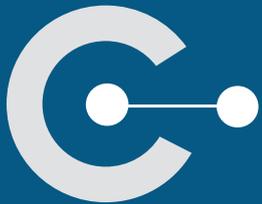


YOU
MAY

CONNECT



USER GUIDE

CASD

USER GUIDE

You are authorized or are in the process of obtaining authorization to work on confidential data which you will access from the Secure Data Access Centre (CASD). In this guide you will find all the information you need to successfully implement your project and work within your secure bubble.



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BEFORE ACCESS

01

Enrolment

Once you have obtained clearance from the competent accrediting authority designated by the depositor of the data 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 information and awareness session is mandatory prior to any CASD access.

The standard enrolment session is organized every month and lasts about 3 hours. Registration for the session is completed via our website: <https://www.casd.eu/en/your-project/seance-denrolement-2/>. Registration for each session will close one week before the date upon which it will be held.

Please note: if you are concerned by access to *Programme de Médicalisation des Systèmes d'Information* (PMSI – the French database on hospital stays and medical procedures / treatments) data, your registration for an enrolment session will only be taken into account once the authorization document has been validated by ATIH (French Agency for Information on Hospital Care).

Each session provides:

- a presentation of CASD
- a description of the secure remote server
- a demonstration of:
 - the connection
 - the work environment
 - 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 which may be required
- a presentation of standards of confidentiality (i.e. statistical or fiscal secrecy, etc.)
- a presentation of the different types of control of exports and the applicable thresholds for projects authorized to undertake automatic exports
- the issuing of an access smartcard containing your fingerprint signature. No biometric data is stored by CASD. Your fingerprint is only present as encrypted data on your smartcard (individual device)¹.
- testing of your connection

¹ | CNIL Resolution No. 2014-369 of 25 September 2014 authorizing the implementation of automated processing of personal data based on a biometric fingerprint device for the purpose of securing access to data made available via the Centre d'Accès Sécurisé aux Données (CASD).

At this session, held on CASD premises², you will need to sign the CASD Terms and Conditions of Use. These govern all aspects of your use of CASD. All users involved in the same project who are duly authorized and wish to obtain any access to data, are required to attend this session and sign this document.

The access smartcard given by CASD is strictly personal. Under no circumstances should you lend it or make it available to third parties.

This standard enrolment session prior to any and all use of CASD, is considered valid for four years.

If you obtain clearance for a new project during the four years of validity of the standard enrolment session, you may attend an "express" enrolment session. This shorter session does not include the information and awareness sections. It is a session during which you will be issued with a new access smartcard for your new project. After this four-year period, for any new project, you will be required to attend a new standard enrolment session.



Contract agreement

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 funding institution and/or the institution hosting the access point), under which:
 - A signatory institution will be able to issue Purchase Orders to fund your use of CASD and/or one (or several) SD-Box™ access points. It will, therefore, be referred to as the **"Funding Institution"**. The institution funding SD-Boxes™ can now be a separate entity from the project-funding institution and there can be several institutions funding SD-Boxes™. However, there can only be one institution funding the services linked to one particular project.
 - A signatory institution will be able to issue SD-Box™ (access point to CASD) "Access Point Hosting vouchers" and will thereafter be identified as the **"Hosting Institution"**. One institution can both fund the SD-Box™ and host it. Should you need several access points (which can be spread out across different buildings), you will need as many hosting vouchers as SD-Boxes™ to be deployed (vouchers which will each need to be signed by the official hosting institution).
- **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 be completed online for hosting an SD-Box™, available on our website: <https://www.casd.eu/en/formulaire-technique/>

² | CASD cannot cover any travel costs related to enrolment session attendance.

- Access Point Hosting Voucher(s) signed by the legal representative of the entity(ies) identified as the SD-Box™ "Hosting Institution"
- Purchase Order(s) signed by the person authorized to sign off expenses within the entity identified as the "Funding Institution" of your project and/or SD-Box™ access point. This purchase order will have been drawn up beforehand with our services, in accordance with your needs and the current pricelist.

