YOU MAY CONNECT

CENTRE D'ACCÈS SÉCURISÉ AUX DONNÉES

USER GUIDE

CASD

Table of Contents

You are authorised, or are in the process of authorisation, to work on confidential data which you will access from the Secure Data Access Centre (CASD). You will find in this guide all the necessary information to successfully implement your project and work within your secured bubble.

Before Access

1. Enrolment

Immediately upon obtaining your clearance from the competent accrediting authority designated by the data owner to which you wish to access, you may sign up for an "enrolment session." Due to the high level of security required for access to confidential data, this session is mandatory for any CASD access.

The enrolment session is organised every month and lasts about 3 hours. Registration for the session is done via our website, https://www.casd.eu/en/your-project/seance-denrolement-2/**. Registration for each session will close one week before that session's date.**

Pay attention : if you are concerned by the access to Programme de Médicalisation des Systèmes d'Information (PMSI) data, your registration to an enrolment session will only be taken into account once the authorization document validated by the ATIH.

Each session consists of:
➢ a presentation of the CASD
➢ a description of the secure remote server
➢ a demonstration :
   o of the connection
   o of the work environment
   o of the import and export methods
➢ the security rules which must be respected
➢ a description of the legal framework for accessing confidential data, in particular any legal formalities that may be required
➢ a presentation of standards of confidentiality (i.e. fiscal or statistical secrecy, etc.)
➢ a presentation of the different type of export controls and the applicable thresholds for the automatic exports allowed to some projects
➢ the issuing of a smartcard once your fingerprint signature has been recorded. The minutiae of your fingerprints are hosted, securely and encrypted with the security certificate only present on the smart card, on the CASD servers. Only the smartcard has the key to decrypt data. CASD employees do not have any access to biometric data and cannot reconstitute them.
➢ testing your connection

During your attendance you will need to sign the CASD Terms and Conditions of Use. These encompass all aspects of your use of CASD. All users involved in the same project, and wishing to have any access to data, are required to attend this session and sign this document.

The smartcard given by CASD is strictly individualized. You must not under any circumstances lend it or make it available to third parties. You do not need to return to CASD for a new smart card for each new project to which you are eligible for access.

An enrolment session, preceding all use of CASD, is considered valid for six years. Beyond the six-year validation date, for any new project, you will be required to attend a new enrolment session.

2. Contractualisation

Access to CASD services requires a preliminary contract agreement. The contract file contains, amongst others, the following 2 documents:

- **CASD Executive Service Agreement,** signed by the legal representatives of the institutions involved in the project (including the financing institution and/or the institution hosting the access point), under which :
  - A signatory institution will be able to issue Order Forms to fund your use of CASD and/or one (or several) SD-Box™ access points. It will, therefore, be referred to as the **"Financing Institution"**. The institution financing SD-Boxes™ can now be separate from the project-funding institution. There can be several institutions financing SD-Boxes™. However, there can only be one institution financing the services linked to one particular project.
  - A signatory institution will be able to issue SD-Box™ (access point to CASD) "Hosting vouchers" and will then be identified as the **"Hosting Institution"**. One institution can both finance the SD-Box™ and host it. Should you need several access points (which can be spread out in different buildings), you will need as many hosting vouchers as SD-Boxes™ that will be deployed (vouchers which will each need to be signed by the official host).

- **CASD Terms and Conditions of Use (TCU),** signed by each member of the project, and regulating the different aspects of the **Use of Service**. There will therefore be as many TCUs as there are users.

These documents are accompanied by the following appendices:
- Pricelist of our services (also available at: https://www.casd.eu/en/tarifs-2/)
- If the building has never hosted an SD-Box™, the technical form to complete on-line to host an SD-Box™, available on our website (https://www.casd.eu/en/formulaire-technique/)
- Hosting Voucher(s) signed by the legal representative of the entity(ies) identified as the SD-Box™ "Hosting Institution"
- Order Form(s) signed by the officer authorised for expenditures by the entity identified as "Financing Institution" of your project and/or for an SD-Box™ access point preliminarily discussed with our services, taking into account your needs and the current pricelist.

To set up these contracts, contact CASD by email (See Contact CASD section p.15)

In order to proceed with opening your access and shipping your SD-Box™, the documents listed above, along with the quote and order form corresponding to the financing institution (mandatory if it is a public entity), must imperatively be returned to us (by post, or email) properly completed, dated, and signed.

Data Access

Access to data and to your secured work environment is done via a secure terminal called SD-Box™, by means of your individual smartcard (issued at the enrolment session) and biometric authentication.

