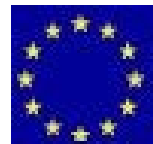




# **PrivAcy pReserving Infrastructure for Surveillance**

## **Deliverable D3.4 Guidelines for SALT Framework Management Tool**

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## Abbreviations and Definitions

Abbreviation	Definition
ICT	Information and Communication Technologies
PARIS	PrivAcy pReserving Infrastructure for Surveillance
PbD	Privacy by Design
PIA	Privacy Impact Assessment

SALT	Social, Anthropological, Legal, Technical
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## **Executive Summary**

This document presents a range of recommendations and rules based on the work and use of the SALT Framework Tools. These guidelines do not only spread over the use of the tools, also over the management of them.

The main goal of the document is to provide the user an overview of a good use of the framework in order to use it efficiently.

# 1 Introduction

## ***1.1 Context and Objectives of the Document***

This document is situated in WP3 after the descriptions of SALT Framework tools in a more technical and accurate way. Once the structure, relations between the data base and the features of the tools are explained, it is the time to know how to use them and explain some best practices for users in order to use them efficiently.

A guide of how to use each tool is not the intention of this document, since the instructions and/or tutorials of how to use the tools shall be provided within the tools. In the tools menu, users can find a help tab, of how to implement a questionnaire or create one. These explanations are based on the screens, buttons, forms and gaps shown in the tools for a better understanding by the users.

In this case, this document tries to be a guidance of recommendations for expertise and users. The main goal is to provide users a guide of best practices, recommendations before and while they answer a questionnaire, search for a reference, create a questionnaire...etc.

Recommendations are given for the different users and tools of the framework. These recommendations or advices in some cases have been thought from the way of each tool has been made. This means that all recommendations are from the point of view of Framework's designers in order to guide users as the same way of the design. Tips and recommendations shall make the use of the Framework easier for users.

## ***1.2 Structure of the Document***

This document is divided in two main blocks of content. On the one hand, first block of content concerns all stakeholders which is about the whole tools of the Framework. A guide for each tool of the framework, according to the most important features of them is described. On the other hand, the second block of content relates to the issues of management and future implementations of some tools in the future.

## 2 Guidelines of use on SALT-based tools

This section provides an overview of recommendations for an efficient use of the tools. The tools are integrated in the SALT Framework. The four tools developed inside the project by the different partners have a different role in the framework.

First, it will be reminded the structure of the framework in order to provide a better understanding of the whole guidelines for each tool.

