



ENTAKSI SOLUTIONS

SISTEMA DI GESTIONE CERTIFICATO

ISO 9001 | ISO 20000-1 | ISO 22301 | ISO 37001

ISO 27001 | ISO 27017 | ISO 27018 | ISO 27035

SERVIZI FIDUCIARI QUALIFICATI

ETSI 319 401 | ETSI 319 411-1 e 2 | ETSI 319 421 | ETSI 119 511

FIRME E SIGILLI ELETTRONICI - MARCHE TEMPORALI

CONSERVAZIONE A LUNGO TERMINE

User Manual

UM ePLUS en 20230516 User manual

Entaksi Solutions SpA

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31/10/2024	1.5.0	Anna Mazzotta	ICT Team	New features of eSIGN Desktop, external metadata, indexes of Confirmation of Receipt and DIPs digitally signed.	Public

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1. Introduction

This user manual describes the **ePLUS** service which is provided by Entaksi Solutions SpA, hereinafter referred to as "Entaksi".

The service **ePLUS** is used to manage the process of IT documents: document management, workflow, signature, preservation.

eCON Digital Preservation Service is the system on which ePLUS is based. It is provided by Entaksi.

Entaksi is listed among the **Qualified Preservation Service Providers** according to the requirements defined by the National Cybersecurity Agency (ACN).

The Storage System complies with the AgID directives on reliability, security and data protection. It has the following features:

- **Completeness** - presence of any uploaded document.
- **Robustness** - consistency guarantee of the data entered.
- **Scalability** - ability to manage an increasing number of users and documents.
- **Security** - protection from unauthorized access and manipulation of data.
- **Reliability** - independence from hardware failures.
- **Clarity** - easy consultation according to various search criteria.

Digital storage is based on supports with characteristics of high reliability and high permanence of data, and its duration is established in the service contract.

Entaksi is registered, through its branch Entaksi Solutions SpA Irish Branch, as a **Trust Service Provider** by the DCCAE - Department of Communications, Climate Action and Environment, Ireland.

Entaksi is a trust service provider for:

- **Issuing qualified certificates for electronic signatures and seals.**
- **Creating electronic time-stamps.**
- **Long-term preservation of electronic signatures and seals.**

Entaksi issues qualified certificates for the following uses:

- **Qualified certificates for electronic signatures.**
- **Qualified certificates for electronic seals.**
- **Qualified certificates for time-stamping units that issue qualified time-stamps.**

This qualified certificates are also used within the service ePLUS. For a detailed description of all the features of the qualified services offered by Entaksi, you can consult the [page "Documentation" within the corporate website](#).

This manual describes:

- how to access the service and how to use it;
- all the functions provided by the service;
- information security procedures.

This manual represents the main reference for the description and regulation of each aspect of the service, including the management of communication between Entaksi and the Customer.

ePLUS is available in SaaS (Software as a Service) mode, and it can be reached through the web interface hosted on the **Console** provided by the Entaksi. It is therefore not necessary to install any software to use the service, just use a browser compatible with modern standards.

Entaksi reserves the right to make changes and updates to the document necessary for the adaptation of the service to regulatory and organizational changes, reporting the extremes in the initial block "Revisions".

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1.1. ePLUS service features

ePLUS is the Entaksi service that allows you to control all application functions for document management, electronic signature and document preservation in compliance with law.

The service allows you to dematerialise your processes linked to paper documents, operating only digitally with simplicity and security.

The service includes:

- the **complete document management**, with controlled documents sharing through specific workflows;
- definition of **access rights** and document visibility criteria;
- the **organization of contents** through folders that can be clearly viewed in tree diagrams;
- the **automated creation and uploading of the Submission Information Packages** for storage;
- the release of the **Deposit Receipt**, digitally signed;
- the use of all **electronic signature types** (simple, advanced, qualified and seal), with the possibility of affixing multiple and repeated signatures;
- the **preservation process in compliance with law** which provides for the creation of the Archival Information Packages (PDA), the generation of the index according to the SINCRO standard, the affixing of the digital signature and the preservation for a period defined by the contract;
- indexing and **document search**: the possibility to search preserved documents through special selection keys or with "full text" search;
- the **possibility to generate Dissemination Information Packages**, which contain a copy of the preserved documents with the preservation index with signature and time stamp which guarantees authenticity.
- receipt by the system of **parameterizable notifications**.

The digital preservation phase is managed through **eCON** service by Entaksi, which uses technological infrastructures that meet the high reliability requirements required by law (in particular: the OAIS Reference Model ISO 14721, the Information Security Management Standard ISO/IEC 27001, the EU legislation about data protection, Italian laws on digital preservation such as DPCM 3 December 2013 concerning the technical rules on the preservation system).

Through eCON service you can upload digital documents into the preservation system, you can digitally sign them and you can ensure their preservation in compliant with law. Thanks to the service interface, it is possible to know the status of the documents, to access the consultation function, to search for the data of interest and to obtain DIP for the required documents.

Regarding the document access component, the service is integrated by a customized management software **eDOC** based on Alfresco Community Edition.

The **ePLUS Service** is structured as follows:



Figure 1. ePLUS service.

All operational phases of ePLUS service are described in the following chapters.

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2. Roles and responsibilities

In this chapter is defined the designated community of the preservation system, as characterized in the Standard ISO/IEC 14721:2012 OAIS (Open Archival Information System). This standard provides an open information system model for the management and long-term preservation of information content, and it is applicable to any type of archive. The chapter also defines roles and activities for each service manager.

The eCON Digital Preservation Service provided by Entaksi labels the roles defined below, in accordance with the document "List of professional profiles for digital preservation" published by AgID on the basis of Circular no. 65/2014 (G.U.n.89 of 16/04/2014). The role of Preservation Manager is also specified in the D.P.C.M. 3 December 2013, articles 6-7.

The legislation defines "**Producer**" people or client systems who provide the information to be preserved, responsible for creating the Submission Information Package (SIP) and its sending to the preservation system. The Producer receives a confirmation of the SIP reception or an error resulting from the SIP submission.

The legislation defines "**Preservation manager**" as the natural person who defines and implements policies necessary for document storage, and he is responsible for managing documents. The Preservation Manager entrusts Entaksi with the digital preservation service in accordance with IT documents, as well as defined in the contract. In Public Administrations, the role of the Preservation Manager is played by an internal manager or a formally appointed internal official.

As specified by the D.P.C.M 3 December 2013, "The preservation can be entrusted to an external subject, according to the organizational models referred to in art. 5, through a contract or service agreement that provides for the obligation compliance with the preservation manual prepared by its manager."

A "**Consumer**" or "**User**" is defined as people, or client systems, who interact with the Preservation System, within the limits indicated in the General Conditions of the Service and permitted by law, to find preserved information of interest and to access them in detail.

The Entaksi Digital Preservation Service is made up of various "**Managers**", each of whom covers a very specific role in the company and in particular in the service, in order to better guarantee the reliability of the system without overlapping activities and with compartmentalization of roles:

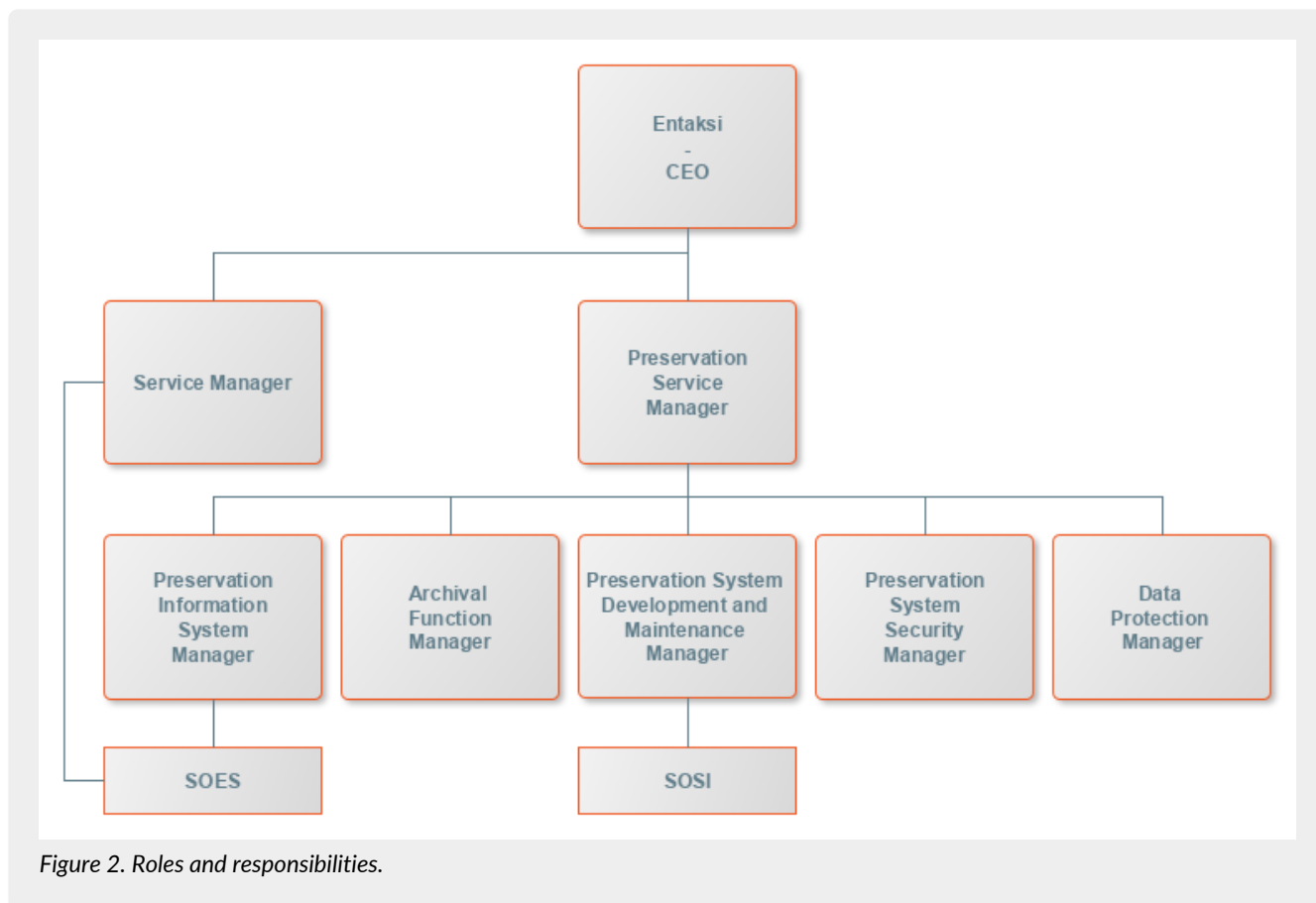
- **Preservation Service Manager.**
- **Archival Function Manager.**
- **Data Protection Manager.**
- **Preservation System Security Manager.**
- **Preservation Information System Manager.**
- **Preservation System Development and Maintenance Manager.**

ePLUS is based on the eCON Storage System, and therefore provides the same roles and responsibilities.

The service is managed by the Preservation Service Manager. His tasks are described in the paragraph [ePLUS Manager tasks](#).

Data relating to the identifiers and specific roles covered by the various managers of the Preservation Service eCON are available in the eCON preservation manual, published both on the [Agenzia per l'Italia Digitale website](#) and on the [Entaksi Website](#).

The roles are represented in the following diagram.



Entaksi Solution SpA is responsible for the provision of the service, and the Preservation Service Manager is the role appointed for the service delivery tasks. Preservation Service Manager can rely on the structures described in the following paragraphs to carry out his duties.

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2.1. Service Delivery Operational Support (SDOS)

Service Delivery Operational Support (SDOS), **Service Delivery Operational Support**, is a Entaksi's department with the aim of **collecting information and problem reports from customers** (Producer and Users) and from the internal structures involved in the provision of the ePLUS Service.

The SOES is managed by the Preservation Service Manager and the Preservation Information System Manager, and it is responsible for the collection and handling of reports coming from users of the service. Reports are entered in Entaksi's ticketing system, and are categorized by type into one of the following classes:

- incident;
- service request.



Customers can send reports and requests to the eCON Service by e-mail at assistenza@entaksi.eu.
SDOS is active from Monday to Friday from 09:00 to 18:00.

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2.2. Information System Operational Support (ISOS)

Information System Operational Support (ISOS), **IT Development Operational Support** is managed by the Entaksi ICT Manager (also Preservation Information System Manager), and it aims to **ensure the correct functioning of Entaksi's technological and software infrastructure** and the preservation system supported by it.

Upon indication of the ePLUS Manager, SOSI keeps the IT infrastructure and application up to date according to Entaksi's preservation policies and customers needs, in compliance with current legislation and international standards.

It works closely with SDOS to manage any malfunction report.

SOSI is active from Monday to Friday from 09:00 to 18:00.

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2.3. ePLUS Manager tasks

The following table shows the Preservation Service Manager's tasks and how these tasks are performed:

Table 1. Tasks.

Preservation Service Manager	How is performed
Management tasks: defines the requirements for the provision of the Service, organizes the content of the storage media and manages the security and traceability procedures that guarantee the correct delivery of the Service.	These tasks are performed by Entaksi's ICT staff, through the functions made available by the system software.
Activities monitoring task: archives and keeps available the access using system processing procedures and processing logs.	These tasks are performed by Entaksi's ICT staff, through the functions made available by the system software.
Maintenance and control tasks: checks the correct execution of the application software procedures and updates the service after the bug fixing or the change request.	These tasks are performed by Entaksi's ICT staff, through the use of a software management system with which maintain the software versioning.
System check tasks: verifies the correct functionality of the system and the software managed.	These tasks are carried out by Entaksi's ICT staff, who periodically check system's functionalities.
System safety tasks: guarantees the mandatory measures for the physical and logical security of the Service and for the creation of security copies.	Physical and logical security refers to the Entaksi systems and networks security. It is in compliance with the Entaksi Security Plan policies. Safety copy creation activities are carried out by Entaksi's ICT staff.
Periodic check of system accessibility: periodically verifies the accessibility of the Service, and guarantees assistance to users and staff.	These tasks are performed by Entaksi's ICT staff, through the functions made available by the system software.
SLA compliance check: periodically checks the compliance with the SLA guaranteed to the Customer.	These tasks are performed by Entaksi's ICT staff, through the functions made available by the system software.



NOTE: The Service Manager is not responsible for the content of the individual documents, which are inserted and managed directly by customers.

2.4. Service management responsibilities

Table 2. Responsibilities

Service Manager	Customer	ePLUS Manager
Generation of data necessary for the Service provision	R	
Data and documents entry	R	
System's availability to receipt and process the data sent		R
Data consistency check	R	

Service Manager	Customer	ePLUS Manager
Management and periodic update of system software and DB		R
Execution of application management activities	R	
Check of elaborated data	R	
Search and browse of documents managed via web interface	R	
Use of elaborated data	R	
Errors or malfunctions reporting	R	
Backup generation and safe storage		R
Periodic check of system accessibility		R
SLA compliance check	C	R

R indicates the manager responsible, C who collaborates in carrying out the activity.

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3. Entaksi Console registration procedure

ePLUS service can be accessed after a **user registration to the Entaksi system Console**, which is reachable at the address <https://entaksi.eu/console>

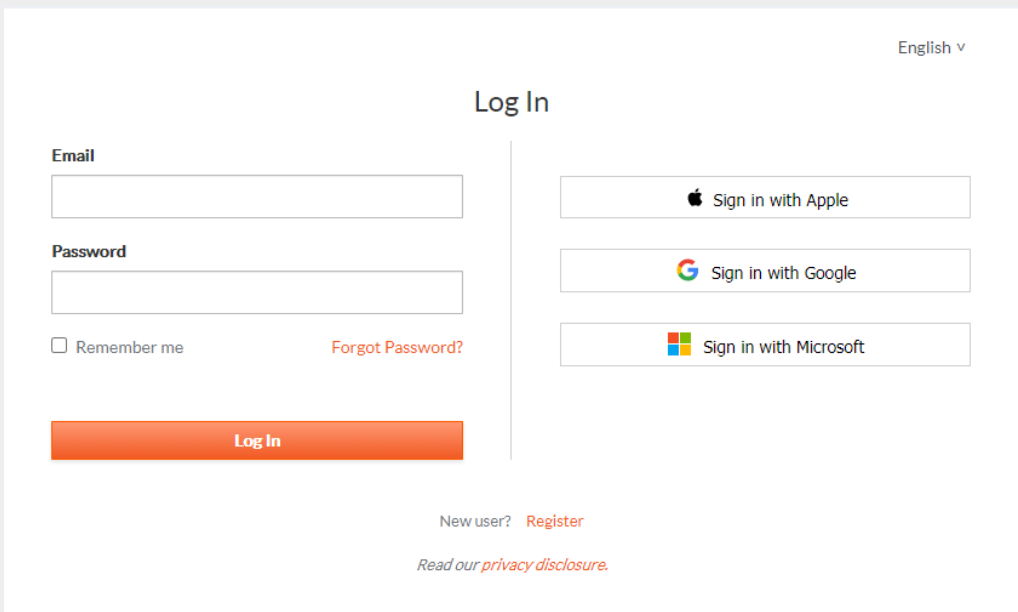
The web interface allows you to access all Entaksi's services. All the different services can be used combined or individually from this interface. Entaksi's services are described on [our site](#).

In order to access to the chosen service, each user must be **registered on the Entaksi Console platform**. He can log into the desired service using his registered credentials (username and password). Credentials are unique for every service provided by Entaksi.

The registration platform complies with the OAuth2 standard which guarantees high levels of access and credential protection.

The access to services' functionalities is subject to the completion of the contract.

In order to register himself, the user must therefore access the Entaksi Console and click on the link "**Register**" placed next to the question "New User?".



English ▾

Log In

Email

Password

☐ Remember me [Forgot Password?](#)

[Sign in with Apple](#)

[Sign in with Google](#)

[Sign in with Microsoft](#)

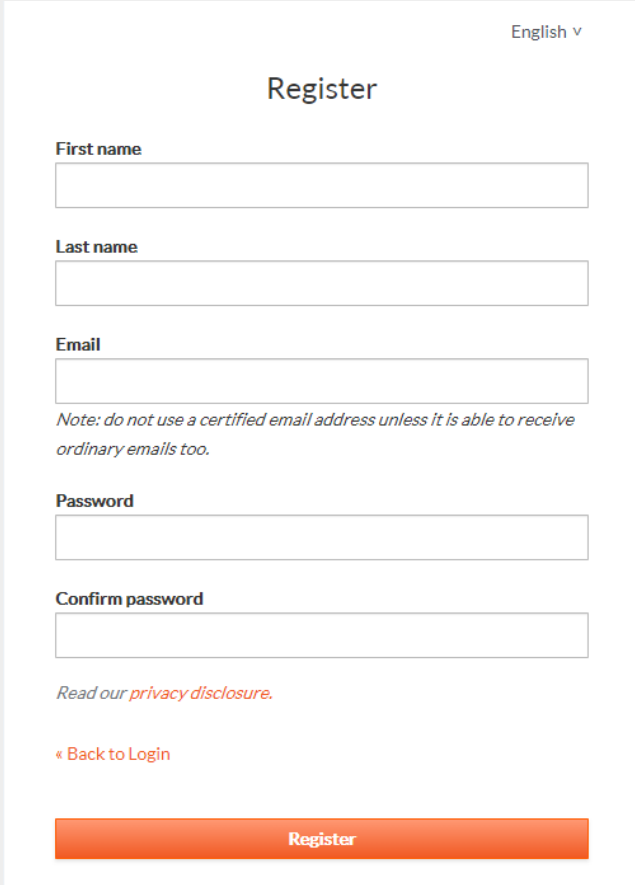
[Log In](#)

New user? [Register](#)

[Read our privacy disclosure.](#)

Figure 3. Sign in.

Into the following form the user must enter his personal data: name, surname, **NOT PEC email if not enabled to receive non-certified email**, username and password.



English v

Register

First name

Last name

Email

Note: do not use a certified email address unless it is able to receive ordinary emails too.

Password

Confirm password

[Read our *privacy disclosure*.](#)

[« Back to Login](#)

[Register](#)

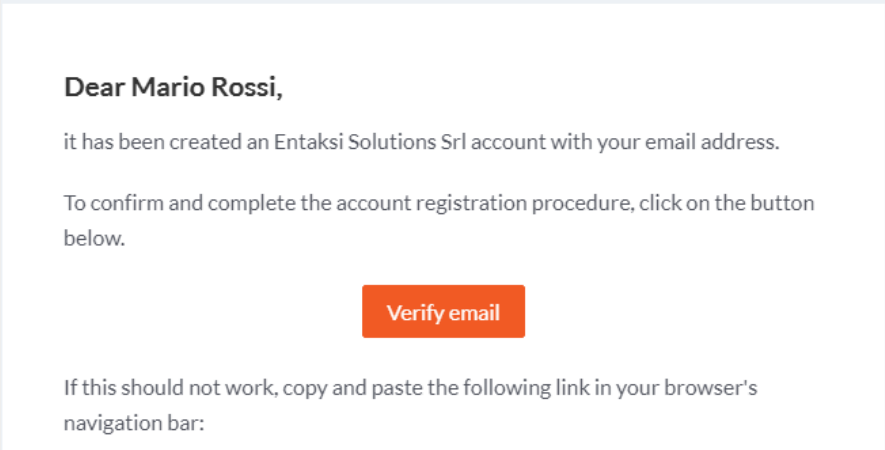
Figure 4. Inserimento dati.



ATTENTION: in order to be able to send the verification email it is required that **the email address indicated in the registration form is NOT a PEC address** as not all PEC mailboxes are enabled to receive non-certified email, and so the verification message should not reach its destination.

Once the information has been entered and the "Register" button is clicked, the data is stored but **the user is not yet active as the verification of the entered email address has yet to be performed.**

The system automatically sends an **email to the address indicated during registration, containing a link that the user must click to complete the registration procedure.**



Dear Mario Rossi,

it has been created an Entaksi Solutions Srl account with your email address.

To confirm and complete the account registration procedure, click on the button below.

[Verify email](#)

If this should not work, copy and paste the following link in your browser's navigation bar:

Figure 5. Email confirmation.

For security reasons, this link is valid and active for 360 minutes (6 hours) from the sending. After this time it will no longer be usable. If necessary, see the paragraph [Resend registration link and password recovery](#). If the registration is not completed, the data will be deleted from the systems within 7 days.

Once confirmed by clicking on the email link, the user is directly redirected to the activated service. From this moment it is possible to access the service entering the name and password previously chosen.

3.1. Single Sign-on access

Single Sign-on access is also available by **Google**, **Apple** or **Microsoft** account.

In this case, the user has to click on the appropriate button of the desired service on the right part of the screen to log in.

Once the account has been selected and logged in, the system acquires the user data directly from the external service, proposing the email verification message again and sending the email to the selected address.

The email confirmation procedure is the same as for standard registration.

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3.2. Resend registration link and password recovery

In the event that the verification email has not arrived or more than 360 minutes have elapsed since receipt, the user can **get a new message containing the confirmation link** by logging back to the page of the service and entering username and password chosen during registration.

The system will not allow access yet, but will send a new confirmation email.

In case of **loss of the password** the recovery is possible by accessing the login page and clicking on "**Forgot Password?**".

On the proposed form the user must indicate username or registration email, and the system will send a message to the registered email address containing a link to start the password recovery procedure.

3.3. How to access the Service

The Service is available using the following browsers:

- Google Chrome
- Mozilla Firefox
- Safari
- Internet Explorer
- Microsoft Edge

To ensure security during the transfer of information, the connection involves the use of TSL protocols.

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3.4. User settings management

From the ePLUS service access link:

- <https://entaksi.eu/console>

it is possible to view the user profile settings by clicking on the user name at the top right.

By clicking on **User settings** in the menu, it is possible to view the user data and make changes related to:

- **Account:** it is possible to change the name and the surname of the user displayed and the login email (it will require a new confirmation via email).
- **Password:** the user can enter a new password.
- **Authenticator:** a QR code is available for mobile applications such as FreeOTP and Google Authenticator in order to activate two-factor verification. This will add an additional security code generated by these applications after each access. On first use, the user has to scan the QR with the smartphone and to enter the verification code.
- **Related accounts:** here it is possible to connect a Google, Apple or Microsoft account.
- **Sessions:** from this tab it is possible to check the sessions currently active for the user, with the referred IP address, starting time, last access and type of open application. If unauthorized sessions are detected, it is possible to interrupt

them by clicking on "Log out all sessions", log back in, and set a new password.

- **Log:** the list of all the sessions opened by the user in the last two months is available here.

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4. ePLUS Console

ePLUS service is available on **Entaksi Console**, the web application that allows you to **upload documents to preserve them**. You can upload your documents and the Submission Information Packages (SIP) will be automatically created and sent on the eCON service.

Consequently, these documents will be visible in the eDOC document service, based on Alfresco Community, where you can both view the documents and download them.

In conclusion, we can safely say that **the ePLUS service was born as a union of the eDOC and eCON Entaksi services**.

The ePLUS service is accessible from **Entaksi Console**, a SaaS platform provided by Entaksi for the management of its services based on the **eCON digital preservation system**.

The Entaksi Console is a flexible application that can be adapted to your needs. In fact, thanks to the configuration tools, users can be different roles and different levels of data visibility.

The interface has a top menu from which you can access your reference company and a menu for the other features.

On the Entaksi eDOC document service, the definition of "**Library**" is fundamental.

A "Library" identifies a **separate area in which the documents are saved and stored**, organized in special folders, created automatically by the ePLUS service using the metadata in the uploaded SIP.

In order to be able to view the documents on the eDOC Library, the user must necessarily be enabled. If there are multiple Libraries (or multiple document folders) an user can be enabled for all or a part of them. In the eDOC home page the user will only see the Libraries for which he is enabled.

The administrator can also configure users' additional visibility restrictions on each document in the Library (as described in the paragraph [eDOC service access management](#)).

In ePLUS the service, you can do the previous configurations by yourself: the creation of the eDOC Site, the users enabled on it, and users' visibility restrictions on documents (as described in the paragraphs [Personal data subject](#)).

4.1. Dashboard

The page is divided into "**My services**" and "**Preservation system**".

All contracted services are displayed in "**My services**" section.

By clicking on each service button, the main page opens.

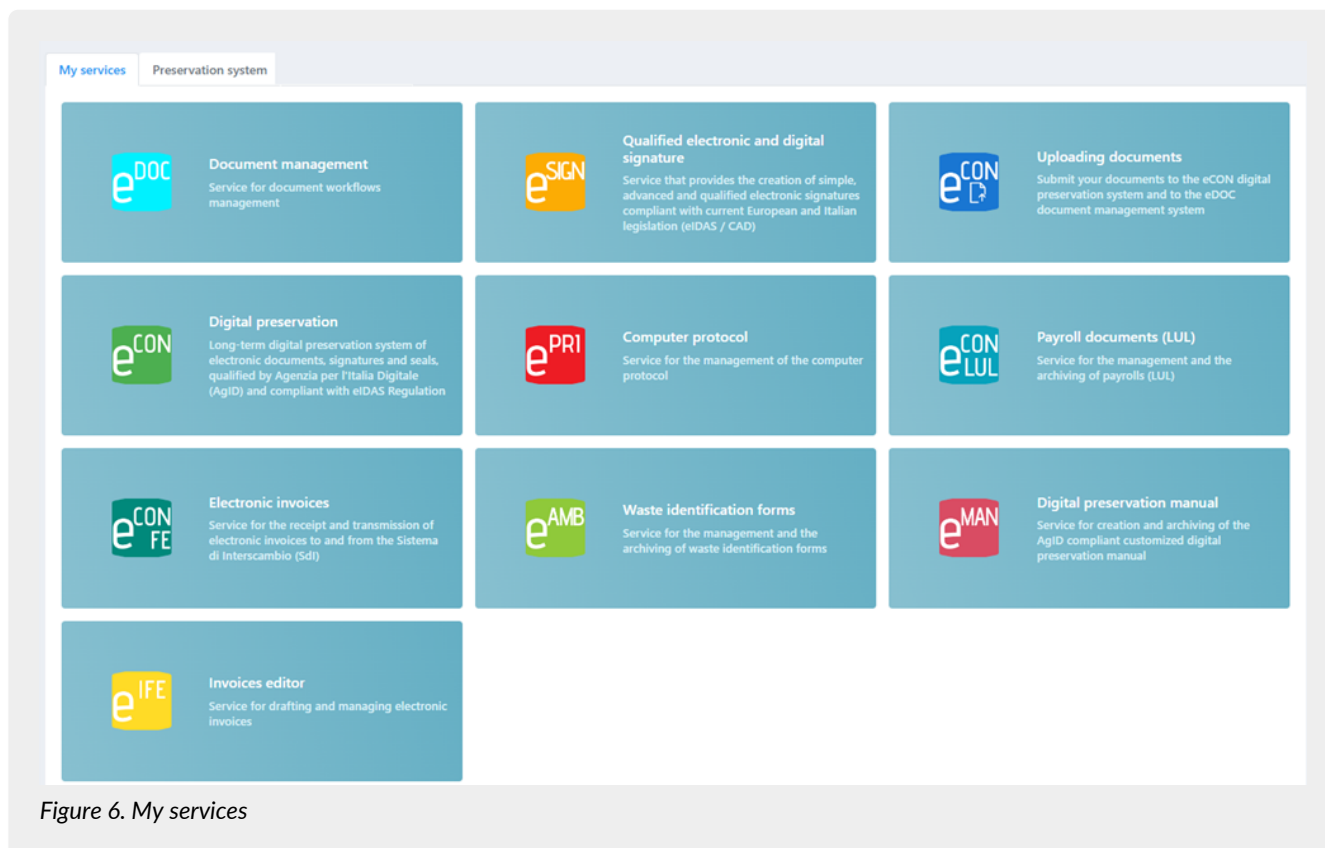


Figure 6. My services

The "**Preservation system**" section presents a summary of the archive status, with the quantity of space disk occupied, number of documents and files uploaded.