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

In order for us to proceed with opening your access and, where required, shipping your SD-Box™, the documents listed above, as well as the order number of the funding institute (or their own purchase order, mandatory if it is a French public entity) must imperatively be returned to us duly completed, dated and signed by post or by email.

Specificities of PMSI project contract agreements:

The specificity of PMSI project contract agreements is that they require a CASD purchase order to be generated prior to ATIH validation of the PMSI Database Request Form. Indeed, this form includes a section to be completed with information contained in the CASD purchase order.

For all first-time access requests, please first generate a quote using the online CASD quote simulator (<https://atih.casd.eu/>) using the current pricelist (<https://www.casd.eu/tarifs-2/>) and send this to CASD via email so that our teams may tailor it according to your needs and issue a final quote ("CASD Purchase Order"). To do this, please complete the following steps:

- a) The simulator will first generate an initial quote based on the information you enter. This proposal does not constitute a firm offer on our part and is therefore not contractual.
- b) As soon as you consider that the simulated quote best reflects your needs, please contact us via email, citing the number of the simulated quote and/or attaching it to your message.
- c) CASD will get back to you to confirm or refine your request before generating a final quote (or CASD Purchase Order).
- d) **Please then have the final CASD quote signed and validated** by the person authorized to sign off expenses within your organization. This document will be considered as an official purchase order, the reference and amount of which will be entered in the [PMSI Database Request Form](#).

NB: The completed form will be inserted as an annex to the agreement with ATIH.

DATA ACCESS

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

01

Presentation and Installation of the SD-Box™

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



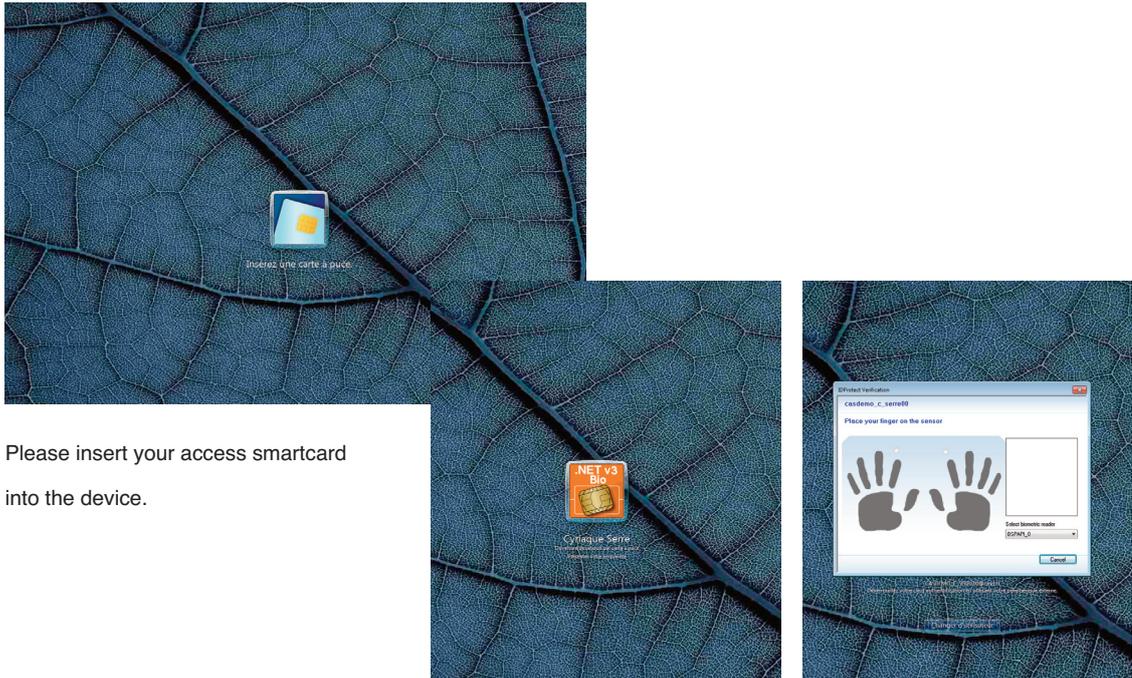
The SD-Box™ must be installed in the hosting institution declared during the contract agreement phase, on the site specified in the Access Point Hosting Vouchers. Do not forget to notify your IT service of this installation, particularly when filling out the technical form available on the CASD website (<https://www.casd.eu/en/formulaire-technique/>). To use the SD-Box™, it must be connected to a network and a screen, mouse and keyboard (none of which are included).