1. Presentation and Installation of the SD-Box™

The SD-Box™ serves solely as the terminal for accessing our secure server: **data are not hosted on an SD-Box™**. All connections are done onto a virtual server dedicated by project.

The SD-Box™ must be installed at the hosting institution declared during the contractualisation phase, in the site specified in the Hosting vouchers. Do not forget to notify your IT service of this installation, particularly in order to fill out the technical form available on CASD's site (https://www.casd.eu/en/formulaire-technique/). In order to use the SD-Box™, it is necessary to connect it to a network and hook up a screen, mouse and keyboard to it (all not-included).

Here are some rules for its physical installation:
- always place it in a location that is locked and secured
- screen should only be visible to the user at all times
- no other device can be connected to the SD-Box™ apart from the screen, keyboard and mouse.

2. Connection

Your SD-Box™ must continuously be switched on. To start it up, press the button located on the back of the case. You may connect once the display unit on the SD-Box™ reads "You may connect".

Please insert your smartcard into the device.

Enter the PIN code given to you at the enrolment session

You have accessed the log-on screen; choose a project and place your finger on the SD-Box™ fingerprint sensor to be identified (the interface varies according to the type of smartcard).
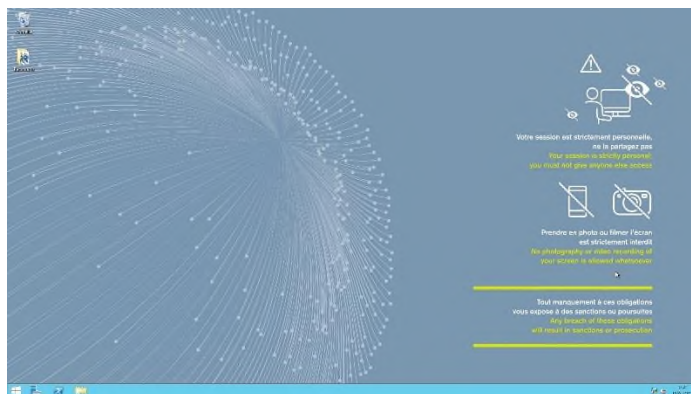
**Your session is strictly personal; you must not give anyone else access to it.**

Troubleshooting:
In the case of connection problems, or for any further instructions about the configurations of the SD-Box™, please consult the document given with the SD-Box™, or contact CASD by email.
In case of loss or theft of your smartcard, please notify CASD immediately. You will need to personally come to CASD for a new card to be issued.

