach your quota with your current portfolio.
Overview invoices	View all issued invoices and credit notes.
Provisioning	Overview of the amount of domain names that will be renewed.
Hitpoints	View transactions that have created hitpoints and unblock yourself if you have exceeded the limit.
Users	Create, update and view users with access to the registrar site.
View and update e-mail addresses	View and update the e-mail addresses for your registrar account. This is DNS Belgium's preferred way of contacting you.
View and update EPP settings	View and update your EPP profile: EPP poll settings and allowed IP addresses to connect to our EPP server.
Update registrar profile	Update the administrative contact of the registrar account.
View registrar profile	View the registrar profile (administrative and official contact).

Domain management

Create contact	Create a contact: billing, technical, onsite or registrant.
Update contact	Modify the attributes of a contact.
Delete contact	Delete an existing contact.
Search contact	Search for a specific contact.
Create domain	Create a new domain name.
Clone domain	Create a new domain name with the same properties as an existing domain name.
Update domain	Modify the attributes of a domain name.
Delete domain	Delete an existing domain name from the .be database.
Reactivate domain	Restore a domain name to the same situation as before deletion.
Undelete domain	Undo the scheduled deletion of a domain name.
Transfer domain	Transfer a domain name to a different registrar and/or registrant.
Transfer from quarantine	Transfer a domain name to a different registrar and/or registrant when the domain name is in quarantine.
Search domain	Search for domain names.
Search transfer	Search for an executed transfer.
Request transfer code	Request a transfer code to transfer a domain name.
Create name server group	Create a name server group.
Update name server group	Modify the attributes of a name server group.



Delete name server group	Delete an existing name server group.
Search name server group	Search for a specific name server group.
Create key group	Create a key group.
Update key group	Modify the attributes of a key group.
Delete key group	Delete an existing key group.
Search key group	Search for a specific key group.
History	View the history of a domain name, contact, name server group or key group. View the transactions you've executed in a certain period and view the history of your registrar account.
Reports	Download reports on registrations, contacts, name server groups and key groups.
DNS quality	View the quality of the DNS configuration of the domain names in your portfolio.

The next chapters will give you a detailed description of each individual transaction.

IDN

In "My registrations", we accept both U-label and A-label for domain names. Every entry field for a domain name also contains an on-screen keyboard with all the accepted IDN characters.

More information about IDN, definitions and allowed characters for .be can be found in the general part of these Registration Guidelines.

When entering a domain name in any search field, this can be done with or without the trailing .be.



REGISTRAR

In this section, we explain how you can view and update all the information relevant to your registrar account.

PROFILE

Your profile contains information about yourself. The screen consists of 4 sections:

- Your profile details as you entered them when you signed up to be a registrar. This part of the
 profile can be updated. Part of this information will be shown in the WHOIS for each domain
 name in your portfolio. All information you enter here should be directed at your clients. Your
 official address information (see below) is for easier communication with DNS Belgium.
- Your product urls are the addresses to which clients are directed if they look for you on the
 public website (www.dnsbelgium.be) via the 'Find a registrar' tool. It is possible to enter a
 different URL per product and per language available on our website. This part of the profile
 can be updated.
- Your financial information, which contains your VAT number (if you have one) and a general
 structured message which can be used for payments between regular invoices. Using this
 structured code will result in a faster processing of your payment by DNS Belgium. Your VAT
 number can't be changed. Please contact DNS Belgium in case of a take-over or merger.
- Your official address information. This is the address which appears on your contract with DNS
 Belgium and which will also appear as your official address on all invoices. If this address
 changes, you should let DNS Belgium know via fax/regular mail because you can't update it
 yourself. This information will never be visible to end-users; therefore, you can give DNS
 Belgium a direct phone and fax number for communication with DNS Belgium staff.

Updating your profile details

You can update your profile details:

- Click on 'Registrar' in the left menu.
- You will see the profile screen immediately.
- Click on the Update button in the first section of your profile.

Required fields are marked with an asterisk (*).

The following fields are shown to end-users and should contain end-user specific information:

<u>Organisation</u> gives you 2 fields to enter the official name of your company. This name will be used on our public website in the list of Registrars, if you choose to be in this list.

<u>Street</u> (3 fields), together with <u>Postal code</u>, <u>City</u>, <u>Province</u> and <u>Country code</u>, form the complete address of your company. You should use these fields in such a way that the address looks like a real address on a letter when printed as follows:

```
Organisation
(Organisation)
Street
(Street)
(Street)
Postalcode City (Province)
Countrycode
```

<u>Postal code</u> should contain the postal code as is customary in the specified country. (e.g. 4 digits for Belgium, 4 digits followed by 2 letters for the Netherlands, etc.). <u>City</u> should contain just the name of the city and <u>Province</u> can be used to indicate a state or province (especially useful for the US). The <u>country</u> can be chosen from a drop-down list.

The <u>phone and fax number</u> should be in the E164 format, i.e. the 'plus' sign, followed by the country code, followed by a dot, followed by the phone number, without spaces, dots or hyphens. For example, the fax number of DNS Belgium is +32.16284971.



<u>Website</u>, the url entered here will be shown in the output of the native WHOIS. For the web-based WHOIS, the links from the section 'Product urls' are used.

Following fields are not shown to end-users:

Email should contain a working e-mail address that will be used for all official communication between DNS Belgium and the registrar. It is very important that this e-mail address works and is regularly read. It will be used for the following purposes:

- To send the activation code to.
- To receive official messages and/or newsletters from DNS Belgium.
- To receive reports: it's advisable to allow large attachments on your mail server for e-mails coming from '@dns.be'.

Language: From a drop-down box, you can choose a combination of the supported languages:

- Dutch
- French
- English

This field contains the languages in which you wish to receive information. In case a message is sent in different languages, you will get them in the languages and in the order indicated. In case the message is only sent in 1 language, we will use the first language of the list.

<u>Automated e-mail address</u>: This field must contain the e-mail address to which the system should send automated messages (that are not picked up using the EPP <poll> command, see further). While this address will be used for structured messages, the <u>Email</u> (see higher) is used for unstructured messages. By doing so, it will be possible to react to the structured messages in an automated way (E.g. to inform your customer automatically when a transaction has completed successfully).

Messages that will be sent to the automated e-mail address are:

- confirmation to the registrar when a transfer (away) has been executed.
- information mails about monitored updates.
- information mails about domain names in violation of the DNS Belgium terms and conditions.
- information mail when a transfer is undone.
- the watermark messages (when the money in the account of the registrar drops under some clearly defined levels, a message is sent for information).

All these messages can be found in part IV of these Registration Guidelines (CPS).

<u>Order Reference</u>: can be used to have a reference printed on your invoices. For faster processing, many companies require an order number on their invoices. When the invoices are processed, the value of that field will be inserted. If you have an 'open order', i.e. an order that can be used for all future orders, you only have to enter this value once. If, however, you need a different number for each invoice, you must update this field at the end of each month (before the invoice processing) with the required value.

To finish the transaction, you need to sign it by entering your passphrase and clicking on the 'Update' button.

If all fields are entered correctly, the update will be done in the database and you will see your new registrar profile immediately.

Updating your product urls

You will appear in the registrar list on the public website if you have entered your url in this section. If you don't enter a product url, you won't be visible in the registrar list.

You can update your product urls:

- Click on 'Registrar' in the left menu.
- · You will see the profile screen immediately.



Click on the Update button in the section Product urls.

Required fields are marked with an asterisk (*).

For each product you are accredited for, you can enter a url. If you want to enter a different url per language, check the box 'Different url per language'.

To finish the transaction, you need to sign it by entering your passphrase and clicking on the 'Update' button.

If all fields are entered correctly, the update will be done in the database and you will see your new urls in the 'Find a registrar' tool. Please note it can take up to 30 minutes to update the tool.