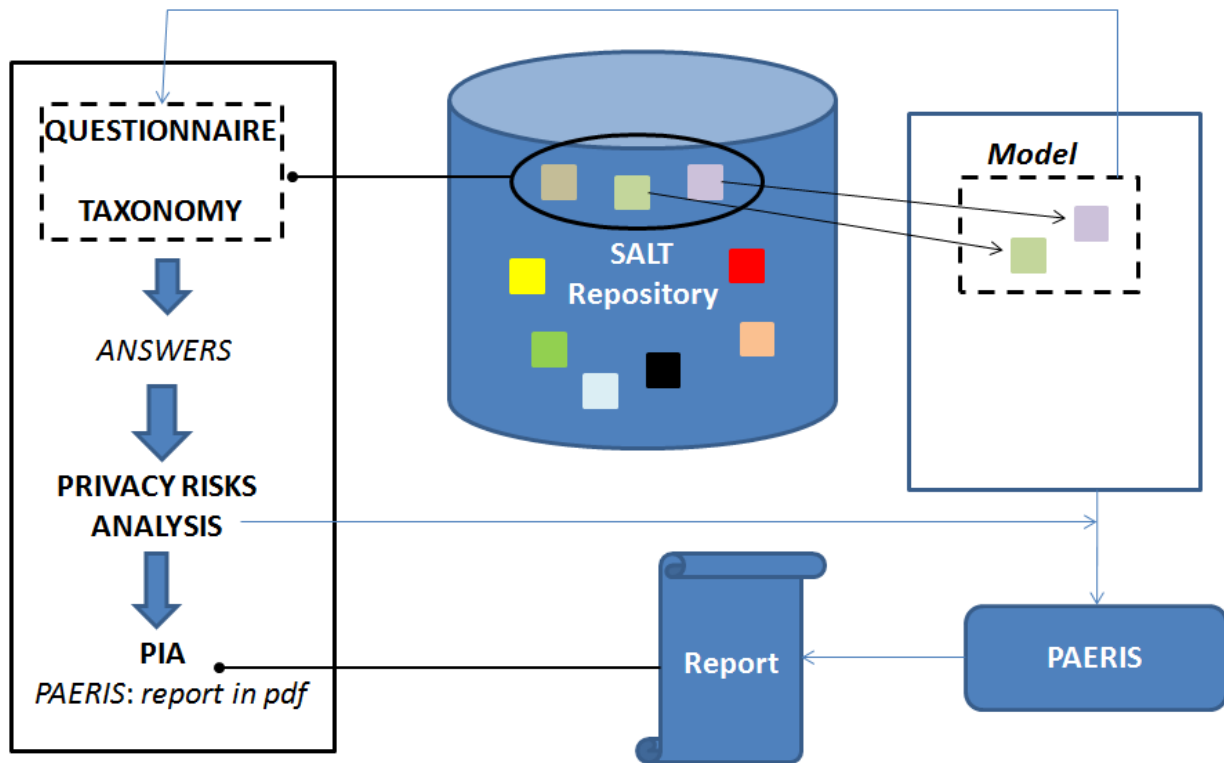


Figure 1 General schema of the SALT Framework

In the Figure 1, it is shown the relations between the different tools. The central SALT Repository will provide information to the user by itself or through the questionnaire and taxonomy tools. The answers provided by the user from the questionnaire can generate an analysis of the impacts and contribute to a privacy impact assessment (PIA), which is further validated by the tool PAERIS, and which can be downloaded in pdf format by the user.

### 2.1 Guidelines for the questionnaire tool

#### 2.1.1 Introduction

The questionnaire tool is divided into different sections and features. It has been thought to be able to:

- Differentiate between expert and designer users that will answer the questions and obtain an evaluation of their system.

- Save the questions and answers of each questionnaire answered by a different user, in a separate way.
- Be able to remark words referred to a taxonomy or reference that, by clicking them, it opens the explanation of the taxonomy or reference in detail.
- Create and modify questionnaires or parts of them at any time by expertise users.
- Show the results of the privacy impact assessments to the user.
- Create and modify criteria of the privacy impact assessment, available only for expert users.
- Download the evaluation report in pdf format.

Questionnaire has these different elements: phases, sections, categories and questions. These elements follow the following structure:

1. PHASE: a questionnaire is divided in phases.
  - a. SECTION: each phase is divided in different sections.
    - i. CATEGORY: each section can be divided into different categories.
      1. QUESTIONS: Each category has questions.
    - ii. QUESTIONS: each section can have questions, but if it has questions, it will not be categories inside that section.

Figure 2 below shows the structure of the questionnaire with the relative numerations of the elements:

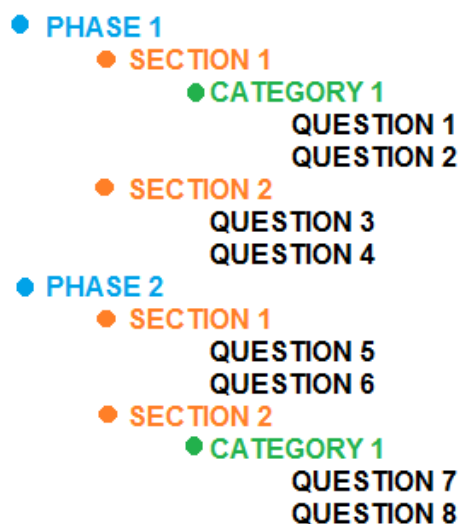


Figure 2 Structure of the questionnaire

The main functionalities are specific, depending on the user logged in the system. Non-expert users, they are allowed to:

- Register as users.
- Display questionnaires and taxonomy information at any time.
- Answer questions of the questionnaire.
- Display and download the evaluation of privacy impact.

If the user has rights of expert, then is allowed to use additional functionalities than those described above:

- Create and update questionnaires, which involve phases, sections, categories and questions.



- Create and update taxonomies and their concepts.
- Create evaluation criteria for generating the PIA.

### 2.1.2 Guidelines

We have developed the tool based on the concepts, described above. One of the main objectives of the questionnaire is to have an accurate and detailed knowledge of the surveillance system that the user is going to develop and provide some assistance to evaluate its impacts on privacy.

First of all, the user has to choose the questionnaire from the list of questionnaires provided. Then, an introduction to the questionnaire is displayed. Further, there are several views about simple instructions as to how to use the questionnaire, its purposes and its structure. Finally, there is a help view that describes basic tutorial information to better understand and use the tool.

#### 2.1.2.1 ANSWER THE QUESTIONNAIRE

It may seem a simple task but it is not for custom questions, where the user has to write the answer. There are other closed questions (simple and multiple choice and conditions) that are easier to answer.

- Answer a question:
  - Read carefully the statement of the question.
  - For a better understanding of the question's purpose, there is an explanation of the goal and purposes of the question. This explanation will give the user an overall idea as to the type of answer expected, in particular for opened questions that he has to answer in a free text box.
  - In each explanation of a question, there could be several words highlighted. They are links to the information and explanation of that concept (it could be taxonomy or a reference). The user can click on it and it will redirect him to a view with more information about that concept and tree structure of the taxonomy, if any.
- Answer an opened question:
  - The user has to take into account the recommendations described above and be aware of the purpose of the question, when he is answering the question. In general, an answer is expected to be between 4 up to 30 lines maximum.
- Answer a closed question:
  - Here are involved the other type of questions (conditions or multiple and simple choice). When answering a closed question and clicking "next", the user should be aware that he could be redirected to another question related to his answer. For example: If the user answers 'Yes,' the redirected next question could be, 'If yes, explain why?'.

