

D6.1

Project website and internal IT communication infrastructure

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Abstract:	This deliverable describes the website and its functionality and the tools provided to facilitate cooperation and coordination.
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Chapter 1 Introduction

This deliverable provides an overview of the HINT project IT infrastructure. It includes the project website as well as the whole set of tools that foster cooperation within the project, coordination and dissemination to the public. Technikon has developed this system for distributed project collaboration in recent years. This trusted collaborative toolbox was awarded an Austrian ICT innovation prize¹ for its security and completeness. The toolbox was incorporated into the architecture which was initiated and configured for HINT.

All tools use encrypted communication paths and can be configured to work through corporate firewalls that allow encrypted web traffic (SSL²).

The following picture presents the overall architecture of the IT infrastructure in HINT:

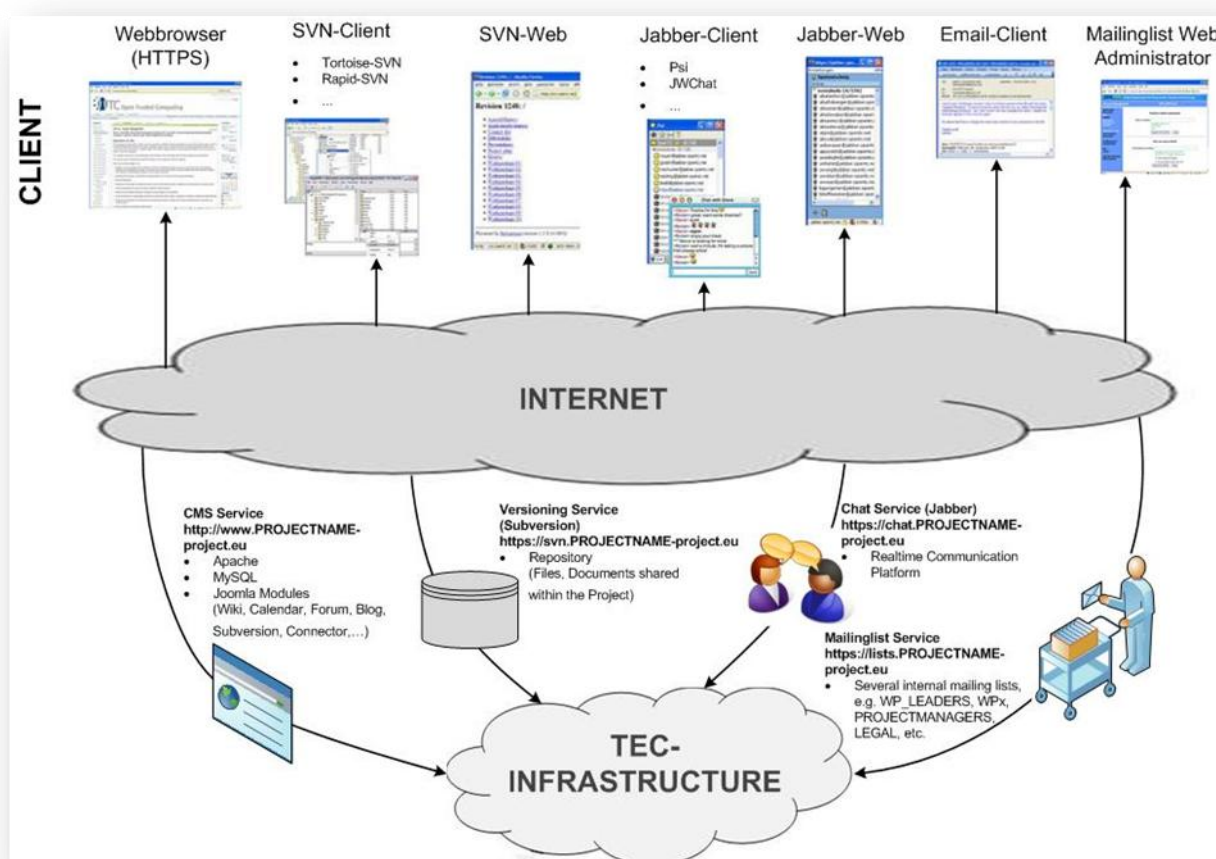


Figure 1: IT infrastructure

¹ https://www.technikon.com/index.php?option=com_content&view=article&id=76&Itemid=79