EPP SETTINGS

In your EPP settings, you can update your EPP profile. EPP is a standard protocol for registering and managing domain names in an automated manner. It allows you to create your own web application for your customers which makes the registration of domain names very easy and quick. EPP works synchronously, which means that your EPP client will receive an immediate response from our EPP server upon a request. Of course, it requires some technical knowledge and programming skills of the registrar.

Your EPP profile consists of two sections:

- If you want to start using EPP Poll, you have to enable it here. The EPP Poll command allows
 you to pick up messages asynchronously from the EPP server. Registrars that don't update
 their profile will receive CPS e-mails. If these registrars try to issue a poll command via EPP,
 this will result in an "Authorization error".
- To be able to use our EPP service, we need to know the IP address(es) you will be using to connect to our EPP server. You can add a maximum of 10 different IP addresses.

Updating your EPP settings

To update your EPP settings:

- Click on 'Registrar' in the left menu.
- · Click on 'EPP settings'.
- · Click 'Update'.

Required fields are marked with an asterisk (*).

You can update your EPP poll settings or your IP addresses or both.

Provide all IP addresses from which you are planning to connect with our EPP server. Make sure you specify the public IP addresses.

Save your changes by submitting your passphrase and clicking on the UPDATE button. You will immediately be able to connect to our EPP server with these IP addresses.

E-MAIL ADDRESSES

To streamline the various communication channels, various e-mail categories are added to the registrar profile. This way, different types of message (technical, legal, newsletter, etc.) can be sent to the correct address. By providing this possibility, we hope to provide the right people in the right place with the appropriate information.

If these e-mail addresses are entered, they overrule the e-mail address in your registrar profile for the appropriate categories. Up to five e-mail addresses can be entered per category. The categories are:

- Communication: Newsletter. This category doesn't default to your general e-mail address and
 is used solely for the DNS Belgium newsletter. To receive the newsletter, enter at least one email address here.
- Legal: Legal communications, defaults to the general e-mail address.



- Technical: Technical communications, updates, releases, maintenance, defaults to the general e-mail address.
- Abuse: Used to inform registrar about abuse (phishing, malware, defacing, ...), defaults to the general e-mail address.

Updating your e-mail addresses

To update your e-mail addresses:

- Click on 'Registrar' in the left menu.
- Click on 'E-mail addresses'.
- Click 'Update'.

Required fields are marked with an asterisk (*).

Your general e-mail address can be updated via your profile.

You can enter up to five e-mail addresses for each category. After submitting your passphrase and clicking on the UPDATE button, your e-mail categories are active.

REPORTS

On a daily basis, we generate an overview of all the domain information of each registrar. From these reports, you should be able to check your database against the DNS Belgium database.

For each report, you can see:

- When the report was generated (max 24 hours ago).
- The two formats in which the reports are available: XML and CSV. Both contain the same information. The CSV format is suitable for import into an Excel spreadsheet.

The 'Registrations' report contains the following columns:

- domain: the domain name concerned (U-label or LDH label).
- registeredOn: the date of creation (registration) of the domain name.
- invoiceMonth: month in which the domain name will be renewed, i.e. on the last day of this month at midnight.
- registrant: the alias used to identify the registrant (i.e. domain name holder).
- deletionDate: if the domain name is scheduled for deletion, you find the deletion date here. If not, this value is 0.
- availableOn: if the domain name is in quarantine, this will be the date when it becomes available.
- $\bullet \hspace{0.4cm}$ status: This can be 'REGISTERED', 'QUARANTINE', \dots

The 'Name server groups' report contains only 1 column:

• name: the name server group concerned.

The 'Key groups' report contains only 1 column:

• name: the key group concerned.

The 'Contacts' report contains the following columns:

- alias: a unique identifier for the contact.
- type: the type of the contact (possible values: BILLING, ONSITE, TECHNICAL, REGISTRANT).
- status: the status of the contact.

USERS

As a registrar, you are attributed a user ID that is identical to your registrar ID. This administrator user has all privileges and can execute all transactions on the system.



The administrator user is the only one who can create other users. As a registrar, you should create a user ID for each of your employees. For each individual user, the administrator can define which information this user can see and which transactions he or she can execute. This gives you better security (check which user executed a transaction/delete user when employee leaves).

Creating a new user

To create a new user:

- · Click on 'Registrar' in the left menu.
- · Click on 'Users'.
- Click 'New'.

Required fields are marked with an asterisk (*).

<u>User ID</u>: this is the name of the user you want to grant access to the web interface.

<u>Password</u>: The password that this user will have to type in order to get access to the registrar site and/or 'My registrations'.

Passphrase: The sentence for signing a transaction.

<u>Permissions</u>: Most of the labels are self-explanatory, the following might need some extra information.

- Access to 'My registrations': must be checked if you want to give the user access to 'My registrations'. If you do not check this box, the user will have access to the secured 'registrar part' of the website http://www.registry.be/ but will not be able to execute transactions or view domain names. This situation would occur if you only want to give the user access to newsflashes and general information.
- View financial data: this privilege determines whether the end-user can see the status of the
 account at the top of his screen. Users with this permission will also be able to do online
 payments.
- Update registrar EPP settings: check this box if this user is allowed to change the EPP settings
 of the registrars, i.e. Update addresses to connect to the EPP interface and set EPP poll
 notifications.
- Invoicing info for billing: the user can see all invoicing info and will also be able to do online payments.

If the new user is only given the permission 'Access to My registrations', he has read-only access to 'My registrations'. He will not be able to execute transactions.

Check or uncheck the relevant permissions. After signing this transaction with the passphrase and clicking on CREATE, the user will be created. He will see a menu that corresponds to the permissions that he has been granted.

WARNING:

Please note that 'USERS' have been created for internal use.

Although a user may be restricted with respect to the functions he or she can execute, within these functions, (s)he has access to ALL data.

This feature is therefore not intended to give your business partners (resellers) access to the web application. Each reseller would have access to the data of other resellers, which creates a serious security problem.

User details

To view the details of a user:

- Click on 'Registrar' in the left menu.
- · Click on 'Users'.



- If you know the user ID, enter it in the search field.
- · Click on 'Search'.
- A list of users matching the search criteria will appear below the search form.
- Choose the appropriate user from the list by clicking its user ID.

The next screen shows the details of the user and gives you some relevant links:

- Update permissions: give the user more/less permissions. Check or uncheck the relevant permissions.
- Change password: change the user's password. Note that you can also allow the user to change his own password and passphrase.
- Reset 2-step: if the user has lost his mobile device, or has switched to a new one, 2-step
 verification can be reset with this button. Afterwards, the user can setup 2-step verification
 on his new device. If the administrator user has this problem, DNS Belgium should be
 contacted.
- Temp 2-step: if the user has misplaced his mobile device, or the battery is dead, a temporary
 phone key can be generated for the user with this button. It is recommended to be in contact
 with the user while doing this, since the temporary key is available for 90 seconds. This
 option is not available for the administrator user.
- Delete: delete the user from the database. The user won't be able to log in to the registrar website anymore.
- Login attempts: show the log in attempts made by this user.

Updating/Deleting a user

To update/delete a new user:

- Click on 'Registrar' in the left menu.
- Click on 'Users'.
- If you know the user ID, enter it in the search field, otherwise click 'Search'.
- A list of users matching the search criteria will appear below the search form.
- Choose the appropriate user from the list by clicking its user ID.
- Choose the action you want to perform for this user.

Required fields are marked with an asterisk (*).

You need to confirm the transaction by signing it with your passphrase.

HITPOINTS

When a registrar sends bad EPP commands or invalid web forms, the hitpoint counter is updated accordingly. The account is blocked for 24 hours when a registrar reaches its maximum number of hitpoints. This is to ensure that problems on the side of the registrar do not affect the registry. See the general part of these Registration Guidelines for more information on the Hitpoint System.

