



DENIC

RAI - Registrar Administration Interface

Table of Contents

Introduction to RAI	3
Product Characteristics	4
Preparatory Steps	5
How to Set Up your RAI Account	5
Mandatory data	5
Optional data	6
How to Request a One-Time Password from DBS	6
How to Install the Password Generator	7
Log in to RAI	9
Open the RAI login page	9
RAI Login Links in the Members' Area	9
Select a Service	10
First Login	10
After the first Login	11
RAI Main Menu	12
How to Set Up a Two-Factor Authentication (2FA)	13
Example: How to scan the QR code by means of the "Google Authenticator"	13
How to Edit the RegAcc Profile	17
Contact Details	17
Mailing Lists	19
Data to Get Access to the Registration System	19
Notification Channel for the Registration System	20

Introduction to RAI

The Registrar Administration Interface is a web-based management tool. You can use it to view and partly process information relating to the registrar. In the RAI, registrar data are combined in profiles (RegAcc profiles) that are used to administer the registrar accounts (RegAccs). Each member has at least one RegAcc.

The RegAcc profile is also used to set up RRI accounts with existing or new handles. You need an RRI account for instance to register domains. Moreover, "General Request" and "Abuse Contact" can be created and updated and be output in response to a domain query on the DENIC website, if no General Request and Abuse Contact have explicitly been specified for a domain.

When you log in to the RAI for the first time with the account data and the one-time password you have received from DBS, you set up a two-factor authentication for future logins to your RAI. This is done for safety reasons.

Product Characteristics

- SSL-encrypted web interface
- Session timeout
- Two-factor authentication with Time-based One-Time Password (OAH-TOTP)
- 3 different authorisation profiles (one profile for each RAI account)
- A message is sent to an e-mail address when a change has been made to the RegAcc profile.
- You can edit confirmation e-mails by sending a message to DENIC Business Services (Please send the message in a master-key-signed e-mail addressed to dbbs@denic.de).

Preparatory Steps

How to Set Up your RAI Account

DBS creates a RAI account for you. To do so, they need some information from you.

If you are a **new member**, you will receive an e-mail from DBS with a reference to an on-boarding website. Here, you must enter the data that are required for RAI.

For a RAI account, you need a user name in form of a DENIC handle. You will receive the DENIC handle when you create a contact via the RRI. When you are a new member, you have neither access to the RAI nor to the RRI at the beginning. Therefore, DBS creates a contact with a DENIC handle for you on the basis of the data you have entered on the on-boarding page. Once you have access to the RAI, you can create a login for RRI. You need the RRI login, for instance, to send domain or contact requests to the RRI.

If you are **already a DENIC member**, you must send a master-key-signed e-mail to DBS that must contain the information listed below.

Mandatory data

- A user name in form of a DENIC handle;
- A password in form of a MD5 hash;
- An e-mail address to which DENIC can send messages about changes made to the RegAcc profile;
- A telephone number DBS can use to contact you to communicate your initial one-time password;
- The environment for which the user name shall apply;

- You can choose between
 - Live environment and Member Test environment;
 - You can also select both environments.

Optional data

- If you want to administer more than one RegAcc with your RAI account, please communicate the relevant RegAccs to DBS.
- Authorisation profiles:
 - **Read/Write Access**

This is the standard authorisation profile. It is assigned automatically, if no details are entered for the authorisation profile.
 - **Read-only Access**

This is the profile for RAI accounts that are only allowed to access RegAcc profiles in the print view.
 - **No Write Access to RRI Access Data**

Additionally, read and write accesses are granted in the same way as for the authorisation profile.

How to Request a One-Time Password from DBS

You enter the DBS one-time password together with your user name and your password on the RAI login page.

You will receive a DBS one-time password

- When DBS creates a new RAI account for you, or
- when you are no longer able to authenticate for an existing RAI account, for instance because you have lost your token. In that case, please contact DBS and request a new one-time password.

DBS will communicate your initial DBS one-time password by phone.

Notice

The DBS one-time password is valid for a limited period of twelve hours. If you do not use the DBS one-time password during this period, it expires automatically.