- Dependent questions or linked questions: The user should know that not all the questions might be answered. Some questions will be displayed to the user, only if he has answered before a determined choice or choices.
- Answer a question of type “conditions”: There are some questions of type conditions. It means that the user should have thought about all of these terms before going on with the system. If all are checked, the system has covered all private aspects related to this question but if they are not, the system will probably have a high impact on private aspects.

### **2.1.2.2 EXPERT FUNCTIONS: CREATE & UPDATE**

As it is mentioned above, these tools have been developed to differentiate between different types of users. The expertise knowledge needs these functionalities, create and update, in order to introduce and keep updated the privacy content of the questionnaire.

#### **CREATE QUESTIONNAIRE**

The tool provides a flexible and intuitive interface for expertise users, so they can introduce new questionnaires, questions...etc.

Before introducing the questionnaire, it is recommended to have the full questionnaire structure prepared. It is easier to introduce the questionnaire and its elements in the tool from a structured document.

Suggestions and tips that are highly recommended to create a questionnaire:

- First, it is important the structure and content of the questionnaire, which includes phases, questions or sections. Each phase, section, category or question should be clearly detailed and determined.
- When using questionnaire for a first time, it is better to follow the order of the phases, sections, categories and questions. It is easier to introduce them in order to not get lost or forget some elements or options of a multiple choice question.
- The user must be careful when he introduces the relations between questions and options answered and type of questions, too. They will not be able to change them after updating, just only by deleting and creating the question again. This restriction in the tool has been decided to ease the update tool for the users.
- The first panel will ask the user for some information about the questionnaire, like title, author and a short description of what it is about, purposes...etc. This information, except the title, will not be shown to other users when answering.
- After each element introduced in the questionnaire: phase, section, category or question, the user should check if it appears in the left index.

- When the user tries to create a question of type conditions or multiple and simple choice, the tool guides the user automatically to create the options to check, one by one.
- The software is implemented to give the user only the options that are possible at that moment. For example, if a questionnaire does not have a phase, in the menu to create elements, the user will have only the option to create phases, not sections until it exists a phase, at least.
- It is mandatory to publish the questionnaire in order to display the questionnaire for users. If not, it will be available only for expert users, for continuing adding elements.

## UPDATE QUESTIONNAIRE

The questionnaire tool is not only able to create questionnaires but also allows to update them. These two functionalities are related between them. Once a user has created a questionnaire, it is displayed as an index while the user is introducing more elements, so that all the elements are available to update them, one by one.

As it has been mentioned above, the relations between questions and options or question types are not possible to update. This measure provides an easier way to update and create questionnaires for the user.

The tool gives the chance to create and update elements of a questionnaire from the same menu. The user can be introducing a question and after saving it, it is ready to update it at the left index. These features give more flexibility and an overall idea to the expertise user of what he is introducing and how it will be displayed on the screen for the real users that will answer it.

## 2.2 Guidelines on the generation of a PIA

Between the SALT Framework tools there are some implicit features that provide the basis for the PIA. As it is one of the goal of the questionnaire, in order to obtain a PIA it is recommended to follow these guidelines:

- For a better understanding of the questionnaire and obtaining at the end of the phase the PIA, the user should answer all the questions and not continue with another phase of the questionnaire if he has not finished all the questions of the actual phase. This is very important because the PIA could not be generated if it has not all the information of all questions. The tool shall inform the user that there are missing questions.
- The user has to pay attention to closed and related questions, since these answers can determine seriously the PIA. He shall read carefully and answer them.

- Once all the questions of a phase have been answered, then the tool will generate the PIA to the user. So, it should be checked that all categories and/or sections of that phase are in green colour, informing that all questions are answered.
- The PIA will inform the user about the risks that his envisaged system entails, based on the answers of the questionnaire and the value of the impact on Privacy (high, very high, low, medium impact). The impact evaluation is also followed by some recommendations to take into consideration and possible changes in the system in order to lower the impact on privacy.

Usually expert users create the questionnaires, from more general questions to more accurate ones, in order to generate the PIA. First sections are more general questions and as the accuracy grows, the PIA is generated, and is shown to the user at the end of the last question of the phase. So the process of generating a PIA can be defined as a progress of the answers of the user, it is made in real time and the user can see the level of impact in which his system ranges while he is answering the questions.

This can give an idea to the user about his system before receiving the PIA at the end of the phase.

### **CREATE PIA BY EXPERTISE USERS**

The guidelines provided above are for the users that answer the questionnaires. From the perspective of the experts, they have to be very careful when they create a PIA within a questionnaire. Before introducing the different criteria and define the phase to evaluate, the experts should have made an exhaustive study of how to evaluate that phase, which are the criteria, which answers are more determinant to the assessment, score each criteria in order to have an internal punctuation (it will not be shown to the final user)...etc.

Within the questionnaire tool is provided a feature for creating this type of evaluations by introducing the criteria. It is not such intuitive as the feature for creating taxonomy or questionnaire due to its complexity but it offers some flexibility to choose all the possible answers and relate each criterion with the impact assessment.