3. Work Environment
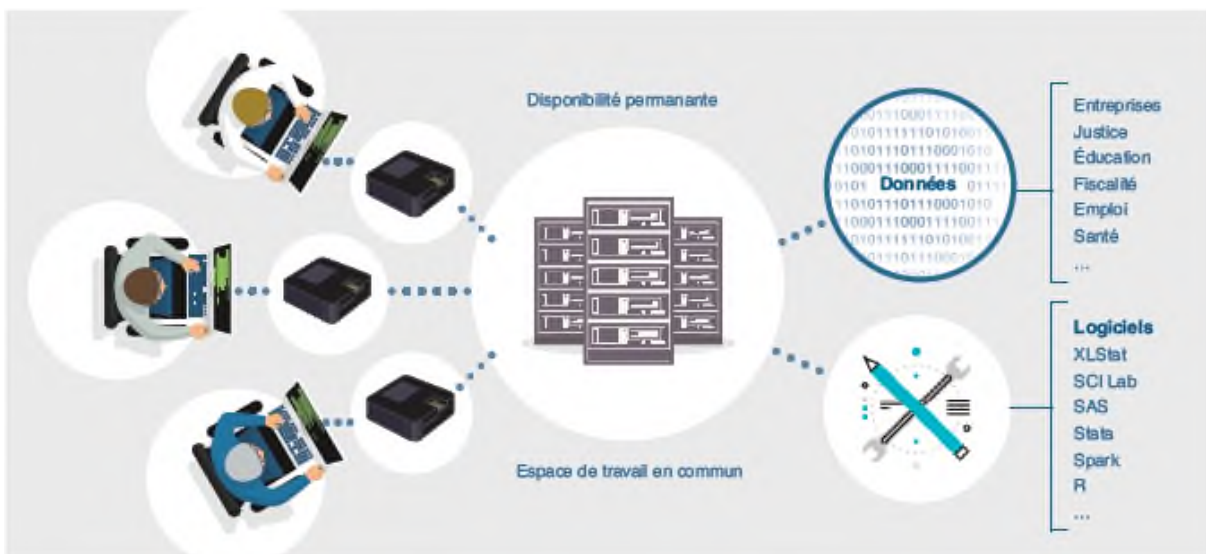
In your work environment, a "Shortcuts" folder is available on your desktop.
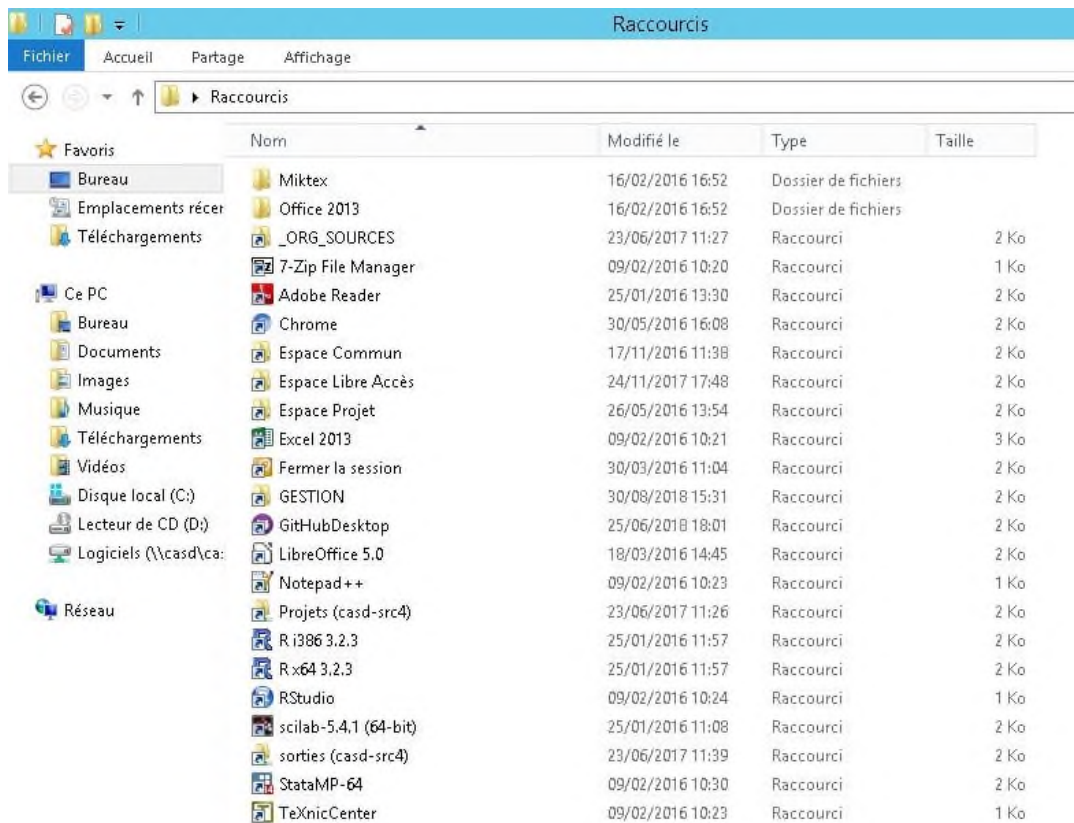
In addition to accessing the available software, your work environment allows you to access 2 different spaces:

- A common workspace for processing data and files created as part of your project (programs, texts, etc.). This workspace is accessible for all the members of your project.
- A project area that groups 4 directories:
  - o "*Data*": all data for which you are authorised are deposited in this directory. We recommend copying them to the common workspace of your project. All data to which you have been given access must never be used for any purpose other than those listed in the project for which you have been licensed.
  - o "*DirectExport*": the set of automatic exits requested (for reasons of traceability of extracted files from your environment, you don't have access to it. This concerns only some projects where authorisation for this was given by the data depositor).
  - o "*Export*": all the standard outputs requested are stored here (see Exports page 8 for the procedure for standard outputs). For reasons of traceability of extracted files from your environment, you do not have access to it.
  - o "*Import*": files that you wish to insert in your environment are placed in this directory in a folder using the current date (see Imports page 8 for input request procedures).
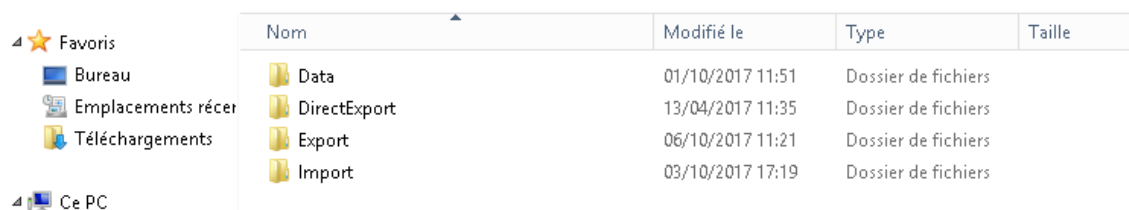
The "Shortcuts" folder also allows you to access the "Libre Accès" folder in your work environment. It contains open data and codes retrievable (geographic databases and zoning, statistical classifications, etc.). It also contains the confidentiality rules which must be applied to the results exports.