Below there is a summary of the latest uploaded documents divided into three sections Submission Information Packages, Archival Information Packages and Dissemination Information Packages.

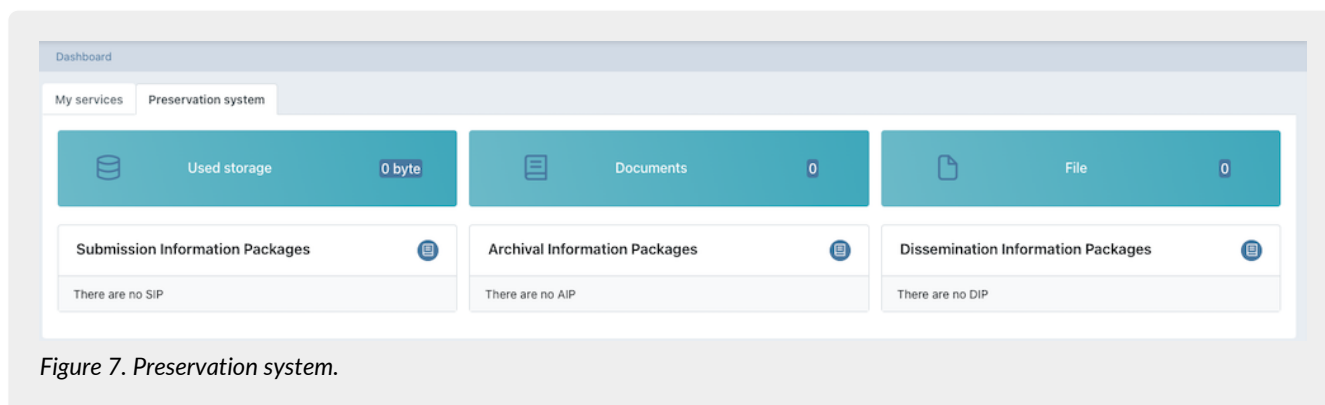



Figure 7. Preservation system.

By clicking on the  button the ePLUS service page opens where all the packages in the system are listed, not just the last ones.

By clicking on the single package, its detail page opens.

4.2. Console tables

Entaksi Console contains several tables that **allow you to navigate and to search data quickly**.

By clicking once the row, it is highlighted, and **it is possible to scroll the list with the keyboard directional arrows**, both on rows and columns. The selected row can be opened by pressing the enter key or by clicking on it.

Thanks to the breadcrumb on the top left of the page, you can go back to the previous table and the selection stays kept. In case the table has many rows, this function is particularly useful and it allows you to **navigate the contents** without losing the sign on the list.

For all system tables, two functions are particularly useful to have an immediate search within the list: the **Filters** and the **Sorts**.

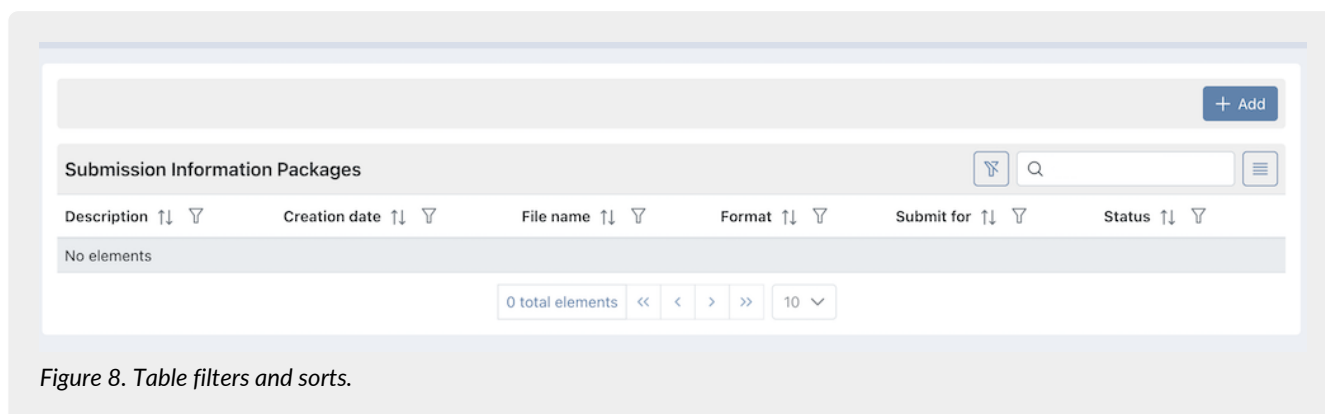






Figure 8. Table filters and sorts.

By clicking on the column header on the  icon you can sort the list in ascending order (and in this case the icon becomes ) or in descending order (and in this case the icon becomes .

There are several types of available sorting:

- **By date:** data will sort with respect to the date.
- **By number:** data will sort with respect to the numerical value.
- **By text:** data will sort alphabetically.
- **By list:** data will sort with respect to the order of the list elements.

In order to filter data, you have to click on the icon  on the desired column.

A form opens and you can enter the desired filter.

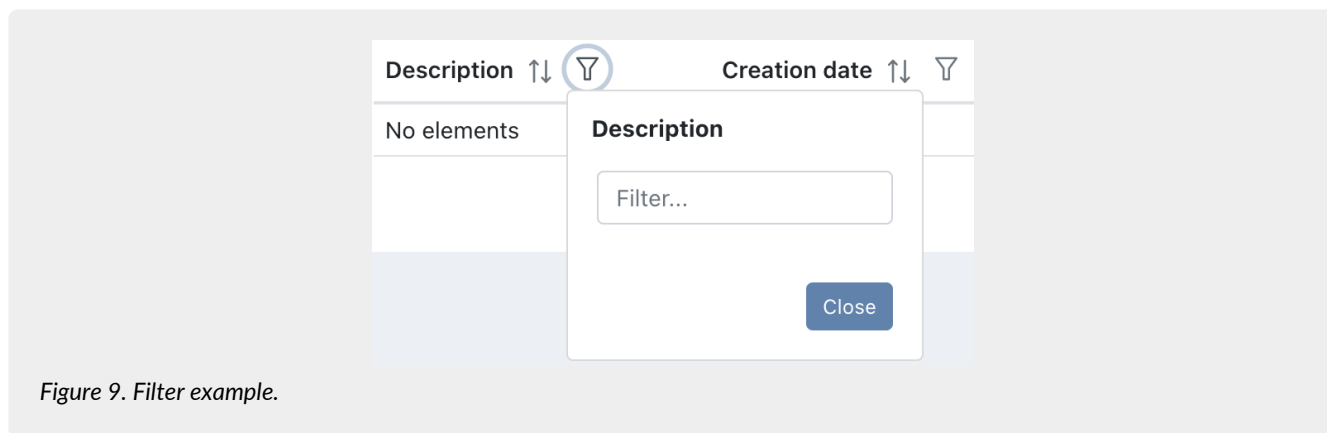




Figure 9. Filter example.

By entering the criterion and clicking the **"Close"** button, the list filters and the icon turns colored (). It indicates the presence of a criterion.

Hovering with the mouse over the icon a tooltip displays the criterion without entering in the form again.

By clicking on the delete filter button () placed at the top right next to the box search, you can massively eliminate all the filters and orders of the list.

On the other hand, if you have several filters set but you need to delete a single one, you have just to click on the "filter" icon again, enter the form, delete the criterion and click the "Close" button.

Various filter types are available:


- **By date:** you have to enter a valid date or choose it directly from the calendar by clicking on the right icon.
- **By text:** you have to enter the text inside the box.
- **By list:** they are filters that are applied by choosing an option from those in the list.

At the top right, there is an additional filter **"Search"** box which allows you to perform a selection with respect to the entered value not on a specific column, but on all columns in the table.

This function is available only for text and number data, it is **not** available for date and list data.


The search keys also **filter the counts of the buttons on the bottom of the page** (eg: if the company has a total of 100 SIPs and the you search in the "Status" item only those rejected, finding 2, also the count at the bottom of the page will show only the total number of rejected SIP, namely 2).

The **made searches** are recorded in the browser cache: so, the search key will preserve.

In order to have all the available data, it is necessary to clean all the search keys by clicking on the delete filter button () or by cleaning each search key.



WARNING: this useful feature of preserving search keys during site navigation by saving them in the browser cache implies that, in case of service updates, saved information may not be consistent with the new version of the console.
We therefore recommend **to clear your browser's cache with each update**, in order to avoid any malfunctions.

With  button it is possible to include or to omit the displayed columns in the list. In fact, by clicking on it, the list of available columns is displayed. By clicking on the column of interest, if it is displayed, it will hide. Otherwise, if it is hidden, it will display.

Any column view changes are logged in the browser's cache, therefore they are preserved.

4.3. Console Menu

The Entaksi Console Menu is located on the left side of the page.


The menu is dynamic: **exclusively** the items relating to the contracted services and functions appear.

The side menu display is minimized by default: only the icons identifying the service and features are visible.

To view the fully open menu with the description of the main items, it is necessary move to the sidebar with the mouse.

If you wish to block the side menu in full view, click on  icon.

To view the sub-items of each menu, click on the scroll arrow  : a drop-down menu opens and by clicking on each item the respective page is displayed.

To unlock the menu and close it laterally, click on .

By clicking on each single menu item, the page is displayed on the right side.



WARNING: For quick access to Entaksi services, it is recommended to bookmark the main page link <https://entaksi.eu/console> rather than links to other pages of the service. This is because if internal links are reorganized for technical reasons, a "404 page Not Found" would be returned, and in such cases, you will need to start from the main link.

5. Configuration

The configuration section of the ePLUS service displays company master data and allows you to configure the general properties of the preservation service such as user's roles or notifications.

The menu contains:

- **Company master data:** section where it is possible to view the company master data entered in the service contract ([Company master data](#))
- **Access management:** section where it is possible to view the list of users connected to the selected company ([Access management](#)).
- **Notification:** section where it is possible to configure the email notifications sent from the system ([Notification](#)).
- **Classification scheme:** section where it is possible to configure and manage the classification scheme of the company ([Classification scheme](#)).
- **Organizational areas:** section where it is possible to configure and manage the company organizational areas ([Organizational areas](#)).

5.1. Company master data

In the **Company master data** section it is possible to view the data submitted by the company during the service registration.

The data cannot be changed directly, because it refers to the service contract. For any changes it is necessary to contact assistenza@entaksi.eu.

5.2. Access management

In the **Access Management** section, the list of users related to the company and to the contracted services is shown. The association with the company and the service allows users to access all the various functions.

The page contains several sections dedicated to a specific service.



The display of these sections is dynamic: only the sections of the contracted services are shown.

In each section, users are listed and their role is shown.

Below there is a brief description of the items and filters in the list.

- **Name:** it is the user's name.
- **Surname:** it is the user's surname.
- **Username:** it is the user's username.
- **Email:** it is the user's email.
- **Role:** it is the user's role in the service.
- **Date of acceptance:** it is the date the user was entered.
- **Data of revocation:** it is the revocation date, when the user is revoked.
- **Additional data groups:** it shows the visibility of additional data management.
- **Status:** user's role status.

From this section it is possible:

- to sort the columns and filter the elements in the table as described in [Console tables](#);
- to modify the user by clicking on , only if the status of the role is "Activated";
- to delete the user by clicking on , only if the status of the role is "Activated".

The table below lists the possible values for the "Status" of the user role:

Value	Description
TO ACTIVATE	The user is inserted, but the role is not yet active: the user can't access to the ePLUS service.
ACTIVATED	The user is inserted and the role is active: the user can access to the ePLUS service.
TO REVOKE	A role revocation is requested for the user.
REVOKED	The revocation requested for the user is definitive (also confirmed by the value of the revocation date): the user can't longer access to the ePLUS service.

To insert a new user, click on the "Add" button. A new form opens where you have to enter the user's name, surname and email. You have also to select a profile among those available.

Each service has roles and dedicated configuration possibilities.

Mandatory fields are shown in red and you'll save only if they are correctly filled in.

5.2.1. eCON service access management

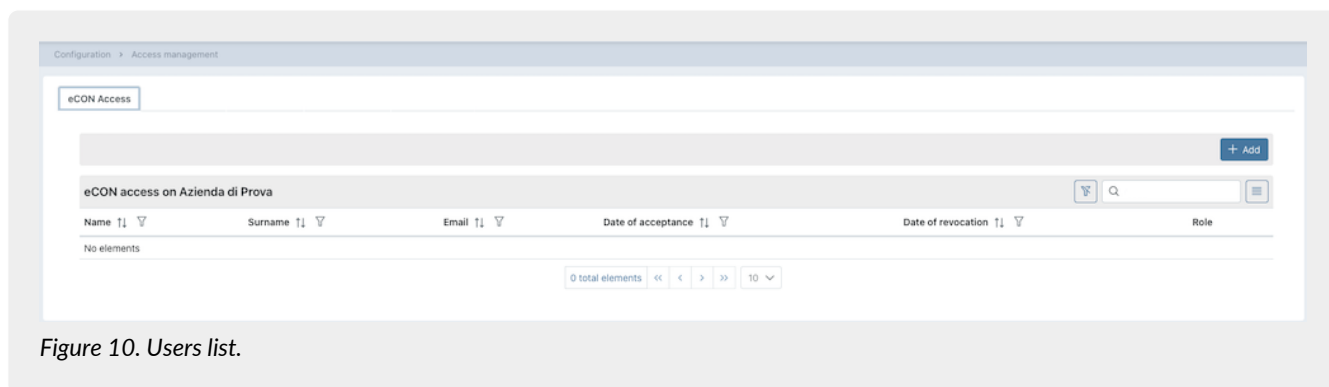


Figure 10. Users list.

The table below shows the available roles for the ePLUS service:

Description	Enabling
Amministratore del servizio (service manager).	The user with this profile can access all the features of the service, including enabling new users.
Utente del servizio (service user).	The user with this profile can access all the features of the service, excluding enabling new users.

If the enabling of document visibility segregation on eCON has been requested, it can be entered when entering the user. In fact, when you are entering the user, you can choose one of the listed segregation possibilities. So, the user can manage **only** the eCON documents for which he has been enabled.

In case an user must have no restrictions (he can manage all documents), just do not select any item.

The system assumes the email from the service contract as service manager, which has privileges over all functions of the service.

When the email address registers and connects to the Console, the personal data will be automatically enhanced with those entered during registration.

In case of digitization of analog documents by affixing digital signature by themselves ([Digital copies of physical documents](#)), signatory users authorization must be requested in order to use the **eSIGN Desktop**, the Entaksi application to sign documents ([Digital copies of physical documents](#) and [eSIGN Desktop](#)).

5.2.2. ePLUS service access management

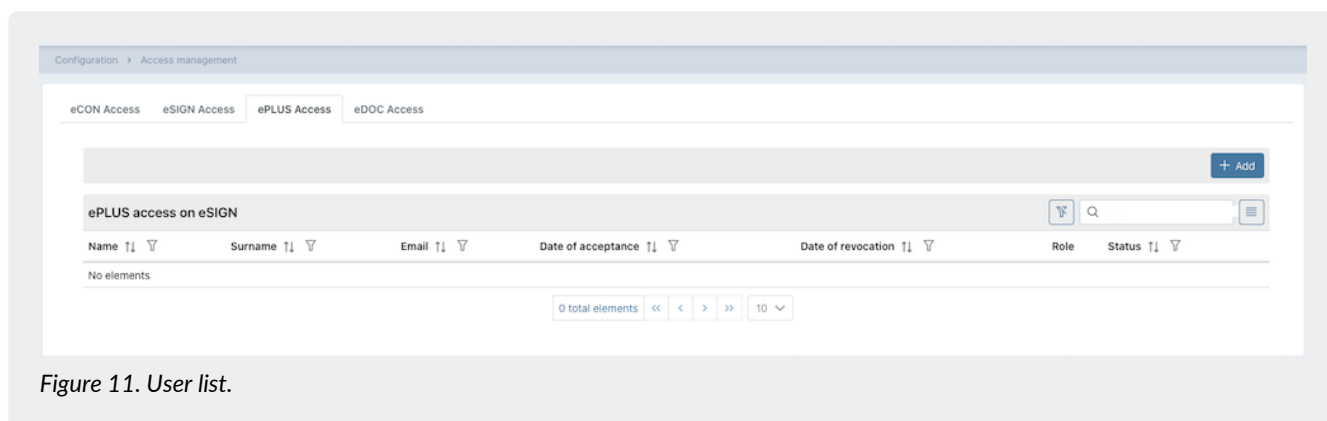


Figure 11. User list.

The table below shows the available roles for the ePLUS service:

Description	Enabling
Amministratore del servizio (service manager).	The user with this profile can access all the features of the service, including enabling new users.
Utente del servizio (service user).	The user with this profile can access all the features of the service, excluding enabling new users.

5.2.3. eDOC service access management

In the "eDOC Access" section, you can enter and / or modify user's roles of the eDOC service, the document management service based on the Alfresco Community.

If there are several Libraries on the eDOC, you can associate a user on all or only on a part.

Furthermore, within each library, for each enabled user, you can configure visibility restrictions of the published documents. The criterion for viewing a user's documents on eDOC is therefore based exclusively on restrictions currently active.

The page contains the list displayed in a grid of all users enabled on an eDOC library.

To select a single library, click on the list at the top left: all the management of the underlying roles is referred to the selected library.

If there is only one library, no choice is allowed: the list of roles refers to the only library on eDOC.

In the event that no Library is yet present on the eDOC, the insertion of the relative roles is not allowed.

The user list also shows the information relating to the restriction of visibility if managed.

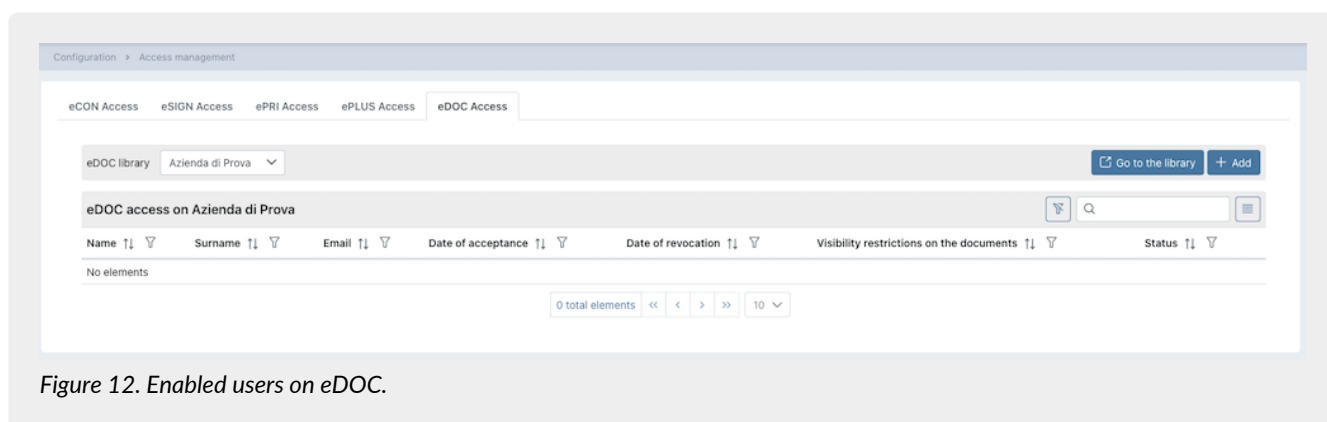


Figure 12. Enabled users on eDOC.

If you want to save a user without visibility restrictions, just select no options in the "Visibility restrictions on the document" list

To associate several restrictions to an user, you have to enter him several times with the different restrictions.

5.3. Notification

Entaksi Console provides a tool to configure email notifications automatically sent by the system after some functions. You can configure your notification settings on the company to which you are associated through the "Notification" link in the "Configuration" menu. If multiple companies are present, you can set different configurations for each one.

At first all the notifications are disabled: you can activate them by selecting the desired sending from the corresponding dropdown for each company.

Notifications can be set to "Do not send" or "Always send", and at the conclusion SIP validation process also "Only in case of error".

5.4. Classification scheme

The classification scheme is a tool to divide documents into sectors and categories, schematizing their competences and functions in a logical way.

In this section, present **only** on some modules and visible **exclusively** for users authorized to manage, it is possible to view all the Classification scheme present in the system, to insert a new ones and to modify those not yet active.

In this page, all the classification schemes entered in the system are listed.

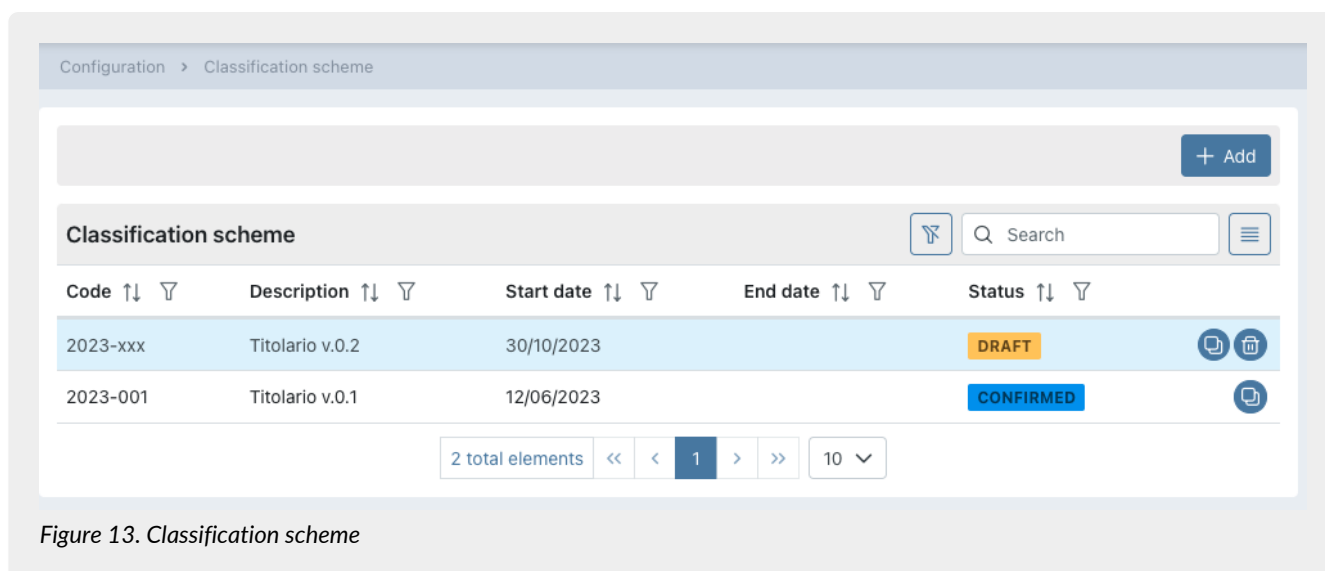


Figure 13. Classification scheme



Below is a brief description of fields preset in the grid.

- **Code:** code automatically assigned by the system in order to uniquely identify the classification scheme;
- **Description:** description entered when saving the classification scheme;
- **Start date:** effective date of the classification scheme;
- **End date:** end date of classification scheme. If empty, the classification scheme is active;
- **Status:** status of the classification scheme.

The table below lists the possible values for the "Status" of the classification scheme:

Value	Description
DRAFT	The classification scheme entered is in Draft. You can modify and / or delete it. This scheme cannot be used for document classification as it is not active.
CONFIRMED	The classification scheme is in confirmed status. You can use it for the classification of documents up to its end date.

From this section it is possible:

- to sort the columns and filter the elements in the table as described in [Console tables](#);
- to delete the classification scheme by clicking on  only if its status is "Draft";
- to duplicate the classification scheme by clicking on . A new classification scheme will be created with the same tree and same header data except the code which will be aaaa-xxx (see [Entering a classification scheme](#)) and the start date which will be equal to the day after the duplication date;
- to enter in the classification scheme detail page by clicking on the row. If it is in "Draft" status, you can modify it. If it is in "Confirmed" status, you can put it back in draft status only if its start date is after the current one. In any other case, you can only see its structure or apply it only on eDOC, only on eCON or both on eDOC and eCON (see [Entering a classification scheme](#)) by clicking the "Apply" button at the top right;
- to add a new classification scheme by clicking on "Add".

Even if there are more classification schemes (confirmed or not), **only one can be active**. It is the one in confirmed status with an absent (not entered) end date or with an end date greater than the current one.

5.4.1. Entering a classification scheme

By clicking on the "Add" button, a new page opens where you can insert a new classification scheme or modify an existing one.

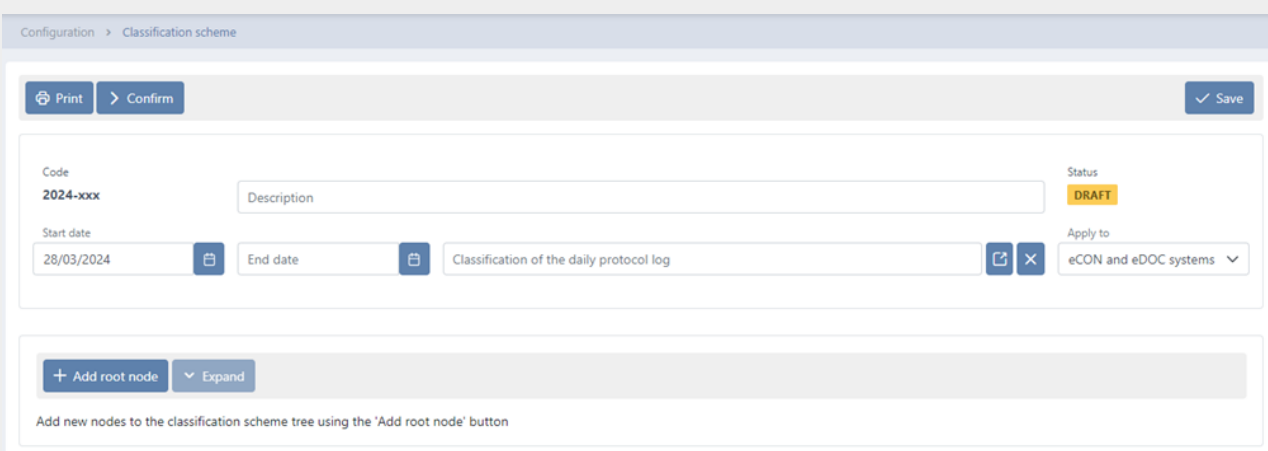


Figure 14. Entering a classification scheme.

During the creation phase, the service assigns an identification code to the classification scheme.

This code will be composed as follows: yyyy-xxx where yyyy indicates the creation year and xxx the unique progressive creation number.

The creation year is assigned immediately, therefore it will be visible even if the title is in draft status.

The unique progressive creation number, on the other hand, it will be assigned only in the confirmation phase of the classification scheme.

In order to insert and to uniquely identify a classification scheme, you have to enter the description and a start date (the date from which the classification is valid).

It should be noted that the start date must **not** overlap with any start date of classifications previously entered in the system.

The service proposes the day following the date of creation as the default start date in order to prevent any error.

The expiry date may also not be entered: the system will automatically enter this date upon confirmation of a new classification by reporting in this field the day before its start date.

To enter the classification of the daily protocol log you have to enter the classification tree first, and then to select a node among those in the list.

The selected classification will be automatically reported in the generation of daily protocol logs until the Classification scheme is valid.

This field is mandatory to confirm the classification scheme.

It will also be necessary to specify the scope of the Classification scheme by choosing one of the options in the list:

- only on the eDOC document service: the application of the Classification scheme **exclusively** concerns the display of documents on the document service, the display of the archival register remains unchanged.

- only on the eCON preservation service: the archival register is automatically configured in accordance with the Classification scheme **exclusively** for documents preservation: the display on the eDOC service remains unchanged.
- both on the eDOC document service and on the eCON preservation system: the archival register of documents is automatically configured according to the structure of the applied Classification scheme: documents are preserved in eCON and displayed on eDOC in accordance with the Classification scheme structure.

To change the classification of the daily protocol log is possible only in the draft status.

To cancel a previously entered value, click on .

To save the entered data, but not confirm classification, click on the **"Save"** button placed at the top right.

In addition to the description and the validity dates, it is necessary to define a document organization scheme of the company. The service prevents you from confirming a classification without a saved scheme.

This classification scheme has a tree structure.

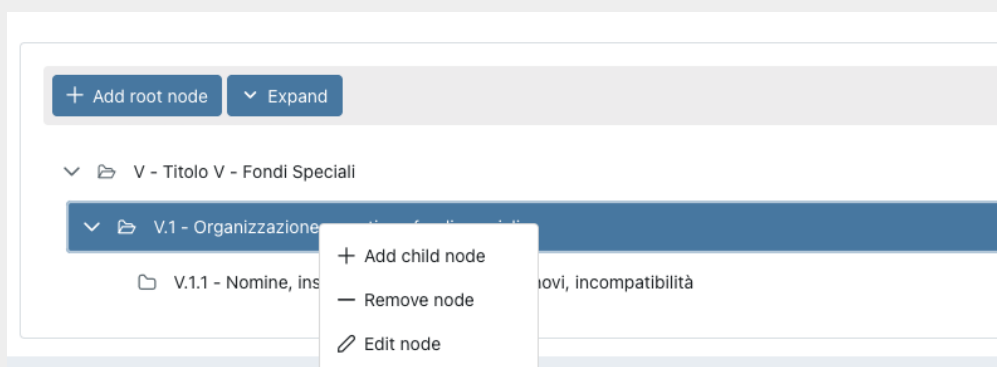


Figure 15. Example of classification scheme structure

To insert the top-level parent node (the "root" node), click on the **"Add root node"** button.