How to Install the Password Generator

Notice

Please contact DBS if you need assistance with the installation of your password generator.

or logging in to RAI, two-factor authentication is mandatory. Two-factor authentication means that next to a first factor, which is your user name plus your password, you enter another factor when you log in to RAI. The second factor is a one-time password that is valid for a restricted period and for **one single** login only.

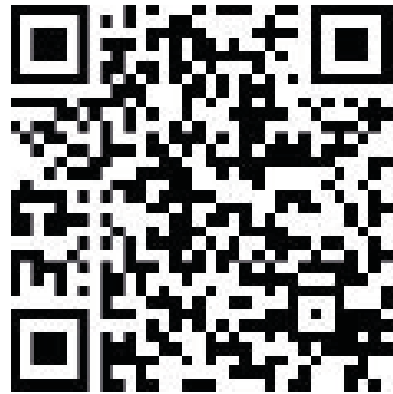
This changing password is generated for you by a password generator, which you install as an app on your mobile device (smartphone/tablet).

For iOS and Android devices, for instance you can use the Google Authenticator app.

Google Authenticator



Android



iOS

You configure the password generator for RAI after you have logged in. For more detailed information go to the chapter ["How to Set Up a Two-Factor Authentication \(2FA\)"](#) on page 13.

Log in to RAI

Go to the RAI login page(s) for the environment(s) for which Denic Business Services has set up one or more logins for you.

Open the RAI login page

- Live environment: <https://rai.denic.de/faces/en/index.jsp?lang=EN>
- Test environment: <https://rai.test.denic.de/faces/en/index.jsp?lang=EN>

RAI Login Links in the Members' Area

The RAI login pages are linked in the members area on <https://www.denic.de>. The member login cannot be used for RAI login page, only the RAI logins set up by DBS for you can be used. After logging in as a member at <https://www.denic.de>, the start page of the member area is loaded. The links to the live and test environments for RAI are on the "Registrar Administration Interface RAI" tile.

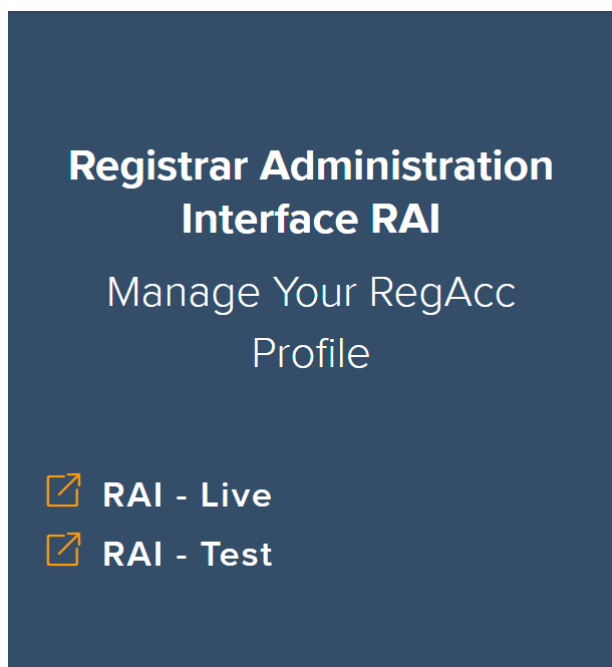


Figure 1: Tile in the members area with links to the RAI environments

Select a Service

When you access the links, you will next be directed to the page "Select a Service". Click on "RegAcc profileMaintenance" to get to the RAI login page.

First Login

Notice

When you log in for the first time, you must enter the one-time password you have been sent by DBS for your RAI account in the field "One-Time Password".

RAI Login

Bitte loggen Sie sich mit Ihrem RAI-Zugang ein. Wenn Sie noch kein Login haben, wenden Sie sich bitte an [Business Services](#).

Username:

Password:

One-Time
Password:

LOGIN

Figure 2: Login page for RAI

After the first Login

After you have logged in for the first time with your user name, password and the DBS one-time password, you must install the two-factor authentication.

RAI Main Menu

Registrar Account Selection

Here, you find a list of your registration accounts. Please select the RegAcc you intend to work on.

DENIC-99995

Two-Factor Authentication

Active token:

TOTP-D36A302B

TOTP

Figure 1: RAI main menu

How to Select a Registrar

Here you find a list of the RegAccs that are managed via the RAI account.