To ensure the confidentiality of all data, it is impossible to:
- **recuperate data files in ways other than the specific procedure** (see Exports p.8)
- **print or do any "copy/paste" or "cut/paste"** (for outside of the work environment)
- **access the Internet from your work environment**

Your activity within CASD and the files that you make or introduce are your exclusive property and are covered by professional secrecy to which all CASD employees are subjected.

4. Available Software

⬤ Installed Software ⬤ Installation on demand ◯ Contact us

Software	Public research projects	PMSI projects
Adobe Reader	⬤	⬤
Firefox	⬤	⬤
GeoDa	⬤	◯
Ghostscript	⬤	◯
Git	⬤	⬤
GSView	⬤	◯
Gvim	⬤	◯
HeidiSQL	⬤	◯
JAGS	⬤	◯
Libre Office	⬤	⬤
MariaDB	⬤	◯
Matlab	⬤	◯
Microsoft Office	⬤	◯
MikTeX	⬤	⬤
MySQL	⬤	◯
Notepad++	⬤	⬤
Philcarto	⬤	◯
Python (Miniconda)	⬤	⬤
Qgis	⬤	◯
R	⬤	⬤
Rstudio	⬤	⬤
SAS	⬤	◯

Scilab	🟢	🟢
SPSS	⚫	⚪
Stata	🟢	🟢
Tau-Argus	⚫	⚪
TeXnicCenter	🟢	🟢
Visual Studio Code	⚫	⚪
XLStat	⚫	⚪
7-zip	🟢	🟢

For private projects without access to the PMSI, please contact us.

All software is available in the "Shortcuts" folder.

For the latest information concerning available software version, please consult the chart on this webpage: https://www.casd.eu/en/technologie/environnement-de-travail/.

To add software or ask for an update, as well as for all modifications to the material configuration of your work environment (defined during the contractualisation phase), please make your request by email.

5. Imports/Exports
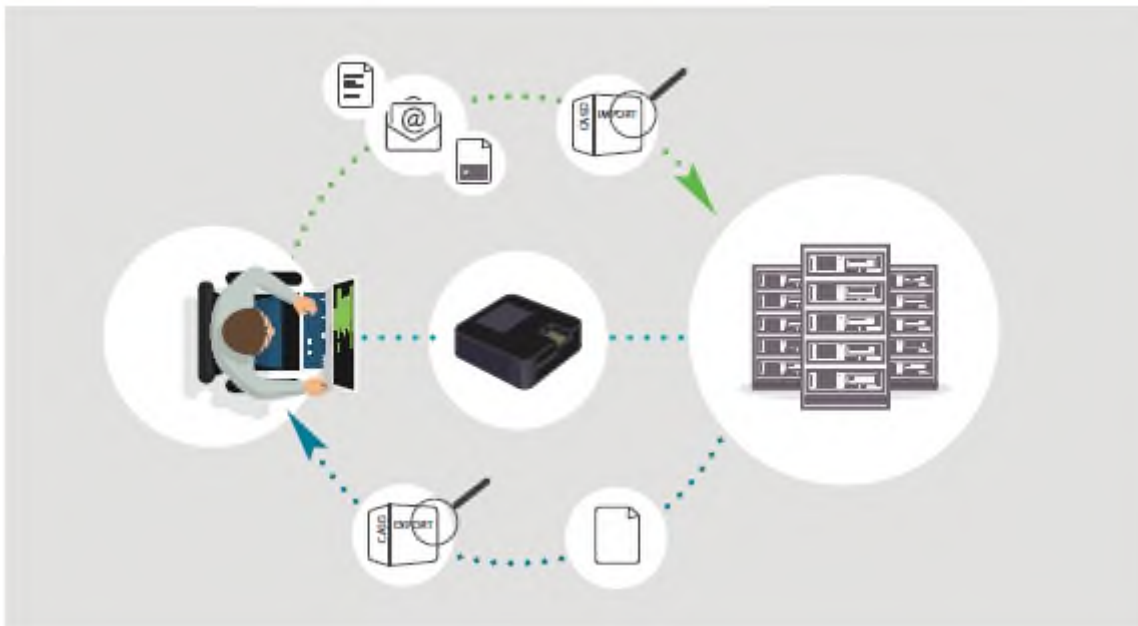
a. Imports

If you wish to work on files that are not currently within CASD (programs, documentation, or all other types of external data), it is necessary to ask for an Import to your workspace. Only "inactive" files (no executable files allowed) as well as objects compatible with the available software in the environment.