To insert / edit / remove a "child" node, click with the right button of the mouse on the "parent" node: a menu drop-down appears with the three options.

To delete a node, select the **"Remove node"** option. In addition to the selected node, all child elements will be removed.

To edit a node, in the code, description or retention rule, select the **"Edit node"** option, make the desired changes and click on the **"Save"** button.

To insert a node click on the **"Add node"** option: a form will be displayed.

Figure 16. Entering a node.

To complete the entry, it is necessary to enter the code and description of the node, any additional notes, define a conservation rule, choosing an element from those proposed in the list or inherit the rule of the "parent" node by ticking the relevant item, and click the **"Save"** button.

You can choose to inherit the retention rule from the parent node only for child nodes. On the root nodes, this option is not visible.

If you insert nodes without specifying any conservation rule, an alert icon is displayed next to the node in order to help you to quickly identify the node with this missing data.

All actions on the node are automatically saved: it isn't necessary clicking the top right global save key.

By clicking on "**Expand**", all nodes of the tree will expand showing the whole structure of the tree.

By clicking on "**Collapse**", all nodes of the tree will compress showing only the "root" nodes.

By clicking on the "**Print**" button, it is possible to print the classification scheme with its retention period.

By clicking on the "**Confirm**" button, the classification passes from the "Draft" status to the "Confirmed" one and, the system automatically sets the end date of the current classification equal to the day prior to the start date of the newly confirmed classification.

In the event that the classification is not active yet, you can make further changes by returning the status to draft click on the "**Modify**" button.

In case of confirmed classification, it is possible to apply its structure both on eDOC service and eCON service by clicking on the "Apply" button on the top right of the page.

5.5. Organizational areas

As defined in Article 50 TUDA, within the context of its legal system, each administration identifies the offices to be considered to coordinate document management in large homogeneous organizational areas, ensuring uniform classification and archiving criteria, as well as internal communication between the same areas.

This section is present only on some services and it is visible only to authorized users. In this section, the homogeneous organizational areas are listed.

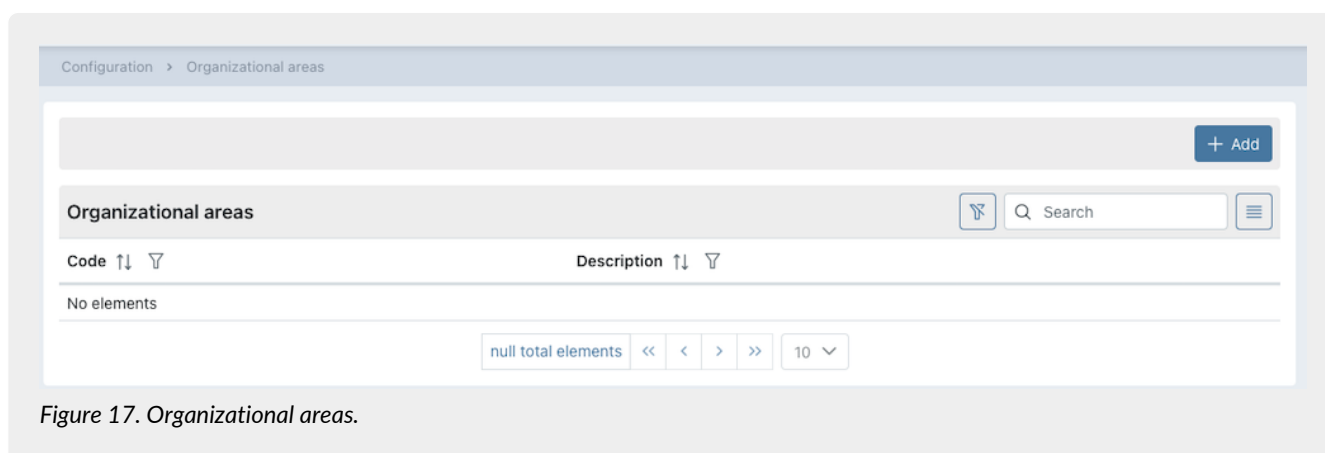


Figure 17. Organizational areas.

- **Code:** it is the code of the homogeneous organizational area entered during insertion;
- **Description:** it is the description of the homogeneous organizational area entered during insertion.

From this section it is possible:

- to sort the columns and filter the elements in the table as described in [Console tables](#);
- to enter in the organizational area detail page to modify it by clicking on the row;
- to add a new organizational area by clicking on "**Add**".

5.5.1. Entering organizational areas

By clicking on the "**Add**" button a new page opens where you can insert a new organizational areas.

Figure 18. Entering organizational areas.

In order to uniquely identify an organizational area, you have to enter a code and a description.

To save the entered data, click on the top right **"Save"** button.

To enter a new organizational area click on the **"Add organizational unit"** button. The inserted organizational units have a tree structure.

Figure 19. Example of organizational area structure.

To insert / edit / remove a "child" node, click with the right button of the mouse on the "parent" node: a menu drop-down appears with the three options.

To delete a node, select the **"Remove node"** option. In addition to the selected node, all child elements will be removed.

To edit a node, in the code, description or retention rule, select the **"Edit node"** option, make the desired changes and click on the **"Save"** button.

To insert a node click on the **"Add node"** option: a form will be displayed.

Figure 20. Entering organizational area units.

To complete the entry, it is necessary to enter the code and description of the node and click the **"Save"** button.

By clicking on **"Expand"**, all nodes of the tree will expand showing the whole structure of the tree.

By clicking on **"Collapse"**, all nodes of the tree will compress showing only the "root" nodes.

6. ePLUS - Uploading documents

Uploading documents of the ePLUS allows the automatic creation of the Submission Information Packages (SIP) with the related archiving attributes and indexing of the documents.

Once logged in to the Entaksi Console, in order to access to the ePLUS service, you can click on the dashboard button "Uploading documents", or you can click on "Uploading documents" on the main menu: each item will open the respective page.

"Uploading documents" contains:

- **Submission Information Packages:** list of all the SIP made by the ePLUS service ([Submission Information Packages](#));
- **Personal data subject:** list of all subjects saved in ePLUS ([Personal data subject](#)).

6.1. Submission Information Packages

In the **Submission Information Packages** all Submission Information Packages (SIP) entered in ePLUS are listed. Through this page it is also possible to create SIPs or edit packages previously created but not yet submitted.

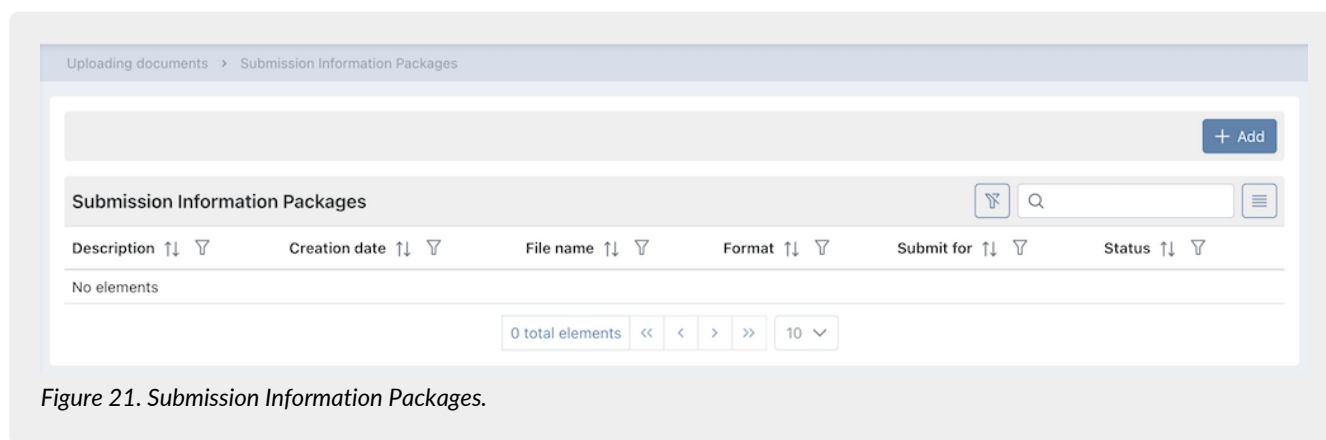


Figure 21. Submission Information Packages.

A description of the fields and filters in the list below.

- **Description:** it is the SIP description which is attributed at the entering time.
- **Creation date:** it is the date the package was created.
- **File name:** it is the file name given upon creation.
- **Format:** it indicates the type of uploaded documents and it is entered during the SIP creation.
- **Submit for:** it indicates the type of the package delivery. It can be:
 - **preservation and document management system:** the package is submitted to both the document management system and the preservation system;
 - **document management system:** the package is submitted to the document management system;
 - **digital preservation system:** the package is submitted to the preservation system;
- **Status:** it is the package status.

The possible states are shown in the table below

Value	Note
CREATED	The package is created but not sent. It is still possible to change the package.
CONFIRMED	The package is confirmed and the upload to the document management system and the preservation system begins.

Value	Note
SIGNATURE IN PROGRESS	If the eSIGN signature service is active for the company, this message indicates that the package with analog documents has been confirmed and the documents are awaiting digital signature. When documents are digitally signed by the eSIGN desktop application, they will be preserved. The message does not appear for uploaded documents defined as "digital".
ARCHIVE IN PROGRESS	This message appears when the package has been confirmed and it is sending to the preservation system to be validated.
PUBLISH IN PROGRESS	This message appears when the package has been confirmed and it is sending to the documentary system.
TO BE PUBLISHED	The package is about to be published
REJECTED	The package is rejected.
COMPLETED	The package is now in the document management system and in the preservation system.

From this page, in addition to viewing the SIPs list, it is possible to:

- sort and filter data as described in the chapter [Console tables](#);
- enter the detail page by clicking on the SIP row. If the SIP is in "New" status, a new page opens and you can still modify data. In case of any other status type, it is not possible to modify data. By clicking on the SIP row a detail page opens where the descriptive data of the package and the relative files are shown.

From this page you can:

- submit package on the preservation system and / or the document management system as previously configured by clicking on the "Send SIP" (➤) button which is on the right of the row. It appears only if the package is in "New" status;
- delete the package by clicking on the "Delete" (🗑) button which is on the right of the row. It appears only if the package is in "New" status;
- add a new SIP by clicking on "Add".

6.1.1. Adding a Submission Information Packages

In this section it is possible to manually enter files and to generate the SIP.

Uploading documents > Submission Information Packages > Package IT00112233221_20230321161013

[Add documents](#)
[Edit metadata](#)
[Send SIP](#)
[Delete SIP](#)

Description: Pacchetto del 21/03/2023 16:10:13
 File name: IT00112233221_20230321161013
 Creation date: 21/03/2023 16:10:13
 Status: **CREATED**
 Submit for: Preservation and document management system
 Format: Digital documents

Documents | Index preview

Document ↑ ↓ | Description ↑ ↓

No elements

0 total elements << < > >> 10

Figure 22. Adding a Submission Information Packages

The section above summarizes the generic data that distinguishes the package.

- **Description:** if desired, enter the description you want to attribute to the SIP. The default description is: "Pacchetto del(Package of) <creation date> <creation time>".
- **File name:** if desired, enter the name you want to attribute to the SIP. The default name is: "Company VAT number <creation date> <creation time>".
- **Creation date:** field generated automatically by the system, it is the date and time creation of the package.
- **Status:** field automatically generated by the system, with "New" status.
- **Submit for:** you can decide to send the POS only in the document management system, only in the preservation system or both in preservation and in document management system.
- **Format:** it is the type of documents uploaded in the SIP. It is specified whether they are IT documents or analogical ones.

By clicking on "Add documents" you can select main files to be uploaded in a new form.

Choose documents to be uploaded into a Submission Information Package

[+ Select file](#)
[Add to SIP](#)

Main_A.pdf	✓	✕
Main_B.pdf	✓	✕
Main_C.pdf	✓	✕

✕ Close

Figure 23. File upload.

By clicking on "**Select file**", you can choose files to upload.

By clicking on "**Add to SIP**", the previously uploaded main files are added to the SIP.

By clicking on "**Close**" the form closes. In case you click "Close" without having previously clicked on the "Add to SIP" button, the selected files are **not** uploaded to the SIP.

By clicking on "**Edit metadata**" a new form opens where you can enter global metadata. This metadata are set to all the previously loaded main files by the system. The metadata that can be entered are: Producer; Recipient; Sender; Intermediary; Date; Start date; End date; Year and Classification.

The "Classification" section is present only if a classification scheme data has been defined in the company (see [Classification scheme](#)). By clicking on the button, you can select the classification of the uploaded documents. The standard metadata for the classification scheme are automatically set to submit the SIP and to preserve documents in eDOC.

If you want to apply the saved metadata to files uploaded in a second time, just enter the edit section by clicking the icon again and confirm the saved metadata.

By clicking on "**Delete SIP**", SIP is deleted. By clicking on "**Send SIP**", SIP is loaded into the environment defined in the "Send by" field.

The SIP composition is shown in the **Documents** section: here the previously uploaded main files are listed.

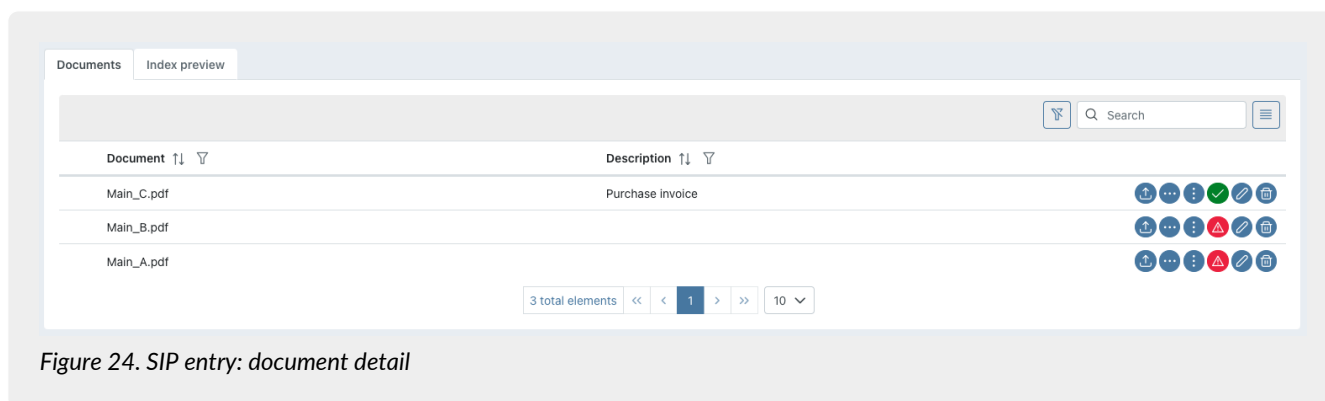






Figure 24. SIP entry: document detail



For each main file loaded there are several in-line functions available.


By clicking on  icon, you can modify the metadata for the main file only. Metadata editable with this feature are the same metadata as the global "Edit Metadata" function previously described.

By clicking on  icon, you can view, insert or modify the metadata of the documentary unit. If you want to modify or insert a metadata value already present in the list, just enter the new data in line in the "Value" field. If, however, you wish to add new metadata to the document, just click the **Add metadata** button, choose the new metadata and fill it. It is not possible to add metadata already in the list. See [Metadata](#) chapter for the metadata descriptions.

By clicking on  icon, you can add or modify the metadata of the main document of the documentary unit. Exactly as previously described for the documentary unit, in case you want to add new metadata to the document, click the **Add metadata** button, choose the new metadata and fill it. If, however, you want to modify a value of a previously entered metadata, modify the data in the "Value" field. See [Metadata](#) chapter for the metadata descriptions.

By clicking on  icon, you delete the main file from the list and it will no longer be in the package. Any attached files connected to it are also automatically deleted.

If the entered metadata for the main file, including any metadata of the attached files, does not contain errors, the icon  is displayed. If there are errors the icon  is displayed. By clicking on it the list of anomalies is displayed and you can correct them manually.

By clicking on  icon, you can upload attached files to the main file with the same loading methodology previously described.

If attachments have been uploaded for the main file, the  icon is displayed to its left. By clicking on it, you can view the list of attachments of the main document.

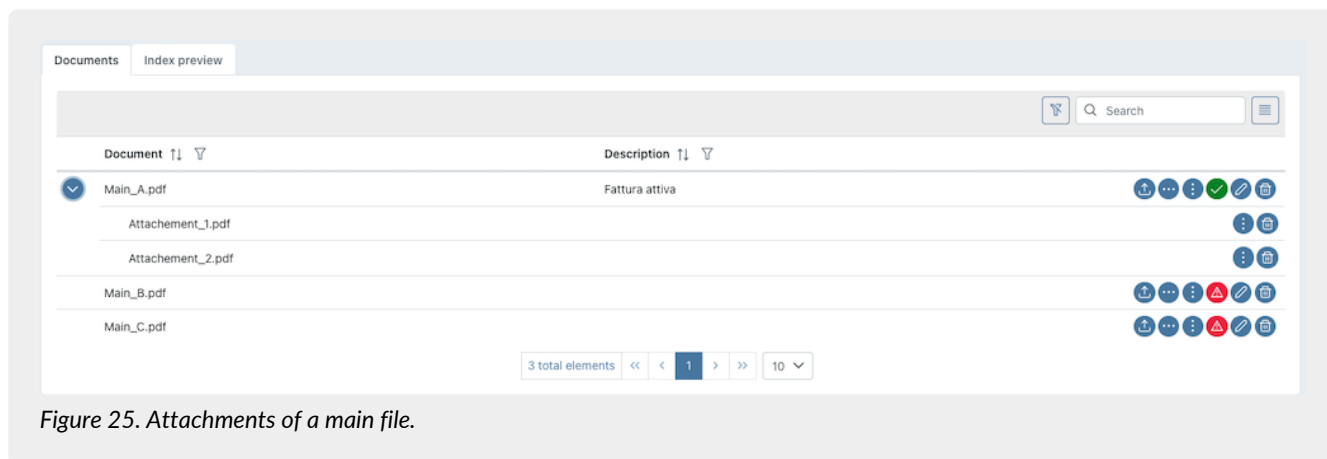



Figure 25. Attachments of a main file.

For each attached document it is possible to add new metadata or modify its value with the same methodology described previously for the main file by clicking on the image .

To delete the attached file, simply click on : deletion will **exclusively** affect the attached file.

In the "Index preview" section, you can view the SIP index. The shown information is the same as described for the "Documents" section, but errors are shown in red.

6.1.2. Package management with documents in analog format

In case the documents uploaded for the creation of the package are analog and, therefore, during the package creation, the type "Analog Document" has been specified, it is necessary to proceed with the validation of the uploaded file with digital signature.

Digital signature must be affixed by document's producer and he is enable for digital signature for the creation of the IT document through the eSIGN Desktop application provided by Entaksi and connected to the eSIGN service.

The user enabled for digital signature will receive an email in which be listed the document contained in the package and for which digital signature is required.

All you need to do is simply connect your smart card and connect the eSIGN Desktop application to the Entaksi's eSIGN service will allow you to proceed with affixing digital signature on the indicated documents as described in the paragraph [Connecting eSIGN Desktop to the eSIGN service](#).

In case that you do not have the eSIGN Desktop application already installed on your computer, you can download it directly from the email you receive by clicking on the "Download eSIGN Desktop".

Clicking on this button, in fact, will open a new page from which you can download and then install the software eSIGN Desktop as described in the chapter [eSIGN Desktop](#).

When all documents in the Submission Information Package are digitally signed, the package will be placed on preservation system and/or document service as previously configured when the package is created.

6.2. Personal data subject

By clicking on the menu "Personal data subject" you can view, enter and modify subject data that can be inserted as metadata within the Submission Information Package.

In this page all subjects previously saved in ePLUS are listed.

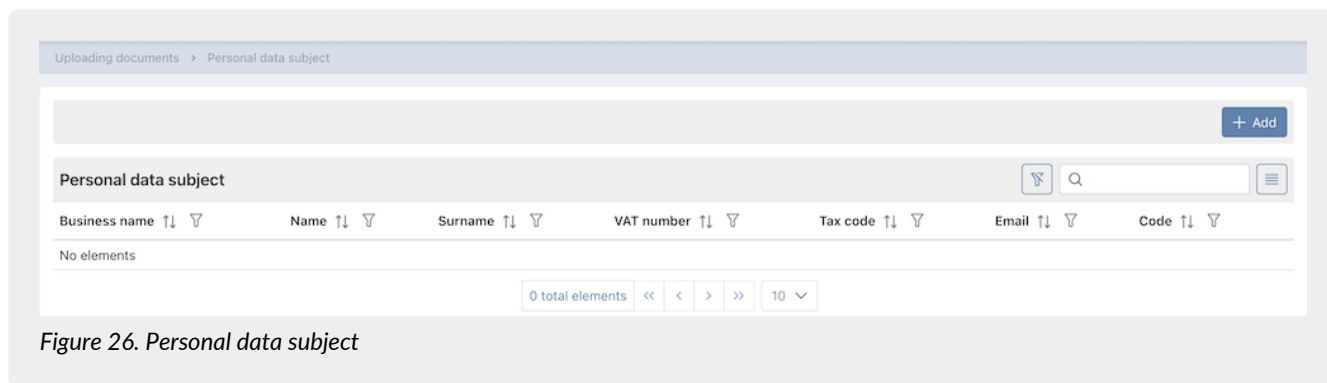


Figure 26. Personal data subject

Below there is a brief description of the items and filters on the list.

- **Business name:** it is the company name of the subject in the case of a legal person.
- **Name:** it is the name of the subject in the case of a natural person.
- **Surname:** it is the surname of the subject in the case of a natural person.
- **VAT number:** it is the possible VAT number of the subject.
- **Tax code:** it is the tax code of the subject.
- **Email:** it is the email of the subject.
- **Code:** it is the code of the subject indicated when entering the personal data.

From this page it is possible to:



- sort and filter data as described in the chapter [Console tables](#);
- By clicking on single subjects, you can enter the corresponding profile to make any necessary changes;
- by clicking on  button (where available) you can delete the subject: the icon will not be available for users that have a Library associated with the eDOC document management service;
- by clicking on the  button (where available) you can directly access the eDOC document library;
- add a new subject by clicking on the "Add" button.

Figure 27. Add a new subject.

Required fields are shown in red. The company name and VAT number will be mandatory in case of legal person. The name and tax code will be mandatory in case of natural person. You can save only if the mandatory fields are correctly entered. In order to save the data just entered and / or modified, click on the "Save" button.

You can return to the list page of the subjects via the breadcrumb located at the top left by clicking on "Personal data subjects".

7. eCON - Preservation

Once logged into the Entaksi Console, to access the interface of ePLUS service you can click on the dashboard button "Preservation", so the "Submission Information Packages" page opens, or you can select one of the submenu items of the "eCON" main menu: each item opens the respective page.

The "eCON" menu contains:

- **Uploading SIP:** in this section it is possible to manually upload .zip SIP generated by other systems procedures ([Uploading SIP](#)).
- **SIP list:** the list of all the information packages ready for storage (SIP) with the related identification data. See chapter [SIP List](#) for the description of the list items.
- **AIP list:** the list of Archival Information Packages (AIP) stored in the system with the related identification data. See chapter [AIP List](#) for the description of the list items.
- **Search and request documents:** it allows you to search stored documents and request DIP(s).
- **Search and document collections:** the list of the last researches made on the system ([Search and document collections](#)).
- **DIP list:** the list of all the required DIP packages. See chapter [DIP list](#) for the description of the list items.

7.1. Preservation process

The process of IT document preservation consists of several phases, involving the Producer, the Company, and any third-parties Users.

All documents submitted to the preservation system must be distinguished by a set of mandatory metadata defined by the AgID Linee Guida (Guidelines).

The metadata managed by the system apply to various entities managed, documentary units, and archived files, making possible the search and storage of archives according to the minimum set defined in Allegato 5 of AgID "Linee Guida sulla formazione, gestione e conservazione dei documenti informatici" which the system can extend this with an additional metadata model according to the different documentary types.

Metadata can be linked to the described object and subsequently stored in two ways: as (*embedded*) metadata, recorded in index files at the file or documentary unit level, or as (*external*) objects, always referenced in the index but stored in separate files. Entaksi used *embedded* metadata until July 8, 2024, when the new archival index with *external* metadata was implemented.

The following provides an overview of the general framework of the preservation process, describing the various stages that documents go through, from submission to permanent preservation.

7.1.1. Methods of acquiring submission packages

The **Submission Information Packages** (SIP) containing the documents to be preserved and uploaded into the system as described in the [Uploading SIP](#) are subjected to a validation process that checks their integrity and a backup, where the packages are stored until the documents are included in an archival package.

All operations performed on the SIP are recorded and stored in the system through an operations log.

7.1.2. Acceptance of submission packages and generation of the confirmation of receipt

If the checks on the received Submission Information Packages are successful, the documentary units contained in them are transferred to the temporary area for the creation of Archival Information Packages.

At the end of this operation, the system prepares the data for generating the confirmation of document receipt (i.e., for the creation of a Confirmation of Receipt).

The **Confirmation of Receipt** (Rapporto di versamento, (RDV) in italian) is automatically generated and relates to a specific SIP, uniquely identified by the Preservation System.

The confirmation of receipt is an XML file containing the index of the SIP it references, along with information processed during validation, it includes data that determines the immutability of the archival units it contains, such as the hash of each file within the SIP.

The time reference containing the acceptance date of the Submission Information Package is represented by the ISO 8601

format in the element /rdv/dataElaborazione.

The Confirmation of Receipt is digitally signed by the Preservation Service Manager.

The processing and digital signature of the confirmation of receipt and the document archiving activities are recorded in the log of operations related to the acquisition of the SIP.

The Confirmation of receipt is kept for the entire preservation period of the documents within the SIP, based on the document with the longest retention period.

7.1.3. Preparation and management of archival information packages

The documentary units of a successfully verified SIP are placed in the archival register identified during validation, in a temporary area dedicated to the creation of a new AIP.

The creation of the **Archival Information Package (AIP)** involves reviewing the contents of the temporary areas of each archival register, assembling the archival information package index, applying the digital signature of the Preservation Service Manager and a timestamp, and including it in the AIP.

The various phases include:

- identification of the previous Archival Information Package;
- preliminary verification for the creation of Archival Information Packages;
- closure of the Archival Information Package.

The identification of the previous AIP involves locating the last closed package within the same archival register.

If there are no PDAs in the register, the new package will be numbered 1; otherwise, the package number will be incremented by one from the previous package.

7.1.4. Preparation and management of the dissemination information package for exhibition purposes

The system allows the user to search for and extract preserved objects display or dissemination of the same through **Dissemination Information Packages (DIP)**.

The Dissemination Information Package is made available as a ZIP file containing:

- a dissemination index digitally signed by the Preservation Service Manager;
- the documentary units corresponding to the selection criteria;
- the set of preservation evidence.

7.2. Uploading SIP

If you want to upload an already formed SIP, you can use the "Uploading SIP" function in the eCON menu.

With ePLUS it is also possible to upload .zip files produced by other software as long as they have a layout compliant with current legislation.

The SIP must be a file in .zip format, with the possibility of choosing between the types of specific "Format".

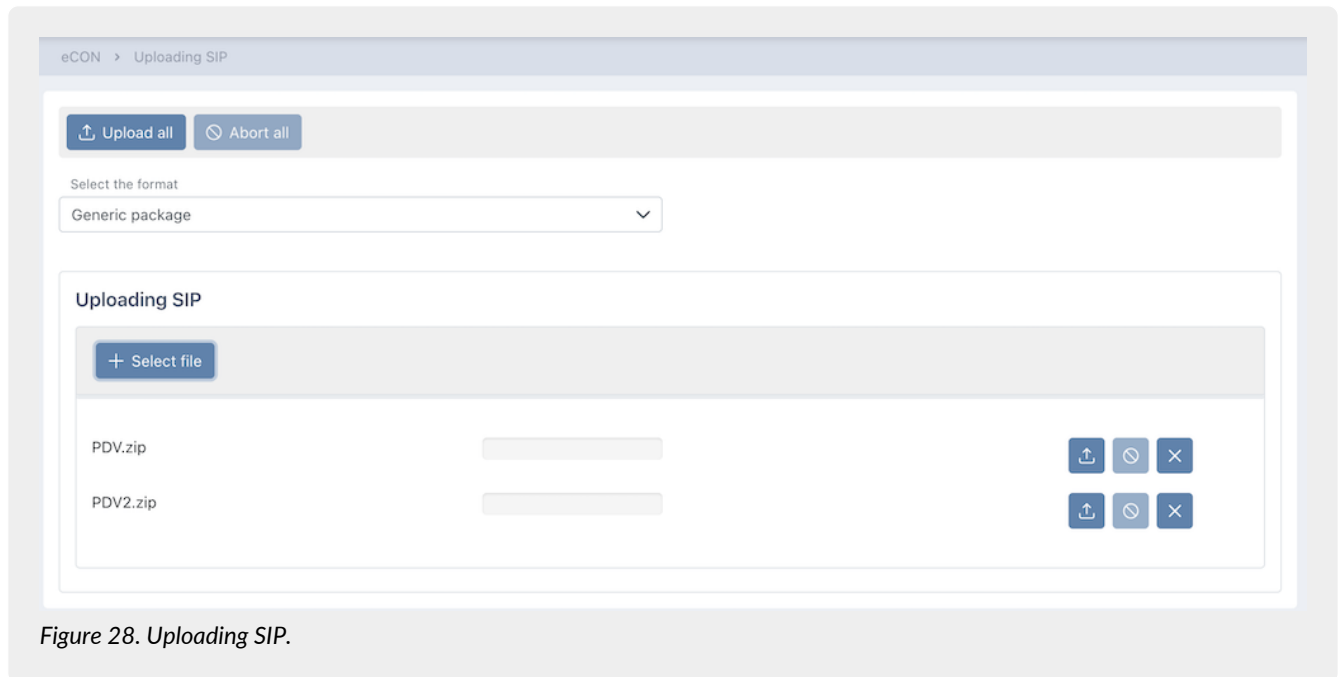


Figure 28. Uploading SIP.