When you're blocked, an error message will appear on all screens in 'My registrations'.

Registrars are allowed to unblock their account themselves once every calendar month. However, it is strongly advised that you find out why your hitpoint limit was exceeded before unblocking your account.

Your hitpoints screen shows all information regarding hitpoints:

- The number of hitpoints you have received since the counter was last reset.
- The maximum number of hitpoints you are allowed to have (this is based on the size of your portfolio).
- The number of unblocks you have already done yourself this month.
- The maximum number of unblocks you are allowed to do yourself (this is set to one per month).

When you have exceeded the number of hitpoints you are allowed to have, you will see extra information:



- Hitpoints limit exceeded on: The date and time when you exceeded your hitpoint limit (in CET).
- You are blocked until: The date and time until when you are blocked (in CET).
- In case you haven't unblocked yourself this month, you will also see an 'Unblock' button below the details information.

Below the details, you see an overview of the transactions that caused hitpoints. This feature helps in detecting faulty transactions, software bugs or human errors.

The displayed table contains the following columns:

- <u>Date</u>: the date and time of the offending transaction.
- <u>Object</u>: The object affected by the command (e.g. Domain name, contact alias, ns-group name, etc.).
- <u>Communication</u>: The type of command (e.g. NEW_DOMAIN, UPD_DOMAIN, etc.).
- Reference: A system-generated unique identifier for the command.
- <u>Hitpoints</u>: The number of hitpoints allocated.

Note!

Registrars are encouraged to always check the error codes of failed transactions. We remind you that resending a faulty transaction (a transaction that already returned an error code) will result in another error code being returned.

The rules that apply to hitpoints and unblocking counters are as follows:

- Unless the registrar unblocks himself, his account will be blocked for 24 hours starting from the moment the last faulty transaction occurred.
- Hitpoint counters are cleared each night at 00:00 (midnight, CET).
- Hitpoint limits are recalculated each night at 00:00 (midnight, CET).
- One self-unblock is allowed per calendar month. A calendar month begins at 00:00 CET on the first day of the month and ends at 23:59 CET on the last day of the month.
- The unblock count is reset at the end of a calendar month, that is, at 23:59:59 CET on the last day of the month.

Unblocking your account

When the hitpoint limit has been reached, the 'Hitpoints' section changes accordingly.

- Click on 'Registrar' in the left menu.
- Click on 'Hitpoints'.
- Below the details section, you should have an 'Unblock' button, if you haven't unblocked yourself yet this month. If you've already unblocked yourself this month, you should contact DNS Belgium. Work out why you were blocked and fix the problem before asking DNS Belgium to unblock you.
- Click 'Unblock'.

Required fields are marked with an asterisk (*).

You need to confirm the transaction by signing it with your passphrase.

The Hitpoints section now reflects the new account situation. Your hitpoints are reset to zero and the unblock counter has been incremented by one unit.

TOP 100

The top 100 shows your position in relation to other registrars based on the total number of domain names in your portfolio. You can see how many domain names each registrar has and the proportion this represents to the total number of .be domain names.



TOP 30

The top 30 shows your position in relation to other registrars based on the transactions you have executed during the last month. The transactions counted are all the paying transactions, i.e. new registrations, transfers, etc. You can see the number of transactions and the position each registrar had last month.

This menu item can also be accessed directly from the start page of the registrar site (if the user has permissions).

CHANGE PASSWORD

Each user with the permission to change his password, can do this here. The screen consists of 2 sections, the second section is only visible to the administrator user:

- Modify your password and passphrase: The password to access the Registrar site and the passphrase to sign transactions in My registrations.
- Modify your EPP password: This is the password to connect to our EPP server.

In the first section of the screen, you can modify your password and passphrase, these are needed on the registrar website and application. Please note both have to be entered even if you only want to change one of them. Both should consist of at least 8 characters, containing at least 1 uppercase, 1 lowercase and 1 numeric character.

The second section of the screen gives you the possibility to change your EPP password (only available to the administrator user).

LOGIN ATTEMPTS

This screen shows the log in attempts made by the current user. The displayed table contains the following columns:

- IP address: the IP address from which the user logged in.
- <u>Date</u>: the date and time of the transaction.
- <u>Status</u>: success or failure of the login attempt.



CONTACTS

In this section, you can view and update contacts in your portfolio. Please refer to the general part of these Registration Guidelines for more information about contact types.

SEARCH

You can search for contacts in your portfolio. Leaving all fields empty and clicking on the search button, will give you a list of all your contacts in blocks of 20. Of course, it would be better to download a report if you want a list of all your contacts.

Search for a contact

To search for a contact:

- Click on 'Contacts'.
- · Your will see the search screen immediately.

If you are looking for a specific contact and you know the 'Alias', you can enter it here.

<u>Type</u> allows you to distinguish between the different types of contacts.

Other search criteria are: part of the contact's <u>name</u> or part of the <u>organisation</u> name, part of the <u>e-mail</u> address or <u>city</u>, or the <u>country</u> of the contact. You can also use a combination of all search criteria.

Result of the search

The result list displayed has seven columns:

- the registrant alias.
- the name of the contact.
- the contact's organisation.
- the contact's city.
- the contact's country.
- the contact type.
- the status of the contact.

Some column titles are links, it is possible to sort the search results by clicking on the column title. The result of your search can be exported to an Excel or csv file.

You can view the details of the contact by clicking its name. The next screen shows all information of that contact and gives you some relevant links, i.e. update, delete, history and connected domain names. Clicking on 'Connected domain names' will show a new search result with only the domain names connected to this registrant.

NEW

In this section, you can create new contacts.

Creating a contact

To add a contact:

- click on 'Contacts' in the left menu.
- Click 'New'

Required fields are marked with an asterisk (*).

The contact type must be chosen from the drop-down box in the first field.



Most of the fields are self-explanatory. In case of a technical or billing contact, the fax number is also required. Please note there is a limit on the number of technical/billing contacts. Refer to the General part of these Registration Guidelines for more information.

For the billing contact, you should take note of the following:

Name is the name of the person to whom the invoice should be sent at the registrar organisation.

The <u>language</u> you choose here will determine the language of the information that will be sent to that person (if the information is available in that language).

The address of the contact should always be up to date.

For a billing contact, this **is the address to which the invoices are sent**. The address will be printed on the invoice as follows:

```
Organisation
Organisation (2)
Att. Name
Street
Street (2)
Street (3)
Postal Code City
[State/Province]
[Country Code]
```

Fields enclosed in [] will not be printed when the country is BE.

Please make sure to provide correct address information. A wrong address can lead to the breach of the contract.

After signing the transaction with your passphrase and clicking 'Create', the contact will be created.

If you enter an incorrect value in a field, the next screen will inform you and you will be able to correct it.

UPDATE

Before changing a contact, you have to find it first. This can be done in two different ways:

- starting from a domain name through search domain names (the information of a domain name may show the contact you are looking for).
- through search contacts.

Each of these transactions will present you with a list from which you can choose the contact by clicking on the alias. Below the contact details, you will see the 'Update' button.

To update the information of a contact, click on 'Update', make the appropriate changes, sign the transaction with your passphrase and submit it as in the creation of a new contact.

DELETE

Find the contact via the search domain names or search contacts.

To delete the contact from the database, click on 'Delete', sign the transaction and submit it.

Note that you cannot delete a contact (or any other object for that matter) if it is still linked to another object. E.g. if the contact is still used for a domain, there won't be a 'Delete' button.

To see which domains are connected, you can follow the 'Connected domains' link.



NAME SERVER GROUPS

Via a name server group, it is possible to group several name servers in one object. This can facilitate the management of domain names and their name servers. For more information about name server groups, please refer to the General part of these Registration Guidelines.