Not all the questions provided in a phase are full determinant to generate the PIA, so the feature has been based on this basis. And the expert user should choose a number of questions that will provide the PIA at the end of the phase. These questions will have different options, conditions...etc.

We recommend experts users to have well prepared the criteria of evaluations, score, impacts and recommendations of the evaluation.

The range of impact on privacy should be between very high and low, considering at least four different types of impact (very high, high, medium and low).

## ***2.3 Guidelines for the taxonomy tool***

SALT Framework includes several tools, and, one of them is the questionnaire. At the first stages of the design of the tool, appeared the need to create a tool that will be a complement for the questionnaire. Along a questionnaire, it will appear many terms related to four different expertise fields, socio-ethical, legal and technical. Users that will answer the questionnaires are not supposed to have an extended knowledge in all those fields, but probably just in one of them. This is one of the main reason for creating a taxonomy tool.

As it happens with the questionnaire tool, there will be some features available for users and others for expertise users.

This tool would not have sense if it is not integrated or linked to the questionnaire tool, because the terms appear in the explanations of the questions, in the options or in their titles. These terms are remarked in a different colour and/or highlighted in order for the user to clearly know that he can get more explanations if needed.

When a user is reading a question and his explanations, it is recommended to view the information displayed when the mouse is on the term. This gives an easy and quick definition of the concept.

After reading the question and explanation and the remarked terms definitions, if these are not clear enough for the user, it is suggested to click on the term for deepening in the terms.

The taxonomy view will give an overall idea to the user in which field is situated the term, what it means and more information about similar terms or concepts.

Some questions and explanations can be more difficult to understand well, in these cases is suggested to go to taxonomies tab to find more information, and not only the information about the term remarked in the question.

### **CREATION AND UPDATE A TAXONOMY**

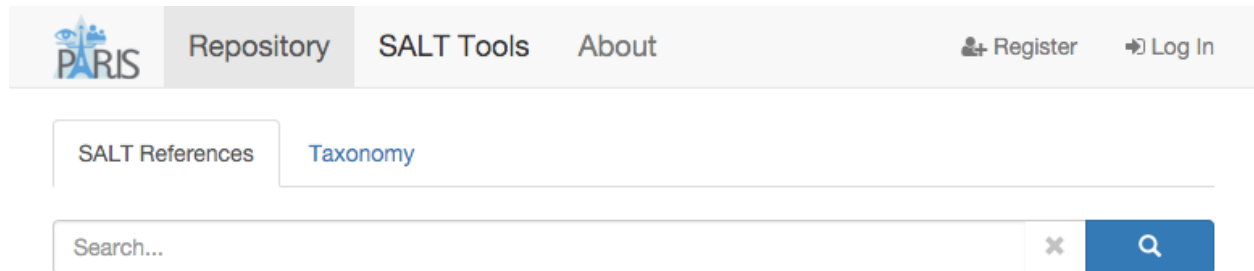
As for the questionnaire tool, the taxonomy tool also provides expertise users with a creation and update tool. Due to the simplicity of the taxonomy tool, these features of creation and update are simpler than for a questionnaire.

It is preferable to have thought about the taxonomy tree and his concepts, synonyms and definitions before introducing them. It will be easier to introduce the information. The administration panel gives the same flexibility as the questionnaire creation and update feature.

## ***2.4 Guidelines for SALT Repository***

The SALT repository is the physical implementation of the SALT framework, that is, a data base where all SALT references are stored. These SALT references are the units where the privacy and accountability information regarding surveillance systems is encapsulated. Within each SALT reference we find the information structured in different (at least one) concerns. A concern deals with a specific privacy related matter from a socio-contextual, ethical legal or technological point of view.

However, SALT references are not the only type of information stored in the SALT repository, but also questionnaires and taxonomies are included. As a result, the SALT repository is a very complete source of information related to the privacy and accountability of surveillance systems. Figure 3 shows the initial interface of the SALT repository. By clicking on «Repository» we can access to the SALT references, whereas clicking on «SALT Tools» will give us access to the questionnaires and the taxonomies. Since the questionnaires and the taxonomies are discussed in Section 2.1 and Section 2.3 respectively, we focus here on the content of the SALT repository related to SALT references.



*Figure 3 SALT repository main initial interface*

First of all, it is obvious that a user has to be registered and logged into the repository in order to have access to all the functionalities of the SALT repository. Registry and logging operations are carried out through the most upper right buttons of the interface (see Figure 3). Once logged into the repository, the system allows us to create new references apart from searching already stored ones (searching is allowed even for not registered users, although they cannot modify in any way the repository content). Figure 4 shows the repository interface for logged users, where we can appreciate the appearance of a new button, which allows create and store a new SALT reference into the repository.