Importing of data in order to be joined to that which is already present at CASD is only possible if it was explicitly mentioned within your authorization. Additional formalities may be necessary to enable this type of import. Please call CASD to find out more about such modalities. The controller must perform the GDPR formalities for their treatment of data.

Importing can only be done by the CASD team. Send your files, along with a description (type of file, contents, source) by email or by file transfer. Please contact us if the volume of your files can't be sent by email.

Files are placed in the "Imports" folder of your work environment. You will receive notification by email that the import has occurred.

b. Exports

At certain stages of your work in your CASD environment, you may need to retrieve datasets of results (whether intermediate or final results).

These datasets must meet all confidentiality policies from the data owner (statistical secrecy, fiscal secrecy, etc.). In general, the data contained in these datasets must not in any circumstance allow for direct or indirect identification of the person or company involved.

For more precise information on confidentiality policies, please refer to the documents given at the enrolment session and available on CASD website (https://www.casd.eu/wp/wp-content/uploads/Output_Confidentiality_Rules-6.pdf) or in the « Libre Accès » folder in your work environment.

In order to export results, several procedures are possible: manual exports and automatic exports. Please note that not all projects qualify for the automatic export procedure.

Manual exports are examined by CASD beforehand. They may be subject to requests for clarification, modification or refusal of extraction if deemed necessary. Automatic exports are not examined prior to transmission but may be subject to an *a posteriori* check by the data depositor.

Procedure for Manual exports

- Insert all the elements that you wish to export into a folder that you've specifically created for this purpose, without forgetting to add the descriptive file that specifies the contents of the files you wish to export: tables, programs, dataset descriptors (clear names and meanings of variables)

- Zip the folder (.zip only)
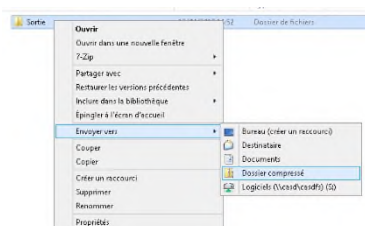
- Right-click on the zipped folder and select "Sortie CASD" (*CASD Output*)
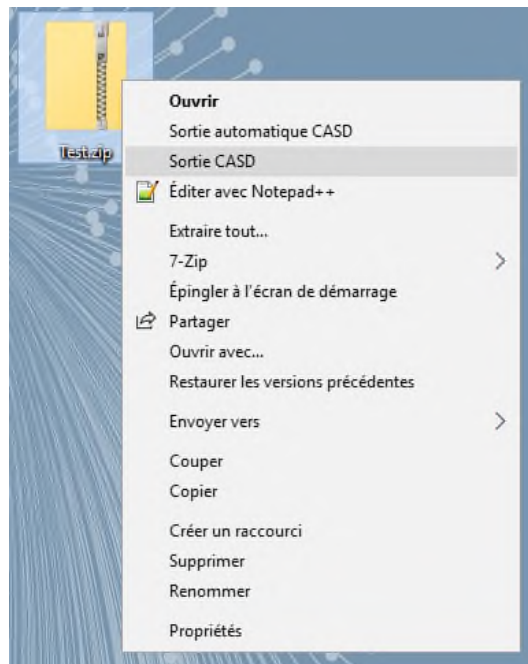
- Click on the "Valider" button to validate your export request.
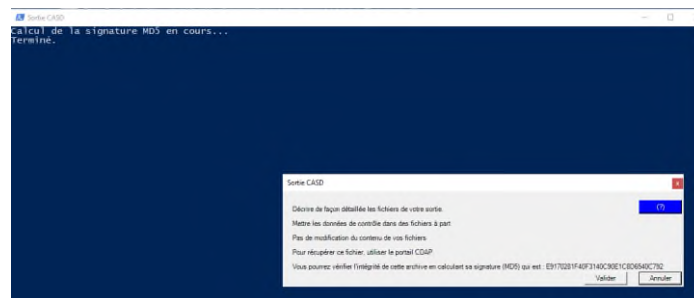
The export request is then transmitted to CASD teams. You can follow the progression of your requests treatment from your CDAP account (https://cdap.casd.eu), CASD menu tab (top left), under "Détail projet" tab.