SEARCH

You can search for the name server groups in your portfolio. Leaving all fields empty and clicking on the search button, will give you an alphabetical list of your name server groups in blocks of 20. Of course, it would be better to download a report if you want a list of all your name server groups.

Search for a name server group

To search for a name server group:

- Click on 'Name server groups' in the left menu.
- You will see the search screen immediately.

You can search name server groups by entering part of the <u>group name</u>. If you know which one you are looking for, you can select <u>exact match</u>. You can also search for name server groups containing a certain <u>name server</u>. If you know the exact name, select <u>exact match</u>.

After clicking 'Search', you will get a list of name server groups matching the search criteria.

Result of the search

The result list displayed has 2 columns:

- The name of the name server group.
- The number of name servers in the group.

Some column titles are links, it is possible to sort the search results by clicking on the column title. The result of your search can be exported to an Excel or csv file.

You can view the details of a name server group by clicking its name. The next screen shows all information of that name server group and gives you some links relevant to the name server group, i.e. update, delete, history and connected domain names. Clicking on 'Connected domain names' will show a new search result from the search domain screen with all domain names connected to this name server group.

NEW

In this section, you can create name server groups.

Create a new name server group

To create a name server group:

- Click on 'Name server groups' in the left menu.
- Click 'New'

Required fields are marked with an asterisk (*).

The group name is a name of your own choice. You can add up to 9 name servers in one group.

Sign the transaction with your passphrase and click 'Create'. You will then receive confirmation that the transaction was successful.



Remark:

No NS records will be created for name servers that are linked to a domain name via a name server group and for which glue records (IP addresses) would be required. In this case you should link the name servers (together with their IP addresses) directly to the domain name.

UPDATE

When you need to add or replace a name server in a group (or delete a name server group), you need to find that group first. This can be done via 'search' under the menu item 'Name server groups'.

After submitting your search, you will see a list of name server groups matching your search criteria.

Choose the one you want to modify by clicking on its name.

To update the information of the name server group, click on 'Update', make the appropriate changes, sign the transaction with your passphrase and submit it as in the creation of a new name server group.

Please note this is a very powerful transaction, as you update all domain names connected to the name server group at once, so use it carefully.

DELETE

Find the name server groups via search name server groups.

To delete it, click on 'Delete', sign the transaction and submit it.

Name server groups that are still linked to a domain name cannot be deleted.

To find out which domain names are still using that name server group, click on 'Connected domain names'.



KEY GROUPS

It is possible to group several DNSSEC keys into one key group. This can facilitate the management of domain names and their DNSSEC keys. For more information about key groups, we would like to refer to the General part of these Registration Guidelines.

SEARCH

You can search for the key groups in your portfolio. Leaving all fields empty and clicking on the search button, will give you an alphabetical list of your key groups in blocks of 20. Of course, it would be better to download a report if you want a list of all your key groups.

Search for a key group

To search for a key group:

- · Click on 'Key groups' in the left menu.
- You will see the search screen immediately.

You can search key groups by entering part of the <u>group name</u>. If you know which one you are looking for, you can select <u>exact match</u>.

After clicking 'Search', you will get a list of key groups matching the search criteria.

Result of the search

The result list displayed has 2 columns:

- The name of the key group.
- The number of keys in the key group.

Some column titles are links, it is possible to sort the search results by clicking on the column title. The result of your search can be exported to an Excel or csv file.

You can view the details of a key group by clicking its name. The next screen shows the keys for that key group and gives you some links relevant to the key group, i.e. update, delete, history and connected domain names. Clicking on 'Connected domain names' will show a new search result from the search domain screen with all domain names connected to this key group.

To see the details of the DNSSEC keys, you have to click the keytag in the details screen of the key group. A popup will appear with all the DNSKEY information: Key tag, flags, protocol, algorithm and public key.

NEW

In this section you can create a key group.

Create a new key group

To create a key group:

- Click on 'Key groups' in the left menu.
- · Click 'New'.

Required fields are marked with an asterisk (*).

The group name is a name of your choice.



You can add up to 4 keys to one group by clicking 'New' next to Keys. A pop-up screen will appear to 'Add a DNSKEY'. The entries necessary for the keys, are available to you after you sign your own zone. You can enter the appropriate values here. When you click 'Create' in the pop-up screen, DNS Belgium will check your keys. If any of the fields are wrong, you will receive an error message. You can correct the relevant field immediately without having to enter all fields again.

After adding all the keys you want, sign the transaction with your passphrase and click on the 'Create' button. You will then receive confirmation that the transaction was successful.

UPDATE

You need to find the key group before you can change it. This can be done via 'search' under the menu item 'Key groups'.

After submitting your search, you will see a list of key groups matching your search criteria.

Choose the one you want to modify by clicking on its name.

To update the information of the key group, click on 'Update', make the appropriate changes, sign the transaction with your passphrase and submit it as in the creation of a new name server group.

DELETE

Find the key group via search key groups.

To delete it, click on 'Delete', sign the transaction and submit it.

Key groups that are still linked to a domain name cannot be deleted.

If you want to know to which domain name(s) the key group is still linked, you can return to the key group view and click on 'Connected domain names'.



DOMAIN NAMES

In this section, you can view and update the domain names in your portfolio. You can also check domain names not in your portfolio.

SEARCH

You can search for domain names in your portfolio. Leaving all fields empty and clicking on the search button will give you an alphabetical list of your domain names in blocks of 20. Of course, it would be better to download a report if you want a list of all your domain names.

Searching a domain name in your portfolio

To search for a domain name in your portfolio:

- Click on 'Domain names' in the left menu.
- You will see the search screen immediately.

If you only remember part of a <u>domain name</u> you should uncheck 'Exact match'. In that case, the search will be done on U-labels and LDH names. If you use 'exact match', you can enter the U-label or the A-label. When your search yields only one result, you will immediately arrive on the details page for that domain name.

If you want to narrow down the search further, you can enter more options by clicking 'Show more options'.

<u>Invoice month</u> gives you the option to search for domain names expiring in a certain month. If you leave every other field blank, this will have the same result as menu item 'Finance/provisioning' where you can also select a month.

<u>Status</u> allows you to distinguish between registered or quarantined domain names. You can also look for domain names that are scheduled for deletion. More information about the possible states of a domain name can be found in the general part of the Registration Guidelines.

Entering a <u>contact alias</u> will limit the result to domain names that are linked to this contact, based on the alias of that person. Please don't create several aliases for the same contact person as this will make it difficult to group domain names per customer, as well as pollute the DNS Belgium database.

Entering a <u>name server group</u> will give you a list of all domain names linked to that name server group. Entering a <u>name server</u> will give you a list of all domain names linked to that name server, either directly or via a name server group.

You can search domain names based on a specific key group or key tag. Entering a keytag will limit the results to domain names that are linked (either directly or via a key group) to a DNSKEY with the given key tag value. Please note that key tags are not unique, it is possible you get results for more than one key.

It is also possible to search domain names according to their DNSSEC status. Possible criteria are:

- All: search all domain names.
- No keys: search domain names without DNSSEC information.
- Kevs: search all secure domain names.

After clicking 'Search', you will get a list of all domain names matching the search criteria.

Result of the search

The result list displayed has five columns:

- Domain name: U-label (A-label) or LDH label.
- Registrant: the name or organisation of the registrant of the domain name.



- Status: the status of the domain name. More information about the possible states of a domain name can be found in the general part of the Registration Guidelines.
- Registered: the date when the domain name was registered.
- Deletion Date: this is empty if no deletion date is set for this domain name.

Some column titles are links, it is possible to sort the search results by clicking on the column title. The result of your search can be exported to an Excel or csv file.