The creation of a new SALT reference follows a well structured process, which strictly follows the predefined template of a SALT reference. Thanks to this, the user is prompted to enter the following information for each reference:

- The name of the SALT reference to be displayed.
- To select whether the SALT reference will be publicly viewable in the repository or not.
- The original language of the SALT reference.
- An abstract in the original language of the SALT reference.
- An abstract in English (in case this is not the original language).
- A link to the source of the SALT reference in the original language.
- A link to the source of the SALT reference in English (in case this is not the original language).
- To select whether the SALT reference has an official translation or not.
- To select to which system type the SALT reference refers to: video-surveillance system, biometric systems or both.
- The geographical scope of the SALT reference.
- The context of the SALT reference,
- The version of the SALT reference (0.1 is the default value).
- A list of keywords to help for later searches.

- A list of privacy and/or accountability related concerns. Each concern will also include the following data:
  - The name of the concern (it can be in multiple languages, separated by "-").
  - Additional information that may be relevant.
  - A textual description of the concern.
  - The category it belongs to: legal, socio-ethical or technical.
  - The topics related to the concern. It can be one or several from the following list: fairness principle, legal basis, purpose specification, data minimization, data quality, data retention, definition, proportionality, further use, authorized disclosure, sensitive data, data subjects' rights, data security, accountability, transparency, data protection risks.
  - The SALT compliant process stages the concern may apply to: none, concept, design, development, evaluation, operation and maintenance, retirement.
  - Keywords for later searches.
  - Guidelines to help system designers to find a possible implementation of the concern in a real design model of the surveillance system.
  - OCL rules that will be used by the automatic validator in order to check whether the previous guidelines of the concern have been met by the system model or not (this field can be left blank).
- A set of additional binary files that maybe useful for the SALT reference, such as descriptive images. This set could be empty.

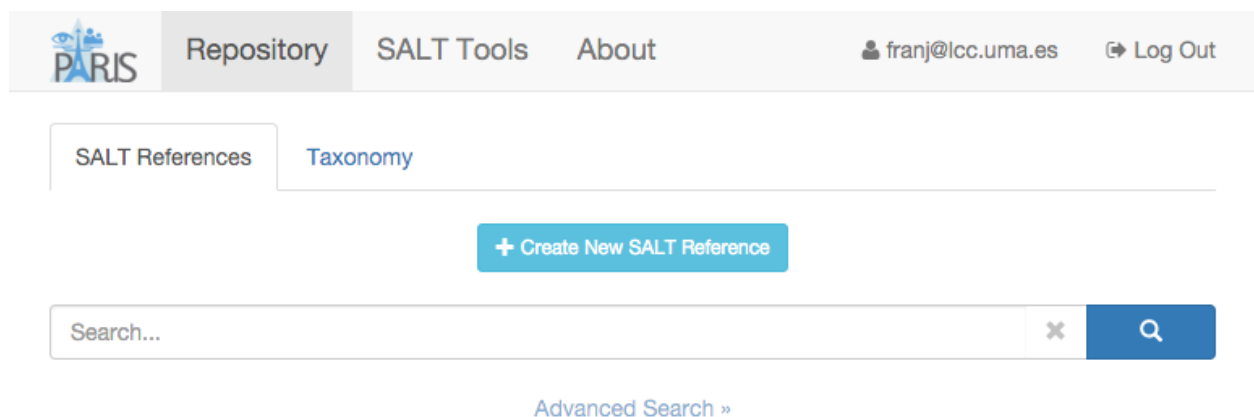


Figure 4 SALT repository interface for logged users

Apart from creating and adding new content to the SALT repository, we can also search the existing content for the appropriate SALT references according to our needs. Having a look at Figure 4 we can see two different ways of performing such operation: a standard search and an advanced search.

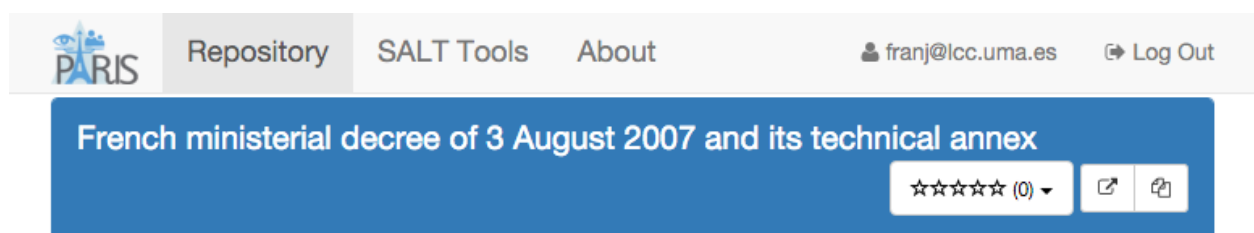
The first one can be carried out straight forward, we just need to input the search terms into the search box and the repository will look for all the SALT references containing the search terms in any of their fields. Of course, depending on the search criteria, this method may produce a list of SALT references too large to deal with, and that is why the advanced search is also available. The advanced search will prompt the user to input the following information:

- The display name of the SALT reference to search.
- The system type.

- The geographical scope.
- A possible list of keywords.
- The name of concerns.
- The category of concerns.
- A list of topics of concerns.
- A list of keywords for the concerns.