² Secure Sockets Layer – Protocol for a secure connection

Chapter 2 The Website

The website is based on a CMS³ – Content Management System named Joomla! and uses a hand of extensions for collaborative working. The project website has been designed to provide a user-friendly and informative environment. Using a readily available open source solution greatly reduces the overhead connected with maintaining the website as it integrates with the workspace.

Figure 3 on the next page shows the actual first page of the HINT website. The right side has a navigation slot, while on the left side the content of the respective section is given. Each page of the HINT website links to the disclaimer, the legal notice and the privacy policy of the website at the bottom.

The website can be best viewed with a standard web browser and will be kept alive throughout the project period and a few years afterwards.

The design of the website is based on the colours of the HINT Logo, which can be seen in Figure 2.



Figure 2: HINT Logo

The HINT project website is available on the following link:

<http://www.hint-project.eu/>

³ Content Management System – is used to build complex websites easily

2.1 Frontend

If a member of the consortium or a third party visits the HINT website, he or she will only see the frontend of the website. The purpose of the frontend is that the visitors cannot change the content of the website like the admin.

For users who have an account at the HINT website it is also possible to log in with their username and password to unlock special features.

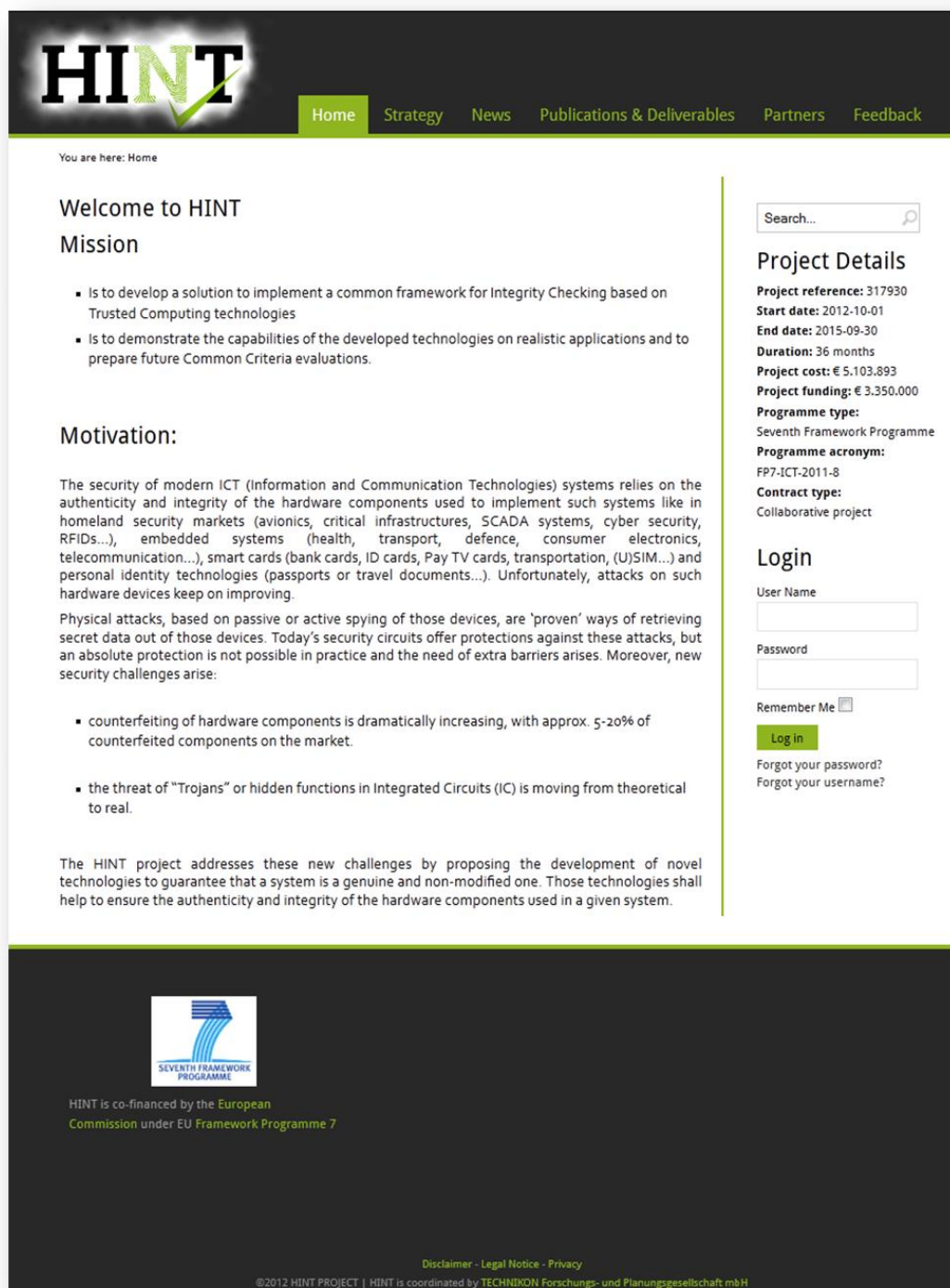


Figure 3: Website

2.2 Backend

This is the interface to manage the frontend and is only accessible for administrators of the HINT website. They can create content like articles or modules, manage the extensions or simply create a new user for HINT.

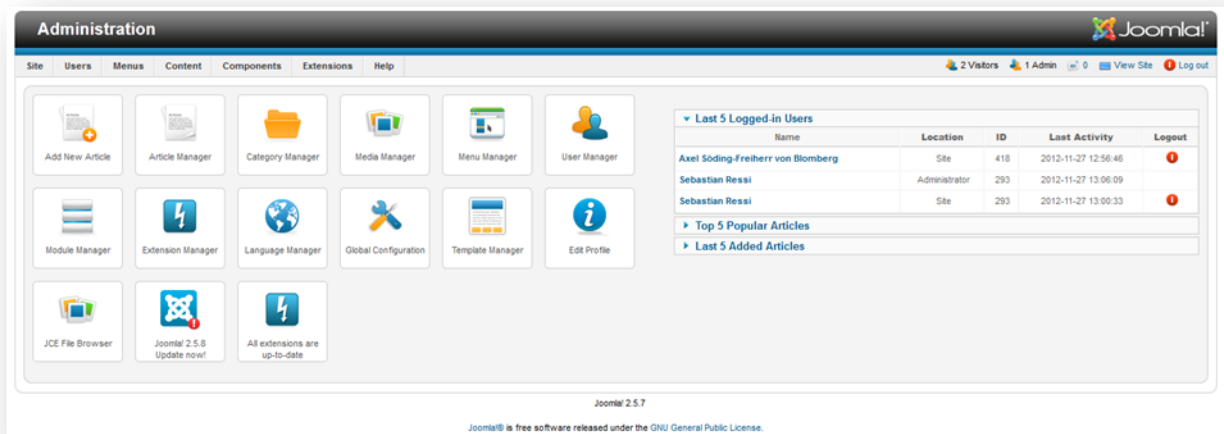


Figure 4: Backend

2.3 Public Area

The public sector can be seen by all and is intended for public information. It includes several links which are listed below.