You can view the details of a domain name by clicking its name. The next screen shows all information of that domain name and gives you some links relevant to the domain name:

- Update: to update the domain name, only if the domain name is active.
- Clone: to clone the data of the domain name.
- Delete: to delete the domain name from the .be database.
- Undelete: to undelete the domain name, only if the domain name is scheduled for deletion.
- Reactivate: to reactivate the domain name, only if the domain name is in quarantine.
- Variants: search for variants of the domain name.
- Keycheck details: only if the domain name has DNSSEC keys.
- Check DNS quality: execute a health check of the domain name.
- History: to view the history of the domain name.

The function of these buttons is explained further in these Registration Guidelines.

In the transfer section, you see whether transfers are allowed for this domain name. The Flags section shows all flags relevant to the domain name. The status of the flags determines the transfer section and the Domain Guard section. More information on these flags is given in the EPP part of these Registration Guidelines.

The Domain Guard section shows the Domain Guard status of the domain name:

- Updates possible: the domain name is not under Domain Guard.
- Delete, transfer and update not possible: the domain name is under Domain Guard (all server-related flags in the section above are on). More information concerning this status is given:
- Activated: when Domain Guard was activated
- Number of unlock requests: how many unlock requests were done since the last invoicing, 4 unlocks are allowed in a one-year period.
- Updates temporarily possible (delete and transfer not possible): Domain Guard has temporarily been disabled to allow an update of a domain name (serverUpdateProhibited is off). More information concerning this status is given:
- Updates possible until: enddate.
- Activated: when Domain Guard was activated
 - Number of unlock requests: how many unlock requests were done since the last invoicing, 4 unlocks are allowed in a one-year period.

To view the details of the registrant, click its Alias. The next screen shows all information of that registrant and gives you some relevant links, i.e. update, delete, history and connected domain names. Clicking on 'Connected domain names' will show a new search result with only the domain names connected to this registrant.

Examples

Examples of a non-exact search:

Input	Search result
xn	All IDN names with the U-label containing "xn" and all non-IDN names with
	the LDH label containing "xn". Be aware this search can't be used to find all
	IDN names in your portfolio.



é	élève	All IDN names with the U-label containing "élève".
ŀ	ve	All IDN names with the U-label containing "lve" and all non-IDN names with the LDH label containing "lve". Élève will not be in the results even though
		the A-label contains "Ive"!

AVAILABILITY

Here you can check whether a domain name is still available in the .be database.

Check the availability of a domain name

- · Click on 'Domain names' in the left menu.
- Click on 'Availability'.

Required fields are marked with an asterisk (*).

The result will be an exact match with your query.

If the domain name does not exist, you will be able to register it. If the domain name is transferable you will see a 'Request code' button to request for a transfer code. Next to it will be a 'Transfer' or 'Transfer from quarantine' button, depending on the status of the domain name. If the domain name is locked for transfer, this will be indicated in the result and no buttons will be available.

If you search a domain name from your own portfolio here, you will see the 'Domain name details' button, indicating the domain name is already yours.

NEW

PRE-REQUISITES: In order to register a domain name, you need to create billing and technical contacts beforehand, and also any name server groups and key groups you wish to use.

Registering a new domain name

To create a new domain name:

- Click on 'Domain name' in the left menu.
- · Click 'New'.

Required fields are marked with an asterisk (*).

A <u>domain name</u> can consist of up to 63 characters, please refer to the general part of these Registration Guidelines for the current naming rules of a domain name.

It is possible to duplicate all the data of another domain name into a new domain name. This is very convenient if you want to register multiple domain names for the same registrant. You need to know the exact name of the domain you want to duplicate. Click on 'Clone the properties of another registration onto this one' and enter the exact domain name. All the entries will be filled in with the same information as the existing domain name. Another way to achieve the same result is by navigating to the domain name that you want to clone and clicking on the 'Clone' button. Note: you can only clone domain names from your own portfolio!

In case you want to enter the rest of the information yourself, go on to the next fields.

The next field to fill in is the <u>registrant</u> info. You have two options to enter a registrant:

Click 'search' in case you want to re-use an existing registrant. A pop-up will appear where you can enter your search criteria and click 'search' again. A list of registrants matching your search criteria will appear. Choose the registrant you want to use by clicking on the Alias, you will return to the 'Register a new domain name' transaction with the chosen registrant filled



- in. If you don't find the registrant you want, you can still choose 'Create registrant' below the search result.
- Click 'New' in case you want to create a new registrant. A pop-up will appear identical to the
 'Create contact' transaction. Enter all the required fields and sign the transaction with your
 passphrase. After submitting, you will return to the 'Register a new domain name' transaction
 with the new registrant filled in.

After using one of these options, the selected registrant will be displayed by its name, company name and e-mail address.

The billing contact is already filled in as it will be the same for all your domain names. Only one billing contact is allowed per registrar.

You have to enter at least one onsite or technical contact.

It is possible to leave the <u>Onsite contact</u> blank as a domain does not have to have an onsite contact if it has a technical contact from the registrar linked to it. If you want to add an onsite contact, you can create it by clicking 'New'. If it already exists, you can find it by using the <u>search</u> link. You can enter up to 5 onsite contacts. To add an extra contact, click again on 'Search' or 'New'. To eliminate a contact, click the 'X' in the contact information.

The registrar <u>Technical contact</u>. If you don't enter an onsite contact, you have to specify at least 1 technical contact from the registrar. You can choose up to 5 registrar technical contacts per domain name. Since the number of technical contacts is limited, these contacts can be selected from a dropdown list. An entry will be added if an extra technical contact is selected from the drop-down list. Removing is done by clicking the 'X' in the contact information.

You can enter 1 to 9 <u>Name server groups</u>. The name server groups are optional. You can use them independently or in combination with the individual name servers, or you can leave them completely out. Name server groups need to be created upfront. There is an auto-complete function in this field: when you start typing in this field, a list will appear with all name server groups containing this text. You can use the mouse or the keyboard to select a name server group from the list. The selected name server group will appear in a rectangle below the input field. Repeat these steps to add more name server groups. Removing a name server group is done by clicking the 'X' in the corresponding rectangle.

You can enter up to 9 <u>Name servers</u>. You can register a domain name without any name servers, to allow companies or individuals to safeguard their domain name for future use (domain parking). In most cases, a name server does not need an IP address. IP addresses are only needed when the name server is in the same domain as the domain name being registered, in which case glue records are needed in the zone file. E.g. registering domain name <myco.be> and giving a name server address 'ns2.myco.be' you have to specify an IP address. Note that IDN names for name servers are allowed.

It is also possible to block <u>transfers</u> for the domain name. If you select this option, the domain name cannot be transferred away from your account. More information about this option can be found in the EPP part of these guidelines under 'check-domain'.

You can enter up to 4 keys or one key group. The 'Key group' field also has an auto-complete function: selecting an existing key group works just like selecting a name server group. You can register a domain name without entering keys or key groups. They are optional but are necessary if you want to use DNSSEC. Please note it is not possible to enter both keys and a key group.

To complete the transaction, you have to sign it with your passphrase.

After clicking 'Register', the next screen will show a summary of the 'new domain' transaction.

The transaction will deduct the current cost (VAT inclusive) for a domain name from the account status. You can see the change immediately in the top right of your screen. Note that the transaction will fail if you have insufficient funds!

In case you have entered DNSSEC information, the keys will appear in the .be zone file immediately.



CLONE

It is possible to create a new domain name with the exact same data as an existing domain name. The best way to do this is to search for the domain name you want to clone. Clicking the domain name in the search result will show you the details of the domain name. Clicking the 'Clone' button at the bottom will take you to the new domain transaction with all fields already filled in. All you have to do is enter the new domain name, sign the transaction with your passphrase and submit.

UPDATE

As with all other update transactions, we start by searching the object we want to change. Click on the menu item 'search' under the heading 'Domain names' to search through the domain names for which you are the registrar.

Click on the domain name to navigate to the details of the domain name.

To change the attributes of the domain name, click on 'Update'. The update transaction looks exactly like the new domain transaction. The difference is that all fields are filled in with the current information.