Here are some procedures for its physical installation:

- always place it in a locked and secured location
- the 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.

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 log in once the display unit on the SD-Box™ reads “You may connect”.



Please insert your access smartcard into the device.

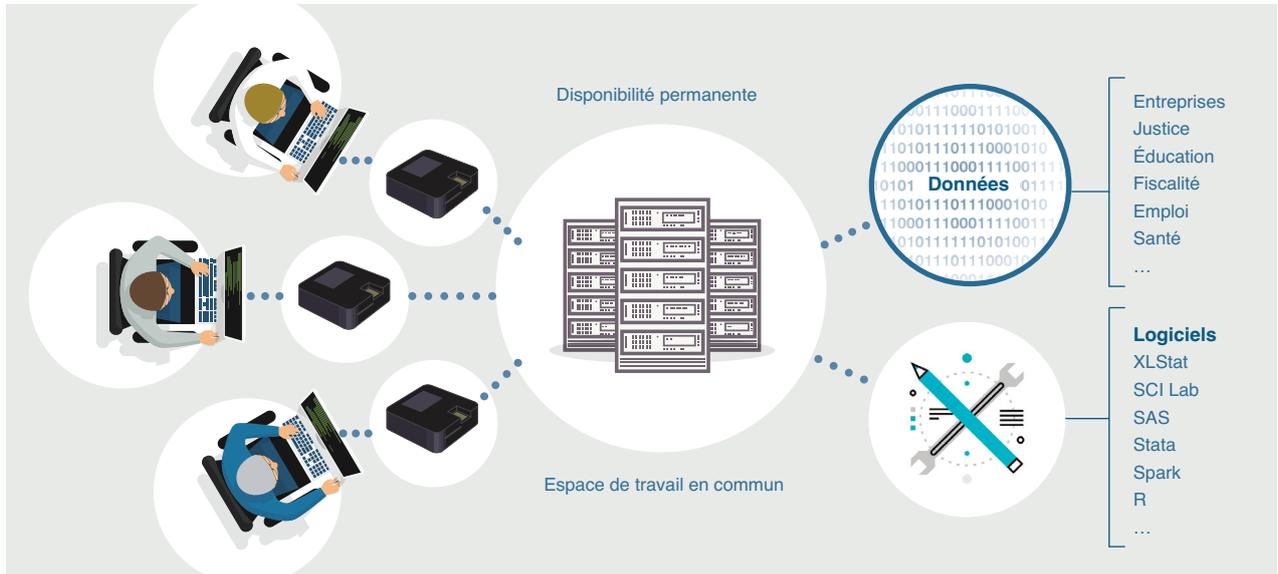
You have accessed the log-on screen; please place your finger on the SD-Box™ fingerprint sensor to be identified (different interfaces according to the type of smartcard presented).