Technical specifications of the .zip file format and of index types are described in the manual "UM 20150928 eDoc API User Manual" available on the site www.entaksi.eu.

To upload the package:

- select the format of document you wish to upload;
- click on the **"Select file"** button and select one or more packages, or simply drag them into the section;
- by clicking on **"Upload all"** all the packages in the section are imported into the system at the same time;
- by clicking on **"Abort all"** the previously started import is aborted: in any case, the files already successfully uploaded are not aborted and they are present in the system;
- by clicking the keys in the single file row:
 - : **only** the relative file is uploaded;
 - : the import of the single file is aborted, but only if it is still in progress and not completed;
 - : the single file is removed from the list.

The **"Previous preservation system package"** option, which is **exclusively** active only after a commercial agreement for each individual company, allows you to upload a Submission Information Packages from another preservation system.

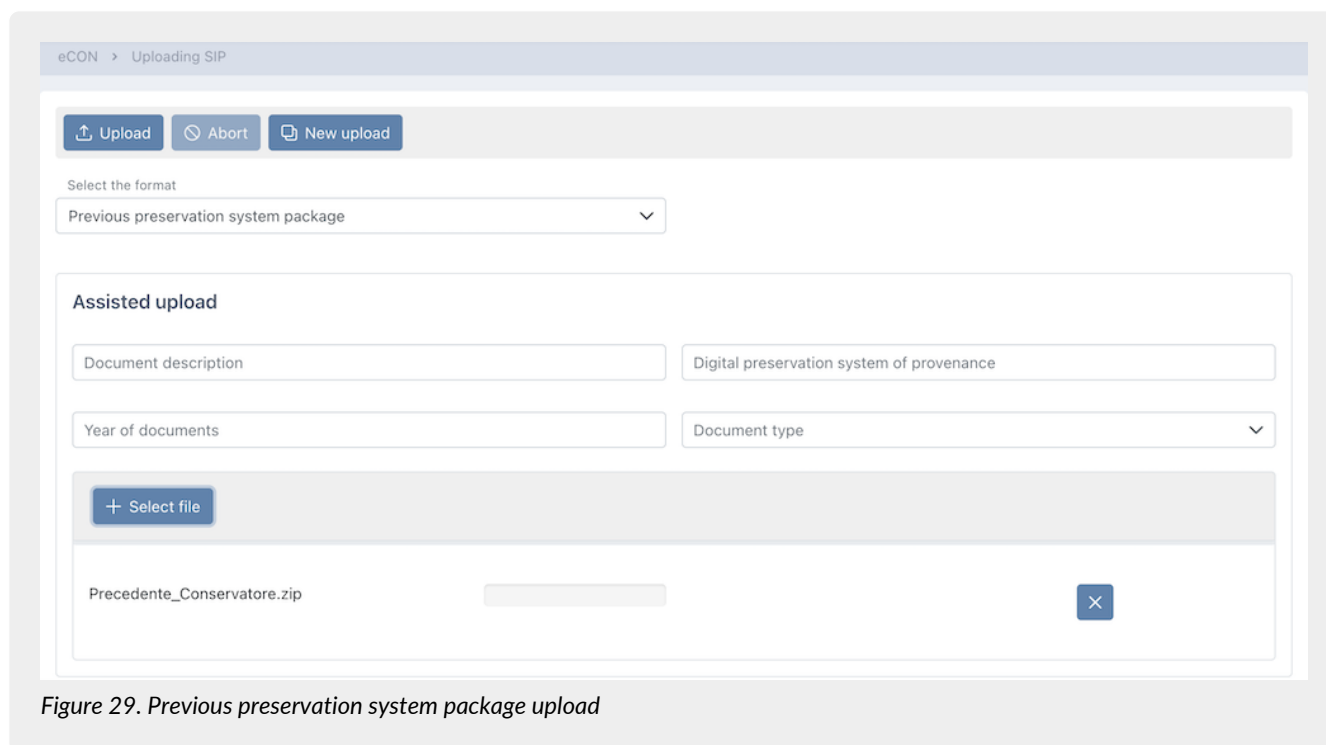


Figure 29. Previous preservation system package upload

This function allows you to load any file from a previous preservation system by indicating the items: "Document description", "Digital preservation system of provenance", "Year of documents". In order to enter the file, click on the **"Select file"** button or drag the file directly into the section.

By clicking on the  button the file will remove and you will be able to select another file.

By clicking on the **"Upload"** button the files will import into the system and by clicking on the **"Abort"** button the import will abort only if it has not already finished.

By clicking on the **"New upload"** button, the page will initialize again to allow you to enter another package.

7.2.1. Metadata

Metadata is an attribute that describes the documents content. It is declared in the SIP index, and it can be:

- automatically set by the system;
- manually entered by the user;
- derived from integration procedures with other software via API.

Metadata is a fundamental part of the archived documentation, as the system allows the search of documents only by querying its values in the SIP index.

The following table shows the correspondence between metadata and search keys, and their description. The search functions are described in the chapter [Search and request documents](#).

Table 3. Research metadata.

Search key	Metadata	Obligatory	Description
Dublin Core			
Abstract	terms:abstract	No	Summary of document content: for some document types, in the absence of metadata specifications, may contain information about the content that you deem necessary for the search of the document.
Access Rights	terms:accessRights	No	Indicates the access rights to the document.

Search key	Metadata	Obligatory	Description
Contributor	<code>terms:contributor</code>	No	In the dossiers produced by Public Administration entities, it indicates (in one or more occurrences) the IPA code of the administration participating in the proceeding according to the IPA : <code> syntax.
Creator	<code>terms:creator</code>	No	In the dossiers produced by Public Administration entities, indicate the IPA code of the administration in charge of the proceeding according to the IPA : <code> syntax. Nei
Date	<code>terms:date</code>	Yes	Signature date of the document.
Date Accepted	<code>terms:dateAccepted</code>	No	In received documents, it is the posting date of the document.
Date Submitted	<code>terms:dateSubmitted</code>	No	In sent documents, it is the date the document was sent.
Description	<code>terms:description</code>	No	Extended description of the document.
Extent	<code>terms:extent</code>	Yes	Document size (e.g. 2345 bytes).. Automatically valued.
Format	<code>terms:format</code>	Yes	The <i>mime type</i> format of the LUL. For PDF it is always the same as "application/pdf". With "analogico" value, it indicates that the document treated was previously analog, and it was converted to a PDF/A and digital signed when the SIP has been created.
Has part	<code>terms:hasPart</code>	No	The URN code of the document unit in addition to the unit documentary of the described document. It can be repeated many times. When it is applied to a dossier, each term indicates one of the documentary units contained in the dossier.
Identifier	<code>terms:identifier</code>	Yes	Document ID in the preservation system.
Is Part Of	<code>terms:isPartOf</code>	No	URN code of the document unit containing the described file.
Is Referenced By	<code>terms:isReferencedBy</code>	No	Document URN.
Medium	<code>terms:medium</code>	No	The <i>mime type</i> format of the container used for the document, for example application/pkcs7-mime for files included in a digitally signed PKCS#7 envelope.

Search key	Metadata	Obligatory	Description
Provenance	terms:provenance	No	The Dublin Core terms:provenance metadata containing the URN of the unit is applied to the documents for which the previous archiving proof is archived.
Publisher	terms:publisher	No	Descriptive metadata which contains the previous preservation system information.
References	terms:references	No	The URN code of the sub-document it refers to.
Replaces	terms:replaces	No	It indicates the name of the document to correct in case of modification (metadata modification:number with value greater than 1). It contains the 20-character eCON document identifier or the file name in the SIP.
Source	terms:source	Yes	URN code of the file described according to the syntax of the provenance SIP. In the Archival Information Packages metadata contains the URN of the Submission Information Packages from which the documents come from, repeated for each involved Submission Information Packages. It is automatically set on archiving.
Subject	terms:subject	Yes	Summary string that contains the type, month, year, surname and first name of the document subject. Eg: "Payroll March 2017 ROSSI MARIO".
Title	terms:title	Yes	Filename.
Type	terms:type	Yes	The type of documents contained in readable terms.
Document			
Document year	documento:anno	Yes	The reference year of the document, extracted from the date. Automatically valued.
Document aoo	documento:aoo	No	Organizational area. With reference to the producer, it identifies the organizational area to which the document belongs in case of multiple document streams.
Document class	documento:classe	No	If present, it is the class code of the document classification.
Document preservation	documento:conservazione	Yes	Document preservation time. It is automatically valued by the system according to the document type.

Search key	Metadata	Obligatory	Description
Document date	documento:data	Yes	Date of the document.
Document start date	documento:datainizio	No	Starting date of the document reference period (only for documents that have a reference period).
Document protocol date	documento:dataprotocollo	No	Value used to indicate the protocol date assigned during the reception in the received documents.
Document registration date	documento:dataregistrazione	No	Date of entry in the VAT register.
Document end date	documento:datatermine	No	Document end date. See "Document start date".
Document flow	documento:flusso	Yes	<p>It indicates the document flow, and it can assume the following values:</p> <ul style="list-style-type: none"> - U = in exit - E = in entrance - I = Internal. <p>It is automatically valued.</p>
Document format	documento:formato	Yes	It indicates the document format as defined by Annex 2 of the "Guidelines on the creation, management and preservation of IT documents".
Document training	documento:formazione	Yes	<p>It indicates the document creation process, and it is valued with one of the following letters:</p> <p>a) creation through the use of software tools that ensure the production of documents in the formats provided for in Annex 2 of the Guidelines; b) acquisition of an IT document electronically or on IT support, acquisition of the copy by image on computer support of an analogical document, acquisition of the IT copy of an analog document;</p> <p>c) storage on computer support in digital format of the information resulting from IT transactions or processes or from the electronic presentation of data through forms made available to the user;</p> <p>d) generation or grouping, even automatically, of a set of data or records, coming from one or more databases, also belonging to several interoperable subjects, in accordance with a predetermined logical structure and memorized in static form.</p>

Search key	Metadata	Obligatory	Description
Document Number	documento:numero	No	Progressive number of the document, if any.
Lot position	documento:posizionelotto	No	The index of the position of the document described within the archived container file (only if the archived file is a format that can contain multiple documents).
Document 'prima nota'	documento:primanota	No	In received documents, it indicates the registration protocol assigned in the 'prima nota'.
Document protocol	documento:protocollo	No	Value available to indicate the protocol number assigned during reception in the received documents
Document registration	documento:registrazione	No	In the received documents indicate the protocol assigned in the VAT register.
Document sectional	documento:sezionale	Yes	Sectional of the document, if not present it acquires the empty value "_default".
Document sub-class	documento:sottoclasse	No	If present, it is the sub-class code of the document classification.
Document type	documento:tipo	Yes	Document type, selectable from the list of documents provided by the system.
Document classification scheme	documento:titolario	No	If present, it is the code of the classification scheme.
Document category	documento:titolo	No	If present, it is the category code of the document classification.
Document type registry	documento:tipoRegistro	No	If present it can be: - Nessuno (Nothing) - Protocollo Ordinario/Protocollo Emergenza (Ordinary protocol/Emergency protocol) - Repertorio/Registro (Repertoire/Register).
Modify			
Modify author	modifica:autore	No	It corresponds to the author (or producer) of the correction.
Modify date	modifica:data	No	It corresponds to the date and time of the modified document.
Modify number	modifica:numero	No	It is the version number of the document.

Search key	Metadata	Obligatory	Description
Modify type	modifica:tipo	No	Indicates the type of modification made to the document and can assume the following values: - Annullamento (Annulment) - Rettifica (Correction) - Integrazione (Integration) - Annotazione (Annotation).
Verify			
Certified digital copy of physical documents	verifica:conforme	Yes	It indicates whether the document is a certified replacement, value "vero" (true) or "falso" (false).
Digital signature	verifica:firma	Sì	It indicates whether the document is digitally signed, value "vero" (true) or "falso" (false).
Digital timestamp	verifica:marca	Sì	It indicates whether the document is digitally marked, value "vero" (true) or "falso" (false).
Electronic seal	verifica:sigillo	Sì	It indicates whether the document è digitally sealed, value "vero" (true) or "falso" (false).
Intermediary			
Intermediary Tax Code	intermediario:codicefiscale	No	Intermediary Tax Code (mandatory if the tax ID is not indicated).
Intermediary surname	intermediario:cognome	No	Intermediary surname (in case of a natural person).
Intermediary tax ID	intermediario:idfiscale	No	Tax identifier composed of the country code and the VAT number of the third party intermediary (mandatory if the tax code is not indicated).
Intermediary name	intermediario:nome	No	Intermediary name (in case of a natural person).
Intermediary Company name	intermediario:ragionesociale	No	Intermediary Company name (in case of a legal person).
Intermediary type	intermediario:tipo	No	Intermediary type, it can have the following values: - PF for Natural Person - PG for Legal Person - PAI for Italian Public Administrations.
Intermediary code	intermediario:codice	No	Code assigned to the intermediary
Sender			
Sender tax code	mittente:codicefiscale	Yes	Sender Tax Code (mandatory if the tax ID is not indicated).

Search key	Metadata	Obligatory	Description
Sender surname	mittente:cognome	Yes	Sender surname (mandatory in case of natural person).
Sender tax ID	mittente:idfiscale	Yes	Tax identifier composed of the country code and the VAT number of the sender (mandatory if the tax code is not indicated).
Sender name	mittente:nome	Yes	Sender name (mandatory in case of natural person).
Sender PEC	mittente:pec	No	Sender PEC.
Sender Company name	mittente:ragionesociale	Yes	Sender Company name (mandatory in case of a legal person)
Sender type	mittente:tipo	Yes	Sender type, it can have the following values: - PF for Natural Person - PG for Legal Person - PAI for Italian Public Administrations.
Sender code	mittente:codice	No	Code assigned to the sender
Producer			
Producer tax code	produttore:codicefiscale	Yes	Producer Tax Code (mandatory if the tax ID is not indicated).
Producer surname	produttore:cognome	Yes	Producer surname (mandatory in case of natural person).
Producer tax ID	produttore:idfiscale	Yes	Tax identifier composed of the country code and the VAT number of the producer (mandatory if the tax code is not indicated).
Producer name	produttore:nome	Yes	Producer name (mandatory in case of natural person).
Producer Company name	produttore:ragionesociale	Yes	Producer Company name (in case of a legal person).
Producer Type	produttore:tipo	Yes	Producer type, it can have the following values: - PF for Natural Person - PG for Legal Person - PAI for Italian Public Administrations.
Producer code	produttore:codice	No	Code assigned to the producer
Recipient			
Recipient tax code	destinatario:codicefiscale	Yes	Recipient Tax Code (mandatory if the tax ID is not indicated).

Search key	Metadata	Obligatory	Description
Recipient surname	destinatario:cognome	Yes	Recipient surname (mandatory in case of natural person).
Recipient tax ID	destinatario:idfiscale	Yes	Tax identifier composed of the country code and the VAT number of the recipient (mandatory if the tax code is not indicated).
Recipient name	destinatario:nome	Yes	Recipient name (mandatory in case of natural person).
Recipient PEC	destinatario:pec	Yes	Recipient PEC.
Recipient Company name	destinatario:ragionesociale	Yes	Producer Company name (in case of a legal person).
Recipient type	destinatario:tipo	Yes	Recipient type, it can have the following values: - PF for Natural Person - PG for Legal Person - PAI for Italian Public Administrations.
Recipient code	destinatario:codice	No	Code assigned to the recipient
Fixity			
XML canonical form	fixity:canonicalXML	No	It is valid only for files in XML format. It is "true" if the file has been reduced to a canonical form before calculating the digest.
Base64 digest	fixity:messageDigest	Yes	The Base64 representation of the file digest calculated according to a given algorithm.
Digest algorithm	fixity:messageDigestAlgorithm	Yes	The algorithm by which the file digest was calculated.
Digest originator	fixity:messageDigestOriginator	Yes	The application that calculated the file digest (this is "edoc" if the digest is calculated from preservation system).
Invoice			
Invoice Cig	fattura:cig	No	It is valid only in case of FatturaPA XML format. It is the "Codice Identificativo Gara" (Tender Identification Code).
Invoice PA code	fattura:codicepa	No	It is valid only in case of FatturaPA XML format. It is the code of the invoice recipient Public Administration.
Invoice CUP	fattura:cup	No	It is valid only in case of FatturaPA XML format. It is the "Codice Unico di Progetto" (Single Project Code).

Search key	Metadata	Obligatory	Description
Invoice PA description	fattura:descrizionepa	No	It is valid only in case of FatturaPA XML format. It is the description of the invoice recipient Public Administration.
Invoice outcome	fattura:esito	No	It is valid only in case of FatturaPA XML format. It is the result of the sending invoice.
Invoice signatory	fattura:firmatario	Yes	The name and surname of the holder of the digital certificate that signed the invoice.
Invoice Id Sdl	fattura:idsdi	Yes	It is valid only in case of FatturaPA XML format. It is the identifier assigned by the Sdl.
Invoice total amount	fattura:importo	Yes	The document total as reported on the invoice including the currency.
Invoice number	fattura:numero	Yes	Invoice number.
Invoice expire date	fattura:scadenza	No	The invoice expire date, if listed in the payment information.
PEC			
PEC direction	pec:direzione	Yes	Direction of the email message.
PEC operator	pec:gestore	Yes	PEC mailbox manager.
PEC id	pec:msgid	Yes	Email message identifier (handler).
PEC message id	pec:id	Yes	Email message identifier.
LUL			
Cost center	lul:ccosto	No	The cost center of the LUL.
Employee level	lul:livello	No	The employee level.
Employee badge number	lul:matricola	No	Search item for the employee badge number (ID).
Employee qualification	lul:qualifica	No	The employee qualification.
Employee production plant	lul:stabilimento	No	The production plant assigned to the employee.
LUL type	lul:tipologia	No	Typology of the LUL (Employee, Temporary, Seconded).
FIR			

Search key	Metadata	Obligatory	Description
FIR copy number	<code>fir:numero</code>	Yes	The unique progressive document number provided by the printer.
FIR number	<code>fir:copia</code>	Yes	It indicates which copy of the FIR it is (it can have a value from 1 to 4).
FIR recipient PEC	<code>fir:pec</code>	Yes	It is the PEC of the recipient of the FIR 4th copy (the producer of the waste).
Waste designation	<code>_extra:denominazionerifiuto</code>	No	Free descriptive item for the treated waste. The limit is 250 characters.
Local unit	<code>_extra:unitalocale</code>	No	It indicates the place of departure of the waste.
Place of destination	<code>_extra:luogodestinazione</code>	No	It indicates the place of destination of the waste.
Transporter address	<code>_extra:indirizzotrasportatore</code>	No	It indicates the address of the transporter of the waste.
CER	<code>_extra:cer</code>	No	European Waste Code (EWC), 6 alphanumeric characters.
Physical state	<code>_extra:statofisico</code>	No	It indicates the physical state of the waste. It can be entered with a number from one to four: 1. Powdery solid 2. Non-powdery solid 3. Shovelable muddy 4. Liquid
Danger	<code>_extra:pericolo</code>	No	Free descriptive item codified by the Ministry of the Environment.
Destination	<code>_extra:destinazione</code>	No	It matches a 3-character value that indicates recovery (R1 to R13) or disposal (D1 to D15).
Gross	<code>_extra:lordo</code>	No	It indicates the estimated gross weight of the waste.
Tare	<code>_extra:tara</code>	No	It indicates the estimated tare of the waste.
Net	<code>_extra:netto</code>	No	It indicates the estimated net weight of the waste.
Unit of measure	<code>_extra:um</code>	No	Waste measurement unit (kg or litres). It refers to net weight.
Transport regulations	<code>_extra:normativatrasporto</code>	No	It indicates whether the transport is subject to the ADR/RID regulation for danger waste.
Plate	<code>_extra:targa</code>	No	The license plate of the vehicle.
Trailer plate	<code>_extra:targarimorchio</code>	No	The license plate of the trailer.

Search key	Metadata	Obligatory	Description
Driver	_extra:conducente	No	Item containing the name and surname of the actual driver of the transport.
Transport start	_extra:iniziotrasporto	No	The start date of the transport, indicated in the format "yyyy-mm-ddThh:mm:ss+00:00" (the last 4 digits refer to the timezone).
Outcome	_extra:esito	No	It contains information on the transport outcome. It can be one of the following values 1. Totally accepted 2. Partially accepted 3. Rejected
End of transport	_extra:finetrasporto	No	Transportation end date, indicated in the format "yyyy-mm-ddThh:mm:ss+00:00" (the last 4 digits refer to the timezone).
Net destination	_extra:destinonetto	No	It indicates the net weight of the waste at destination.
UM destination	_extra:destinoum	No	Indicate the unit of measurement at the destination.
Not accepted	_extra:nonaccettato	No	Metadata containing the reason why the waste was not accepted.
Order			
Order Id NSO	ordine:id	Yes	It is the order exchange system Id.
Order total amount	ordine:importo	Yes	It indicates the amount of the order.
Order number	ordine:numero	Yes	It indicates the order number.

For other SIPs examples please refer to our website www.entaksi.eu.

7.2.2. Digital copies of physical documents

The F997 format of the SIP indicates that it is a package which contains digital copy of a physical document. As a result of this declaration, the system converts files into PDF/A and subsequently validates them with digital signature. The digital signature can be affixed either by Preservation Service Manager delegated by the producer, or by the producer himself, who is authorized for digital signing to create the electronic document.

The company will need to identify a user who signs the documents in order to enable him to digitally sign the analog documents.

The signature can be applied in two distinct ways: through the eSIGN Desktop application or via remote certificates. Once all the documents in the submission information package have been correctly digitally signed, the package will be archived. When all the documents in the SIP are correctly digitally signed, the package will be placed in preservation.

Applying a signature with the eSIGN Desktop application

If a user authorized to sign analog documents does not have remote certificates assigned to them, they must sign the documents using the eSIGN Desktop application.

The user will need a signing device, either a reader with a smart card or a token, and have the eSIGN Desktop application installed on their computer.

The enabled signatory user will receive an email where the documents for which digital signature is required will be listed.

If you haven't got the eSIGN Desktop application installed on your computer, it will be possible to download it directly from the email received by clicking on the "**Download eSIGN Desktop**" button.

By clicking on this button, a new page will open from which it will be possible to download and, therefore, to install the eSIGN Desktop application as described in the [eSIGN Desktop](#) chapter. Once the email is received, the user has to connect his smart card and to start the eSIGN Desktop application in order to sign the documents as described in the [Connecting eSIGN Desktop to the eSIGN service](#) paragraph, to proceed with applying the digital signature to the analog documents as described in the paragraph [\[Analogue documents\]](#).

Applying a signature via remote certificates If a user authorized to sign analog documents has remote certificates assigned to them, they will **not** receive any email, will **not** need to obtain any signing device, and will **not** need to install any application on their computer: the documents will be automatically signed via the remote certificates and archived.

7.3. SIP List

By accessing the list of **Submission Information Package (SIP)** present in the system, it is possible to monitor the status of the SIPs.

The SIP consists of a .zip file containing the documents belonging to one or more documentary units to upload into the preservation system, and an index file in XML format.

SIPs can be uploaded from three different sources:

- automatic loading by external procedures;
- manual loading by the user;
- other service modules.

The Preservation System defines a series of different SIP formats which determine the validation method for the package. These formats can be of general use or agreed with the individual producer to contain specific requirements related to the desired metadata set.

The Preservation System receives the documents sent by the producer through a REST services, and the connection and the authentication are guaranteed by a HTTPS protocol.

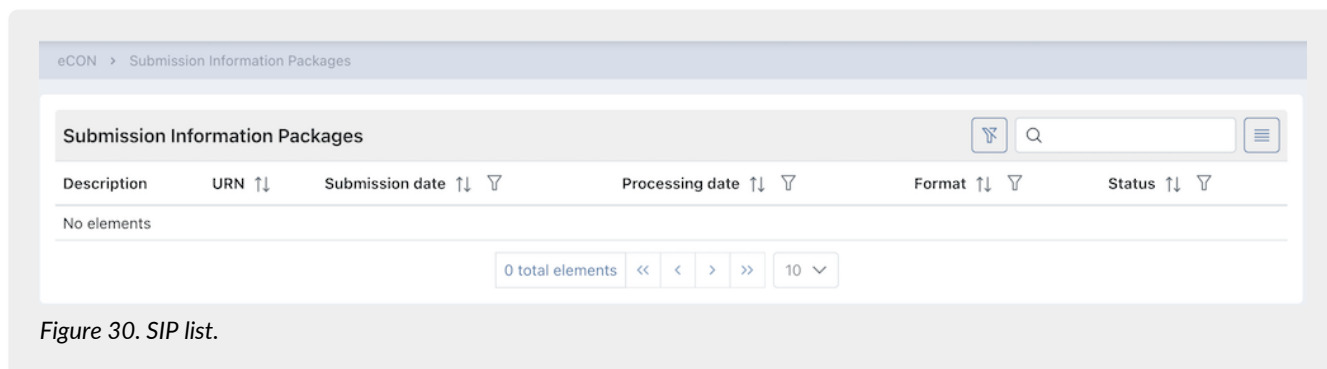


Figure 30. SIP list.

The list shows the following information:

- **Description:** a item that contains the description as reported in the "Subject" field for generic and analogue packages if valued (otherwise it will report only "Generic package"), or a description associated with the document type;
- **URN:** the unique identification of the payment package;
- **Upload date:** the date / time when the SIP was loaded;
- **Processing date:** the date / time when the SIP was processed;
- **Format:** the format in which the SIP was received.;
- **Status:** the status in which the package is located at a given moment. It can take the following values:
 - "Initial status";
 - "Under construction";
 - "Processing";
 - "Processed";
 - "Signing in progress";
 - "Archived";

- "Accepted";
- "Rejected";
- "SIP verification".

The status of interest to the user are:

- **Open package:** the package remains in this status from the payment until the end of the month, when the associated management cycle is closed and the package is submitted into the preservation system. Once it is closed and paid, the payment report is issued.
- **Processed:** the validation has been successful, the SIP has no problems and it is ready for the preservation of the documents it contains.
- **Accepted:** the SIP contents are put into preservation.
- **Refused:** the SIP validation is not successful, the package has problems and it must be reloaded. All the rejected SIPs are periodically deleted from the system with an automatic procedure.

Other status are mostly automatically generated by the service, and the SIP assumes these values only for few seconds.

From this section it is possible:

- to sort columns and filter the elements present in the table as described in the chapter [Console tables](#);
- to access the detail page of the submission package where its information is shown.

The SIP detail page is divided into two sections.

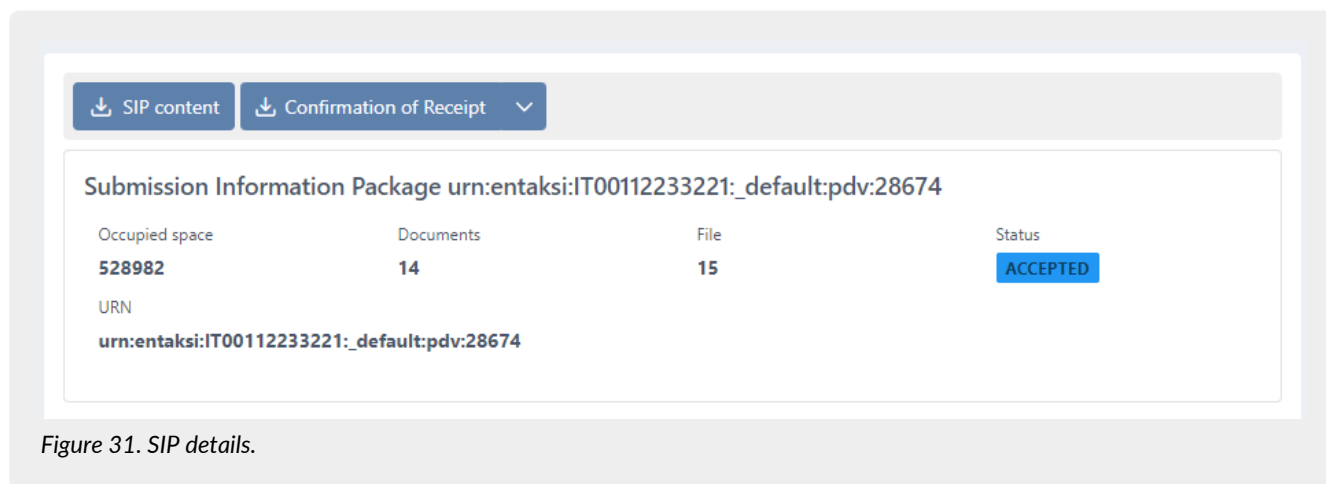


Figure 31. SIP details.

In the top section, in addition to the title of the package (such as the progressive number assigned by the system) the following information is present: the space occupied by the package, the documents and the number of files that make up the package, the status of the package and its URN.