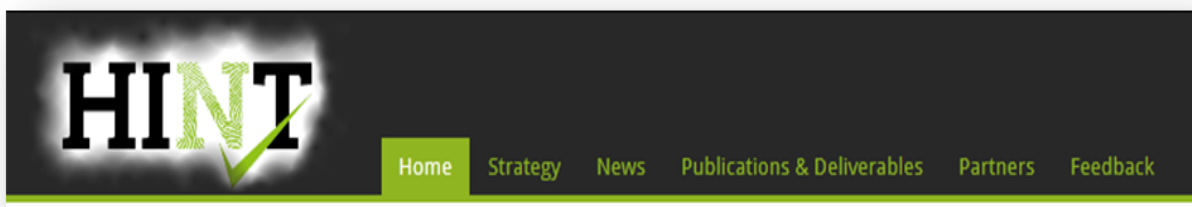


Figure 5: Public Area

2.3.1 Home

This is the first page the user will see. It contains a short summary of the HINT project and gives the reader an overview of what are the goals of the project.

2.3.2 Strategy

Under *Strategy* you can find an overview of the HINT work-package structure and their contents.

2.3.3 News

In this area you can find an overview of the things happening in the project. Things like press releases, the periodical newsletter or other general information for the public will be published here.

2.3.4 Publications & Deliverables

Here you can find all public deliverables of the HINT project or publications written by the project partners to download or to view.

2.3.5 Partners

On this page, all partners of the HINT project are listed. The Homepage of every partner is linked on his logo or name. For some partners there is a contact form which sends an email to the person responsible for this project.

2.3.6 Feedback

The feedback-form sends an email directly to the coordinator of the HINT project. It's intended for general feedback to the project or website.

2.4 Private Area

The *Private Area* is only for registered users. The users log in to the workspace from the website and are then presented with the additional protected information accessible through a separated user menu. Once logged in, the users have read and write access to several useful and practical features such as a calendar or the SVN-Repository. The “*Your Profile*” functionality allows the user to change his personal details and password. Moreover, the menu item “*Documentation*” provides helpful links and documentation concerning the internal IT infrastructure and SVN. With the mailing list connector in the protected workspace it is also possible for each user to subscribe to the different mailing lists online. Figure 6 illustrates the content of the restricted area.

2.4.1 Documentation & Tutorials

In this section every registered user can download or view some documentation regarding to the project. For example:

- IT-Infrastructure Tutorial
- LaTeX Tutorial

2.4.2 Calendar

The calendar shows every user upcoming events separated in 4 categories:

1. Meetings
2. Teleconferences
3. Deliverable Submission
4. Conferences and Workshops

The standard settings are the monthly overview but the user can view the calendar by year, month, and week or by day and eventually he can search for an event.

Further, there is an overview with upcoming event in the left navigation bar which shows the next three events.

2.4.3 Mailing Lists

Here you can see an overview of all available mailing lists.

Under *Mailinglist Subscription* you can simply subscribe to the list you want by selecting the checkboxes.

In *Mailinglist Archives* you can find links to the archives of all lists. To get access to the archives you have to enter your user credentials.

2.4.4 SVN Repository

With this link you have read-access to the SVN-Repository after you have entered your credentials.

2.4.5 Your Profile

Your Profile is needed for managing your details like e-mail or changing your password.

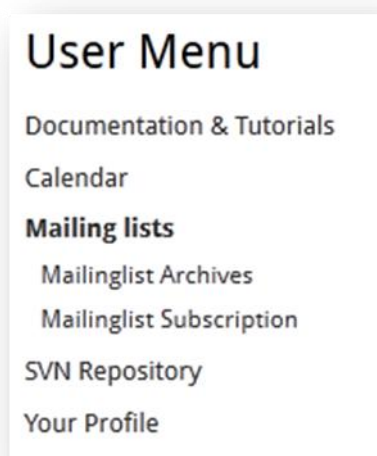


Figure 6: Content of restricted area

Chapter 3 Collaborative Tools

A set of collaborative tools are provided by the coordinator to facilitate the cooperation within the project and to assist in the coordination work. These tools are:

- A protected online workspace (CMS),
- A private instant messaging server, with the possibility of encrypted communication,
- A versioning system for keeping track of documents, and
- A mailing list system for information exchange.