**Your session is strictly personal;
you must not give anyone else access.**

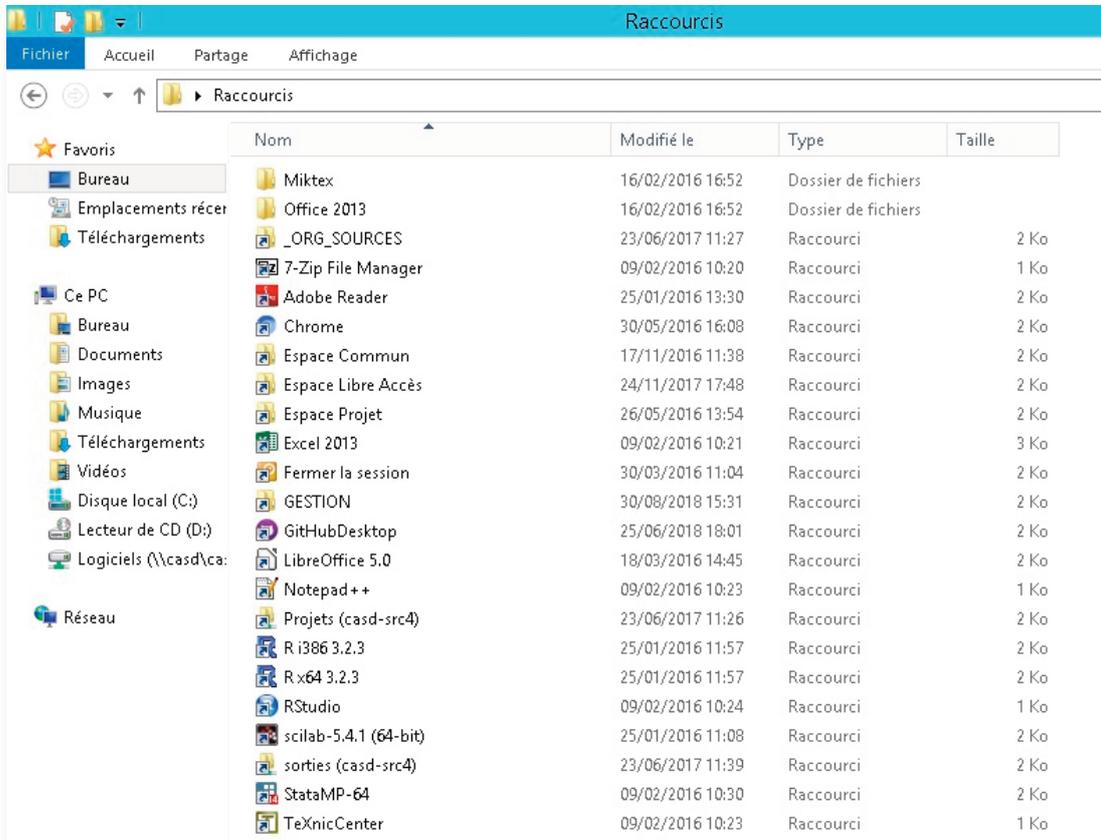
Troubleshooting

In the event of connection problems, or for any further instructions on setting up the SD-Box™, please consult the document provided with the SD-Box™ or contact CASD by email.

In case of loss or theft of your access smartcard, please notify CASD immediately. You will need to personally come to CASD for a new card to be issued.

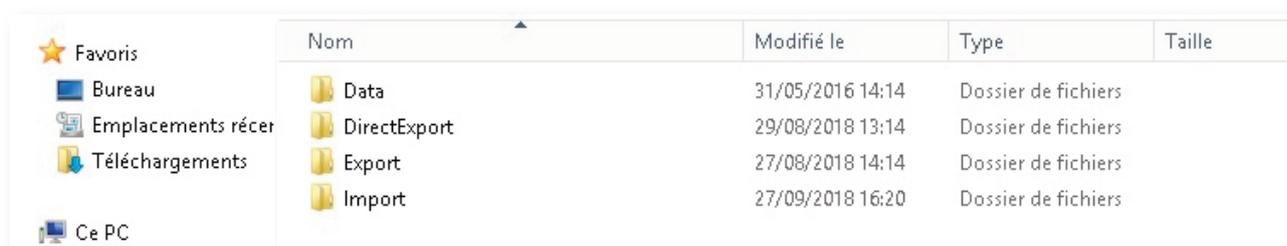


In your work environment, a “Shortcuts” folder is available on your desktop.



In addition to accessing the available software, your work environment allows you to access 2 different spaces:

- A **shared workspace** for processing data and files created as part of your project (programs, texts, etc.). This workspace is accessible to all the members of your project.
- A **project area** comprising 4 directories:
 - **"Data"**: all data you are authorized to access are deposited in this directory. We recommend copying them to the shared 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 given authorization.
 - **"DirectExport"**: all the automatic outputs requested are stored in this directory (for reasons of traceability of files extracted from your environment, you do not have access to this directory. This only concerns certain projects for which this feature is authorized by the data depositor).
 - **"Export"**: all the standard outputs requested are stored here (see Exports page 8 for the procedure for standard outputs). For reasons of traceability of files extracted from your environment, you do not have access to this directory.
 - **"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).