Of course, the user is not forced to input all this data, although he has the possibility to do it in order to produce the most accurate search possible.

Now that we have seen how to store and retrieve SALT references from the SALT repository, we move to some other interesting functions. Once we have retrieved a given SALT reference the SALT repository offers some other functionality, as displayed in Figure 5.



*Figure 5 SALT repository displaying a given SALT reference*

Here any user can rate a SALT reference with a score from 1 to 5 (selecting the corresponding number of stars). Thanks to this, future users will see how popular a given SALT reference is for the rest of the community, which can help them to make a decision in the case of finding several SALT references about the same privacy/accountability concerns.

The button at the right of the score provides a detailed view of the selected SALT reference, taking it apart from the rest of the references obtained from the search engine. This is only a viewable option, but it helps users to focus their attention on a single reference when needed.

Finally, the most right button duplicates the SALT reference. This functionality is useful when a user needs to create a new SALT reference based on another one instead of doing it from search results, which will help the user to save time and effort.

The SALT repository also offers the possibility to show the JSON data of a SALT reference, but we are not going to detail this function, since it is more focused to software developers than to regular SALT users (nevertheless, the option is there in case it is required).

The whole SALT repository has been developed taking into account the scalability and flexibility needs. For this reason, all structures and mechanisms within the repository have been defined via JSON files. Thanks to this, the repository can be modified and extended as necessary according to the future requirements. Even though the internal formats for SALT references and concerns are susceptible of change if needed.



## ***2.5 Guidelines for UML Profile and PAERIS validator tool***

The UML profile is a tool intended to help system designers to create a system model of the surveillance system under development. It has been created in the same way as a single project for Magic Draw, an internationally known application for UML diagrams and extended functionalities.

The UML profile provides a set of predefined elements regarding video-surveillance and biometric systems, extracted from the previous deliverables of WP5 and WP6. Thanks to these elements, system designers will have an easier experience during the creation of a system design (materialized in the form of a UML model). Users will be able to pick up the elements needed by their systems and add them to their design.

All elements of the UML profile are the so called stereotypes. Stereotypes have many advantages, such as being able to be applied to any other artefact within the UML model. They can contain specific attributes, and they can also be checked by the automatic validator, as we will see later in this section.

According to the knowledge gathered from the technological partners of the PARIS project, each stereotype of the UML profile contains a list of attributes relevant to the specific surveillance element it represents. In this way, once a designer uses one of these stereotypes, he does not have to worry about what information to include or not, but just filling out the proper values for the displayed attributes. Of course, there may be situations where some attributes can be left blank, this will depend on the designer decision, but at least the tool will offer him to do so. Figure 6 shows an excerpt of the elements included in the UML profile.

Then, once we know the objective of the UML profile and what it offers, how can we use it? In first place, the system designer needs to create the system model in the same Magic Draw project where the UML profile is located. Then he can start to place all the system parts he wishes (cameras, network video recorders, video processing units...), all the relations he wishes, and even more, he can also model them in the way he feels more comfortable with (using a class diagram, an activity diagram, etc.). This is a very important feature, since it lets system designers to make the model according to a given company policies, or just following the way they are used to. Afterwards, he just needs to assign the proper stereotype to each element (some elements can be left without stereotypes associations) and to provide values for the attributes. Here we must remark that the number of stereotypes assigned to each element is variable, from zero to any desired number.