After entering the passphrase and submitting the request, the following screen will confirm the successful execution of the transaction.

It is possible to use this transaction to change the registrant of the domain name. However, restrictions have been built-in to ensure that the identity of the registrant remains intact (i.e. organisation and/or name). See the general part of these Registration Guidelines for more information about contacts.

DELETE

IMPORTANT

Before deleting a domain name, you should know more about DELETIONS and QUARANTINE in general. This is explained in the general part of these Registration Guidelines.

Navigate to the domain name details for the name you want to delete. This can be done via the 'Search' item in the 'Domain names' menu. Click on the 'Delete' button at the bottom of the page showing the domain name details.

<u>The deletion date</u> is the date on which the deletion will be executed. This can be used e.g. if a client does not want to renew the right of use for this name but still wants to use it until the end of the current registration period.

After signing the transaction with your passphrase and submitting it, the domain name will be scheduled for deletion. The deletion will become effective during the day specified.

UNDELETE

Deletion requests can be undone, as long as the deletion date has not arrived. When searching for a domain name, choose 'more options' and select <u>scheduled for deletion</u> from the status drop down box. You will see the domain names scheduled for deletion in the search result. In the details screen for such a domain name, an 'Undelete' button will be available.

Click on the button, fill in your passphrase and click 'Submit' to undelete the domain name.



REACTIVATE

When a domain name is deleted, it will get a new status: 'quarantine'. To reactivate a domain name in quarantine, you need to visualise it first. Click on 'Search' under the heading 'Domain names'. Choose 'more options' and select status 'In quarantine' in the drop-down box.

After submitting, you will receive a list of domain names in quarantine.

Clicking on the domain name will give you the domain name details. Here you can see that the domain name is indeed in quarantine.

Clicking on the 'Reactivate' button will allow you to reactivate the domain name.

After entering your passphrase and submitting, the domain name will revert back to status 'Registered'. The corresponding transaction cost will be deducted from your account. Note that the transaction will fail if you have insufficient funds!

VARIANTS

DNS Belgium offers the possibility to search for variants of .be domain names. To demonstrate the level of similarity, DNS Belgium uses an algorithm based on the 'Levenshtein Distance'. This algorithm generates a list of domain names that are given a score based on their similarity. Because this process involves a mathematical algorithm, there is always the possibility that the results may differ widely.

Some restrictions apply:

- You can do 50 variant searches per day for domain names in your own portfolio.
- If you try to do more searches, you will get an error message, but we won't give a hitpoint.
- You will receive maximum 50 variants for a domain name (not counting the domain names in your portfolio).

Navigate to the domain name details for the name you want to research. This can be done via the 'Search' item in the 'Domain names' menu. Click on the 'Variants' button at the bottom of the page showing the domain name details.

Variants results

You will be redirected to the 'Results variants' item in the 'Domain names' menu, where you can see that the request is scheduled. As soon as the request is processed, this page will be updated, and the domain name will become clickable. Clicking on the domain name shows the list of domain names that have similarities with the requested domain name and also provides the link to the WHOIS results for these .be domain names. This list can also be exported to an Excel or csv file.

KEYCHECK DETAILS

DNS Belgium has created this section to verify the DNSSEC data added to a domain name.

Since release 12.0 all DS records will be published in the .be zone immediately. Historical domain names that are insecure will be published as soon as an update is done on the domain name.

First you need to visualise the domain name you want to check. Click on 'Search' under the heading 'Domain names'. There you can choose which domain names you want to check. Choose 'more options and select the appropriate 'DNSSEC status' in the drop-down box.

If you want to see which domain names have errors, you should pick keys but not secure from the drop-down box.

Clicking on the domain name will give you the domain details view. Here you can click on 'Keycheck details'.

Some examples of errors are:



- Unknown host: <<nameserver>>
- no DNSKEYS found
- no RRSIG found
- no matching DNSKEY found on name server
- The inception date of the RRSIG lies in the future 2020/11/25 10:50:59
- RRSIG expired on 2010/02/02 11:36:59
- no matching DNSKEY found on name server

CHECK DNS QUALITY

Every month, DNS Belgium runs a DNS quality check on all .be domain names. The results of this check can be found in the menu 'DNS quality'. They include secure DNS checks.

It is also possible to check the DNS quality of a domain name in real-time.

Navigate to the domain name details for the name you want to check. This can be done via the 'Search' item in the 'Domain names' menu. Click on the 'check DNS quality' button at the bottom of the page showing the domain name details. The check will be executed immediately, and you will see the results on the next page.

DNS quality results

In the resulting screen, you see the result of the checks. It also gives some extra links relevant to this page:

- Recheck: execute the checks again. If there was an error in the check, DNS Belgium recommends that you update the domain name before rechecking it.
- Update: update the domain name.
- Scheduled DNS quality checks: will direct you to the results of the latest DNS quality run for this domain name.



TRANSFERS

A transfer is used to change the registrar and/or registrant of a domain name. There are 2 types of transfers that can be done for a .be domain:

- 1. change registrar/registrant.
- 2. change registrar/registrant of a domain in quarantine (transfer from quarantine).

For more information on these transactions and the complete procedure to follow, please read the general part of these Registration Guidelines.

REQUEST CODE

Before you can start a transfer, you need to request the transfer authorisation code for the domain name.

Request a transfer authorisation code

To request a transfer authorisation code:

- Click on 'Transfers' in the left menu.
- Click on 'Request code'.

Or:

- · Click on 'Domain names'.
- Click on 'Availability'.
- Enter the domain name you want to transfer.
- · Click 'Check availability'.
- If the domain name is transferable, you will have a 'Request code' button below the result.

Required fields are marked with an asterisk (*).

Enter the <u>domain name</u> for which you wish to get an authorisation code. You can also enter a <u>URL</u> to guide your customer to the appropriate page on your website. This URL will be included in the e-mail with the transfer authorisation code sent to the registrant.

You need to sign the transaction with your passphrase. After submitting, you will see the result page indicating an authorisation code has been sent.

Possible error messages are:

- domain [\$domain] has invalid status (serverTransferProhibited) [HITPOINT]
- domain [\$domain] has invalid status [HITPOINT]
- URL should start with 'http://' or 'https://'
- URL is too long (max 500 characters)
- 4 e-mails were already sent to this registrant for this authorisation code.

NEW

When you've received a transfer authorisation code from your customer, it's possible to transfer the domain name.

Transfer a domain name

In order to start a transfer:

- click on 'Transfers' in the left menu.
- You will see the new transfer screen immediately.



Required fields are marked with an asterisk (*).

You will have to enter all information for this domain name, like you would for a new registration. The system does not take over information from the old registrar. It is however possible to take over the registrant information in case of a change of registrar only. Please refer to the 'new domain' transaction for information about the corresponding fields.

As <u>Transfer type</u> you should pick the right action according to the status of the domain name (registered or quarantine).

When you are only doing a change of registrar, you can check the box 'Re-use existing registrant'. The registration system will create a copy of the registrant object currently linked to the domain name. However, if you already have a contact object for your client, you should use that contact object. Don't make the system create new contacts if they are not necessary!

Your client should provide you with an authorisation code. A transfer can't be done without one!

Then you have to enter your <u>passphrase</u> and submit the transaction. When the transaction has been executed successfully, the transfer of the domain name to your account is done immediately. The corresponding transaction cost is deducted from your account. Note that the transaction will fail if you have insufficient funds!

In case you checked 'Re-use existing registrant', the automatically created contact alias is shown in the next screen. Exactly the same registrant exists in the account of the 'old' registrar, although the content of this registrant is identical, the alias is not shared between registrars and a new alias is created.

A 'Transfer from Quarantine' can be initiated in the same way. For more detailed information about transfers we would like to refer to the general part of these Registration Guidelines.

SEARCH

Here you get an overview of all transfers linked to your portfolio.