Nom	Modifié le	Type	Taille
Data	31/05/2016 14:14	Dossier de fichiers	
DirectExport	29/08/2018 13:14	Dossier de fichiers	
Export	27/08/2018 14:14	Dossier de fichiers	
Import	27/09/2018 16:20	Dossier de fichiers	

The "Shortcuts" folder also allows you to access the "Libre Accès" (Open Access) folder in your work environment. This contains open data and codes (geographic databases and zoning, statistical classifications, etc.). It also contains the confidentiality rules which must be applied to the results of data exported.

To ensure all data remains confidential, it is impossible to:

- **recuperate data files in ways other than the specific procedure (see Exports p.8)**
- **print or "copy/paste" or "cut/paste" (for use outside of the work environment)**
- **access the Internet from your work environment**

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

Available Software

● Installed software ● Installation on demand ○ Contact us

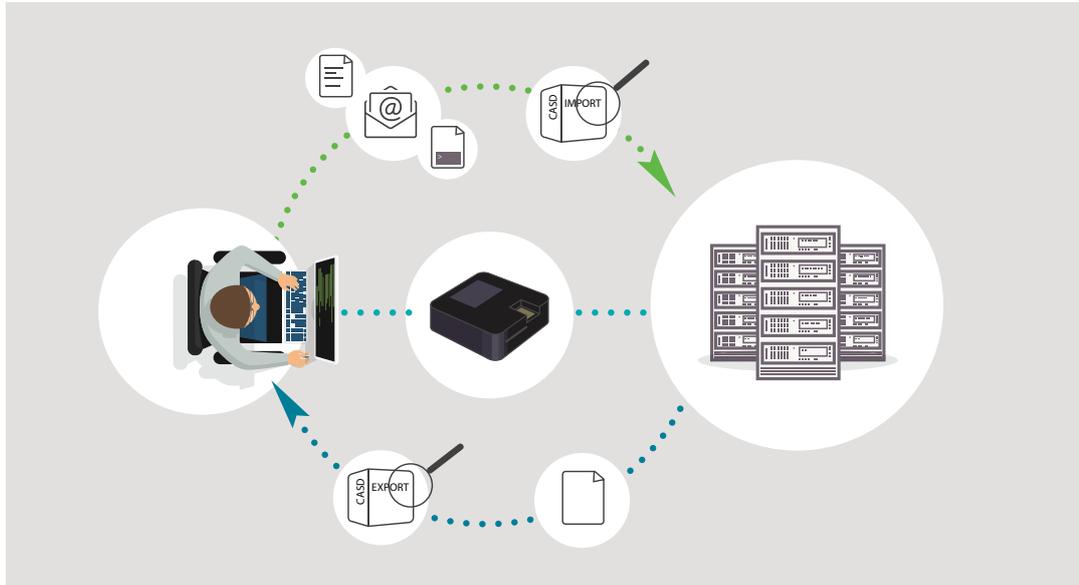
Software	Public research projects	PMSI projects
Adobe Reader	●	●
Anaconda	●	○
GeoDa	●	○
Ghostscript	●	○
GView	●	○
Gvim	●	○
HeidiSQL	●	○
JAGS	●	○
Libre Office	●	●
MariaDB	●	○
Matlab	●	○
Microsoft Office	●	○
MikTeX	●	●
MySQL	●	○
Notepad++	●	●
Philcarto	●	○
Qgis	●	○
R	●	●
Rstudio	●	●
SAS	●	○
Scilab	●	●
SPSS	●	○
Stata	●	●
Tau-Argus	●	○
TeXnicCenter	●	●
Visual Studio Code	●	○
XLStat	●	○
7-zip	●	●

All software is available in the "Shortcuts" folder.

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

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

To add software or request an update, as well as for any modification of the hardware configuration of your work environment (defined during the contract agreement phase), please send your request by email.