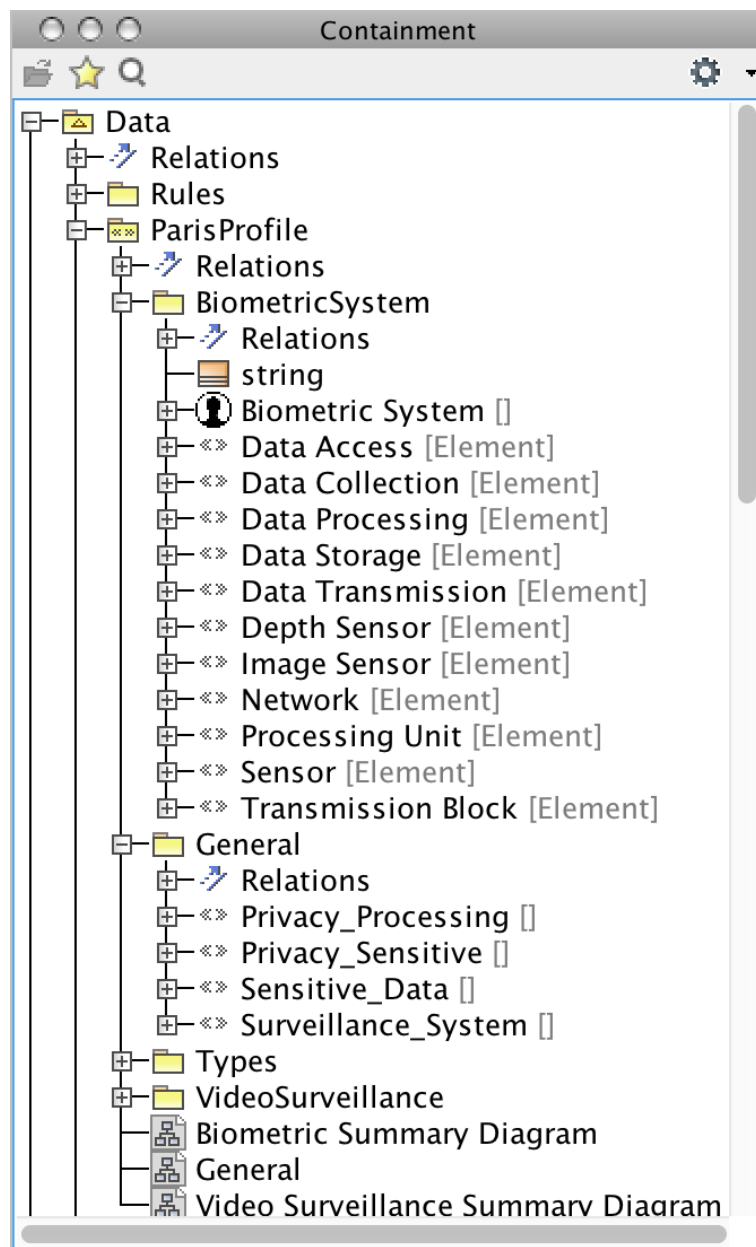


Figure 6 Elements of the UML profile

But the provided stereotypes are not only related to technological elements of video-surveillance and biometric systems, but also to privacy and accountability issues for this kind of systems. In this way, these stereotypes are closely related to the guidelines provided in the SALT references for the repository (see Guidelines for SALT Repository), hence in case the designer decides to follow these guidelines he will find appropriate stereotypes to implement them (let us not forget that all these tools and the whole SALT methodology are intended to help, not to take any decision, therefore a system designer could decide not to use the guidelines of SALT references or not use the stereotypes provided with the UML profile, although in this case we would not guarantee a SALT compliant surveillance system).

At this point is where the automatic validator comes in. This tool is also integrated in Magic Draw as a plugin, therefore it works in parallel with the UML profile. There is nothing the user needs to know in order to use it, since its operation is fully transparent and it is carried out in the background during the creation of the system model. However, it is mandatory for the

system designer to use the guidelines provided by a single SALT reference in order for the automatic validator to be able to check it. As stated in section 2.4, SALT references bring a set of OCL rules together with the guidelines. Such OCL rules are downloaded by the automatic validator and according to its content will check whether the associated guidelines are fulfilled or not. The user will not see anything unusual unless some guideline is not fulfilled, in which case a message will be prompted to the user during design time, thus he will be able to react according to the raised alert. Depending on the content of the SALT reference, the severity of the message may vary: info, alert, error.

The system designer can dismiss this messages at his own responsibility and even deactivate them for not to see them while making the system design (in case the reader of this document is used to software development, the automatic validator works in a similar way to normal software compilers). On the contrary, these messages will let him know what to fix in order to produce a SALT compliant surveillance system.

## 3 Guidelines of the SALT Reference Management

This section provides specific guidelines on SALT reference management. Since the beginning of the project, all partners have studied how the tools should work in production. We have identified 3 main topics:

- The collaboration between all stakeholders involved in a project
- The way to validate a reference developed by an expert
- The way for deprecating a reference

All of these bullets listed above are detailed in the following subsections.

### 3.1 *Towards a Project-based Workspace*

In an industrial project, a team has to collaborate. The PARIS partners have not developed yet any feature in the tools for allowing the collaboration among project participants. This subsection provides some general guidelines how the tools should work inside a project.

#### 3.1.1 Common Recommendations

The concept of project space has to be defined in the tools. This workspace will be common to all project participants with potential different access controls/rights. In particular, at the creation of a new project, it is necessary to declare the project, create some roles (e.g., project manager, developer, and lawyer), define the role access policy, and associate real user to the different roles.

The traceability of actions has to be ensured. In particular, we recommend that all actions and choices are recorded (i.e., the action, the timestamp, and the user identity). A synthesis can be generated in order to summarize the steps achieved by the project (e.g., to highlight that a lawyer has validated some choices made by an engineer).

#### 3.1.2 SALT Reference Repository Recommendations

The repository of the SALT references can show several inputs. In the project, it is necessary to store all references selected in the project. When a reference is selected, it seems important that a SALT expert check the relevance of the reference for the project. Indeed, some references can be incompatible or not applicable for the project. The selection of the references can be done at any phase of life cycle. An expert has to validate that the reference is compatible and makes sense for the project. At the end, all selected and used references have to be summarized in a report for traceability reason.

#### 3.1.3 Questionnaire Tool Recommendations

One of the first steps is to identify the most relevant questionnaire for the project. Then, it seems important that all involved partners can contribute to the questionnaire. Some user will answer to some questions, others will review the answers by adding some notes. The editor should use the revision mode as it is done in Microsoft Word. All contributors have their own colour and a tag shown easily the identity and the timestamp.