Search for a transfer

To search for transfers:

- Click on 'Transfers' in the left menu.
- · Click on 'Search'.

You will have to specify the period and the direction of the transactions.

This info is available for transactions from July 2001 on and is grouped per month.

Result of the search

The result has 4 columns:

- The domain name.
- The date the transfer was executed.
- The type of transfer: for more information about transfer types, see the general part of these Registration Guidelines.
- Whether the transfer was incoming (to your portfolio) or outgoing (away from your portfolio).
 In case of a change of registrant within your own portfolio, this will say 'Stays with registrar'.

Some column titles are links, it is possible to sort the search results by clicking on the column title. The result of your search can be exported to an Excel or csv file.



FINANCE

In this section, you can view your invoices, see your provisions and check your quota.

OVERVIEW

This view will give you a detailed look at the invoices that have been issued as well as all payments that have been received. There is no equivalent for this transaction in the EPP interface. This information is available from September 2001 onwards.

Finance overview

- Click on 'Finance' in the left menu.
- You will see the 'Overview' screen immediately.

Choose the <u>year</u> you want to look at from the drop-down box. You can also choose to see payments or invoices or both <u>types</u>. After clicking 'Search', you will get a list of all transactions matching the search criteria.

Result of the finance overview

The result list displayed has 5 columns and there is a distinction between payments and invoices:

The payments:

- The <u>date</u> when the payment has been entered into the DNS Belgium system.
- Type contains 'PAYMENT' or 'ONLINE PAYMENT' to identify this entry as a payment.
- The amount of the payment in Euro.
- The details of a payment: By clicking on 'view' you can see extra info on the payment:
 - In case of an online payment, you see the reference here.
 - In case of a manual payment, you see the information provided by DNS Belgium staff.
- The last column is not relevant for payments.

The invoices:

- The <u>date</u> on which the invoice was issued (E.g. 30/11/2009 is the invoice for all new names, renewals, transfer etc. of November 2009).
- <u>Type</u> contains the type of invoice. Possibilities are: MONTHLY INVOICE, PREPAY INVOICE, SERVICE INVOICE, CREDIT NOTE, etc.
- The total amount of the invoice (including VAT!).
- The <u>details</u> of the invoice with the identification number of the invoice.
- The last column gives the possibility to <u>download</u> the invoice in a format preferred by you: pdf, xml, smime or zip file.

The result of your search can be exported to an Excel or csv file.

To view the details of an invoice, click on the link in the 'Details' column.

The next screen will show you all the information you need about the invoice:

- The <u>date</u> of the invoice.
- The identification <u>number</u> of the invoice.
- The payment info you can use to transfer the money to DNS Belgium's account.
- An overview of the paying transactions you've done in this month. By clicking on the transaction name, you will see the list of domain names concerned. Invoices may show 5 labels:
 - New names: all new registrations in that specific month.
 - Renewals: the number of names renewed in that month.
 - Reactivations: domain names that have been reactivated after a deletion.
 - Transfers: the number of names transferred from another registrar to yourself.



- Transfers from quarantine: the number of names transferred from another registrar to yourself while the domain name was already in quarantine when the transfer was initiated.
- Below the overview, you can <u>download</u> the original invoice in different formats.

Note that the only official invoice is the one that is signed with the DNS Belgium certificate. It contains the full detailed information and a global overview. The official invoice displays 2 addresses: the address of the billing contact to whom the invoice is sent, and your official address according to your contract with DNS Belgium.

ACCOUNT STATUS OVERVIEW

For some registrars, it's important to know the account status at the end of each month. In the 'Finance overview' page you also see a link to 'Account status'. By clicking this link, you get an overview of your account status at the beginning and at the end of each month for the chosen year.

Please note that a rounding error (due to VAT calculations) might appear in some cases. The account status mentioned on the invoices however, is correct.

PROVISIONING

The invoice provision transaction will give you the number of domain names that will be renewed for each of the next 12 months. This will allow you to estimate the financial impact of the renewals well in advance and at your convenience.

View provisions

- Click on 'Finance' in the left menu.
- Click on 'Provisioning'.

The following screen will show a table with 3 columns:

- The first column indicates the invoice month of the domain names.
- The second column indicates how many domain names expire in this month.
- The third column indicates how many domains under Domain Guard expire in this month.

A domain name that expires in a given month will be renewed automatically if that name still resides in the database on the last day of that month at 00:00 (midnight, CET). At that time, the registrar account will be reduced with the total cumulative fee for those names.

If you don't want to renew a specific domain name, you will have to delete it from the database before its renewal date!

Clicking on a specific month will give you a search result with only the domain names expiring in that month (in blocks of 20). Note that this transaction is not very practical for very long lists of domain names. In such cases, you should take a look at the Reports.

QUOTA CHECK

The quota check gives an overview of the current turnover in respect to the annual turnover threshold.

This transaction gives the registrars the possibility to check their status with regard to their (contractually established) annual turnover threshold. To see your quota check:

- Click on 'Finance' in the left menu.
- Click on 'Quota check'.



Quota check result

The quota is established as a virtual domain name counter and shows the actual status of that counter. The virtual counter shows the number of paying transactions. The virtual counter is increased:

- +1, for every new registration, every reactivation and every incoming transfer carried out,
- + number of renewals, for every monthly invoicing,
- + number of domains in portfolio, for a take-over of a portfolio.

Note: When a registrar (A) takes over the portfolio of another registrar (B), then all domains in the portfolio of registrar (B) are added to the virtual counter of registrar (A).

Deletes and outgoing transfers don't have an impact on the virtual counter. A registrar should achieve its yearly quota between 1 January and 31 December. Registrars who start up, won't have their quota checked in the first incomplete period before 1 January.

The screen of the quota check typically contains the following information:

- First of all, a message is shown whether or not you've reached your quota. More on this message below.
- In <u>Quota checked on</u> the time and date when the report was generated is shown (using the current state of affairs).
- The <u>Start date</u> shows when the registrar was activated.
- The Year shows the current year, which always runs from 1 January to 31 December.
- Must reach quota indicates whether the registrar must reach the quota in this period.
- The Quota is the turnover threshold of 250 'units'. As explained earlier, a unit corresponds with a domain when it is created, transferred, renewed or reactivated. E.g. when a registrar registers 250 new domain names in a year but loses them all at the end of that year, the virtual counter will remain at 250.
- The actual status of the virtual counter.
- <u>Provisions</u> gives an estimate of the number of units that will be added to the virtual counter in the remaining months of the current year. The estimate is based on the expected number of renewals. In case some of these domain names are not renewed, the total will be lower than estimated. The provisions do not consider new registrations that will probably be done in those months.
- The total of these estimates for the remaining months of the current year.
- In the summary, the <u>current virtual counter</u> is compared with the <u>quota to be reached</u>. If the <u>net result</u> is negative, at this point of the year, the quota has not been reached. The negative number is the number of domain names that needs to be added to the virtual counter to reach the quota. If the result is positive, the quota has been reached for the current year.
- The last section only exists if the <u>net result</u> is negative. In that case, the <u>current virtual counter</u> is increased with the estimated number of renewals for the remaining months (<u>projected provisions</u>). This <u>projected revenue</u> is compared with the <u>quota to be reached</u>. If the <u>projected net result</u> is positive, the target will be achieved if all domain names that need to be renewed in the remaining months of the current year, are effectively renewed.

Possible messages are:

- In case the registrar doesn't have to reach the quota, because he is in his activation year, the message will be: "The quota check details are indicative. You do not have to obtain a specific volume (quota) in <<YEAR>>".
- In case the status of the virtual counter is positive without any provisions for renewals, the message will be: "Net result is positive, quota has been reached in <<YEAR>>".
- In case the registrar doesn't reach his quota, but will reach it if all provisions are met, the
 message will be: "Projected net result is positive, quota will be reached in <<YEAR>>,
 provided the provisioned renewals will be attained".
- In case the registrar doesn't reach his quota, even when considering the provisions for the renewals in the remaining months: "Projected net result is negative, quota will NOT be reached in <<YEAR>>. An additional revenue of <<TARGET>> is necessary, provided the provisioned renewals will be attained".