Imports

If you wish to work on files that are not currently within CASD (programs, documentation, or any other type of external data), it is necessary to request for it to be imported to your workspace. Only “inactive” files (no executable files allowed) as well as objects which are compatible with the available software in the environment can be imported. **The import of data to be matched with those present in CASD is only possible if this has been explicitly approved in your authorization.** Additional formalities may be required to allow the import of this type of data. Please contact CASD to find out how this is done. It is the responsibility of the data controller to carry out in parallel all applicable GDPR formalities in the context of the planned import.

Importing can only be performed 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 cannot 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 taken place.

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 requirements set out by the data depositor (statistical secrecy, fiscal secrecy, etc.). In general, the data contained in these datasets must not under 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 the CASD website (https://www.casd.eu/wp/wp-content/uploads/casd_user_guide.pdf) or in the “Libre Accès” (Open Access) folder in your work environment.

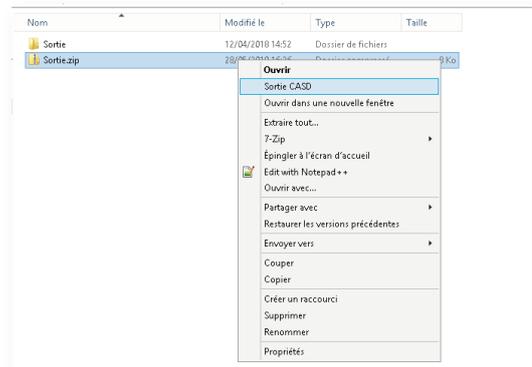
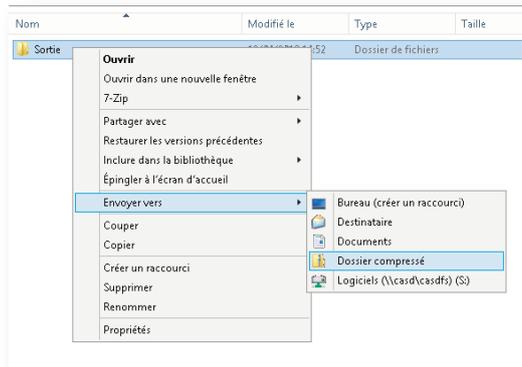
In order to export results, several procedures are possible: manual exports and automatic exports. Please note that not all projects qualify for the automatic export procedure.

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 you wish to export into a folder that you’ve specifically created for this purpose, without forgetting to add the descriptive file specifying the contents of the files you wish to export: tables, programs, dataset descriptions (clear names and meanings of variables)



- Zip the folder (.zip only)
- Right-click on the zipped folder and select "Sortie CASD" (CASD Output)



- Make note of the key that is displayed for reference (32 characters, only numbers and only letters A to F)
- Click on the "Valider" button to validate your export request.

- Finally, send your request by email to the team at CASD. Your message must contain the name of your project and the 32-character key given before validating.

CASD must be able to review the exported content without needing to ask you for more detailed information. CASD reviews the files and ensures that they do not contain any confidential data. Once the data export has been reviewed and is found to comply with confidentiality rules, the CASD team will send it to you by email. If explicitly requested in your output request email, your output can be compressed into a 7-zip file and encrypted with AES-256.

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 perform this export, submit an export request as indicated in the previous paragraph, and specify in your email that you want to transfer the export between two projects, citing the names of the projects. After verification, the export will be directly transferred from one work environment to the other.

Please note that if the exporting project has more than and/or different sources to the recipient project, you will need to provide a detailed description of the files to be transferred so that CASD can verify that they do not contain data to which the receiving project is not entitled.

Export Credit

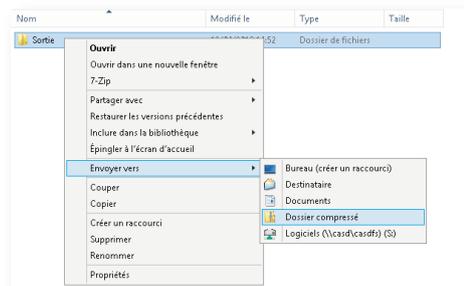
When starting a project, you are given export credit, which is determined when the project is created (by default, 20 exports over the duration of your project, to be used over a maximum of 3 years; please note that it is possible to ask for extra export credit packs). One unit of this export credit corresponds to 30 minutes of CASD processing time. Verification of an export is counted according to the processing time actually used. The breakdown into 30-minute units allows the number of credits available to be monitored as the project progresses.