By clicking on the **"SIP content"** button you can download the SIP ZIP file and by clicking on the **"Deposit receipt"** button you can download the SIP deposit receipt.

Through the **"Confirmation of receipt"** button, user can download the confirmation of receipt for the uploaded SIP: clicking on the arrow to the right open a menu from which user can choose the file type (.xml or .pdf) that wants to download by simply clicking on it.

In the section below **"Confirmation of receipt"**, the data relating to the receipt is present.

For packages containing more than 10000 documents, the confirmation of receipt is displayed in a condensed format; the full version is available exclusively by downloading the relevant document.

The **Confirmation of receipt** (Rapporto di versamento, RDV, in italian) is an XML file that contains the SIP index it refers to, along with information processed during validation and details ensuring the immutability of the archival units contained, this includes the hash of each file in the SIP (see [Acceptance of submission packages and generation of the confirmation of receipt](#)).

The Confirmation of Receipt is digitally signed by the Preservation Service Manager with an XAdES BT level signature, which consists of a digital signature with an embedded timestamp, in compliance with the ETSI EN 319 132-1 standard - "Electronic Signatures and Infrastructures (ESI) - XAdES digital signatures - Part 1: Building blocks and XAdES baseline signatures". This signature provides additional assurance that the submission process is completed within the legal deadlines.

The cryptographic certificates used in the signing process and for applying timestamps are issued internally by Entaksi Solutions SpA - Irish Branch, registered on the EU Trust List.

Entaksi may also use backup Certification Authority that are part of the European Union Trusted List (EUTL) under eIDAS.

7.4. AIP List

In the "AIP List" section it is possible to view the list of SIPs brought into preservation as AIPs (Archival Information Package) after SIPs have been closed. In order to form an AIP and to make effective the preservation status, it is necessary to apply a signature and a time-stamp.

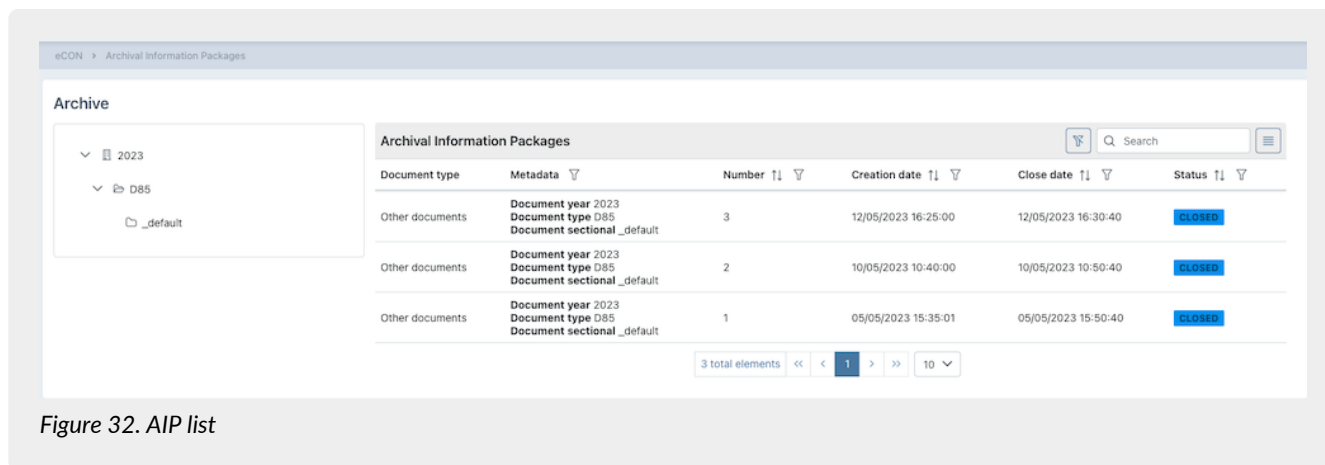


Figure 32. AIP list

The structure of the metadata for the archive log used by the company is shown on the left side.

By clicking on nodes, the list on the right will be automatically filtered by the selected node. This node appears highlighted. To remove the selection from the node, it is necessary to click twice (double click) on the node. The node will no longer be highlighted and the list on the right will no longer be filtered.

The list shows the following information:

- **Document:** the extended description of the document type;
- **Metadata:** it's the metadata with which the company has organized its document preservation;
- **Number;**
- **Status:** the status in which the package is located at a given moment. It can take the following values:
 - "To be processed";
 - "Processed";
 - "To sign";
 - "Signing in progress";
 - "Signed";
 - "Closed".

The most important states for the user are:

- **Processed:** the index has been created, the AIP has no problems and is ready for storing the documents it contains.
- **Closed:** the AIP is in preservation.

From this section it is possible:

- to sort columns and filter the elements present in the table as described in the chapter [Console tables](#);
- to access the detail page of the archival package where the AIP information is shown.

Refused packages are periodically deleted from the system through an automated procedure.

The Archival Information Package (AIP) is a logical entity that contains the documentary units from one or more SIPs and an index file that is digitally signed and timestamped by the Preservation Service Manager using the XAdES B-LTA signature defined by the standard ETSI EN 319 132-1 - "Electronic Signatures and Infrastructures (ESI) - XAdES digital signatures - Part 1: Building blocks and XAdES baseline signatures". This signature, which consists of a digital signature with an embedded timestamp and the inclusion of all materials necessary for verifying long-term validity, also meets the requirements for Long-Term Preservation according to the ETSI TS 119 511 standard - "Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for trust service providers providing long-term preservation of digital signatures or general data using digital signature techniques" (see [Preparation and management of archival information packages](#)).

This index file is the proof of the preservation of the archival units contained.

The AIP index is an XML format file which describes, for each of the documentary units contained, information including the unique identifier assigned according to the URN code, and, for each file, a digital fingerprint (hash) and the algorithm with which this fingerprint was calculated.

The Archival Information index allows you to check the integrity of each individual file, regardless of all the other files stored in the same block. In fact, it will be sufficient to be in possession of the file to be able to execute the hash algorithm on its content and to compare the recalculated fingerprint with the string shown in the index.

The solution adopted by Entaksi uses the UNI 11386:2020 standard - Support for Interoperability in the Preservation and Recovery of digital Objects (original: Supporto all'Interoperabilità nella Conservazione e nel Recupero degli Oggetti digitali), also called SinCRO, for the format of the AIP index.

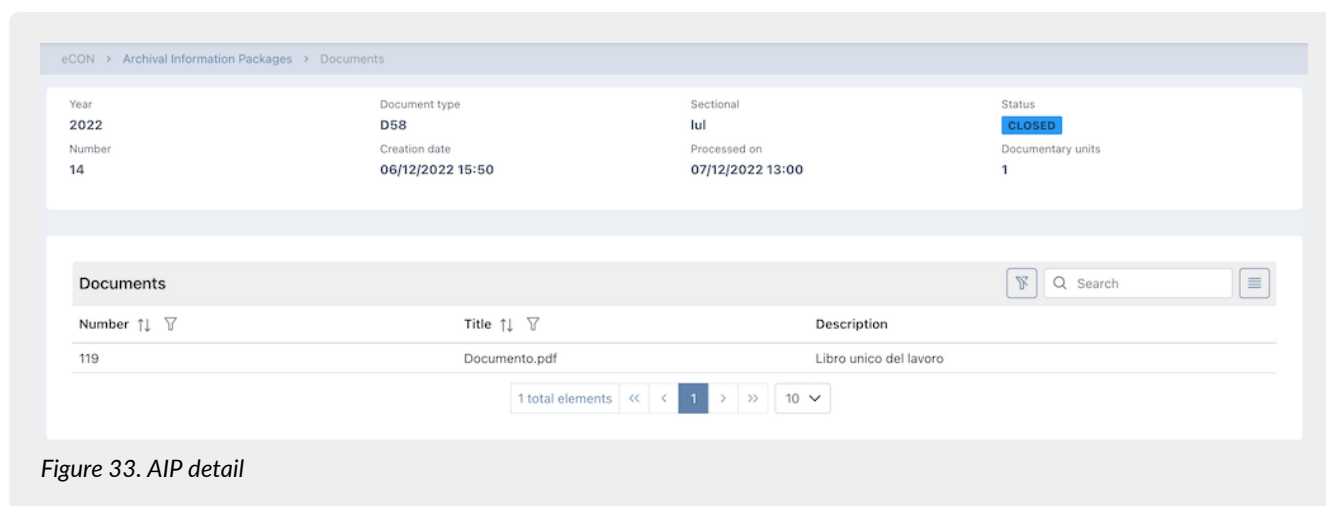
Within the DIAM/SC11 (Management of archival documents) subcommittee of the Italian National Unification Body (Ente Nazionale Italiano di Unificazione, UNI), a special working group called SinCRO defined the structure of the data set to support the preservation process, by identifying the necessary elements for the creation of a Preservation Index ("closing file").

The implementation of this index, of which SinCRO has described both the semantics and the articulation, allows you to use a shared data structure and achieve a satisfactory degree of interoperability in the migration processes from a preservation system to another, through the adoption of a specially developed XML Schema.

The AIP index scheme defined in the UNI 11386 standard includes four "extension" points, where the preservation manager can insert additional information according to a customized scheme. Entaksi uses these additional information:

- **Additional information on the package description** (SelfDescription/MoreInfo). This section contains the references to the SIP from which the AIP data come.
- **Additional information on the contents of the package** (VdC / MoreInfo). This section lists the metadata in the archival package.
- **Additional information on the individual archival units** (FileGroup / MoreInfo). This section contains the metadata of the archival unit(s).
- **Additional information on individual files** (File / MoreInfo). This section shows the metadata of the individual archive unit file.

In the "AIP List" section by selecting an AIP from the list, it is possible to view the detail where are shown both general information about the package itself, such as the structure of the archival register, creation and processing dates, number, and status, either the list of documentary units contained in it, divided by number, title and description.



The screenshot displays the 'eCON > Archival Information Packages > Documents' interface. At the top, a summary table provides key details:

Year	Document type	Sectional	Status
2022	D58	lul	CLOSED

Below this, a second table lists additional metadata:

Number	Creation date	Processed on	Documentary units
14	06/12/2022 15:50	07/12/2022 13:00	1

The main section, titled 'Documents', features a search bar and a table of units. The table has columns for 'Number', 'Title', and 'Description'. One unit is listed:

Number	Title	Description
119	Documento.pdf	Libro unico del lavoro

At the bottom of the table, a pagination control shows '1 total elements' and navigation buttons.

Figure 33. AIP detail

If it is necessary to deepen the content, by clicking on each documentary unit, it is possible to view the search keys indexed by the system (metadata) and how they have been set.

7.5. Search and request documents

Figure 34. Search and request documents.

Through **"Search and request documents"**, using the predefined searching metadata and setting the value to be assigned to the key ("equal" in the case of text searches, "greater" and "lesser" if looking for a range, such as for dates), it is possible to set up the general search within all the preserved documents for the company and to request DIPs.

Research keys are made up of metadata in documents. All search items correspond to the metadata as listed in the chapter [Metadata](#).

To combine several search terms, click on the **"Add criteria"** button: a second section appears where further criteria can be entered.

To enter multiple values for the same search key (where it is possible) just click on the "+" button next to the value box. By clicking on this key a further line is displayed where the new value can be entered.

If you want to delete an entered value because it is not correct, just click on the blue trash icon. Instead, by clicking on the red trash icon all entered predicates of the line are deleted.

To carry out a search, you have to insert a title into the "Search title" box (the one proposes by default is "Search for" plus the current date) and to enter the predicates in the selection criteria.

The **"Save"** button allows you to save the terms without start the search, the **"Find"** button starts the search which is saved in the "Search and document collections" section, the **"Search and Request DIP"** button starts the search and automatically requests a Dissemination Information Packages.

7.5.1. Search and request documents using a list of values separated by the character

As explained in [Search and request documents](#) paragraph, in order to search multiple values, you have to manually add new criterion lines and manually enter each individual value.

If you want to perform a filter for a large number of values, this operation could be very long and hardworking.

For this reason, Entaksi has developed a simultaneous multiple selection function by inserting a list of values separated by the character #.

This selection methodology can be used for any search criteria.

Suppose, for example, that you want to perform a multiple search for recipients
MARCO VERDI;MARIO BIANCHI;MARIO ROSSI.

Then, you have to select "Recipient name" as metadata, set the search criterion "is equal to" and enter the list structured as follows inside the value box:

MARCO VERDI#MARIO BIANCHI#MARIO ROSSI

The screenshot shows the 'eCON > Search and request documents' interface. At the top, there are buttons for '+ Add a criterion', 'Find', 'Search and Request DIP', and 'Save'. Below this is a 'Title of the research' field containing 'Research on 16/05/2023'. Under the 'Selection criteria' section, there are three fields: 'Select a metadata' (set to 'Recipient name'), 'Selection criterion' (set to 'is equal to'), and 'Select a value' (containing 'MARCO VERDI#MARIO BIANCHI#MARIO ROSSI'). To the right of the 'Select a value' field are icons for adding (+), deleting (trash), and saving (red square with a white 'x').

Figure 35. Name entry via value list.

By pressing the "Enter" key on the keyboard, the names are automatically included in the search with the "or" option:


This screenshot shows the same interface as Figure 35, but the 'Select a value' field now contains three lines of text, each with a value and a delete icon: 'MARCO VERDI', 'MARIO BIANCHI', and 'MARIO ROSSI'. Between each line is the word 'Or', indicating an OR search. The 'Add a criterion' button is still visible at the top left.

Figure 36. Multiple values search.

The table below lists the various types of criteria of a list of values with separator.

Type of criterion	Example list of values
String type	MARCO VERDI#MARIO BIANCHI#MARIO ROSSI
Numeric type	2022#2023
Date type	06-12-2022#07-12-2022
Date time type	06-12-2022 14:16#07-12-2022 14:16
List type	D01#D02#D03

If you want to replicate a criterion of a previously performed search, you can copy the list of values.

In this case you have to enter the DIP detail page (see [DIP list](#)) or a previously performed search detail page (see [Search and document collections](#)), to click on "copy criteria" button  next to the criterion you want to reproduce, and to paste the copied string into the corresponding criterion of the new search.

7.5.2. Interoperability DIPs

Interoperability DIPs are those containing all the AIPs within the preservation system, aimed to transferring the data to another preservation system.

They are available only if the service has been ceased by the company, for six months from the ceasing date. Interoperability DIPs can be obtained with the following procedure:

1 . In the "Search and request documents" function [Search and request documents](#) (available on our application: <https://entaksi.eu/console>), **leave all the data selection fields blank** and click on the "Search and Request DIP" button. In this way, the research will return all AIP preserved for the reference company, and so the interoperability DIP(s) will correctly form.



NOTE: Data selection process is an activity that may take some time to complete, it depends on the system data traffic and on the size of the DIP(s) to be created.

2 . Once the search process is finished, (it is possible to check the search progress looking at the status that appears in the last column of the "Document collection" section that it is set on 'DIP ready' by the system) you can select the obtained search in "Document collection", and the following section appears:

eCON > Dissemination Information Packages > Dissemination Information Package LUL 2022

[Download DIP](#)

LUL 2022 [✎](#)

The Dissemination Package with the selected documents is ready to be downloaded.

Selection criteria

Document type is equal to D58

Document sectional contains lul

Document year is equal to 2022

Results

Id	Title	Subject	Type	Uri Pda
000MYJ80YE00000II06P	DATA/202208/BCCLSN69L20F205T.PDF	Cedolino Agosto 2022 ALESSANDRO PINCO	Cedolino	urn:entaksi:IT00112233221:_default:reg:2022:D58:lul:pda:13
000MYJ80YE00000CM068	STAMPE/202208/Firma_202208_Marche_0995.Pdf	Riepilogo documenti firmati Agosto 2022	Riepilogo firme LUL	urn:entaksi:IT00112233221:_default:reg:2022:D58:lul:pda:9

Figure 37. Interoperability DIPs creation.

3 . The search result thus carried out includes the list of all the AIPs in the preservation system. Now you can click on "Download DIP" button to get all the company documents to send to another preservation system. There may be one or more DIPs: it depends on the number of documents (each DIP includes about 900 signed documents and indexes).

As creating, also downloading DIP(s) is a process that may take some time to complete.

Created DIPs are ready to be submitted to the new preservation system, following the indications defined by the new preservation manager.



NOTE: Please consider that there may be some SIPs still to be "closed" and to be processed into AIPs in the preservation system. The closing process takes place on a defined basis, approximately monthly: it is recommended to carry out the interoperability procedure described above after having checked in the [SIP List](#) section in the Console that all the AIP have been correctly created.



NOTE: If the company contract with Entaksi is not ceased, the procedure will give an error message, as at least one term must be entered in the search menu for an active company.

7.6. Search and document collections

In the "Search and document collections" section, a list of all the saved searches is shown.

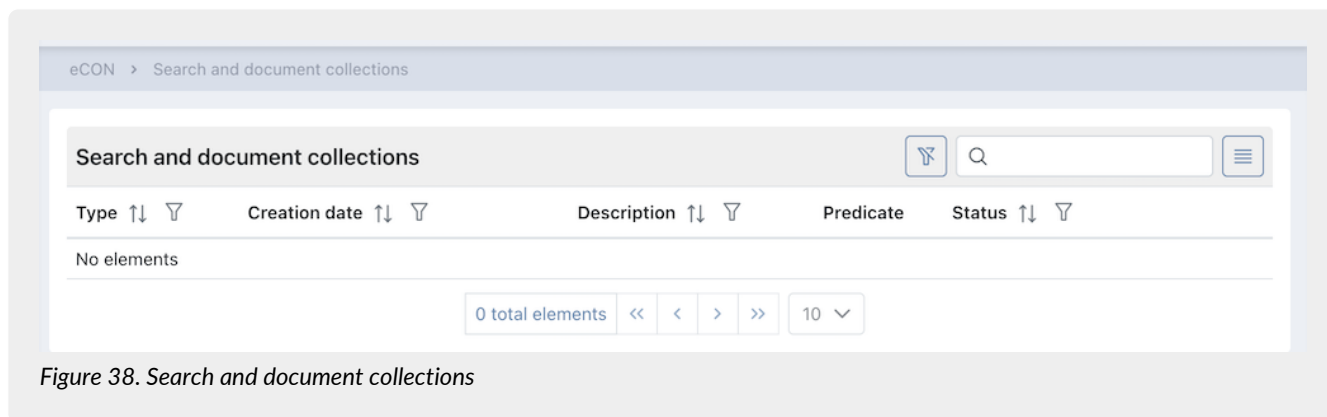


Figure 38. Search and document collections

The items listed are:

- **Type:** type of extraction. It can assume the values of "Search" or "Collection";
- **Creation date:** it is the date the search was started;
- **Description:** it is the title of the search;
- **Predicates:** they are the criteria entered during the search creation phase ([Search and request documents](#))
- **Status:** it is the state the search. It can have the following values:
 - "Draft";
 - "Saved";
 - "Search in progress";
 - "Results available";
 - "DIP requested";
 - "DIP under construction";
 - "Enable";
 - "DIP ready";
 - "DIP to delate";
 - "DIP delated";

Among these, the statuses the more interesting are:

- **Draft:** it means that the search made in [Search and request documents](#) has simply been saved.
- **Search in progress:** your requested search is being processed.
- **Results available:** your search is finished. To view the results, just click on the row to enter the detail page.
- **DIP ready:** the required DIP is available.

From this section it is possible:

- to sort the columns and to filter the elements in the table as described in [Console tables](#);
- to enter the detail page by clicking on the single row.

In the case of a "Search" type with a "Draft" status, entering the detail page you can modify and / or complete the search requiring a DIP.

In the case of "Search" type with "Results available" status, entering the detail page you can see the results of the research.

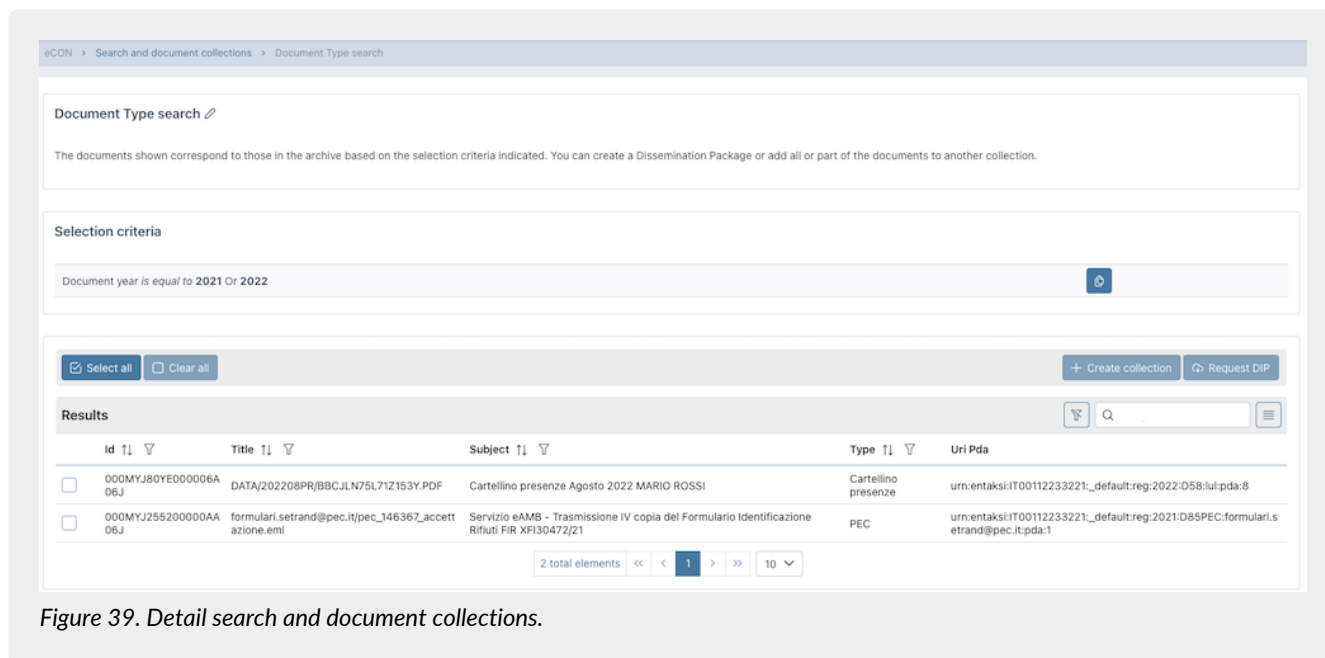



Figure 39. Detail search and document collections.

In the first section, the search title is shown and you can change it by clicking on  next to the title.

In the central section, the selection criteria previously carried out are listed. By clicking on  next to the criterion, you can copy its list of values.

You can create a new search by copying the list as explained in [Search and request documents using a list of values separated by the character .pdf](#)

The documents that meet the extraction criteria are listed in the bottom section.

You can select the elements individually in the list or all by clicking the buttons on the left. By clicking on "Select all" all listed items are selected, by clicking "Clear all" all listed items are deselected.

The right buttons are enabled only if some item is selected. By clicking them, you can:

- to request a DIP by clicking on "Request DIP": the request will be present in the list of "Search and document collections" page;
- to create a collection by clicking on "Create collection". In this case, a new form opens from and you can decide to create a new collection by entering its description or merge the selected items into an existing one by selecting it from the list of existing collections. By clicking on "Save", the chosen option is executed.

Exactly as in the case of a Search in "Results available" status, entering into the detail page of a collection in "Active" status, by selecting all or part of the items, you can request a DIP, create a new collection or add them to an existing one.

If the search is in "DIP ready" status, you can enter in the DIP detail page.

7.7. DIP list

The section dedicated to **Dissemination Information Packages (DIP)** allows to view all the DIPs requested through the search functions previously described.

You can search and extract documents stored in the system, for the purpose of consulting them or distributing them through this specific information package.

Based on the selection criteria of the documents, the preservation system provides a Dissemination Package in .zip format, that includes:

- a DIP index called "*PIndex.xml*", digitally signed by the Preservation Service Manager with an XAdES B-T level signature, which consists of a digital signature with an embedded timestamp, in compliance with the ETSI EN 319 132-1 standard - "Electronic Signatures and Infrastructures (ESI) - XAdES digital signatures - Part 1: Building blocks and XAdES baseline signatures.

The cryptographic certificates used in the signing process and for applying timestamps are issued internally by Entaksi Solutions SpA - Irish Branch, registered on the EU Trust List. Entaksi may also use backup Certification Authority that are

part of the European Union Trusted List (EUTL) under eIDAS.

The index also serves as the dissemination report, containing the index of all requested archival packages.

- the documentary units within the archive, corresponding to the selection criteria organized according to their respective AIPs, which may correspond to one or more folders within the ZIP file, named according to the AIP's urn (e.g., urn_entaksi_IT01234567890__default_reg_2022_D85_man_pda_9);
- any signature validation reports;
- the set of preservation proofs for the selected documentary units (the signed indices of the provenance AIPs).

DIPs can contain parts, one or more AIP. Their download is available for one year, then an automatic deletion will be operated.

The DIP's index uses the same SinCRO format used by the AIP's index, including the MoreInfo tags definitions defined for that format.

DIPs are tracked by the System, as they constitute an authentic and signed copy of the documents contained in the AIPs. Their download is available to the user for six months before automatic disposal.

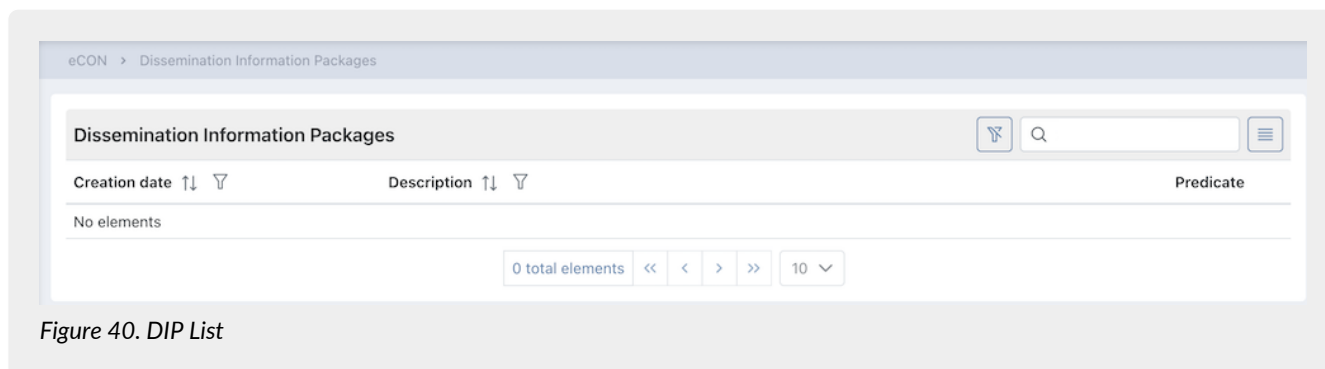


Figure 40. DIP List

The DIPs are displayed in a list where you can see the creation date, the description of the package and the values entered during the search.

From this section it is possible:

- to sort the columns and to filter the elements in the table as described in [Console tables](#);
- to enter the detail page by clicking on the single row.

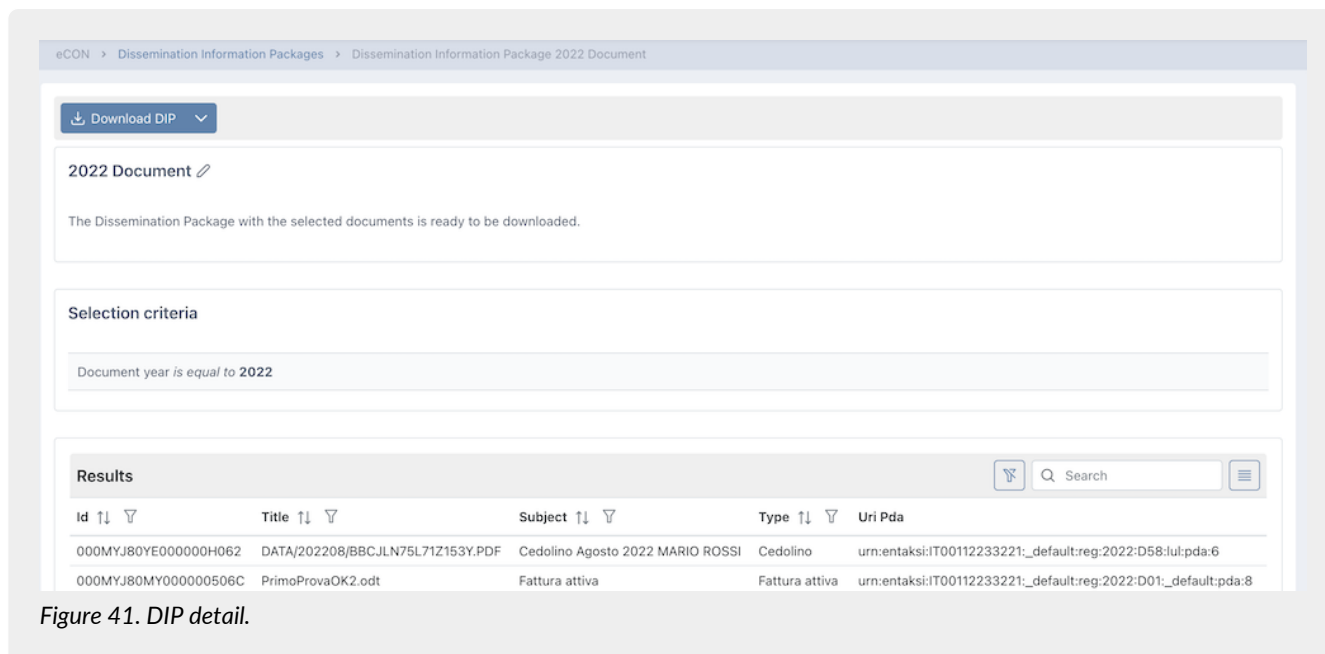


Figure 41. DIP detail.