If you're supposed to reach your quota and you haven't, you will receive a service invoice for the remainder of the yearly quota fee owed to DNS Belgium. It is therefore very important to keep an eye



on your virtual counter and take appropriate action beforehand to make sure your quota will be reached.

ONLINE PAYMENT

This section gives the registrars the possibility to make an online payment.

Execute an online payment

To initiate a payment:

- Click on 'Finance' in the left menu.
- Click on 'Online payment'.

The next screen is made up of 2 sections: The first section shows your **account overview**. The current amount is the amount available as indicated in the top right of 'My registrations'. The expected renewals indicate the cost of the renewals at the end of this month, in case no domain names are deleted or transferred away. The expected amount available is your expected account status at the end of this month when the renewals are deducted. If this amount is negative, this means you won't be able to make paying transactions at the beginning of next month unless you top up your account.

In the next section, you can make a deposit:

- Amount (EUR): Enter the amount you want to deposit. This should be minimum 100 EUR and maximum 5000 EUR.
- Payment method: Enter the payment method you want to use.
- Transaction fee: This will always be 0. We do not charge transaction fees anymore.

By clicking 'Pay now', you are redirected to our payment gateway. Follow the instructions to complete the payment.

When your payment is completed, your account status is raised with the deposited amount.



HISTORY

The history section allows you to view which transactions you've executed in the past for all the objects in the DNS Belgium database.

When you are viewing one of these objects via a search, then you also have the possibility to view the history. We provided a 'History' link in the details screen for every object.

The result of your search can be exported to an Excel or csv file.

TRANSACTION HISTORY

To view your transactions during a certain period:

- Click on 'History' in the left menu.
- Click on 'Transactions'.

You can enter a <u>from date</u> and an <u>until date</u> for a period in which you want to view your transactions. Default values are the current date.

Result

The result list displayed has five columns:

- Execution date.
- Object type (domain, contact, ...).
- The type of transaction.
- The <u>reference</u> number of the transaction.
- The <u>result</u> of the transaction.

DOMAIN HISTORY

To view the history of a certain domain name:

- Click on 'History' in the left menu.
- Click on 'Domain history'.

You need to enter a correct domain name.

Result

The result list displayed has five columns:

- Execution <u>date</u>.
- The description of the transaction.
- The type of transaction.
- The reference number of the transaction.
- The registrant attached to the domain name.

CONTACT HISTORY

To view the history of a certain contact:

- Click on 'History' in the left menu.
- Click on 'Contact history'.

You need to enter a correct contact alias.



Result

The result list displayed has four columns:

- Execution <u>date.</u>
- The <u>description</u> of the transaction.
- The type of transaction.
- The reference number of the transaction.

KEY GROUP HISTORY

To view the history of a certain key group:

- · Click on 'History' in the left menu.
- Click on 'Key group history'.

You need to enter a correct key group.

Result

The result list displayed has four columns:

- Execution date.
- The <u>description</u> of the transaction.
- The type of transaction.
- The <u>reference</u> number of the transaction.

The possible types of communication are:

- NEW_KEYGROUP: new key group created
- UPD_KEYGROUP: key group updated
- DEL_KEYGROUP: key group deleted

Other actions, such as linking a key group to a domain name, are not visible here. These are considered to be part of the domain name's history.

NAME SERVER GROUP HISTORY

To view the history of a certain name server group:

- Click on 'History' in the left menu.
- Click on 'Name server group history'.

You need to enter a correct <u>name server group</u>.

Result

The result list displayed has four columns:

- Execution <u>date</u>.
- The <u>description</u> of the transaction.
- The type of transaction.
- The <u>reference</u> number of the transaction.

REGISTRAR HISTORY

To view the history of actions on your account:

- Click on 'History' in the left menu.
- Click on 'Registrar history'.



Result

The result list displayed has four columns:

- Execution date.
- The <u>description</u> of the transaction.
- The <u>type</u> of transaction.
- The <u>reference</u> number of the transaction.

ONLINE PAYMENT HISTORY

To view the history of online payments on your account:

- Click on 'Finance' in the left menu.
- Click on 'Online payment'.
- Click on 'History' at the bottom of the page.

Result

The result list displayed has eight columns:

- the <u>Reference</u> of the online payment.
- the date when the payment was <u>Initiated on.</u>
- the <u>Amount</u> of the payment.
- the transaction Fee associated with the payment.
- the <u>Status</u> of the payment: success or failure.
- the Method used: credit card.
- the <u>Brand</u> of the credit card used.
- the <u>Card number</u> of the credit card used.



DNS QUALITY

The DNS quality project is intended to monitor the quality of the .be zone per registrar and in total. As a registrar, you get access to the information concerning the domain names that are in your portfolio. This project focusses on the correctness of the name server configuration of your domains. For every domain in your portfolio the complete name server tree is walked and discrepancies between settings on the different levels are marked as warning or error depending on the severity of the discrepancy found.

The project intends to point out that there are still a lot of wrongly configured name servers and to give the registrar an insight of where the problems are located. We will do these extensive tests on a regular basis. This way we can monitor the quality in the long term hoping to improve the overall .be zone quality.

OVERVIEW

When clicking on the overview button you will find an overview of how many domain names have errors grouped by the number of errors. In the drop-down box you can also select to display statistics based on numbers including warnings or including warnings and notifications.

When rolling over the graph or the entries in the table, you will get more information on the topic linked to the part you are hovering over. The graph is split into parts linked to the number of errors ('none', 1, 2, 3 or '4 and more'). The table, which is sorted by the number of issues based on the selection you have made in the pull-down, gives you the number of domains grouped per amount of issues and the percentage of this group is compared to the number of domains in your portfolio.

When you click on one of the rows in the table, you will be directed to a web page with the domain names linked to the entry in the table you just clicked. Note that the graph is displayed using a flash plug-in. Install the appropriate plug-in if you do not see a graph being displayed.

ERROR FREQUENCY

Aside from statistics linked to domain names, there is also an overview of the most frequent configuration errors grouped per name server. The error frequency gives an overview of all the detected configuration errors linked to all the name servers used to serve the domains in your portfolio.

In this overview, you find a list of issues and their severity (Error, Warning or Notify), the number of name servers the issue is linked to, the relative portion of how many name servers are concerned, the number of domain names linked to these name servers that have this specific issue and the relative amount of domain names this constitutes.

Clicking on the name server number or the domain name number will bring you to the list of name servers or domain names respectively that are linked to this specific type of problem. Note that the domain names are grouped per letter, so you can find your way easily by selecting the appropriate letter.

If you follow the link to the list of name servers, you get a list of the domains linked to the specific issue. You can also directly use the 'Name servers' link.

NAME SERVERS

The next menu topic 'Name servers' brings up an overview of the top-50 name servers with the most issues. The name servers are ordered according to the total number of issues. Following the link of a name server will show you all the issues linked to the name server and the number of domains linked to the name server that have the specific issue.



SEARCH DOMAIN RESULTS

Obviously, you can also look up any domain name in your portfolio and directly find the issues related to this domain name.

This is done by using the "Search domain results" button. You can specify the domain name and directly go to the appropriate page.

ERROR HISTORY

To determine the overall improvement of the domains in your portfolio, the 'Error history' page shows the evolution of the total number of issues concerning the domain names in portfolio. Therefore, the quality of the name server tree will be investigated periodically.

For every batch we run, there will be an error rate calculated. This way you can verify the effect of your infrastructure changes and the relative position to the average quality of the total .be zone.