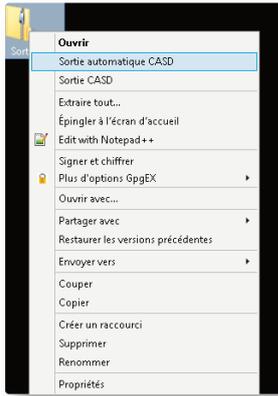
Your request for an export will only be processed if you have enough export credit on the day of your request. If this is not the case, you will need to order an extra credit export pack by contacting CASD by email.

Procedure for Automatic Export

To request an automatic export, please proceed as follows:

- Insert all the elements 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 facilitate a posteriori verification by 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 access it. You will receive this link by email, but the password is only given in your work environment. Make sure you write the password down before closing the window.

Here is an example of the 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 externally using HTTPS. If its size allows, the output is also sent as an email attachment.

To obtain your export, you will receive two emails:

- One containing the download link to your output file.
- A second one with the file attached, where its size allows. The download link will be provided in this one again, as well as the identification information required to access our web server on the Internet:

Login: export

Password: Casd2016

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

6

Closing your Session

Two cases are possible:

- You have finished 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 the session 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, where possible, in order to allow the server to be updated. Additionally, this frees resources on the server.

SECURITY: TERMS & 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 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.

END OF A SUBSCRIPTION OR PROJECT

01

End of a Subscription

At the end of your subscription, CASD will send you a renewal application form containing all the information about your project. If you wish to renew your subscription, you will need to check, complete and update this information so that CASD can send you the corresponding Purchase Order and other relevant documents if necessary (see section “Contract Agreement” above for further details). **Please note that your clearance must cover the period for which you are renewing your subscription.** If not, you will have to apply to the competent accrediting authority for an extension of access to the data. 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.

02

End of a Project

At the end of a project, you must return all of the project SD-Box™ access points along with their power supplies. In accordance with the CASD Terms and Conditions of Use, please remember that you have agreed to destroy your personal smartcard.

CITING DATA AND PUBLICATIONS IN THE CONTEXT OF SCIENTIFIC RESEARCH PURPOSES

01

CASD Citation

If you are eligible for the subsidized rate (see pricelist: <https://www.casd.eu/en/tarifs-2/>), part of this agreement is to mention your 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 of the data used in this work was carried out in secure environments provided by CASD – Centre d'Accès Sécurisé aux Données (Ref. 10.34724/CASD)” (Other publications)

In addition, you can use the Digital Object Identifier (DOI) to cite the specific data used to produce the results presented in your publications. The DOI for each data source is listed on the CASD website on the page describing the source.

02

Information about Publications

When you have published results produced through your work at CASD, we welcome you to let us know via the following online form: <https://www.casd.eu/en/share-a-new-article/>.

Furthermore, CASD contacts all its users for an end-of-the-year registration of their publications using this same form.

CONTACT CASD

Email: service@casd.eu

Health projects email: acces.sante@casd.eu

Projects accessing 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

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.

Authorization: decision made by the competent authority (data owner and/ or archive administrator, 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”, the main mission of which is to organize and implement secure access services to highly-detailed microdata for non-profit research, study, evaluation or innovation purposes. As a second mission, CASD promotes its technology for securing access to private sector 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 authorization and to CASD terms and conditions of use.

Data Depositor: legal entity having entrusted CASD with the Data, to which CASD grants access to the User in accordance with the authorization procedure defined by the data depositor.

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, a 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 the 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) has clearance, and for the term associated with such authorization.

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

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

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

Standard Enrolment Session: training workshop organized by CASD for Users in order to inform them of the legal, IT and security aspects relating to data access. These sessions are held at a CASD-designated location. At the end of the session, the User is given their access smartcard, which is strictly personal. The validity period of a standard enrolment session is four (4) years.

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