In the lower part of the page, all the DIP documents are shown in a list.


In the top section, in addition to showing the general information of the package such as the year, document type, sectional, number and the creation date, you can download the DIP .zip file by clicking on "Download DIP".

Each DIP contains a maximum number of documents (about 900). For this reason, a search can produce one or more .zip files.

In this case, assuming a number equal to n of created PDD files, by clicking on "**Download DIP**" all the n files produced are downloaded at the same time.

In order to download only one file, open the pull-down menu of the button and click on the desired file.

The selection criteria are displayed in the central section.

By clicking on the icon  next to each selection criterion, the list of values with the criterion separator will be copied, a new search can then be created by inserting the copied list as shown in [Search and request documents](#).

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8. eDOC - Entaksi document management system

The "eDOC" button on the Console menu bar allows the user to access the eDOC Document Management System. This section consent to consult the documents uploaded through the ePLUS service on this specific customized Enterprise Content Management system.

The section allows the user to view the organization of the document archive and to search for specific documents in the structure, through an advanced metadata search system.

The documents included in the preservation system are automatically published on this management system based on Alfresco Community Edition, which allows the user to view and download work copies of the legally preserved documents.

Through this DMS it is possible to look up the documents for internal office management purpose only Please consider that to obtain documents with legal value, in according to what established by the D.P.C.M. 03/12/2013, it is necessary to follow the procedure described in the chapter [Search and request documents](#). **Only DIPs, signed and time-stamp marked, match with the legal definition of normative valid documents.**

DIPs contain one or more AIP, and meet the preservation requirements for digital documents in case it is necessary to show them to a supervisory authority or to third-parties.

Therefore, through the same **Entaksi Console** access point it is possible to check both the status of the preservation system and access the management system in which the documents are published.

The same credentials used to access the eDOC Console work on the DMS.

The DMS shows a control panel containing the list of documents areas (called "sites") to which the user has access. Each area corresponds to a company and will contain only the documents published for that company.

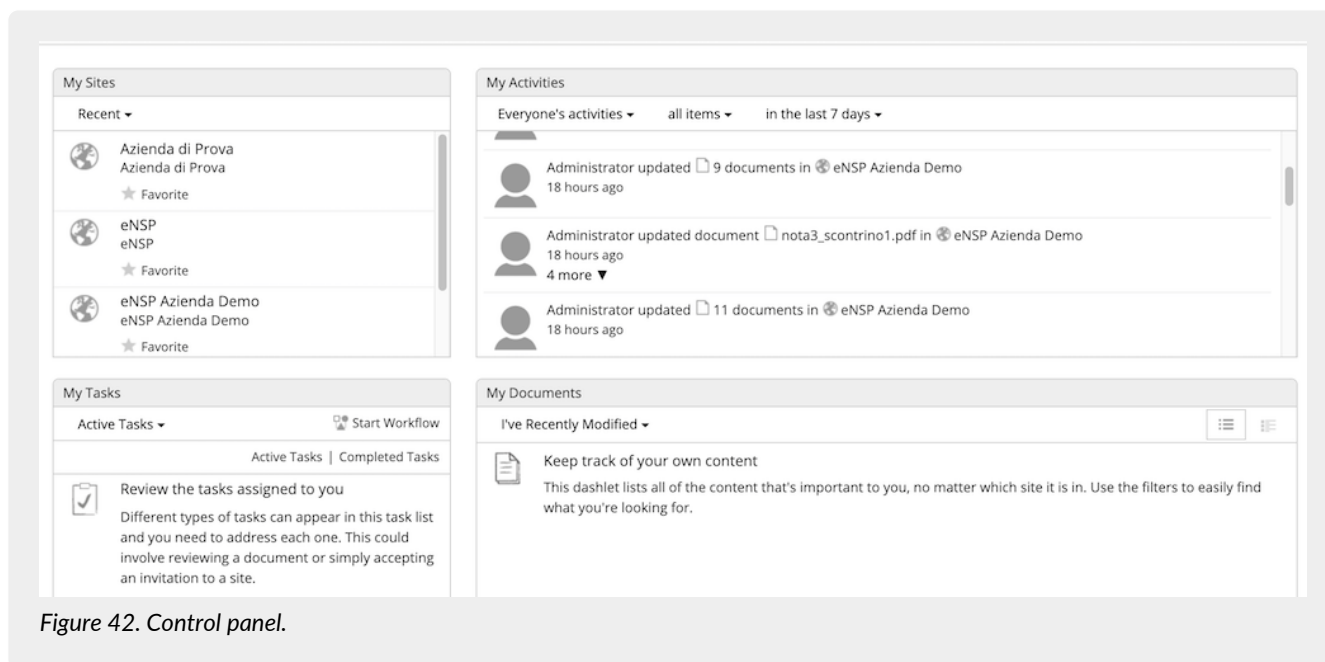


Figure 42. Control panel.

By clicking on the desired site the user can access the Document collection.

On "Raccolta documenti" the user can scroll through the folder structure in which the documents are divided by year, document type and sectional.

Folders can be explored both through the left menu or by opening each single folder in the central box.

Within the folders further categorizations are available if required, and documents can be consulted. By opening the single document, the metadata information related to it is available in the left menu.

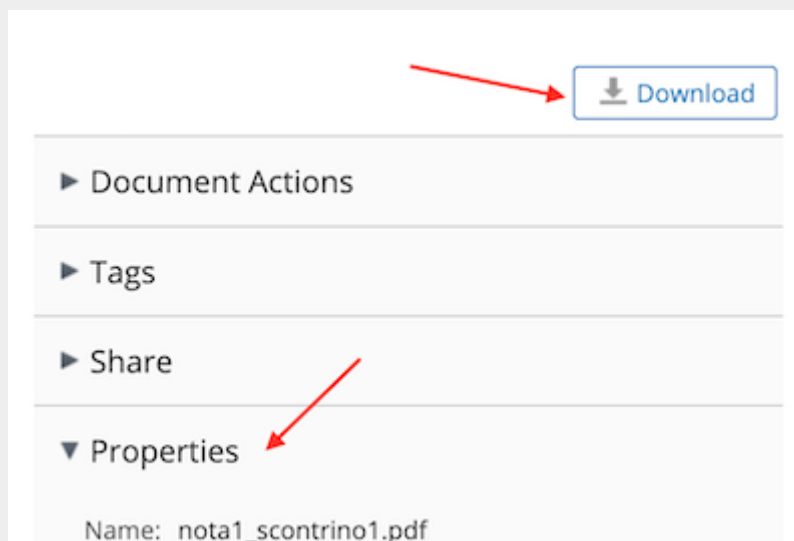


Figure 43. Document info.

A "Download" button is available on the top.

8.1. Advanced search

Using the "Ricerca avanzata" (Advanced search) function, the user can search through a specific metadata in documents. Metadata are the same as already defined in the chapter [Metadata](#). The function is placed on the search bar, and can be reached by clicking on the search icon:

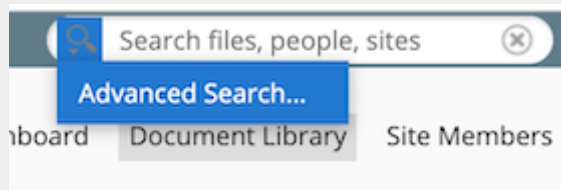


Figure 44. Advanced search.

The search is available on all the documents metadata using the "Parole chiave" (Keywords), or by using the predefined items of the single metadata type.

The available items are divided into various sections with respect to the related metadata:

- **Dublin Core Section**
 - Tipo Documento (Document type).
 - Descrizione Dublin Core (Dublin Core description).
 - Data, con valori da - a (Date, with values from - to).
- **Produttore (Producer) Section**
 - Identificativo Fiscale (Tax ID).
 - Codice Fiscale (Tax code).
 - Nome (Name).
 - Cognome (Surname).
 - Ragione Sociale (Company name).
- **Destinatario (Recipient) Section**
 - Identificativo Fiscale (Tax ID).
 - Codice Fiscale (Tax code).
 - Nome (Name).

- Cognome (Surname).
- Ragione Sociale (Company name).
- PEC
- **Intermediario (Intermediary) Section**
 - Identificativo Fiscale (Tax ID).
 - Codice Fiscale (Tax code).
 - Nome (Name).
 - Cognome (Surname).
 - Ragione Sociale (Company name).
- **Mittente (Sender) Section**
 - Identificativo Fiscale (Tax ID).
 - Codice Fiscale (Tax code).
 - Nome (Name).
 - Cognome (Surname).
 - Ragione Sociale (Company name).
 - PEC
- **Document Section**
 - Anno (Year).
 - Tipologia Documentale (Document typology)
 - Sezionale (Sectional)
 - Data, con valori da - a (Date, with values from - to).
 - Data inizio, con valori da - a (Start date, with values from - to).
 - Data termine, con valori da - a (End date, with values from - to).
 - Data registrazione, con valori da - a (Registration date, with values from - to).
 - Registrazione (Registration)
 - Data protocollo, con valori da - a (Protocol date, with values from - to).
 - Protocollo (Protocol).
 - Posizione lotto (Lot location).
- **Fattura (Invoice) Section**
 - Codice destinatario (Recipient code).
 - Descrizione destinatario (Recipient description).
 - Scadenza (Expiration date).
 - Importo (Amount).
 - Codice CIG (CIG Code).
 - Codice CUP (CUP Code).
 - Firmatario (Signer).
 - Identificativo SdI (SdI identifier).
 - Esito (Outcome).
 - Numero (Number).
- **PEC Section**
 - Descrizione del messaggio (Message description).
 - Gestore della casella PEC (PEC mailbox manager).
 - Identificativo del messaggio (gestore) (Message identifier (handler)).
 - Identificativo del messaggio (Message identifier).
- **LUL Section**
 - Tipologia (LUL type).
 - Centro di Costo (Cost center).
 - Matricola del dipendente (Employee's service number)..
 - Livello del dipendente (Employee's level).
 - Qualifica del dipendente (Employee's status).
 - Stabilimento del dipendente (Employee's plant).
- **FIR Section**

- Numero (Number).
- Numero copia (Copy number).
- PEC Destinatario (Recipient PEC).

Ricerca avanzata

Cerca: Documento eCon Cerca

Parole chiave:

Metadati Dublin Core

Tipo di documento: Descrizione:

Data:

Da: A:

GG/MM/AAAA GG/MM/AAAA

Produttore

Identificativo fiscale: Codice fiscale:

Nome: Cognome:

Ragione sociale:

Destinatario

Identificativo fiscale: Codice fiscale:

Nome: Cognome:

Ragione sociale: PEC:

Intermediario

Identificativo fiscale: Codice fiscale:

Nome: Cognome:

Figure 45. Advanced search key.

The search can be set on "Documenti eCon" (eCon documents) or on "Cartelle" (folders), and this value can be set via the dropdown at the top of the search page.

The displayed results can be further filtered through the search keys shown in the box on the left of the page.

The correspondence between search keys and metadata is described in the chapter [Metadata](#).

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9. Entaksi Token

There are different types of kits available on the market for applying digital signatures to documents, the most common are smart card readers and token.

To use them, it is necessary to download drivers for hardware recognition and specific software used for applying digital signature.

The smart card reader is a device that must be connected to the PC via USB in which must be inserted a chip card, in "credit card" format, which contains the data of owner and of service provider, as well as the signature certificate.

Tokens (compatible with Windows, Linux and MAC) are USB "pens", similar to common data storage devices, which contains a chip like to the smart card where data of the owner, the service provider and signature certificate are saved. Unlike smart card, these devices do not require a reader as they directly connect to the PC via a USB port.

The signature token chosen by Entaksi Solutions SpA is the model "**SafeNet eToken 5110 CC**", a USB-A device containing the IDPrime 940 chip from Thales Group (formerly Gemalto).

This model has been selected by Entaksi Solutions SpA for use as Qualified Signature/Seal Creation Device that it meets the eIDAS requirements for this purpose.

The model is shown at the [compiled list of devices](#) with the name "Carte IAS Classic en version 4.4.2 avec serveur MOC 1.1 sur plateforme Multiapp v4.0.1" among the certified devices of France, the manufacture's member state.

Regarding the difference between the chip name included in the token (IDPrime 940) and the one listed in the list (Carte IAS Classic en version 4.4.2), the following manufacture's declaration on the change of nomenclature applied in 2018: [Certification Report](#) and [Security Target](#).

With these characteristics the device hosts the certificate and the relative private key for the application of qualified signatures with legal validity throughout the European Union.

Through the Entaksi token it is possible to digitally sign documents both through Acrobat (see paragraph [Sign documents through Acrobat](#)) and through the Entaksi signature application eSIGN Desktop (see paragraph [\[Connection with Entaksi Token\]](#)).

9.1. Management

The Entaksi token must be input into a USB-A port of a Windows, macOS, or Linux computer.

For proper use of the signature device, it is necessary to download and to install the drivers and management software, which depend on the adopted operating system, available at the following links:

- [SafeNet Authentication Client Tools for Linux 10.8 R1](#)
- [SafeNet Authentication Client Tools for Windows 10.8 R8](#)
- [SafeNet Authentication Client Tools for macOS 10.8 R2](#)

The token has four roles, each corresponding to four passwords (or PIN):

- **Role#1 "Token password"**: It is used to perform operations such as writing and deleting keys. It is exclusively used when writing operations need to be performed, for example, during certification renewal.
- **Role#2 "Administrator password"**: It is used to reset the value of the "Token password" and to initialize the device. The device comes with factory default value, that is, a string of 48 zeros. With this password you can reset the value of the "Token password", in case it is forgotten.
- **Role#3 "Digital Signature PIN"**: It is used to authorize electronic signature operations using keys for signature only in the Common Criteria protected zone. It corresponds to the PIN for daily use of the electronic signature and must be inserted whenever you want to affix an electronic signature.
- **Role#4 "Digital Signature PUK"**: It is used to restore the value of "Digital Signature PIN" for device initialization, in case it is forgotten.



ATTENTION: The Digital Signature PIN is invalidated after 3 incorrect insertion attempts and must then be restored using the "Digital Signature PUK".



IMPORTANT: The Digital Signature PUK is invalidated after 3 incorrect insertion attempts and it is **not recoverable** either with the intervention of Entaksi or the device manufacturer. **Invalidating the Digital Signature PUK the token becomes unusable and must be replaced with a new one.**



It is recommended to avoid performing operations to modify these passwords if not setting up an orderly environment, making sure you have the time to record or securely memorize the values you want to set.

9.1.1. Driver and management software installation

For the correct use of the token you need to download and install the drivers and the management software.

The drivers and the software depend on the operating system of your computer, and they are indicated in the previous paragraph [Management](#).

Once you have been downloaded the software and the drivers, you can proceed with their installation by extracting the downloaded folder and following the simple installation workflow.

Click to "Next" on the first introductory screen, choose the language and click "Next", accept the contractual terms and click "Next" again.

The default installation path will be displayed, click "Next" to continue, or change the path if necessary and click "Next".

Choose among the three installation options: the suggested one is Typical, but you can choose the desired one. Once the installation option is set, click "Next", and finally, click "Install".

The software and token drivers will be installed in the previously indicated path, and you can now digitally sign documents with the Entaksi token.

9.2. Sign documents through Acrobat

Using the Entaksi token, you can digitally sign your documents through Acrobat with just a few simple steps.

After connecting the token to your computer, open the document you want to sign with Acrobat, in the left side menu click on "Visualizza più" ("View more"): an additional menu will appear. By clicking on the "Utilizza certificato" ("Use certificate") option and then on the submenu "Firma digitalmente" ("Digitally sign"), you can start the configuration process for signing.

By clicking and holding down the left mouse button, you can define the area where you want to place the signature: once this operation is completed, you can proceed to the next phase of the signature process.

If multiple certificates are available on your computer, select the option to sign with the certificate issued by Entaksi.

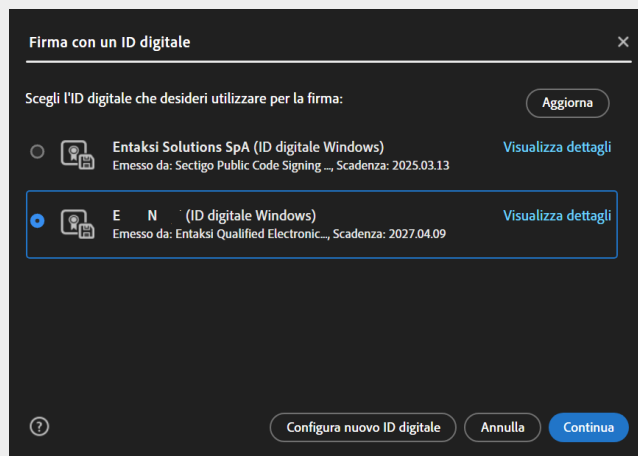


Figure 46. Select certificate.

You will see how the signature appears on document after it's been applied. From this screen, you can modify the appearance to the standard one proposed, view the certificate details and lock the document after signing.

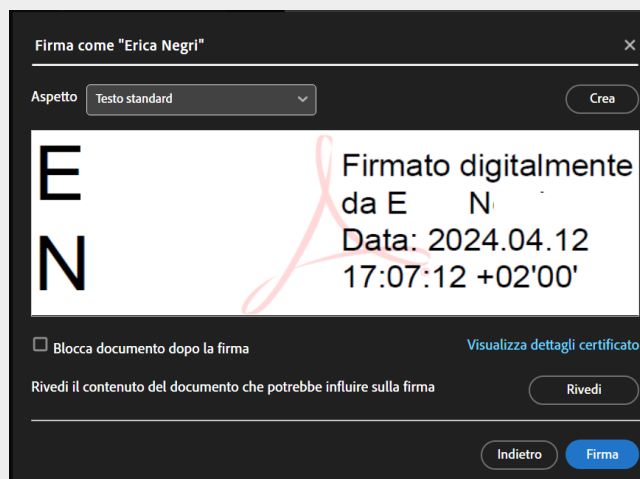


Figure 47. Signature creation.

By clicking the "Crea" ("Create") located at the bottom right, you will be prompted to enter the PIN code received with the token.

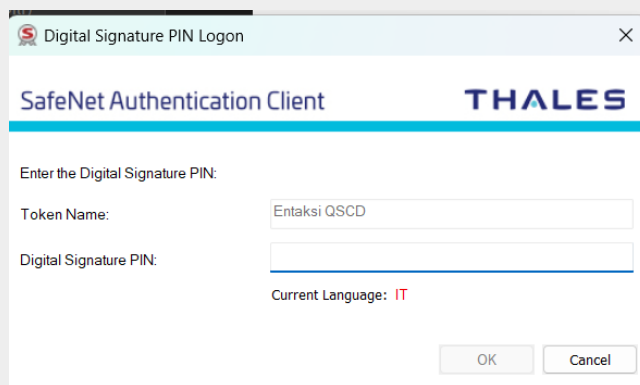


Figure 48. Enter PIN.

By entering the PIN code and clicking the "OK" button at the bottom right, the document will be successfully signed.

10. eSIGN Desktop

The software is available for Windows, macOS and Linux environments.



eSign Desktop for Windows



eSign Desktop for macOS



eSign Desktop for Linux

Figure 49. Operating systems

Once the operating system has been found, you have to select the relevant item.

On the page below you will find all the instructions necessary to download the application and drivers for the smart card.

In order to download "eSIGN Desktop", click on **"Download eSIGN Desktop"** button. Once the package has been downloaded, it will be possible to install it following the instructions in the [eSIGN Desktop Installation](#) paragraph.

In order to download the smart card drivers, you will first need to locate your smart card type by choosing from the options shown (ATHENA card, card Oberthur / IDEMIA, card STMicro).

Once the type of card has been identified, you can click on the link of the driver and download it.

To install the downloaded driver, you have to unzip the folder and to click on the "Setup file". It will be possible to continue


with the installation following the wizard instructions.

10.1. eSIGN Desktop Installation

Once the "eSIGN Desktop" software has been downloaded, it will be possible to proceed with its installation by clicking on the executable file you just downloaded.

A wizard will be opened. By clicking on the left bottom buttons you can print and download the user licence. With the right bottom buttons it will be possible to refuse the license (in this case the installation wizard will close) or to accept it continuing with the installation.

The program's default destination is displayed, and you can modify it.

Once the installation is finished, the management icon  will display, and by clicking it, the program will start automatically.

When the application is launched, two main menus, "File" and "Help" will be displayed in the top right corner, whose main features are outlined in the following sections.

By connecting the signing device, whether it's a token or a smart card, it will be possible to digitally sign documents saved locally or those started through the eSIGN service (see [Signing documents with eSIGN Desktop](#)) Simply by connecting to the service itself (see [Connecting eSIGN Desktop to the eSIGN service](#)).

10.2. File Menu

In the top left corner, there is the 'File' menu, which contains the following options.

Clicking "Quit" (the last option) will close the application.

10.2.1. Verify

In this section you can check the correctness of the signatures affixed to a file.

The libraries used by the application to perform the check are the same as those used by the DSS and, consequently, the results will be in accordance with those reported on the page of verification signatures [verifica firme](#) of the European Commission.

By clicking on the "Select file" button in the top left corner you can choose the file that you want to check.

Once the file is uploaded, the system will start the scanning procedure.

As a first step, the Trusted Lists (TLS) will be updated if they have not been updated for more than 24 hours and will be saved in the ".entaksi/cache/tls" folder in the home directory of your device.

Then the DSS validation procedure will start, which uses a cache for the Certificate Revocation List (CRL) that is saved in the ".entaksi/cache/crl" folder in the home of your device. Once the verification process is complete, the results will be reported in the four sections described below.

Simple Report

This section, divided into three additional subsections, displays the validation policy and general information about the document. In the central part, along with the main information about the signature (such as signature format, date, and time), the compliance status of the verified signature is also shown.

For this check, you can download a document in either .pdf or .xml format by clicking the respective buttons located at the bottom right, which contain the same information presented in the section.

Detailed Report

This section lists all the steps taken to verify the signature.

For each check performed, the outcome is reported, and for each step of the check, any relevant icons indicating a successful, warning, or failed check are displayed.

For this type of report as well, you can download a document in .pdf or .xml format by simply clicking the respective buttons located at the bottom right.

Diagnostic Data

This section reports the diagnostic results, which are available exclusively in .xml format.

To download the document, click the corresponding button located at the bottom right.

ETSI Validation Report

This section reports the result of the ETSI validation, which is available exclusively in .xml format.

To download the document, click the corresponding button located at the bottom right.

10.2.2. Connect to the Registration Authority

Clicking on this option will open a connection form for the Registration Authority.

By clicking "**Connect**" a page will open from which you can, by entering your credentials, access the Registration Authority.

10.2.3. Settings

Clicking this option will open a new form where you can enter settings for a customized use of the application.

The form is divided into the following sections.

General

This section displays the last update of the Trusted Lists (TLS).

By clicking the "**Start TLS Update**" button, you will manually force an update of the Trusted Lists in the ".entaksi/cache/tls" folder in your device's home directory (instead of automatically as indicated in [Verify](#)).

Clicking the "**Clear CRL Cache**" button will delete all items in the Certificate Revocation List (CRL) in the ".entaksi/cache/crl" folder in your device's home directory.

Custom Stamp

In this section, it is possible to customize the signature that will be applied to a .pdf file using the visible local signing method.

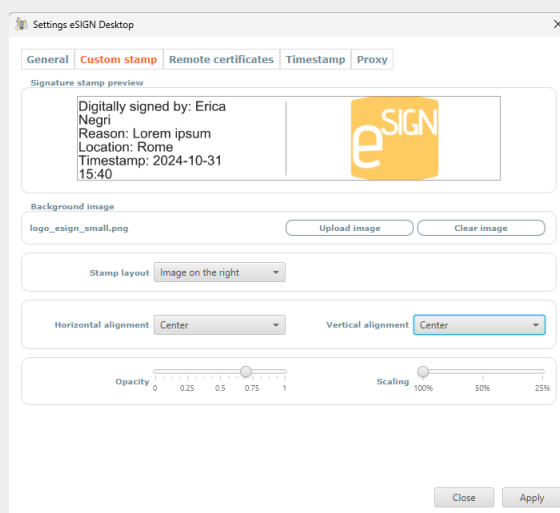


Figure 50. Custom Stamp.

At the top, a preview of the stamp, that is the signature, is available, which will be applied to the document using the visible local signing method: any changes made to the stamp are displayed in this section.

By clicking the **Select image** button, you can choose an image that will be applied to the signature. Only if an image has been selected will the following options be enabled:

- **Stamp layout.** With this option, you can choose the position of the image relative to the descriptive information of the stamp by selecting one of the three options available in the list:
 - Text overlay: the text overlaps the image, which will appear in the background;
 - Image on the right: the image is placed to the left of the text, with a vertical line displayed as a divider between the text and the image;
 - Image on the left: the image is placed to the left of the text, with a vertical line displayed as a divider between the text and the image.
- **Horizontal alignment - Vertical alignment.** The user can decide the horizontal or vertical alignment of the image relative to the previously set layout. The available options are listed as follows: Center, Right, Left for horizontal alignment; Center, Above, Below for vertical alignment
- **Opacity.** Adjust the transparency of the selected image: by moving the gradient slider to the right or left, the image will become more or less opaque.
- **Scaling.** Adjust the size of the selected image: by moving the gradient slider to the left or right, the image will be respectively decreased or increased in size.

By clicking the **"Remove Image"** button, the previously uploaded image will be removed, and the options below will be disabled.

Remote Certificates

By clicking the **"Log In"** button, after logging in with your credentials, a page will open displaying the available remote certificates.

If no remote certificates are available for the user, a message indicating their unavailability will be shown, from which you can access the Entaksi website to request additional certificates.

Timestamp

In this section, you can configure the data for using a timestamp and its authentication.

To enable the use of time stamp, you need to check **"Use timestamp service"** checkbox located at the top left and define the timestamp provider (Entaksi or another service) by selecting one of the two options available in the list.

If the chosen service is Entaksi, it is necessary to enter the **"Username"** and **"Password"** (mandatory fields) and, optionally, fill in the **"Policy Oid"** field.

If another service is selected, it is necessary to fill in the **"Service URL"** field (mandatory) and, optionally, the **"Policy Oid"**, **"Username"**, and **"Password"** fields (for third-parties services, credentials are not mandatory).

Proxy

In this section, you can enable the connection to a proxy server and its authentication by simply checking the relevant options and entering the required data.

In the bottom right, by clicking the **"Apply"** button, all changes made will be saved, clicking the **"Close"** button the changes made will not be saved.

10.3. Help menu

In the top left corner, next to the File menu, there is the **"Help"** menu, which contains the following options.


User Manual

Clicking this option will open a page from which you can download the User Manual for the eSIGN service, which includes a chapter dedicated to the proper use of the eSIGN Desktop application.

About

Clicking this option will open a panel that provides general information about the eSIGN Desktop application and Entaksi's contact details for any needs.

10.4. Launch eSIGN Desktop

In order to apply a digital signature to any type of document, it is necessary to connect your signing device to the computer and launch eSIGN Desktop by clicking the icon  on your computer after installing the software (see the [eSIGN Desktop Installation](#)).

If the signed device is connected and recognized correctly, the screen of connected device will be displayed.

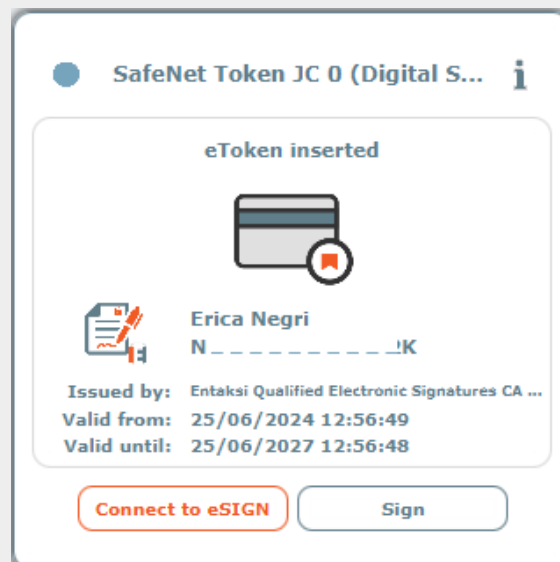


Figure 51. Connected device.

If the device has not been previously connected, the application will notify its absence. Without closing the application, you can connect the device to your computer, and it will be automatically detected, displaying the connection screen.

The connection screen displays the following information:

- the first name, last name, and tax code of the user holding the certificate;
- the Certification Authority that issued the certificate;
- the certificate's start validity date;
- the certificate's end validity date.

To the left of the information about the certificate holder user there are images indicating both the type of certificate (signature, seal, or authentication) and the issuing Certification Authority (Entaksi or third-parties).








Image	Description
	The certificate on the device is a "signature" type, and the issuing Certification Authority is Entaksi Solutions SpA - Irish Branch.
	The certificate on the device is "signature" type, and the issuing Certification Authority is a third-parties CA.
	The certificate on the device is "seal" type, and the issuing Certification Authority is Entaksi Solutions SpA - Irish Branch.
	The certificate on the device is "seal" type, and the issuing Certification Authority is a third-party CA.
	The certificate on the device is "authentication" type for websites, and the issuing Certification Authority is Entaksi Solutions SpA - Irish Branch.
	The certificate on the device is "authentication" type for websites, and the issuing Certification Authority is a third-parties CA.