#### 3.1.4 Taxonomy Tool Recommendations

Taxonomies are useful in order to have a common vision inside a project. We consider that the project workspace has a minor impact on the taxonomy tool. Indeed, we recommend only to define at the project which taxonomies are relevant for the project. Some specific taxonomies can be developed for the project if necessary.

## **3.2 Scenarios for Validating a Reference**

The content of the SALT framework, that is the SALT references, is a key element within the whole SALT methodology, since the design and implementation of final surveillance systems will rely in the information from such references. Therefore, it is important to ensure a high level of accuracy when adding new references to the SALT repository.

The ideal way to achieve this goal would be by validating each SALT reference prior to its storage into the SALT repository. This validator can be done through an external authority in charge of checking and filtering all SALT references submitted to the SALT repository. This authority would be a third party with specific knowledge regarding to privacy and accountability for surveillance systems. But not only that, knowledge from the socio-contextual, ethical, legal and technological areas of surveillance systems is also required.

The technological knowledge is very tricky, since it also requires validate the OCL rules included into the SALT references. To perform this task, the validator must first understand the content of the given SALT reference, then to check that the proposed guidelines are appropriate for the corresponding privacy/accountability concern, and finally to validate that the OCL rules included effectively match with those guidelines.

On the other side, the legal area may also be one of the most important (if not the most), since legal concerns usually refer to mandatory requirements that have to be met by the surveillance system. Hence, they also have to be carefully checked in order to ensure their validity period and their proper applicability to surveillance systems.

As it can be seen, the validator process for SALT references is a heavy task that needs a set of resources out of the scope of the PARIS project and definitely not included into the initial goals, although how to perform it has already been thought for possible future works related to the PARIS project. Still, the PARIS consortium has not left this task unattended, and even though the creation of a third party authority is out of our resources, we have implemented a rating mechanism. Thanks to this mechanism, each user of a given SALT reference will have the possibility to provide a score for that reference between 1 and 5 (one for the worst and five for the best, as usual). Therefore, whenever someone searches for a set of SALT references, he will quickly have an overview about how popular each reference is among the community of users.

This method is not a strict validator as the one initially discussed, and it does not prevent the addition of SALT references not accurate enough. However, it is a useful approach to detect the quality of the SALT references already included into the SALT repository.

## **3.3 Guidelines for the SALT Input**

The deletion of references from the SALT repository is a subject we have discussed so far within the PARIS project consortium. According to the explanation from Section 3.2, an external approved authority would be a good candidate for keeping the privileges of data erasure. Another possibility is to create a procedure that automatically deletes all deprecated references whose expiration dates have been reached.

However, no matter the case, we have always agreed not to give the user the privilege to erase a SALT reference, not even if the user is the author of such reference. This is a security measure that allows keeping the repository consistency, and in the case any SALT reference expires, its author always has the possibility to create a new version of the reference (from scratch or duplicating the original reference and then applying the corresponding changes).

The major concern here is the following: a surveillance system is designed, implemented and deployed according to the guidelines provided by a set of SALT references retrieved from the SLT repository. After a period of time of system operation, one (or several) of the originally used SALT references is not valid anymore and the surveillance system needs to reconsider some facts. In this situation, the best case would be to access the updated version of the SALT reference and put in practice the new guidelines. But, what does it happen if a new version of the SALT reference has not yet been provided? If this happens, the users of the surveillance system should at least have access to the old (invalid) SALT reference and check what concerns need to be reconsidered. It is for this reason that even an outdated SALT reference is still useful for some users. Therefore, what to delete and when to delete it is a question that has to be carefully thought.

In practice, we have adopted a conservative position: the implemented SALT repository does not perform any deletion at all. This is the safest position, and in case any SALT reference is not valid any more (by reaching the expiration date, for example), the system will mark it as a deprecated reference, but it will keep it.

Whatever the case, the provided implementation of the SALT repository is very flexible (see Section 2.4) and a method for erasing data does really exist, although it is not used. This means that any change of the policies regarding SALT references deletion can be carried out in a cost effective way.

## 4 Conclusions

Along the document in the different sections, it has been described a complete guide of use for the different tools of the SALT Framework. It should be clear after reading this document that:

- This is not a tutorial or instructions of how to use each tool of the SALT Framework.
- This document guides expertise and non-expertise users by giving recommendations of what to do when you are going to answer a question or what you should have done before beginning with the creation of a questionnaire.
- Guidelines described in this document are not only for the SALT Framework ready to use. Some recommendations are mentioned to next future recommended implementations (For example: workspace for each project).
- From all the sections, it is understood that before starting using in deep the tools, most of all for the expertise users, it is needed to have a guide and advices to follow. Before starting with the instructions of the tools, it is strongly recommended to read the guidelines, recommendations and explanations about how to create or use the tools properly.

Finally, we could conclude that this file provides users a way to understand and begin in the use of the SALT Framework, clear and efficiently.