3.1 Protected Workspace

The collaborative workspace is using the restricted area of the website as platform.

3.2 SVN Server

The Subversion server allows easy synchronization of documents between the server and a participant's local file storage. The system includes tools for retrieving older versions of a particular file, resolving conflicts between different versions of the same file and locking files for local editing. A versioning file server is provided for easy synchronization of project information and for use as a code repository.

This is a very useful software tool for sharing documents within a project. It is a central file repository where all project partners can get access to the required documents.

Some major advantages are for example:

- Offline availability of the data via SVN clients (stored on your local hard disc)
- Read-only access via HTTPS⁴ (Web Browser)
- Synchronizing the data between Client/Server
- all former versions of the file are available and reproducible
- User authentication with group based privileges via ACLs (Access Control Lists)
- Email notification on activity (e.g. "commit" action)

⁴ Hypertext Transfer Protocol Secure – used for a secure connection between Browser and Web server

3.2.1 Local SVN Checkout

To get a feeling on how to handle the connection to the SVN Server the following chapter shows a short introduction on installing and using the software tool:

a.) Create and download the repository:

- Download and install the subversion client.

The rest of this instruction will assume that you have installed the TortoiseSVN client, which can be downloaded from <http://tortoisesvn.net/downloads>. For the installation of the client please follow the instructions written on the homepage.

- Create a folder on a local disk. For example C:\SVN\HINT
- Right click on the folder and choose "SVN Checkout"

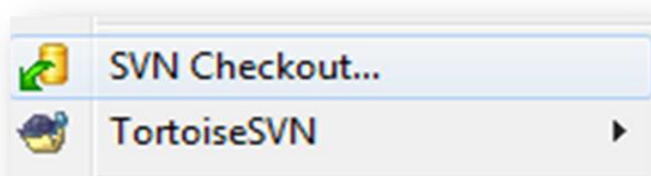


Figure 7: SVN Checkout (a)

- Use <https://hint.technikon.com> as the URL of the repository. Everything else can be left as it is. Make sure that **"HEAD revision"** is checked.

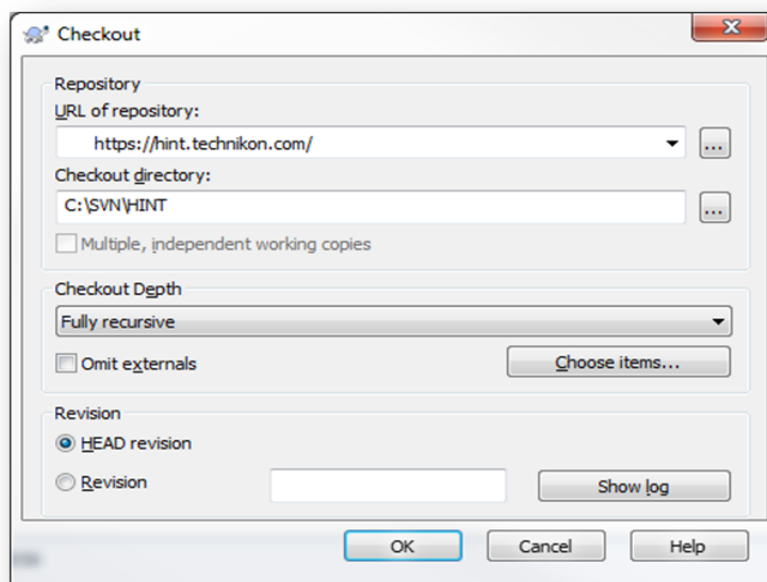


Figure 8: SVN Checkout (b)

- Authorization for HINT SVN is required: Insert your username and password.

- Download the content of the repository to the newly created folder. This might take a while, depending on the bandwidth and the size of the repository.