Two-Factor Authentication

This menu item is used to replace the DBS one-time password by a token or to replace an old token by a new one.

How to Set Up a Two-Factor Authentication (2FA)

Notice

Once you activate a new token (orange button "Roll Out NEW SOFTWARE-Token (TOTP)"), any existing token will become invalid immediately.

When you print out the page with the QR code and store it safely, you can scan the QR code again, for instance if you have lost your mobile device.

Alternatively, DBS will create a new one-time password for you.

You set up your access for the two-factor authentication by scanning a QR code with your mobile device.

Alternatively, you can enter the line that starts "secret=..." in your password generator.

Example: How to scan the QR code by means of the "Google Authenticator"

- Click the orange button "**Roll Out NEW SOFTWARE-Token (TOTP)**" in the main menu.

- On the screen you will see a page that has a QR code.

Info: [195000000001] A new token has been generated successfully

OTP Token TOTP-C7A31496



otpauth://totp/TOTP-C7A31496?secret=TMGWHLL55ZVG5FVIETJKBSVVTD7LXVRJ&counter=0&period=30&issuer=DENIC+eG+RAI+Live

Please scan the QR code above by means of your application (for instance Google Authenticator, free OTP).

Since it is impossible to generate the secret a second time, we recommend to save the QR code and to keep it in a safe place.

Figure 1: Token webpage displaying a QR code

- Start the "Google Authenticator" app.

- Tap on **"Scan barcode"**.

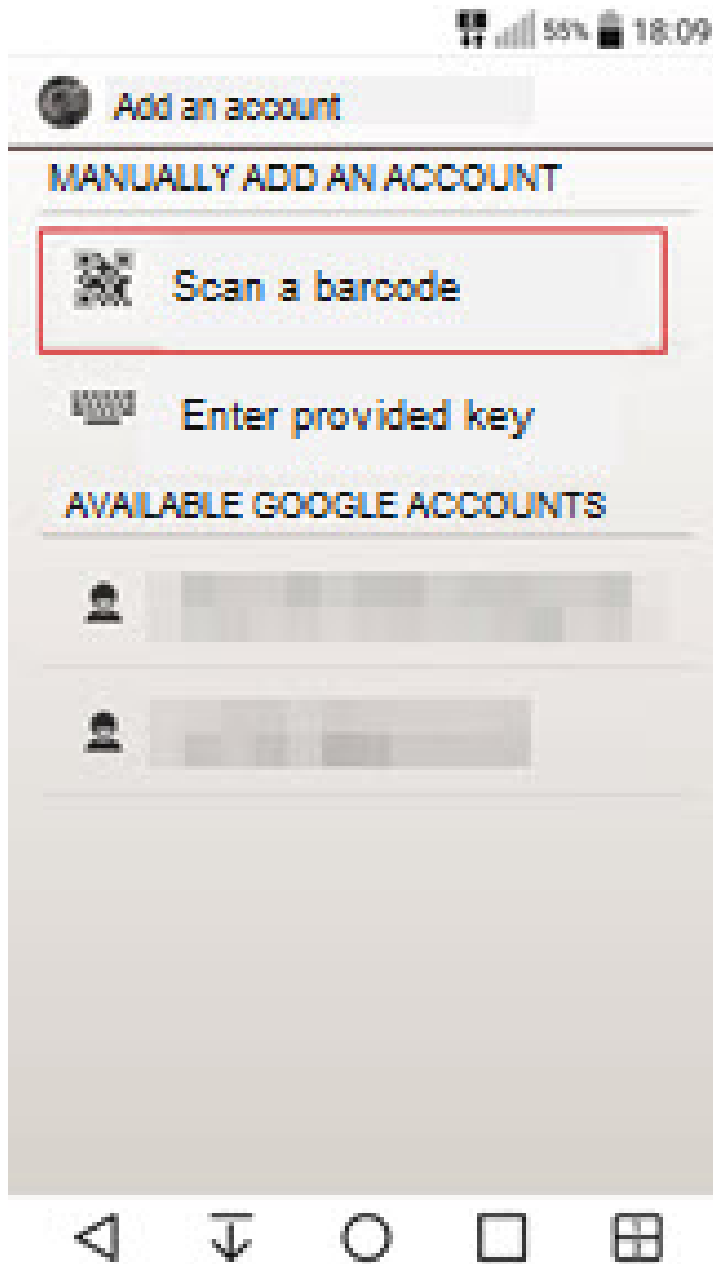


Figure 2: Calling the QR code scanner

- Hold the camera of the mobile device at the QR code displayed.