Three cases are possible :
- The export request is validated and you can download it under CDAP application. You will also receive an email about the export availability.
- Some files have been removed from your export folder and you only can get the other ones, under CDAP application once again. In this case, the email will specify which files have been removed.
- The export is not allowed. CASD team will send you an email explaining the denied reasons.

The average delivery time for exports is one to two working days. In case of complex or heavy exports, the delivery period may increase to five working days or more.

Inter-project Export

You also have the option to request a transfer of an export from one project to another (whether you are working on it or not). To make this export, do an export request as indicated in the previous point, and specify by email (imports-exports@casd.eu) that you want to transfer it between two projects and mention the name of the projects. After the checking, the export will be directly transferred from one work environment to the other.

Be careful, in case the origin project of the export is authorised to data sources different from those of the receiving project, you will have to provide a detailed description of the files to be transferred. It will allow CASD to check if the export do not contain data for which the project receiving the export is not authorised.

Export Credit:

When starting a project, you are given export credit, which is determined when the project is created (by default, 20 exports over the duration of your project, for a maximum of 3 years; please note that it is possible to ask for extra export credit packs). One export credit occurs for 30 minutes of CASD team's time needed to control the folder. The control time is counted according to the actual time used. The division under 30 minutes credits packs aims only to follow the use of credits along the project life.
Your request for an export will only be treated if you have enough export credit the day you request it. If it is not the case, you will need to order an extra credit export pack by contacting the CASD by mail.

Procedure for Automatic Exports :

To request an automatic export, proceed as follows:

- Insert all the elements that you wish to export into a folder that you've specifically created for this purpose, without forgetting to add a descriptive file in order to ease the retrospective control of the accrediting authority.
- Zip the folder (.zip only)
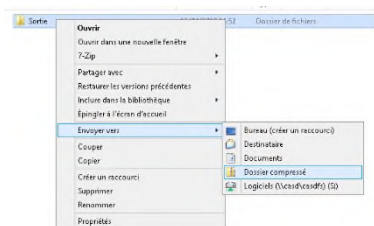
- Right-click on the zipped folder and select "Sortie automatique CASD" (Automatic *CASD Output*)
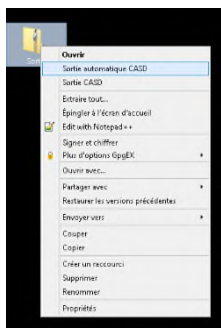
You will then be asked to fill out a form describing your export. This represents a commitment on your part to ensure the accuracy of the information submitted. On submitting this form, an automatic process will check your export (size and frequency criteria defined by the data depositor).
In a new window you will be shown the password to decrypt your export as well as the link to get it. You will receive this link by email but the password is only given inside your work environment. Make sure you write the password before closing the window.

Here is an example of window generated after an automatic export request :
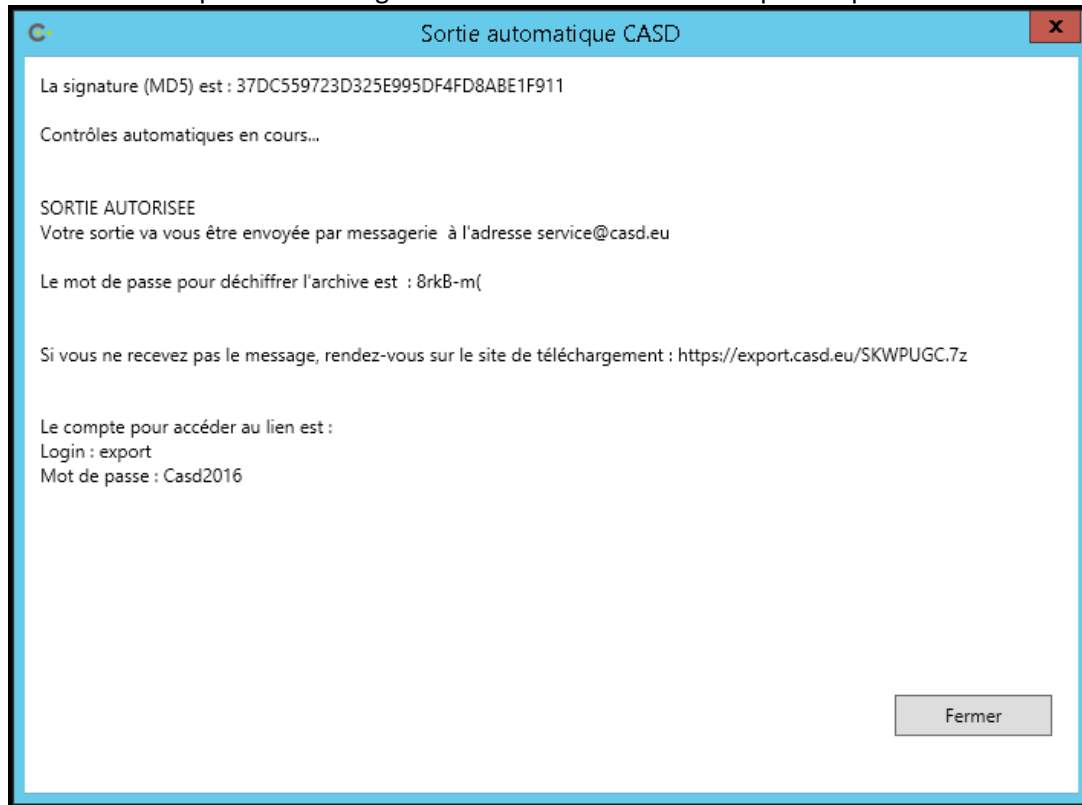
The export is compressed in a 256-bit AES encrypted 7-Zip file. Once the system processes your request, the output is deposited on a web server available from the outside using HTTPS. If its size allows it, the output is also sent attached to an email.