Image	Description
	The certificate on the device is an unknown type, meaning it is not recognized as any of the three types listed above.

10.5. Connecting eSIGN Desktop to the eSIGN service

In order to apply the digital signature to documents initiated through the eSIGN service (not locally saved documents), it is necessary to connect eSIGN Desktop to the eSIGN service by clicking the "**Connect to eSIGN**" button: a request will be initiated, and the "**Connection in progress**" screen will appear.

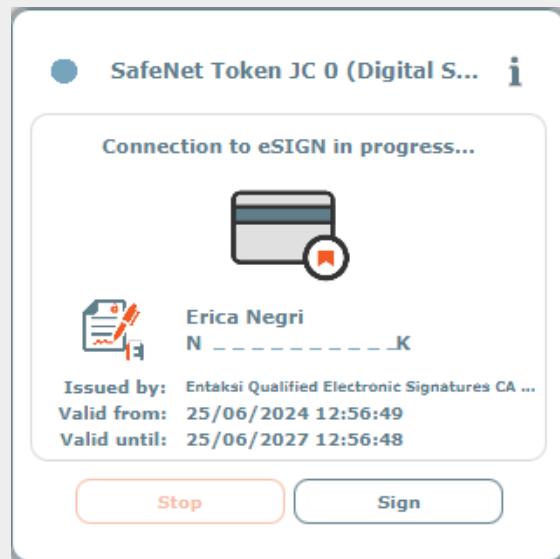


Figure 52. Connection in progress.

Clicking the **"Stop"** button will interrupt the attempt to connect to the eSIGN service.

To proceed with the connection request, you must accept the terms and conditions of use. By checking the acceptance box and clicking the **"OK"** button, the connection request will continue, clicking the **"Cancel"** button will interrupt the process. Once the terms of use are accepted, you will need to enter the device PIN, and by clicking **"Apply"**, the connection request is started. Clicking **"Cancel"** will interrupt the process.

When the application is successfully connected to the eSIGN service, the "**Connection successful**" screen will appear

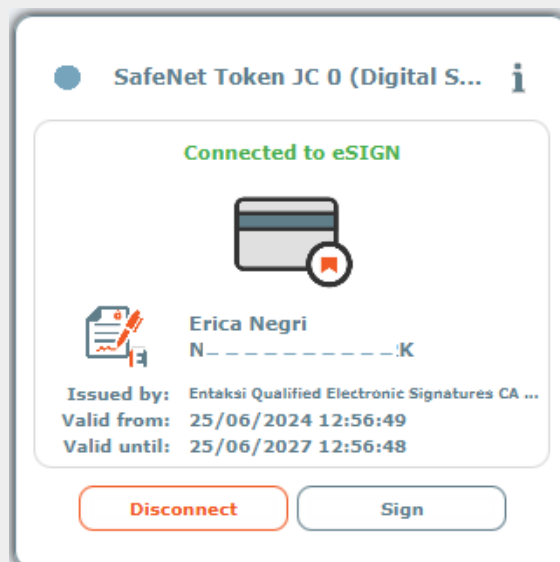


Figure 53. Connection successful.

10.6. Signing documents with eSIGN Desktop

10.6.1. Analogue Documents


The digital signature for analogue documents will be possible **exclusively** if the signer has been previously entered in eSIGN service and enabled to this function as described in the eSIGN Service User Manual available on the website www.entaksi.eu in the chapter "Signatory Users".

When the eSIGN Desktop application is connected, on the right side of the screen it will be displayed the list of documents for which signature is required.


The visible details are:

- smart card: shows the generic information of the smart card connected to the system through which documents will be signed;
- tipo firma (Signature Type): indicates the type of signature that will be affixed to the document;
- motivo firma (Reason for signature): the information relating to the SIP which contains the file;
- documento (Document): Contains the name of the document you are signing.

All columns can be sorted: by clicking on the column header it will be possible to sort the data in ascending or decreasing order.

By clicking on the button  it will be possible to view the document.

In order to sign documents you have to select them and then to click on "**Autorizza le firme selezionate**" (Authorize selected signatures) placed at the top right: only the selected documents will be signed.


To select all documents you have to click on the  button placed at the top left of the grid header. Instead, by clicking on it in the row only the single document will be selected.

SIPs containing documents are also viewable in the eSIGN service in the "Signature processes" section as described in the eSIGN User Manual in the chapter "Signature processes".

In the event that all the files in the package have been signed, it will result in "Completed" status. Instead, if the files, all or in part, are unsigned, the package will be in "Waiting for signature" status.




ATTENTION: the SIP, originally containing the physical documents, will be sent to the storage system **exclusively** when all the documents contained in it will be signed.



By clicking on the  icon, the list of documents signed by the smart card during the connection will be displayed. This list will appear on the right of the connection screen session with eSIGN.

The details shown are:

- **smart card**: it shows the generic information of the smart card connected to the system.
- **data (date)**: it shows the date and time of the signature.
- **tipo firma (signature type)**: it shows the signature type of the document.
- **motivo firma (Reason for signature)**: it shows information relating to the reason for which the signature was requested.
- **documento (document)**: it shows the name of the signed document

All columns can be sorted: by clicking on the column header it will be possible to sort data in ascending or descending order. By clicking on  it will be possible view the signed document.

In the event that new signature requests are submitted when the user is engaged in viewing the list of signatures affixed, the application will automatically propose the list of signatures to be authorised. The list will update with the new documents at the end of those already present.

To display again the list of files in the PDV for which signature is required, you will have to click on the top right button  (in case of signatures to be authorized) or  (in case the list is empty).

10.6.2. Local documents

It is possible to sign with any signature device adopted with eSIGN Desktop, even local documents, that is saved on your computer, by signing like:

- **PADES** (PDF Advanced Electronic Signature): the signature can be **exclusively** affixed to documents in .pdf format, allowing the document to retain its name, format, and extension even after the electronic signature is applied.
The validity of the PAdES signature will be immediately readable with the most common PDF readers available for free on the market.
When the signed PAdES file is opened through the reader, a horizontal bar containing the specifications of the signatures applied to the document will appear, and their details will be visible by clicking on the "Signature Panel" option.
- **CADES** (Cryptographic Message Syntax Advanced Electronic Signature): the signature can be affixed to any type of document, in any format.
In the case of a digital signature in CAdES mode, the original document and the signed document are enclosed in an envelope, which is a new file with the extension .p7m.
Therefore, all digitally signed files in this mode have a secondary .p7m extension. For this reason, electronically signed files in CAdES format can only be read and recognized with specific software.
- **XAdES** (XML Advanced Electronic Signatures): the signature can be affixed to .xml files. Since there is no enveloping phase, it is possible to access the data contained within the file even after the signature is applied.

For each of the signature types mentioned above, it is also possible to select a signature profile.

The available signature profiles are:

- **BASELINE-B**: basic electronic signature.
- **BASELINE-T**: joins *BASELINE-B*, for which a Trust Service Provider has generated a reliable token (time-mark or time-stamp token) to verify that the signature indeed existed at a specific date and time.
- **BASELINE-LT**: joins *BASELINE-T* signatures with a long-term validation attribute containing certificate values and certificate revocation status values used to validate the signature.
- **BASELINE-LTA**: joins *BASELINE-LT* signatures with one or more long-term validation attributes to prevent the signature from being compromised due to weakening algorithms during extended preservation periods.

After starting the eSIGN Desktop application, on the screen indicating the correct connection of the signing device, whether it is a token or a smart card, click the "Sign" button located at the bottom right: a dialog mask for signing local documents will appear.

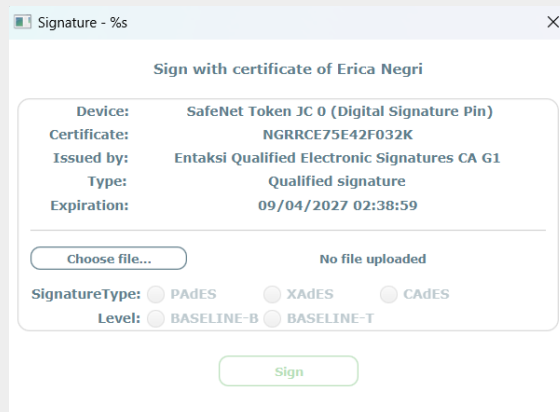


Figure 54. Sign documents locally.

The dialog mask is divided into two sections: the upper part displays all the information related to the signing device and the certificate used; the lower part shows the settings for the correct application of signatures.

By clicking the **"Select file..."** button, a search dialog mask will appear from which it is possible to select the file on which you want to apply the digital signature.

The types of signatures that can be applied will be enabled according to the extension of the selected file: for example, if a .pdf file is selected, the PAdES and CAdES signatures will be enabled; if an .xml file is selected, the XAdES and CAdES options will be enabled.

Once you have selected the type of signature you wish to apply, choose the signature profile: by default, the *BASELINE-B* profile is selected. If you have not enabled the "Timestamp" section of the "Settings" menu (see [Settings](#)), only the *BASELINE-B* profile will be enabled.

You can also add additional information that will be shown on the signature of the document: **"Reason for signature"** which can be enhanced even on multiple lines with a maximum length of 300 characters, and **"Location"** with a maximum length of 200 characters.

These two information are optional: they will be displayed on the signature only if provided.

Visible signature

This type of signature is available **exclusively** for PAdES signatures, i.e., for .pdf documents, by checking the **"Visible Signature"** option.

Clicking the **"Sign"** button will open a new form where you can view the document to be signed.

By clicking on the document at the exact point where you wish to place the signature, a yellow field will be created to help visualize where the signature will be applied.

Click **"Apply"** to confirm the placement and proceed with the signing.+ You will be prompted to enter the device PIN, and then a form will open for saving the signed file: by default, it will open in the same folder as the previously selected file to be signed.

Click **"Save"** to save the signed file to your computer.

No-visible signature

This type of signature is automatically applied for CAdES and XAdES, while for PAdES, simply do not select the 'Visible Signature' option.

In this case, the document will be properly signed, but the position of the signature cannot be chosen by the signatory user.

Once the desired signature type is selected, click the **"Sign"** button at the bottom.

You will be prompted to enter the device PIN, and then a form will open for saving the signed file: by default, it will open in the same folder as the previously selected file to be signed.

Click **"Save"** to save the signed file to your computer.

11. eMAN - Digital preservation manual

The "Guidelines on the creation, management and preservation of IT documents" published by AgID on 10/09/2020, on chapter 4.5, define the "digital preservation manager":

"In Public Administration, the digital preservation manager:

- a. he is a role provided for in the organization chart of the owner of the object of conservation;
- b. he is a manager or an internal officer formally designed and in possession of suitable legal, archival and IT skills;
- c. he can be the responsible of the document management or the coordinator of the document management (if he is appointed).

For subjects other than the Public Administration, a person external the organization can be the digital preservation manager. He must have suitable legal, IT and archival skills and he must be different from the Preservator, in order to ensure the function of the owner of the object of preservation with respect to the system of storage".

From an operational point of view, the digital preservation manager must carry out the activities listed in chapter 4.5 from point a) to point m):

- "a. he defines the preservation policies and functional requirements of the preservation system according to current legislation and international standards for the specific documents stored (IT documents, IT aggregations, IT archive);
- b. he manages the preservation process and guarantees compliance with the law over time;
- c. he generates and signs the preservation report, according to the procedures set out in the digital preservation manual;
- d. he generates and signs the DIP with digital or electronic signatures in the cases provided by the digital preservation manual;
- e. he monitors the correct functionality of the preservation system;
- f. with a frequency not exceeding 5 years, he carries out a periodic check of the integrity and legibility of IT documents and all the document aggregations in the archives;
- g. in order to ensure the preservation and the access to electronic documents, he adopts measures to detect any degradation of the preservation and to restore correct functionality;
- h. he duplicates the IT documents in relation to the evolution of the technological context, in accordance with the digital preservation manual;
- i. he prepares the necessary measures for the physical and logical security of the preservation system as foreseen by par. 4.11;
- j. in the appropriate cases, he ensures the presence of a public official, guaranteeing him the necessary assistance and resources for carrying out his activities;
- k. he ensures the necessary assistance and resources for the performance of verification and surveillance activities by the competent subject required by current regulations;
- l. he provides to send IT documents, IT aggregations and IT archives, and all the tools which guarantee its consultation to the Central State Archives and to the territorially competent state archives, according to the deadlines set by art. 41, paragraph 1 of the Code of cultural heritage;
- m. he prepares the digital preservation manual and he takes care of its periodic updating in case of regulatory, organizational, procedural or technological changes."

All the activities listed in letters a) to l), which include technical monitoring, the generation of the payment report, the definition of security and technical policies for the maintenance of the preservation system, and others, can be delegated to the Preserver.

The only non-delegable activity, which therefore remains in the hands of the digital preservation manager, is the one relating to point m), that is **the creation and the maintenance of the digital preservation manual according to the criteria defined by the Guidelines**.

Since the digital preservation manual is a must for PA and private individuals, Entaksi provides a **specific service through which it is possible to obtain a manual that is already conformed to the Guidelines**, containing the description of the preservation processes already used. It will also be kept constantly updated with respect to changes in legislation and methods of the preservation service.

When the manual has been digitally signed by the digital preservation manager, it will be stored through the Entaksi conservation service.

11.1. Digital preservation manuals

In order to access to the interface to create the digital preservation manual, you can enter in Entaksi Console and click on the dashboard button "**Digital Preservation Manual**" or click on the top menu item "**Digital Preservation Manual**" and choose one of the submenus.

The **Digital preservation manuals** section contains a list of all the manuals created with the service.

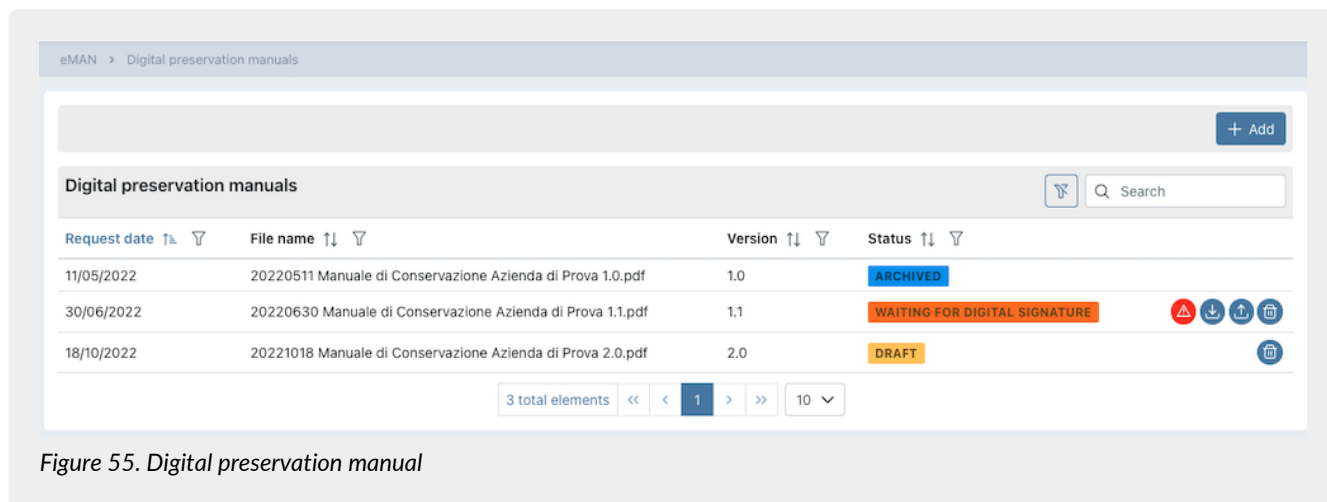





Figure 55. Digital preservation manual

Below there is a brief description of the items and filters on the list.

- **Request date:** it is the date of the manual's request. This data is editable only as long as the status of the manual is in "Draft".
- **File name:** it is the name of the manual. It isn't editable and it is automatically created by the system.
- **Version:** it is the version of the manual. This data is editable as long as the status of the manual is in "Draft".
- **Status:** it is the status of the manual.

From here it is possible :

- to sort the columns and to filter the elements in the grid;
- to access to the detail of the digital preservation manual by clicking twice on the single line in order to make any changes to the data. It is possible only in the case the manual's status is in "Draft";
- to remove an unsigned manual by clicking on the icon  ;
- to download and to upload the manual by clicking on the icons  and  ;
- to insert new manuals by clicking on the "Add" button.

The table below shows the states available when processing the manual:

Valore	Descrizione
DRAFT	The manual is created but not required. In this state it is still possible to make any changes to the request date and to the version of the manual or to delete it.
PROCESSING	The manual was requested and the system starts the process of its creating.
WAITING FOR DIGITAL SIGNATURE	The manual has been created, but it must be digitally signed to be validated. In this state it is not possible to change the request date and version, but it is can be deleted.
PROCESSING	Final state of processing: the manual was created and digitally signed, it is therefore compliant with regulations and ready to be downloaded.
ARCHIVED	Archiving status successful: the manual was entered in the preservation system thanks to the automatic generation of a SIP, which has been validated and automatically sent for storage.
ARCHIVING ERROR	Archiving status with errors. This state could be caused because the SIP's automatic creation with the manual inside went in error, or the created SIP has not been validated and therefore refused for preservation.

The digital preservation manual processing workflow is as follows:

1. Create a new digital preservation manual's request in draft status and then start it.
2. Wait for the manual to be created and the changing of the status from "In Process" to "Waiting for digital signature".
3. When the status changes into "Waiting for digital signature", you can download the digital manual, check it and sign it in a digitally way and upload it again using the upload button.
4. When the state change from "Waiting for digital signature" into "Processing", it will be possible to download the digitally signed preservation manual.
5. The service automatically creates a SIP (approximately weekly) and sends it in the preservation system. If the SIP is accepted, the status of the manual changes automatically in "Archived", otherwise, the status of the manual will be "Archiving Error".

11.1.1. Digital preservation manual request

In this section it is possible to create a new digital preservation manual request and to start it. It is possible to make changes, exclusively if its state is in "Draft".

The screenshot shows a web interface for creating a digital preservation manual request. At the top, there is a breadcrumb trail: "eMAN > Digital preservation manuals > Digital preservation manual 20221018 Manuale di Conservazione Azienda di Prova 2.0.pdf". Below this, there are three buttons: "Delete manual", "Save", and "Request". The main form area is titled "Digital preservation manual" and contains the following fields:

- File name:** 20221018 Manuale di Conservazione Azienda di Prova 2.0.pdf
- Status:** DRAFT (highlighted in orange)
- Request date:** 18/10/2022
- Version:** 2.0

Figure 56. Digital preservation manual's request

The default state is "draft" and it is not possible to modify it.

The name of the file is automatically generated by the system, it can not be modified and it is made up as follows:

"yyyymmdd" + "Manuale conservazione" + "Company name" + "Version" + ".pdf"

Where:

- "yyyymmdd": it is the year, the months and the day of the request of the manual;
- "Manuale conservazione": it is a wording automatically inserted by the system;
- "Company name": it is the name of the company for which you are creating the manual;
- "Version": it is the version of the manual. The system automatically proposes the following number of the last created one;
- ".pdf": it is the file extension.

Assuming the first digital preservation manual is being created in 2021-06-07 for the ROSSI SRL company, the following name will be automatically proposed:

"20210607 Manuale conservazione ROSSI SRL 1.0.pdf"

The values of the request date and the version number can be changed, remaining, however, congruent (consecutive) with the date and version of the last manual.

By clicking on the top buttons:

- **"Delete manual"**: the manual will be deleted;
- **"Save"**: all changes made to the manual will be saved;
- **"Request"**: the current manual processing will begin. It will **not** be possible to start a new request if there isn't a digital preservation manager for the specified date. It means that the role end date of the digital preservation manager (if it exists) must be higher than the request date of the manual (chapter [Digital preservation managers](#))

It would be possible to come back to the digital preservation manuals list by clicking on the breadcrumb on the top "Digital preservation manuals".

11.2. Configurations

By clicking on the menu item "Configurations", a submenu is opened and by clicking on the respective item it is possible to check, modify and insert the personal data of the **Digital presentation managers** and of the **Company contact person** and the logo that is automatically shown in the digital preservation manual.

11.2.1. Digital preservation managers

In the **Digital preservation managers** section all the inserted preservation managers are shown in a list.

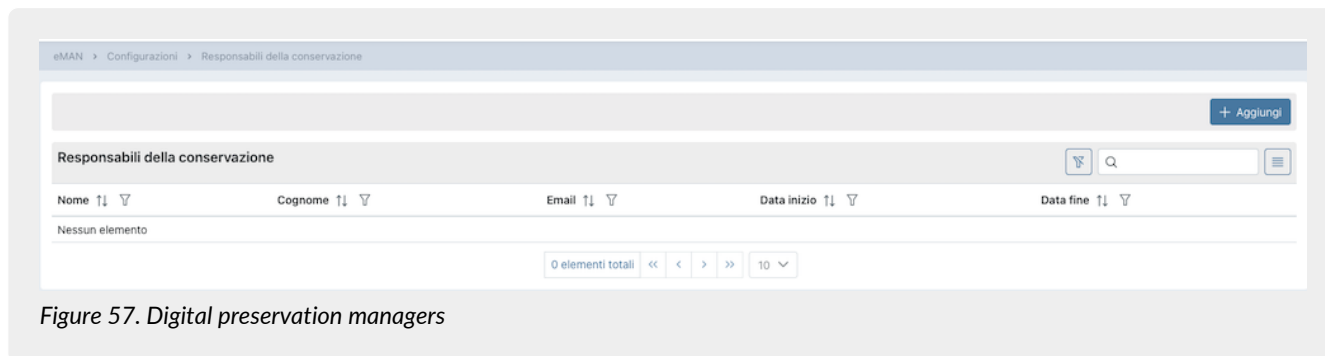


Figure 57. Digital preservation managers

Below there is a brief description of the items and filters on the list.

- **Name:** the digital preservation manager's name;
- **Surname:** the digital preservation manager's surname;
- **Start date:** the digital preservation manager's role start date;
- **End date:** the digital preservation manager's role end date.

Thanks to the start and the end date of the role, it is possible to have the historian of the digital preservation managers.

From here it is possible:

- to sort the columns and to filter the elements in the list;
- to access the detail page by clicking twice on the single row in order to make any changes.
- to insert new managers by clicking on "Add".

11.2.2. Adding digital preservation managers

In this section it is possible to add new digital preservation managers. It is not possible to delete an inserted digital preservation manager.

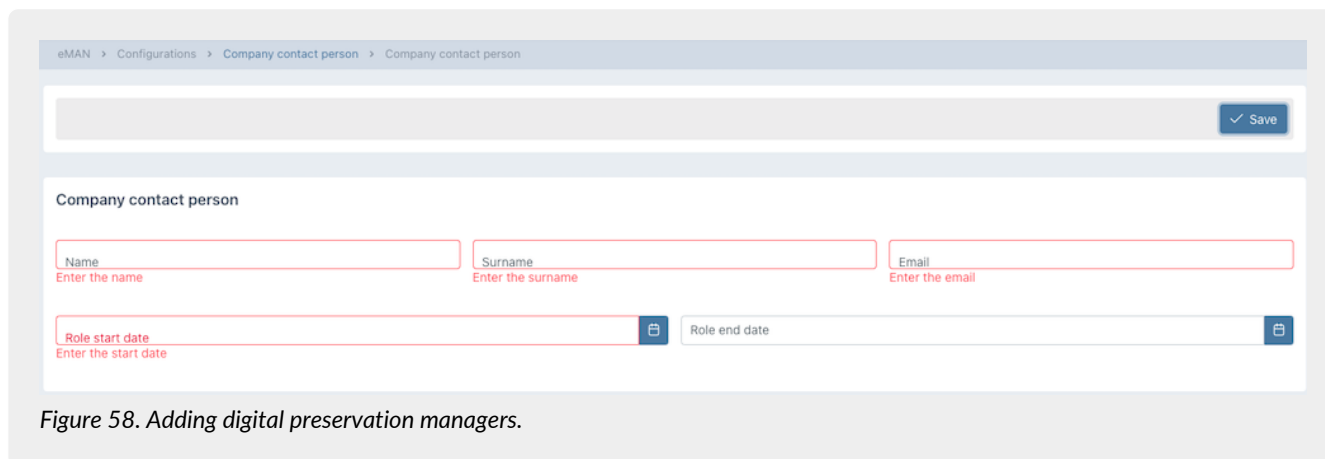


Figure 58. Adding digital preservation managers.

It is necessary to insert the following data:

- **Name:** it is the digital preservation manager's name. It is a mandatory item.
- **Surname:** it is the digital preservation manager's surname. It is a mandatory item.

- **Email:** ist is the digital preservation manager's e-mail. It is a mandatory item.
- **Role start date:** it is the digital preservation manager's role start date. It is a mandatory item.
- **Role end date:** it is the digital preservation manager's role end date. if it is not inserted it indicates that the role is active until a date to be determined.

The mandatory items are shown in red and it is not possible to save until they are correctly entered.

All the entered data is saved by clicking the "**Save**" button.

It would be possible to come back to the digital preservation managers' list by clicking on the breadcrumb on the top "Digital preservation managers".

11.2.3. Company contact person

In the **Company contact person** section all the inserted company contact people are shown in a list.

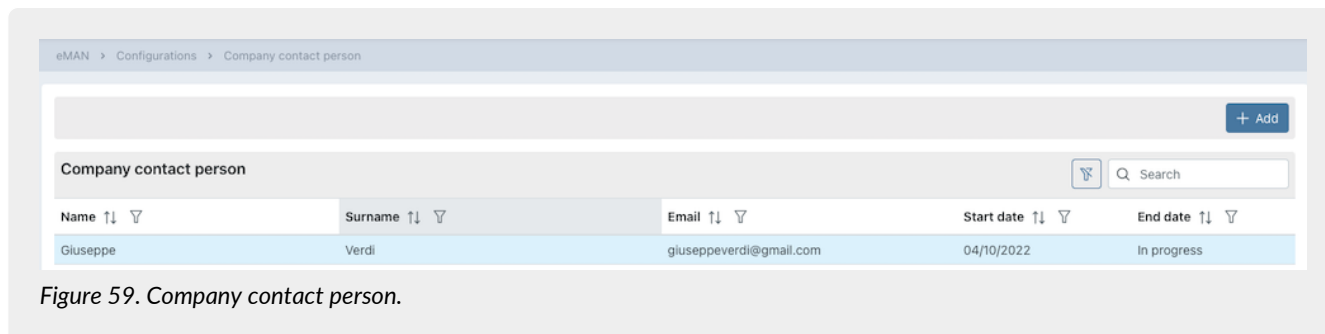


Figure 59. Company contact person.

Below there is a brief description of the items and filters on the list.

- **Name:** the company contact person's name;
- **Surname:** the company contact person's surname;
- **Start date:** the company contact person's role start date;
- **End date:** the company contact person's role end date.

Thanks to the start and the end date of the role, it is possible to have the historian of the company contact people.

From here it is possible:

- to sort the columns and to filter the elements in the list;
- to access to the detail page by clicking on the single row in order to make any changes.
- to insert new managers by clicking on the "**Add**" button.

11.2.4. Adding company contact person

In this section it is possible to add a new company contact person. It is not possible to delete an inserted company contact person.

Figure 60. Adding a company contact person.

It is necessary to insert the following data:

- **Name:** it is the company contact person's name. It is a mandatory item.
- **Surname:** it is the company contact person's surname. It is a mandatory item.
- **Email:** it is the company contact person's e-mail. It is a mandatory item.
- **Role start date:** it is the company contact person's role start date. It is a mandatory item.
- **Role end date:** it is the company contact person's role end date. If it is not inserted it indicates that the role is active until a date to be determined.

The mandatory items are shown in red and it is not possible to save until they are correctly entered.

All the entered data is saved by clicking the **"Save"** button.

It would be possible to come back to the company contact people's list by clicking on the breadcrumb on the top "Company contact person".

11.2.5. Adding a company logo

In this section it is possible to save the company logo which will be automatically shown in the digital preservation manual.

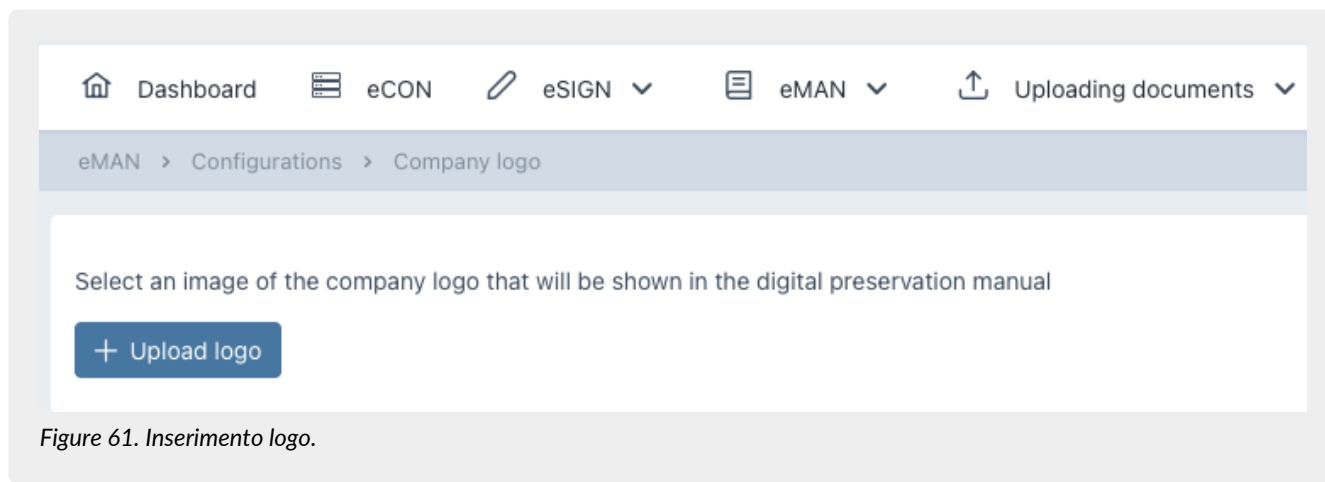


Figure 61. Inserimento logo.

