



RESEARCH DATA CENTER

REX - Remote Execution / Sistema di elaborazione a distanza

REX User Guide



March 2023

Dear researcher,

Welcome to the Bank of Italy's remote execution application REX. In the following pages you will learn how to register and use the system for your research.

Please write to RemoteExecution@bancaditalia.it if any information is incorrect or missing

Summary

1. Access request.....	3
2. First Access and registration.....	3
3. Access and homepage	6
4. How to use the application.....	8
5. Troubleshooting	10

1. Access request

- Go to the following address https://www.bancaditalia.it/statistiche/basi-dati/rdc/rex/riciesta_accesso_rex_EN.pdf, fill in the form and send it to RemoteExecution@bancaditalia.it together with a valid photo ID and a brief abstract of your research project. If you already have a username//userid for the Bank of Italy's systems, please provide this information in the corresponding field in the form. Keep a copy of the form for future reference.
- If your request is accepted, you will receive a confirmation email containing your username and the address of the application.

2. First Access and registration

After receiving the confirmation email containing your username, you can register to the system at the following website: <http://rdc.bancaditalia.it/>

- Click on 'Activate credentials';
- Wait for the next prompt;

The screenshot shows the authentication interface for the Application Research Data Center Portal. It features a login section with fields for Username and Password, and buttons for ACCESS and ACTIVATE CREDENTIALS. Below this is a section for users who have forgotten their credentials, with links for Password Recovery and Username Recovery. The page is part of the Banca d'Italia website, as indicated by the header and footer.

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- In the username field, insert the username you received in the confirmation email;
- Complete the security check ('security code')//or insert password and click on 'Send OTP' to receive the OTP on your mobile phone.

OTP Request

OTP Request

To receive One Time Password to activate your credentials enter user name and security code.

OTP REQUEST

Username
WRDC35244971

sy sing

Codice di sicurezza

Send OTP

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- Use the OTP in the empty field and click on 'Confirm';
- Should you need another OTP, click on 'Send new sms'. This will send you back to the previous step. If it still doesn't work, visit the 'Troubleshooting' section;

Credentials Activation

Credentials Activation

To activate your credentials enter user name and One Time Password.

CREDENTIALS ACTIVATION

Username
WRDC82964362

OTP

Send new sms

Confirm

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In the next window you can check or insert your personal identification data and mandatory data:

- Name
- Surname
- Email (PEC not allowed)
- Confirm Email
- Secret Answer Question
- Secret Answer
- Password: must be between 10 and 20 characters long and must contain at least one lowercase letter, a capital letter, a number, and a special character (eg: '-', '_'). Furthermore, it must not contain the username, the name, the surname or the word 'password'
- Confirm Password

User registration

Registration
The Mobile OTP Number field will be the cell phone number to which an SMS including One Time Password required for authentication will be sent. After the registration process, a confirmation email will be sent to the specified address. The email will have a link to a web page for user activation.

Note
The password must be between 10 (ten) and 20 (twenty) characters long and must contain at least one lowercase letter, a capital letter, a number and a special character (eg. "-", "_", "!"). Furthermore it must not contain the username, the name, the surname and the word "password".
The link sent by e-mail will be valid for 72 hours.

IDENTIFICATION

Username
WRDC82964362

Name
[REDACTED]

Surname
[REDACTED]

MANDATORY INFORMATION

Email (PEC not allowed)
[REDACTED]

Confirm Email
[REDACTED]

Secret Answer Question
[REDACTED]

Secret Answer
[REDACTED]

Password
[REDACTED]

Confirm Password
[REDACTED]

[Terms and Conditions](#)

- Read carefully and accept the Terms and Conditions by flagging the box and clicking 'Confirm';

Terms and Conditions

Carefully read the terms and conditions of use of our service

Users must provide their personal data in order to access the services offered by the Bank of Italy that require authentication. The data collected for such purpose by the Bank of Italy in its capacity as Data Controller, will be processed in full compliance with the data protection laws, such as those of Regulation (EU) 2016/679 (GDPR) and Legislative Decree 196/2003, as amended. Data are processed electronically with appropriate security measures in place to guarantee the confidentiality of the personal data and to prevent access to the data by unauthorized third parties or personnel. Specifically, mobile phone numbers will be used for those services for which two-factor authentication is required, solely to send one-time passwords (OTPs) via text message, and can be consulted, by authorized personnel, only when there is a problem with the procedure. The data inserted in this form will be stored for the time strictly necessary to achieve the purposes for which they were collected, as better described in the disclosures on the individual services provided.