- The password generator will take over the token and generate a new time-based one-time password every 30 seconds, which is displayed as a six-digit code.

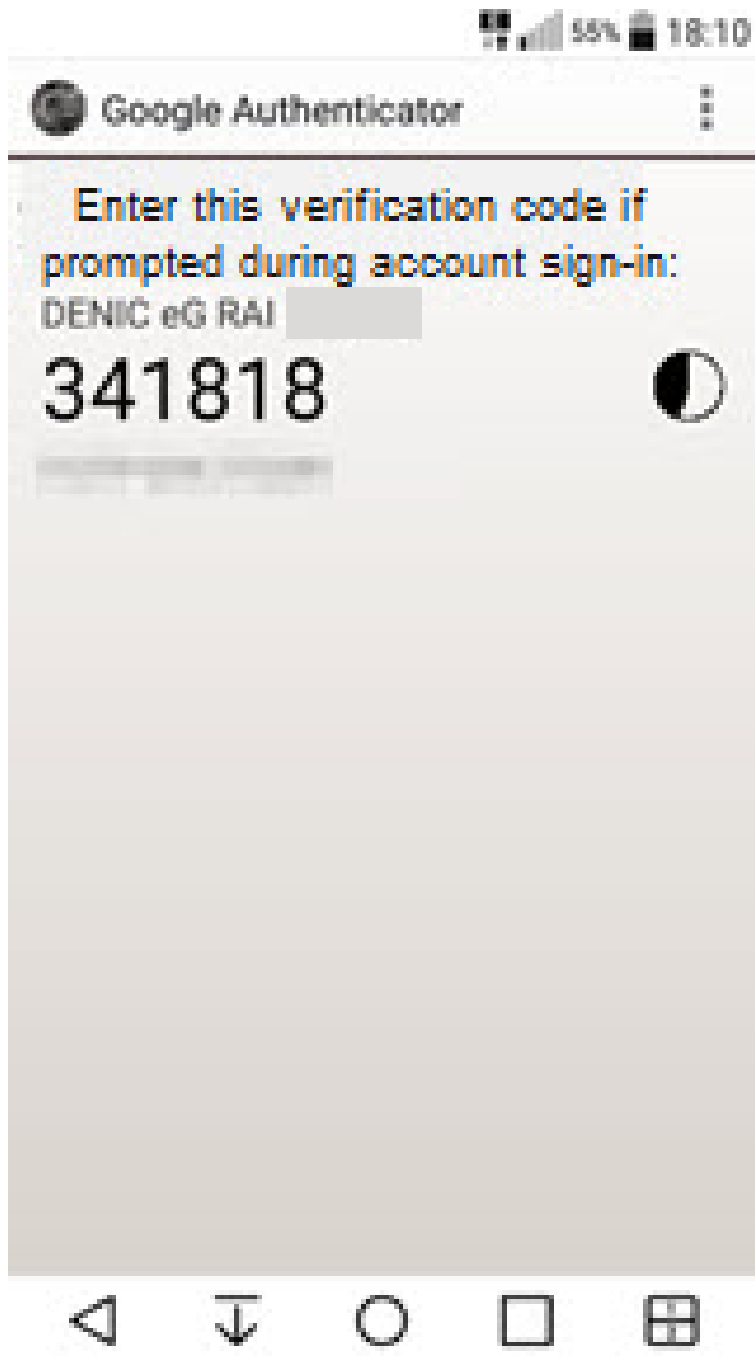


Bild 3: One-Time Password of limited validity

- When you log in to RAI, enter this code in the "One-Time Password" field.

How to Edit the RegAcc Profile

If you select a RegAcc profile for editing in the "Registrar Administration Interface" overview, you will be directed to the RegAcc profile maintenance.

RegAcc profile maintenance

In the "RegAcc profile maintenance" section you can see the individual fields of a RegAcc profile.