To get your export, you will receive two emails:
- One containing the download link to your output file.
- A second one with the file attached, if its size allows it. The download link will be there again, as well as the identification information to access our web server on the Internet:
    Login: export
    Password: Casd2016

Finally, you will have to decrypt the zip file using the password given in the window inside your work environment.

6. Closing your Session

Two possible cases:
- You are done with your work session, with no ongoing calculations: click on "Close Session" in the "Shortcuts" directory on your desktop. Remove your smartcard from the card reader.
- You are in the middle of a calculation or need to leave your desk temporarily: remove your smartcard from the reader. Your session on the server will remain open. You will find it the way you left it when reconnecting, as previously indicated.

It is imperative to only use this last option when needed (ongoing calculations), as well as to close your server session, as much as possible, in order to allow the server to be updated. Additionally this frees resources on the server.

Security : terms and conditions

Access to the data is permitted subject to compliance with security rules. By signing the General Terms and Conditions of Use (T&Cs) when you receive your card, you agree to abide by these.

- Do not take any photographs or attempt to capture the image displayed on the screen connected to the SD-Box, whether the screen is currently displaying data or not. Session login pages or error messages should not be photographed unless this is requested in writing by CASD.
- Do not give access to your session to any third party. The smart card is strictly personal.
- Use the SD-Box on the premises of a designated Host, located in an office that can be locked
- and secured. The screen must be visible to you alone. Remove your access card from the SD-Box reader when you are away from the screen, even if it is only for a short period of time. Work in progress is not interrupted when the card is removed.
- Do not connect any device to the SD-Box other than the monitor, keyboard and mouse.

Subscriptions updates

1. Addition of Users or Data sources to a project

The addition of users or sources to a project requires authorizing authorities agreement (Comité du secret statistique or producers). The addition of a user leads to a cost estimate. The addition of sources is free, unless it leads to a configuration growth or it is a specific data addition of Banque de France (cf. below).

2. Addition of Banque de France datasets to a project

Banque de France datasets are the subject of a specific regulation about firm data pseudonymisation. In other words, their matching to other datasets require the encryption of every firms IDs (SIREN and SIRET). It is made by CASD.

The addition of Banque de France data to an existing project containing data from other producers must take this constraint into account, resulting in additional costs for the user:

- with the agreement of the Banque de France's Data Access Committee (CAD), CASD can create a second work environment, a copy of the initial environment which did not contain Banque de France data, by adding this data and encrypting all identifiers (the cost associated with this operation is 0.5 UO, i.e. €424 excluding VAT). The transfer of documents between the two environments is possible after all traces of SIREN/SIRET have been erased (programs, texts, etc.). It is operated by CASD on request. The two environments do not communicate.
- the two environments coexist for a maximum of 12 months, resulting in double billing;
- users then choose which environment they wish to keep. If the initial environment still has unused credits, these can be deducted from the second environment containing all the data, at the request of the project manager.

1. End of a Subscription

At the end of a subscription, CASD will send you an Order Form for renewal. If you wish to renew, send us by email the Order Form fully completed, dated and signed, accompanied by either the order number of the financing institution, or its order form (which is mandatory if the financing institution is a public entity). **Be very careful that your authorisation includes this renewal period**. If not, it is necessary to ask for a prolongation of your rights to access data by the competent accrediting authority. For the CSS, the procedure must be carried out via the CDAP portal: https://cdap.casd.eu/. If you do not wish to renew your subscription, CASD will tell you the procedure to follow.