Users may, at any time, exercise their rights pursuant to Articles 15 and 16 of the GDPR by contacting the Data Controller - Bank of Italy - Organization Directorate, Via Nazionale 91 - 00184 - Rome (Italy), email: org.privacy@bancaditalia.it.

The Data Controller is the Bank of Italy's Organization Directorate, Via Nazionale 91, 00184 Rome, email: org.privacy@bancaditalia.it.

The Data Protection Officer can be contacted at Via Nazionale 91 - 00184 Rome, or at the following email address: responsabile.protezione.dati@bancaditalia.it.

Should the data subject deem that their data have been processed in violation of the law, they can lodge a complaint with the Italian Data Protection Authority (*Garante per la Protezione dei dati personali*).

I confirm that I have read and agree to the Terms and Conditions and privacy statement.

Confirm

Cancel

- You should receive an activation email (validity 72 hours) to activate your account;
- Verify your email address by clicking on the link you received to activate your account and use the application.

3. Access and homepage

Go to the website <http://rdc.bancaditalia.it/>

- Insert username and password and click on 'Access' to access the system;

BANCA D'ITALIA
EUROSISTEMA

Home Accessibility FAQ

Authentication

ACCESSING THE APPLICATION RESEARCH DATA CENTER PORTAL

LOGIN

Username
WRDC35244971

Password

ACCESS ACTIVATE CREDENTIALS

FORGOT YOUR ACCESS CREDENTIALS?

Password Recovery
Username Recovery

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- You will receive an OTP code on your mobile phone. Enter the OTP code in the login window and click again on 'Access';

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Home Accessibility FAQ

Authentication

Insert the SMS code

Send new sms

Modify your mobile phone number

LOGIN

OTP

ACCESS CANCEL

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- You are now in your personal work area. Here you will see:
 - On the application bar
 - User data
 - Language menu (you can switch between English and Italian)
 - On the application window
 - Button for new job submission
 - Filter to sort your previous jobs by submission status
 - Table with submitted jobs and relating info
 - Available datasets (only those accessible by you)
 - Current software versions in runtime environment

Button for new job submission

User

A WRDC35244971 - ELENA GRECO EN

Filter your previous jobs by submission status

Submissions

Show 10 entries

Filter by submission status **All** Completed Pending Rejected

Nº	File name	Datasets	Submission date	Last update	Status	Actions
5	regressione_stata_invind_ok.do	INVIND [stata]	15/04/2022 12:49	15/04/2022 12:51	Pending	[Download]
4	regressione_stata_invind_ok.do	INVIND [stata]	15/04/2022 11:55	15/04/2022 12:50	Completed	[Download] [View]
3	regressione_stata_invind_ok.do	INVIND [stata]	15/04/2022 11:50	15/04/2022 11:52	Pending	[Download]
2	regressione_stata_invind.do	INVIND [stata]	15/04/2022 11:43	15/04/2022 11:45	Pending	[Download]
1	regressione_stata.do	INVIND [stata]	15/04/2022 11:16	15/04/2022 11:18	Pending	[Download]

Showing 21 to 25 of 25 entries

previous 1 2 3 next

Datasets you have been granted access to

- Available datasets
- [IAI] Indagine sulle aspettative di inflazione
 - [INVIND] Imprese
 - [SONDTEL] Sondaggio congiunturale
 - [TESTE2E] Test End-To-End

Current software versions in runtime environment

- Runtime environments
- R – R scripting front-end version 4.1.3 (2022-03-10)
 - Stata – version 17.0

List of available packages

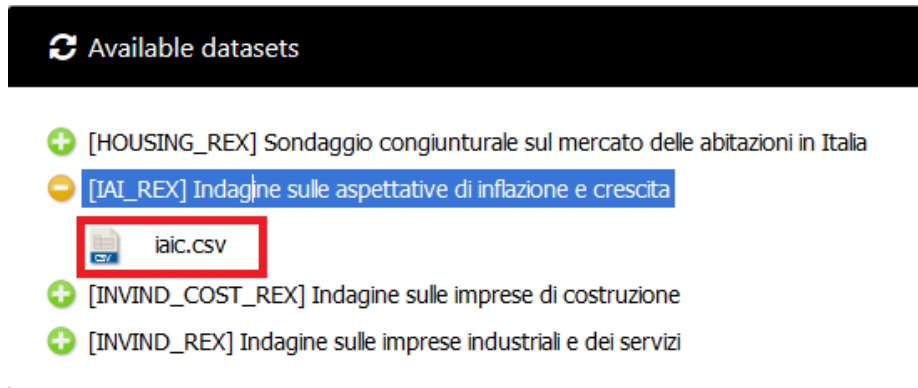
Select language (IT – EN)