Change/Save change

If you want to edit the contents of your RegAcc profile, activate the editing mode by clicking on "Edit" at the end of the profile overview. When you have finished your editing, save the changes. RAI will then send a change notification to the e-mail address stored in RAI. This e-mail will inform you about the fields that have been edited.

Printing the new profile

If you need a printed version of your revised RegAcc profile, click on the "Print" button below your RegAcc profile data to print out the profile.

Contact Details

Notice

The name of the RegAcc, the address and the login to RAI cannot be changed by you via the RAI.

If you want to change these data, please contact DBS.

The registrar must store data to ensure that they can be contacted by DENIC or other registrars. These data include the phone number and e-mail address.

Phone (Mandatory field) and Fax (Mandatory field)

These characters for the phone and fax number of the RegAcc are permitted:

- >+ (first character)
- 0-9
- . (dot)
- x
- blank space

You must follow the notation defined by the [ITU-T E.123](#) standard, including the country code. The maximum number of characters is 254.

Email (Mandatory field)

The e-mail address must comply with the requirements of [RFC 5322](#). The maximum number of characters is 254.

"Email" is the fallback if no "GeneralRequest" has been specified.

Url (Mandatory field)

The URL must be stated in a valid format.

GeneralRequest (Mandatory field), GeneralRequestUriTemplate, AbuseContact and AbuseContactUriTemplate

DENIC handle of the REQUEST type.

This information is output by the web-whois for all domains that are administered by the RegAcc (unless specific data are explicitly stated with the domain).

The URI template includes an e-mail address and/or the link to a web template. You can also specify a wildcard for the domain as a variable.

Specifications by DENIC:

- The URI template string must not exceed 1024 characters in length.
- You must use http, https or mailto for the URI schemata.
- The URI template variable for ASCII code domains is **Alabel**.

- The URI template variable for Unicode domains is **Ulabel**.
- URI template variables are case-sensitive.

Example:

```
mailto:info@denic.de?subject=domain:{Ulabel}
```

Mailing Lists

DENIC uses the mailing lists to inform you about technical changes or maintenance work. Moreover, DENIC discusses various topics with the members on the lists.

E-mail hostmaster list (Mandatory field)

This is the e-mail address for subscribing to the hostmaster-l. This mailing list is used for technical discussions between DENIC and its members.

E-mail tech-announce list (Mandatory field)

This is the e-mail address for subscribing to the tech-announce-l mailing list. DENIC uses this mailing list to make technical announcements.

Data to Get Access to the Registration System

You can store user names and passwords for using the RRI, and PGP keys for the communication with DBS. Moreover, you will define IP addresses that will allow you to inquire additional information from the whois that is available to DENIC members only.

You can create RRI accesses independently in the RAI profile. When you click the button "SAVE CHANGES", a contact of the ORG type is created in the RAI profile with the following information: Handle (RRILogin), Name, Address, City, PostalCode, CountryCode and Email. Then the handle is saved in the RAI profile.

RRILogin

DENIC handle for access to the RRI. Valid for .de.

RRILoginPw

The password for the RRI login should be written in lower case and stored as an MD5 hash value in the RegAcc profile.

PGPKey

The public PGP key is used for authentication when communicating with DBS.

Further information on the PGP keys, such as the conditions, can be found in the documentation Registration System for .de in the appendix under [GnuPG and PGP](#).

Notification Channel for the Registration System

In your RAI profile, you specify e-mail addresses that will be used by the registration system to send notifications to you in specific application cases.

These include notifications relating to deletions in the name of DENIC's Legal Department that are sent to the e-mail address stored in the profile for legal matters. If no address is stated in the field **EmailLegal**, the **EmailTo** address is used.

EmailTo (Mandatory field)

This is the e-mail address to which the .de registration system will send e-mails.

EmailLegal

This is the e-mail address to which e-mails relating to legal aspects of .de domains are sent.

EmailChprovIn (Mandatory field)

This is the e-mail address to which notifications to the RegAcc are sent in case of provider transfers (CHPROV) for .de domains that were initiated by the RegAcc.

EmailChprovOut (Mandatory field)

This is the e-mail address to which notifications to the RegAcc are sent in case of provider transfers (CHPROV) for .de domains that must be confirmed.

MsgFeed (Mandatory field)

This is the type of delivery for notifications from the .de or ENUM registration system.

- rri: notifications are collected via RRI