It is possible to upload the company logo by clicking on **"Upload logo"**. When uploaded, the logo will appear in the body of the page. In order to delete the uploaded logo, just click on the icon  and upload another logo.

11.3. Sign and preservation

Once obtained the digital preservation manual, in order to make it legally valid, the digital preservation manager will have to digitally sign it and reload it on the system through the same interface.

The document has protection of the content.

Some digital signature software cannot sign documents in PAdES format with this protection. In this case, the document can be digitally signed in CAdES format (p7m).

Thanks to an automatic process, when the digital preservation manual will be signed and reload into the system, the system proceeds to create a SIP and to send it in the preservation system. When the SIP containing the manual will be present in the preservation system, the manual's status will be changed from "Archiving" to "Archived" as described in [Digital preservation manuals](#) paragraph.

The archived manual can be searched in Entaksi Console, as described in the paragraphs [SIP List](#) and [Search and request documents](#).

In particular in the SIP list, the manual's SIP will appear with the description "Manuale di conservazione" and it will be possible to see the detail, as described in [SIP List](#).

When the SIP is in "Accepted" state and its relating AIP is "Closed", it will be possible to do a "Search and request documents" by inserting the *Documento type - is equal to - D8503 Manuali* as criteria. If it is necessary, it would be possible to request the relative DIP.

12. Terminology

The terminology used in the manual is shown below, divided between the glossary of technical terms and acronyms.

12.1. Glossary

Access

It is an operation that allows you to view IT documents.

Reliability

In reference to a document management or preservation system, it expresses the level of trust that the user places in the system itself. In reference to the IT document it expresses the credibility and accuracy of the representation of acts and facts in it contained.

Computerized document aggregation

Set of IT documents or set of IT files grouped by homogeneous characteristics, concerning the nature and form of the documents or the object or the functions of the entity.

Archive

Set of documents produced or acquired by a public or private entity during the carrying out its business.

IT archive

Archive made up of IT documents, organized in IT documentary aggregations.

Homogeneous Organizational Area

In accordance with the provisions of art. 50 paragraph 4 of the Presidential Decree December 28 2000, n. 445, it is a set of functions and offices identified by the institution in order to manage documents in a manner unitary and coordinated. It represents the official channel for submitting applications and initiating proceedings administrative.

Certification of conformity concerning image copies of an analogue document on IT support

Declaration issued by a notary or another public official authorized thereto that is attached or sworn to the IT document.

Authenticity

Characteristic for which an object must be considered as corresponding to what it was in the original moment of its production. Therefore an object is authentic if, in the course of time or space, it has not undergone any unauthorized changes. Authenticity is assessed on the basis of precise evidence.

Certification

Third party attestation relating to compliance with specified product requirements, processes, people and systems.

Classification

Organization of all documents according to a scheme consisting of a set of items articulated in a hierarchical way and which identify the functions, skills, activities and/or materials of the producer in an abstract way.

Cloud of the PA

Virtual environment that allows Public Administrations to provide digital services to citizens and businesses in compliance with minimum safety and reliability requirements.

Codec

Encoding and decoding algorithm that allows to generate binary streams, possibly envelop them in a file or wrapper (encoding), as well as extracting them from it (decoding).

Conservative

Public or private entity that carries out the preservation of IT documents.

Preservation

Set of activities aimed to define and implement overall policies of the preservation system and to govern its management in relation to the organizational model adopted, guaranteeing the characteristics of authenticity, integrity, legibility, availability of documents over time.

File naming conventions

Set of syntactic rules that defines the name of files within a filesystem or package.

Document Management Coordinator

Person responsible for defining uniform classification and archiving criteria as well as internal communication between the AOOs pursuant to the provisions of Article 50, paragraph 4 of Presidential Decree 445/2000 in cases of administrations that have set up more AOOs.

Recipient

Person or system to which the IT document is addressed.

Digest

See Cryptographic Fingerprint.

IT administrative document

Any type of representation, graphic, photographic, electromagnetic or any other especially the content of documents, including internal ones, formed by public administrations, or, in any case, used by the latter for administrative purposes.

Electronic document

Any content stored in electronic form, in particular text or audio, visual or audiovisual registration.

IT document

Electronic document that contains the IT representation of acts, facts or data legally relevant.

IT duplicate

See art. 1, paragraph 1, lett) i quinquies of the CAD: "the IT document obtained through the storage, on the same device or on different devices, of the same sequence of binary values of the original document".

eSeal

See electronic seal.

Exhibition

Operation that allows you to view a stored document.

eSignature

See electronic signature.

Computer document extract

Part of the document taken from the original document.

Abstract for summary of electronic document

Document in which facts, conditions or qualities inferred from IT documents are attested in a synthetic manner

Static data extraction

Extraction of useful information from large amounts of data (e.g. databases, data warehouse etc ...), through automatic or semi-automatic methods.

IT evidence

Finite sequence of bits that can be processed by a computer procedure.

IT file

Structured and uniquely identified IT document aggregation containing deeds, documents or IT data produced and functional to the exercise of an activity or carrying out a specific procedure.

File

Set of logically related information, data or commands, collected under a single name e recorded in the memory of a computer by means of a processing or writing program.

File container

See container format.

File wrapper

See container format.

Manifest file

File that contains metadata referring to a file or a package of files.

Filesystem

A structured file management system through one or more tree hierarchies, which determines the methods of assigning names, storing and organizing within a storage.

Electronic signature

See article 3 of the eIDAS Regulation: "data in electronic form, attached or connected through logical association with other electronic data and used by the signatory to sign "

Advanced electronic signature

See Articles 3 and 26 of the eIDAS Regulation: "An advanced electronic signature satisfies the following requirements: a) it is connected only to the signatory; b) it is suitable for identifying the signatory; c) it is created from data for creating an electronic signature that the signer can use under your own exclusive control with a high level of security; d) it is connected to the signed data in order to allow the identification of any subsequent changes to them data."

Qualified electronic signature

See article 3 of the eIDAS Regulation: "an advanced electronic signature created by a device for the creation of a qualified electronic signature based on a qualified certificate for electronic signatures".

Flow (binary)

Sequence of bits produced in a finite and continuous time interval that has a precise origin but whose moment of interruption may not be predetermined.

Container format

File format designed to allow for inclusion ("enveloping" or wrapping) of one or more IT records subject to different types of encoding in one same file and to which specific metadata can be associated.

Format of the IT document

Type of representation of the sequence of bits that make up the IT document; it is commonly identified by the file extension.

"Deprecated" format

Formerly considered official format whose use is currently not recommended in favor of a latest version.

Additional functions of the IT protocol

In the computer protocol system, they are additional components compared to the minimum ones, that are necessary for the management of document flows, for the preservation of documents as well as for the accessibility of information.

Minimum functions of the computer protocol

Components of the computer protocol system that meet the requirements of operations and minimum information referred to in Article 56 of Presidential Decree 28 December 2000, n. 445.

Cryptographic hash function

Mathematical function that generates a cryptographic fingerprint starting or digest (see) from computer evidence in such a way that it is computationally difficult (in fact impossible) reconstruct the original computer evidence, starting from this, and generate identical footprints a starting from different computer evidence.

Document management

Process aimed at the efficient and systematic control of production, reception, holding, use, selection and storage of documents.

hash

English term used, improperly, as a synonym for the use of "cryptographic fingerprint" or "digest" (see).

Unique identifier

Sequence of numbers or alphanumeric characters associated in a unique and persistent way to an entity within a specific scope of application.

Cryptographic fingerprint

Sequence of bits of predefined length, the result of applying a cryptographic hash function to an IT evidence.

Integrity

Characteristic of an IT document or of a document aggregation through which it appears that they have not undergone any unauthorized alteration in time and space. The characteristic of integrity, together with that of completeness, helps to determine the characteristic of authenticity.

Interoperability

Characteristic of an information system, whose interfaces are public and open and capable to interact in an automatically way with other information systems, for the exchange of information and the provision of services.

Readability

Characteristic of an IT document that guarantees the quality of being able to be decoded and interpreted by a computer application.

Digital preservation manual

IT document that describes the preservation system and illustrates in detail the organization, the persons involved and the roles performed by them, the model of operation, the description of the process, the description of the architectures and of the infrastructure.

Management manual

IT document that describes the management system of IT documents, also for preservation purposes, and provides instructions for the correct functioning of the service for the maintenance of the IT protocol, the management of document flows and archives.

Metadata

Data associated with an IT document, an IT file or a document aggregation in order to identify them describing their context, their content and their structure - so as to allow time management - in compliance with what is defined in the ISO 15489-1: 2016 standard and more specifically by the ISO 23081-1: 2017 standard.

Preservation object

Digital object poured into a preservation system.

Digital object

Digital information object, which can take various forms including those of a IT document, IT file, IT document aggregation or IT archive.

Archival package

Information package generated by the transformation of one or more payment packages consistently with the methods indicated in the digital preservation manual.

Dissemination package

Information packet sent by the storage system to the user in response to his request to access to the preserved objects.

File package

Finite set of multiple files (possibly organized in a subtree structure within a filesystem) which collectively as well as individually constitute a unitary and self-consistent information content.

Submission package

Information packet sent by the producer to the storage system according to the format described in the digital preservation manual.

Information package

Logical container that holds one or more preserved objects with their metadata, or even only the metadata referring to the preserved objects.

Pathname

Ordered concatenation of a file's path and its name.

Path

Information relating to the virtual location of the file within the filesystem which is expressed as an ordered concatenation of the name of the path nodes.

Preserved system security plan

In the context of the general safety plan, it is a document which describes and plans the activities aimed to protect the IT document storage system from possible risks.

Security plan of the IT management system of documents

In the context of the general safety plan, it is a document which describes and plans the activities aimed to protect the IT document management system from possible risks.

Classification plan (Titolario)

Logical structure that allows you to organize documents and digital objects according to a scheme derived from the functions and activities of the concerned administration .

Preservation plan

Document attached to the management manual and integrated with the classification system. In this document, the criteria for organizing the archive, for periodic selection and for preservation are defined, pursuant to Article 68 of Presidential Decree 28 December 2000, n. 445.

Organization plan of document aggregations

Tool integrated with the classification system starting from the lower hierarchical levels of the latter and aimed at identifying the types of documentary aggregations (types series and types of dossiers) that must be produced and managed in relation to procedures and activities in which the functions performed by the entity are declined.

General safety plan

Document that plans the activities aimed at creating the protection system and all of them the possible actions indicated by risk management within the organization of membership.

Taking charge

Acceptance of a payment package by the storage system as in accordance with the procedures set out in the digital preservation manual and, in the case of assignment of the external service, by the agreements entered into between the owner of the preserved object and the manager of the preservation service.

Process

Set of interrelated or interacting activities that transform input elements into exit elements.

Producer of SIP

Natural person, usually different from the person who formed the document, who produces the submission package and who is responsible for transferring its contents to the system of storage. In public administrations, this figure is identified with the person in charge of document management.

qSeal

Qualified electronic seal, as per art. 35 of the eIDAS Regulation.

qSignature

Qualified electronic signature, as per art. 25 of the eIDAS Regulation.

Submission report

IT document certifying that the system has taken charge of storage of submission packages sent by the producer.

Protocol register

IT register where all the information required by law are stored for all documents received and sent by an entity and for all IT documents of the entity same.

Particular register

IT register identified by a public administration in order to store information relating documents subject to a special registration.

eIDAS regulation

electronic IDentification Authentication and Signature, Regulation (EU) N° 910/2014 of European Parliament and of the Council, of 23 July 2014, on electronic identification and trust services for electronic transactions in the internal market and repealing the directive 1999/93 / EC.

Repertoire

Register on which the files are noted with a progressive number according to the chronological order in which they are formed within the subdivisions of the classification plan.

Manager for information systems for preservation

Person who coordinates the information systems within the conservative.

Head of the preservation service

Person who coordinates the preservation process within the conservator, in accordance with the requirements defined by AgID in the "Regulation on the criteria for the provision of IT document retention services"

Preservation Manager

Person who defines and implements the overall policies of the preservation system and governs its management with full responsibility and autonomy, in compliance with the requirements defined by AgID in the "Guidelines on training, management and storage of electronic documents "

Manager of the archival function of preservation

Person who coordinates the preservation process from an archival point of view within of the registrar, in compliance with the requirements defined by AgID in the "Regulation on the criteria for the supply of IT document storage services "

Responsible for document management

Person who is responsible for the management of the document system or for the service or the keeping the IT protocol, the management of document flows and the archives, pursuant to Article 61 of Presidential Decree 28 December 2000, n. 445.

Data protection manager

Person with specialist knowledge of legislation and practices relating to the protection of data, who is able to perform the tasks referred to in Article 39 of Regulation (EU) 2016/679.

Manager of the safety of preservation systems

Person who ensures compliance with the security requirements within the conservator.

Manager of the development and maintenance of the preservation system

Person who ensures the development and maintenance of the system within the conservator.

Time reference

Data set that represents a date and time with reference to Coordinated Universal Time (UTC).

Transfer

Procedure by which one or more IT documents are converted from a file format (envelope, or package of files) to another, leaving the content unchanged as far as possible by the technical characteristics of the format (or formats) of files and of the target files and encodings.

Reject

In accordance with the provisions of the law in force, it is the operation with which the documents that are deemed no longer relevant for juridical-administrative and historical-cultural purposes are definitively eliminated

Series

Grouping of documents with homogeneous characteristics (see also document aggregation Informatics).

Sidecar (file)

See Manifest File.

Electronic seal

Data in electronic format, enclosed or connected by logical association to other data in electronic form, to ensure the origin and integrity of the latter.

Preservation system

Set of rules, procedures and technologies that ensure the preservation of IT documents in implementation of the provisions of art. 44, paragraph 1, of the CAD.

IT document management system

Set of computing resources, equipment, communication networks and procedures information technology used by organizations for document management. As part of the public administration is the system referred to in Article 52 of the Presidential Decree 28 December 2000, n. 445

Timeline

Virtual timeline on which events relating to an information system or to a IT document are arranged. Two very different examples of timeline are a file of system's log, a multimedia stream containing synchronized audio/video essences.

Owner of the object to be preserved

Producer of the objects to be preserved.

Transfer

Transfer of custody of documents from one person or entity to another person or entity.

TUDA

Consolidated Administrative Documentation, Decree of the President of the Republic 28 December 2000, n. 445, and subsequent amendments and additions.

Office

It is referring to a homogeneous organizational area, an office in the same area that uses the services made available by the IT protocol system.

User enabled

Person, entity or system that interacts with the services of an IT management system documents and/or a system for storing electronic documents, in order to use information of interest.

Submission

Transfer of custody, ownership and/or responsibility of the documents. In case of public judicial and administrative authority it is the operation with which the responsible for conservation transfers to the State Archives or to the Central State Archives of the documentation that will be stored there in accordance with current legislation on cultural heritage.

12.2. Acronyms

AgID

Agency for Digital Italy.

AOO

Homogeneous Organizational Area.

CA

Certification Authority.

CAD

Digital Administration Code - Legislative Decree 7 March 2005, n. 82 and later modifications and additions.

eIDAS

Regulation (EU) № 910/2014 of the European Parliament and of the Council, of 23 July 2014, in electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93 / EC.

FEA

Advanced Electronic Signature.

FEQ

Qualified Electronic Signature.

PdA (AiP)

Archival Information Package.

PdD (DiP)

Dissemination Information Package.

PdV (SiP)

Submission Information Package.

UOR

Responsible Organizational Unit

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13. Regulations, reference standards and certifications

In order to guarantee the correct management of ePLUS, Entaksi defines criteria and processes of the Service on the basis of the Italian and European legislation on the matter, and also implements international standards that define the theoretical, operational and functional management of the system. The reference norms and standards for the company are listed below.

13.1. Company certifications

Entaksi, as part of the development and maintenance of its Integrated Management System, has obtained the following certifications:

- **ISO 9001:2015:** Quality management systems - Requirements.
- **ISO/IEC 20000-1:2018:** Information technology - Service management - Part 1: Service management system requirements.
- **ISO/IEC 27001:2013:** Information technology - Security techniques - Information security management systems - Requirements.
- **ISO/IEC 27017:2015:** Information technology - Security techniques - Code of practice for information security controls based on ISO/IEC 27002 for cloud services.
- **ISO/IEC 27018:2019:** Information technology - Security techniques - Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors.
- **ISO/IEC 27035:2016:** Information technology – Security techniques – Information security incident management.
- **ISO/IEC 22301:2019:** Security and resilience – Business continuity management systems – Requirements.
- **UNI ISO 37001:2016:** Anti-bribery management systems - Requirements with guidance for use.
- **eIDAS Regulation for Qualified Trust Service Providers:**
 - **ETSI EN 319 401:** Electronic Signatures and Infrastructures (ESI) - General Policy Requirements for Trust Service Providers.
 - **ETSI EN 319 411-1:** Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for Trust Service Providers issuing certificates - Part 1: General requirements.
 - **ETSI EN 319 411-2:** Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for Trust Service Providers issuing certificates - Part 2: Requirements for trust service providers issuing EU qualified certificates.
 - **ETSI EN 319 412-1,2,3,5:** Electronic Signatures and Infrastructures (ESI) - Certificate Profiles.
 - **ETSI EN 319 421:** Electronic Signatures and Infrastructures (ESI) - Policy and Security Requirements for Trust Service Providers issuing Time-stamps.
 - **ETSI EN 319 422:** Electronic Signatures and Infrastructures (ESI) - Time-Protocollo di marcatura temporale e profili di token di marcatura temporale.stamping protocol and time-stamp token profiles.
 - **ETSI TS 119 511:** Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for trust service providers providing long-term preservation of digital signatures or general data using digital signature techniques.

13.2. Regulations

Codice Civile, R. D. 16 marzo 1942 n. 262

Libro Quinto Del lavoro, Titolo II Del lavoro nell'impresa, Capo III Delle imprese commerciali e delle altre imprese soggette a registrazione, Sezione III Disposizioni particolari per le imprese commerciali, Paragrafo 2 Delle scritture contabili, articolo 2215 bis – Documentazione informatica (regarding provisions for commercial enterprises, article on electronic documentation).

Legge 7 agosto 1990, n. 241 e s.m.i.

Nuove norme in materia di procedimento amministrativo e di diritto di accesso ai documenti amministrativi (new rules on administrative procedures and access rights to administrative documents).

Decreto del Presidente della Repubblica 28 dicembre 2000, n. 445 e s.m.i.

Testo Unico delle disposizioni legislative e regolamentari in materia di documentazione amministrativa (consolidated law on legal and regulatory provisions concerning administrative documentation).

Decreto Legislativo 30 giugno 2003, n. 196 e s.m.i.

Codice in materia di protezione dei dati personali (Data Protection Code).

Decreto Legislativo 22 gennaio 2004, n. 42 e s.m.i.

Codice dei Beni Culturali e del Paesaggio (Code of the Cultural and Landscape Heritage).

Decreto Legislativo 7 marzo 2005 n. 82 e s.m.i.

Codice dell'amministrazione digitale (CAD) (Digital Administration Code).

Decreto del Presidente del Consiglio dei Ministri 22 febbraio 2013

Regole tecniche in materia di generazione, apposizione e verifica delle firme elettroniche avanzate, qualificate e digitali ai sensi degli articoli 20, comma 3, 24, comma 4, 28, comma 3, 32, comma 3, lettera b), 35, comma 2, 36, comma 2, e 71 (Technical rules for the creation, application and verification of advanced, qualified and digital electronic signature).

Decreto del Presidente del Consiglio dei Ministri 3 dicembre 2013

Regole tecniche in materia di sistema di conservazione ai sensi degli articoli 20, commi 3 e 5-bis, 23-ter, comma 4, 43, commi 1 e 3, 44, 44-bis e 71, comma 1, del Codice dell'amministrazione digitale di cui al decreto legislativo n. 82 del 2005 (Technical rules concerning digital preservation systems).

Regolamento (UE) n. 910/2014 del Parlamento europeo e del Consiglio

Regolamento UE del 23 luglio 2014 (eIDAS), in materia di identificazione elettronica e servizi fiduciari per le transazioni elettroniche nel mercato interno (EU Regulation regarding electronic identification and trust services for electronic transactions in the internal market).

Linee Guida sulla formazione, gestione e conservazione dei documenti informatici

Linee guida ufficiali sulla creazione, gestione e conservazione dei documenti informatici, pubblicate da AgID in data 11/09/2020 alle quali vengono aggiunte le modifiche con la relativa proroga contenute nella Determinazione 371/2021 del 17/05/2021 (Official guidelines on the creation, management and conservation of electronic documents).

Determinazione AgID 25 giugno 2021 n.455

Concernente l'adozione del "Regolamento sui criteri per la fornitura dei servizi di conservazione dei documenti informatici" (Regulation on the criteria for the provision of IT document preservation services).

Regolamento (UE) 2016/679 del Parlamento europeo e del Consiglio

Regolamento UE del 27 aprile 2016, relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, nonché alla libera circolazione di tali dati e che abroga la direttiva 95/46/CE (General Data Protection Regulation on the protection of natural persons with regard to the processing of personal data and on the free movement of such data).

Decreto Legislativo 10 agosto 2018, n. 101

Disposizioni per l'adeguamento della normativa nazionale alle disposizioni del regolamento (UE) 2016/679 del Parlamento europeo e del Consiglio, del 27 aprile 2016, relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, nonché alla libera circolazione di tali dati e che abroga la direttiva 95/46/CE (regolamento generale sulla protezione dei dati) (provisions on General Data Protection Regulation).

13.3. Standards

ISO 9001:2015

Quality management systems - Requirements.

ISO/IEC 20000-1:2018

Information technology - Service management - Part 1: Service management system requirements.

ISO/IEC 27001:2013

Information technology - Security techniques - Information security management systems - Requirements.

ISO/IEC 27017:2015

Information technology - Security techniques - Code of practice for information security controls based on ISO/IEC 27002 for cloud services.

ISO/IEC 27018:2019

Information technology - Security techniques - Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors.

ISO/IEC 27035:2016

Information technology — Security techniques — Information security incident management.

ISO/IEC 22301:2019

Security and resilience — Business continuity management systems — Requirements.

UNI ISO 37001:2016

Anti-bribery management systems - Requirements with guidance for use.

EU Regulation no. 910/2014 - eIDAS

EU Regulation 910/2014 of the European parliament and of the council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market and repealing Directive 1999/93/EC.

ETSI EN 319 401

Electronic Signatures and Infrastructures (ESI) - General Policy Requirements for Trust Service Providers.

ETSI EN 319 411-1

Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for Trust Service Providers issuing certificates - Part 1: General requirements.

ETSI EN 319 411-2

Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for Trust Service Providers issuing certificates - Part 2: Requirements for trust service providers issuing EU qualified certificates.

ETSI EN 319 412-1,2,3,5

Electronic Signatures and Infrastructures (ESI) - Certificate Profiles.

ETSI EN 319 421

Electronic Signatures and Infrastructures (ESI) - Policy and Security Requirements for Trust Service Providers issuing Time-stamps.

ETSI EN 319 422

Electronic Signatures and Infrastructures (ESI) - Time-Protocollo di marcatura temporale e profili di token di marcatura temporale.stamping protocol and time-stamp token profiles.

ETSI TS 119 511

Electronic Signatures and Infrastructures (ESI) - Policy and security requirements for trust service providers providing long-term preservation of digital signatures or general data using digital signature techniques.

UNI 11386:2020

Supporting interoperability in preservation and retrieval of digital objects.

ISO/IEC 14721:2012

"Space data and information transfer systems - Open archival information system (OAIS) - Reference model", open information system reference model for management and long-term preservation of information content.

ISO 15489-1:2016

Information and documentation - Records management - Part 1: Concepts and principles.

ISO 15836-1:2017

Information and documentation - The Dublin Core metadata element set - Part 1: Core elements.

ISO 16363:2012

Space data and information transfer systems - Audit and certification of trustworthy digital repositories.

ISAD(G)

General International Standard Archival Description, standard for the description of archives intended for the recording of documents produced by organizations, people and families.

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14. Periodic check of system accessibility

The procedure is performed by the Preservation Service Manager, who personally or through a delegate ascertains the accessibility of the Service by the Customer and its effective usability, also with regard to performances.

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15. Localization of stored data

The data entered and managed during the Service operation are archived in dedicated storage servers located in the IT network of Entaksi Solutions SpA.

The physical servers provided by the datacenter supplier are subject to a rental agreement that includes hardware maintenance and software configuration availability only, so that, after installation, the supplier no longer has access to the system .

The Storage Service is provided by a Private Cloud, consisting of machines that operate in a highly reliable configuration, located, pursuant to law 244/2007, within the borders of the European Union.

For the provision of the service aligned with the terms defined by the requirements from "Agenzia per l'Italia Digitale" for the supply of conservation services to the Public Administration, an instance of the service is based on machines operating in a highly reliable configuration positioned within the borders of the Italian Republic.

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16. Backup copies management policy

The backup security copies managed by the system are created for the sole purpose of ensuring the operational continuity of the service.

The service is hosted on a server cluster which guarantees the redundancy of the information managed, to provide the best accessibility.

In compliance with the internal information security management procedures, a specific process for the generation of the backup copies is however envisaged.

These copies are used by the Service Manager in case of particularly serious events, which make the currently used work environments unavailable.

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17. Maintenance of the application software

Entaksi ICT Department takes care to keep updated the version of the Software used for the Service's provision.

For this purpose, all the software created for the delivery of the application functionalities and the processes connected to them is archived within a certified software management system compliant with the ISO 9001:2015 standard, therefore able to maintain the versioning of the developed source code.

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18. Malfunctions management

Despite the use of the most advanced standards for system development and test, Entaksi recognizes the possibility that a malfunction, an error or a need to adapt to regulatory changes may occur. To remedy these cases, Entaksi has arranged a corrective and evolutionary maintenance service, which keeps the Service regularly updated and usable.

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18.1. Service reports

The Customer can report any problems encountered by sending an email to assistenza@entaksi.eu.

Entaksi Solutions provides the customer with software environment, called Redmine, accessible via Internet and dedicated to the management and tracking of service reports (incidents, errors, change requestes, etc).

Through this ticket platform the Customer can insert any request related to technical or economic problems encountered in the use of the eCON service, and stay informed on their management and evolution.

Entaksi can also communicate through the site, through the page status.entaksi.eu, any malfunctions detected on the system.

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18.2. Claims

Claim is defined as a special type of report, relating to the failure to comply with the SLAs (Service Level Agreement) established in the service contract.

The customer can redact a claim and follow its evolution through the ticketing management environment described in the previous paragraph.

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18.3. Emergency changes

In the case of accidents that cause sudden blocking malfunctions or significant deviations from the established SLAs, Entaksi reserves the possibility of making a change to the Service, called "Emergency Change", the application of which may involve the temporary suspension of the Service. The modalities of its implementation will be communicated to the Customer via email.

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19. Data protection management

Concerning access to data by Entaksi personnel, please refer to the data protection management procedures included into the official Entaksi's documentation.

Besides, regarding access to data by the Customer's personnel, and in particular by personnel who will have access to the web interface for searching, viewing and exhibiting documents, reference will be made to Customer data protection internal procedures.

As part of the processing of personal data related to the performance of the activities provided for in this Manual, Entaksi acts as a Processor, by virtue of by specific legal delegation conferred by the Customer.

The complete set of provisions relating to the processing of personal data is reported in the document "Condizioni Generali del Servizio", chapter "Trattamento dei dati personali".

The complete set of provisions relating to the processing of personal data is reported in [the Entaksi website](#).

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19.1. Data Breach

According to the General Data Protection Regulation (EU) 2016/679 (GDPR), articles 33-34, "in the case of a personal data breach, the controller shall without undue delay and, where feasible, not later than 72 hours after having become aware of it, notify the personal data breach to the supervisory authority competent".

"Where, and in so far as, it is not possible to provide the information at the same time, the information may be provided in phases without undue further delay".

Therefore, as soon as Entaksi becomes aware of a data breach of the personal data processed, as data Processor, it will notify the violation both to the Customer than to the supervisory authority, without undue delay, **within 72 hours** from the time it became known.

The obligation does not exist in the event that it is possible to demonstrate that the violation is unlikely to represent a risk to the rights and freedoms of individuals such as: loss of control of personal data or limitation of their rights, discrimination, theft or usurpation of identity, financial losses, unauthorized deciphering of pseudonymisation, prejudice to reputation, loss of confidentiality of personal data protected by professional secrecy, or any significant economic or social damage to the data owner.

After 72 hours from the violation the notification must be accompanied by the reasons for the delay, and must be given in any case the maximum willingness to collaborate with the competent authorities.

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20. Service Level Agreement

The service-levels or SLA (Service Level Agreement) are settled on the service agreement.

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21. Service reporting

Once a year Entaksi sends to the Customer a specific report on the service's SLA, obtained from the processing of specific data from the internal tracking system, which summarize the following indicators:

- service availability time (% on the total solar time of theoretical availability);
- number of critical incidents managed;
- number of Non-Compliance (NC) detected;
- number of customer claims received.

The customer is also asked, annually, to communicate his level of satisfaction in the use of the service by filling a survey, which contains some questions on some critical aspects of the service, and the possibility of sending personal considerations to Entaksi.

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