2. End of a Project

At the end of a project, you must return all of the project's SD-Boxes™ with their power supplies. In agreement with the CASD Terms and Conditions of Use, please remember that you have committed to destroying your personal smartcard.

Citation of Data and Publications with Access for Scientific Research Purposes

1. CASD Citation

If you have benefited from a subsidised rate (see pricelist https://www.casd.eu/en/tarifs-2/), part of this agreement is to mention the use of CASD in your publications as follows:

- « L'accès à certaines données utilisées dans le cadre de ce travail a été réalisé au sein d'environnements sécurisés du Centre d'accès sécurisé aux données – CASD (Réf. 10.34724/CASD) » (French publications)
- « Access to some confidential data, on which is based this work, has been made possible within a secure environment offered by CASD – Centre d'accès sécurisé aux données (Ref. 10.34724/CASD) » (Other publications)

Otherwise, you can use the Digital Object Identifier (DOI) to cite the data used to produce the results presented in your publications. The DOI of each data source is indicated on the CASD website on the page describing the source.

2. Information about Publications

When you have published results stemming from your work at CASD, we welcome you to indicate that via this on-line form: https://www.casd.eu/en/share-a-new-article/.
Furthermore, CASD contacts all of its users for an end-of-the-year registration of their publications using this form.

Contact CASD

Email: service@casd.eu
For import and export requests: imports-exports@casd.eu
Projects accessing to PMSI data email: acces.pmsi@casd.eu

Telephone:
- Contracts and Billing (incl. renewals): 01 80 86 92 64
- Data, Enrolment, Import/Exports: 01 80 86 92 50
- IT: 01 80 86 92 57

Glossary

Access point Hosting Voucher: document indicating the agreement of the legal or physical signatory to host an SD-Box access point. This access point can be funded by the signatory of the Hosting Voucher, or any other legal entity with a contractual relationship to CASD.

Access smartcard: personal card issued to the Users by CASD enabling them to access the various services of CASD to which they have subscribed.

Authorisation: decision made by the competent authority (data owner and/ or archives administration, etc.) giving clearance to certain data within a project.

Biometric Reader: device equipped with a fingerprint sensor and an access card reader provided to the Hosting Institution by CASD.

CASD: means the French public interest grouping "Centre d'Accès Sécurisé aux Données" that has for main mission to organise ant implement secure access services to highly-detailed microdata for non-profit research, study, evaluation or innovation purposes. As a second mission, CASD can promote its technology for securing access to private sector's data.

Contract: set of contractual documents including CASD service contract signed by the Host of the Access Point and the Funder of the services subscribed, CASD terms and conditions signed by the User, as well as their annexes, any specific forms, and potential amendments.

Data: set of information to which CASD provides access to the User according to their authorisation and to CASD terms and conditions of use.

Data Depositor: legal entity having entrusted CASD with the Data, to which the latter grants access to the User in accordance with the autorisation procedure that the data depositor has defined.

Export: output of non-confidential data performed by CASD at the request and subject to the responsibility of the User.

Express Enrolment Session: For Users who have followed a standard enrolment session within the last four (4) years, session during which the User receives their access smartcard.

Funder or Funding Institution: capacity of the legal or natural person who issues or has issued at least one Purchase Order for a service from CASD. A Funder can also be a Host.

Host or Hosting Institution: capacity of the legal or natural person who issues or has issued at least one Access Point Hosting Voucher. A Host can also be a Funder.

Import: integration of files provided by the User into their secure workspace by CASD.

Pricelist: document available on CASD website showing the applicable rates.

Project: set of activities, performed in a secure workspace provided by CASD, by one or more Users, designated by name, on all the data for which the User(s) got clearance for, and for the term associated with such authorisation.

Project Continuation: extension of a project through the renewal of the initial Authorisation, the Subscription, and any related contracts.

Purchase Order: the document sent by the Funder to formalise an order. This document details the services required by the Funder. The Purchase Order constitutes a legal and financial commitment for the Funder.

SD-Box™: electronic device comprising a box with a built-in biometric reader, allowing access to the CASD servers and rented to a Host by CASD.

Enrolment Session: training workshop organised by CASD for Users in order to inform them of the legal, IT and security aspects relating to data access. These sessions are held remotely. After the session, the User must go to a designated CASD location where they will receive their access smartcard. The smartcard is strictly personal. The validity period of an enrolment session is four (4) years.

Technical Form: form available on the CASD website to be completed by the Hosting Institution.