Submitted jobs and relating info

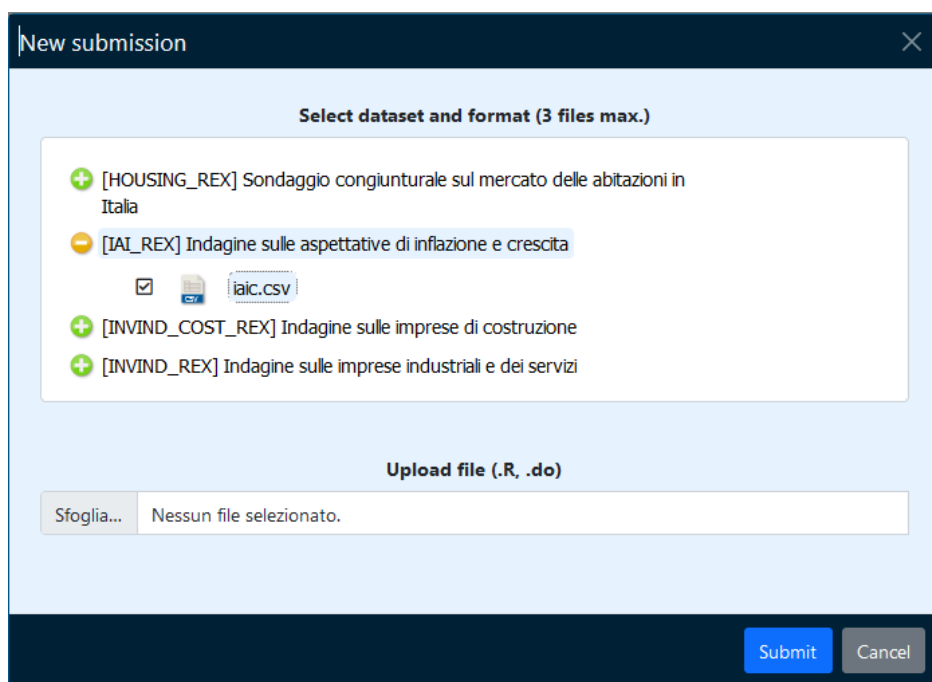
4. How to use the application

These are the steps to submit your jobs:

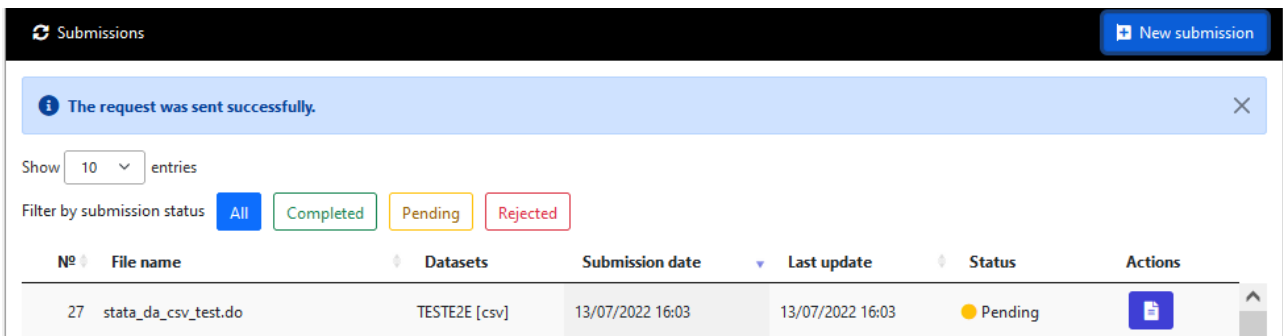
- Look for the name of the dataset of interest (e.g. *filename.csv*) browsing through those available (up to 3 datasets in the same job);



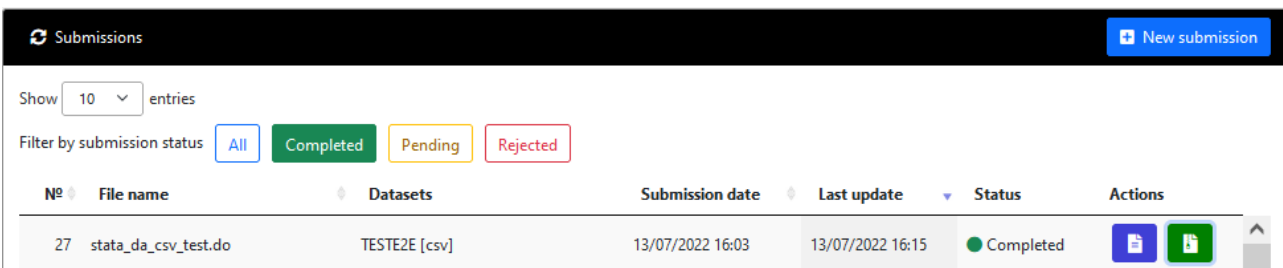
- Compile your code in the language of choice (e.g. R or Stata) including the instructions to upload the data (for Stata: import delimited "*filename.csv*"; for R: read.csv("*filename.csv*", header = TRUE)) and perform your analysis (see job examples). It is possible to save temporary data in the default work area (e.g. save "*new_data*" in Stata);
- Click on 'New submission' in the top-right corner and select the dataset(s) you want to upload from the window;
- Upload your job code (the software will automatically recognize the language);
- Click 'Submit';



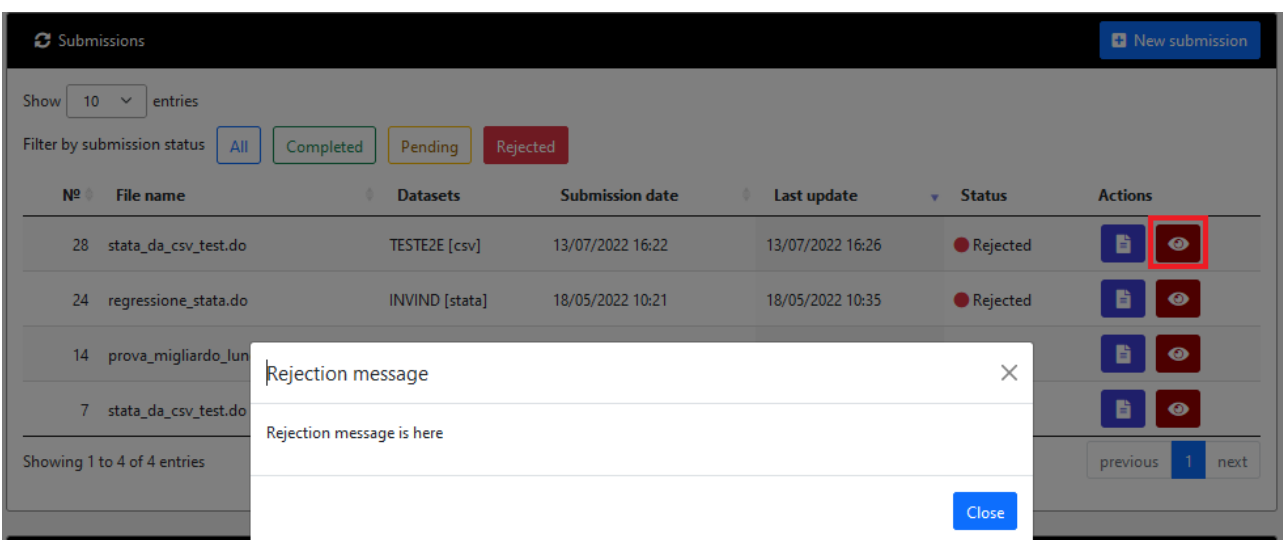
From your user interface you can check that the job was successfully sent and that the job status is 'Pending'. Once RDC has reviewed your job, you will find an update in the status ('Completed' or 'Rejected').



If your output is compliant with all the rules, the job status will be set to 'Completed' and you will be able to download the results (in a zipped file) clicking the rightmost button in the action column (Download output).



Should your output violate any disclosure rules, RDC will reject your output and the status will be set to 'Rejected'. You can click on the 'View rejection message' button to read the reason for the refusal (if any is provided).



You can check the job you submitted at any time by clicking on the 'Download input' button (on the left under 'Actions').

You can't install extra packages on your own; installation of unavailable packages needs to be requested with an e-mail to RemoteExecution@bancaditalia.it.

5. Troubleshooting

For security reasons, if your session is idle for some minutes you will be logged off from the application without warning but upon performing any actions you will be redirected to the login page after a brief error message. Log in again to resume use of the application.

Keep in mind that security policies require the password to be changed frequently and you are required to do so when prompted. If you forgot your password you can reset it and choose a new one, at any time, using the appropriate option (Password recovery) in the access page.

If your OTP is not accepted, try clicking on 'Send new SMS' to receive a new OTP and try again. You might experience temporary connection issues. If you do not receive an OTP, please double-check the phone number you entered on the request form and write to RemoteExecution@bancaditalia.it specifying your username to rectify any incorrect data.

If your job is in 'Pending' status for a while, please consider that review times by RDC staff depend on output length, job complexity and general workload.

For any further issues or assistance requests, please email RDC at RemoteExecution@bancaditalia.it. The REX team will get back to you as soon as possible.