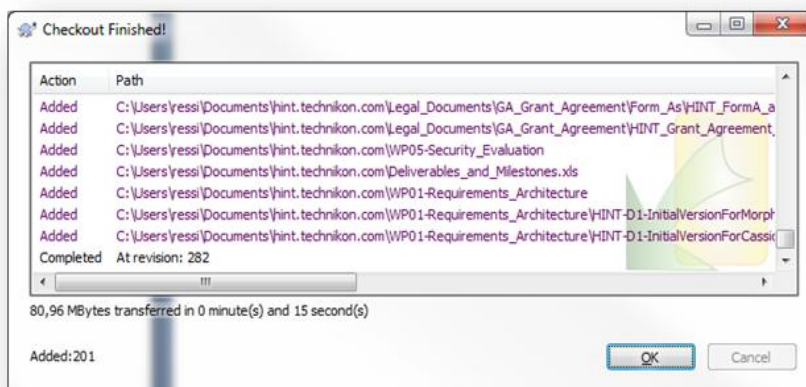


Figure 9: Download content from repository

b.) Keeping up to date:

- Right click on the folder and choose "SVN Update".



Figure 10: SVN Update

c.) Committing new documents (uploading)

- Save the document in an appropriate location within the folder created in the chapter above.
- Right click on the new file and choose TortoiseSVN → Add. (A small + will be added to the icon of the file)
- Right click on the file again and choose "SVN Commit..."



Figure 11: SVN Commit (a)

- Enter a comment about the document and the updates you made.

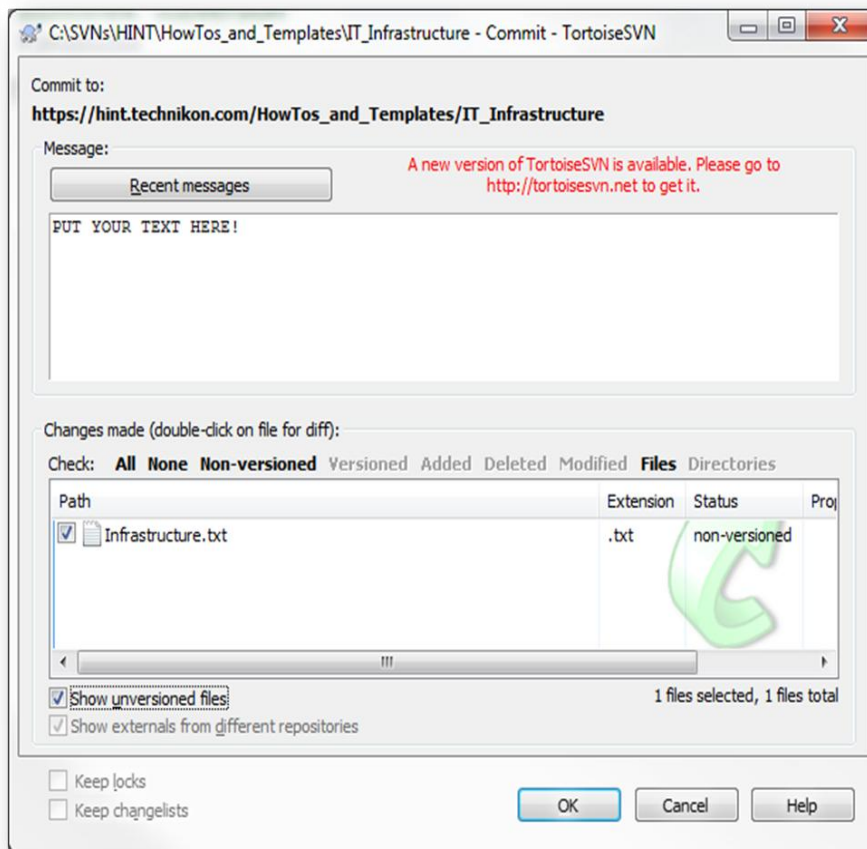


Figure 12: SVN Commit (b)

3.2.2 Browser Access

It's also possible to access the data through your Web Browser. *NOTE:* With the Web Browser you only have read-access to the data.

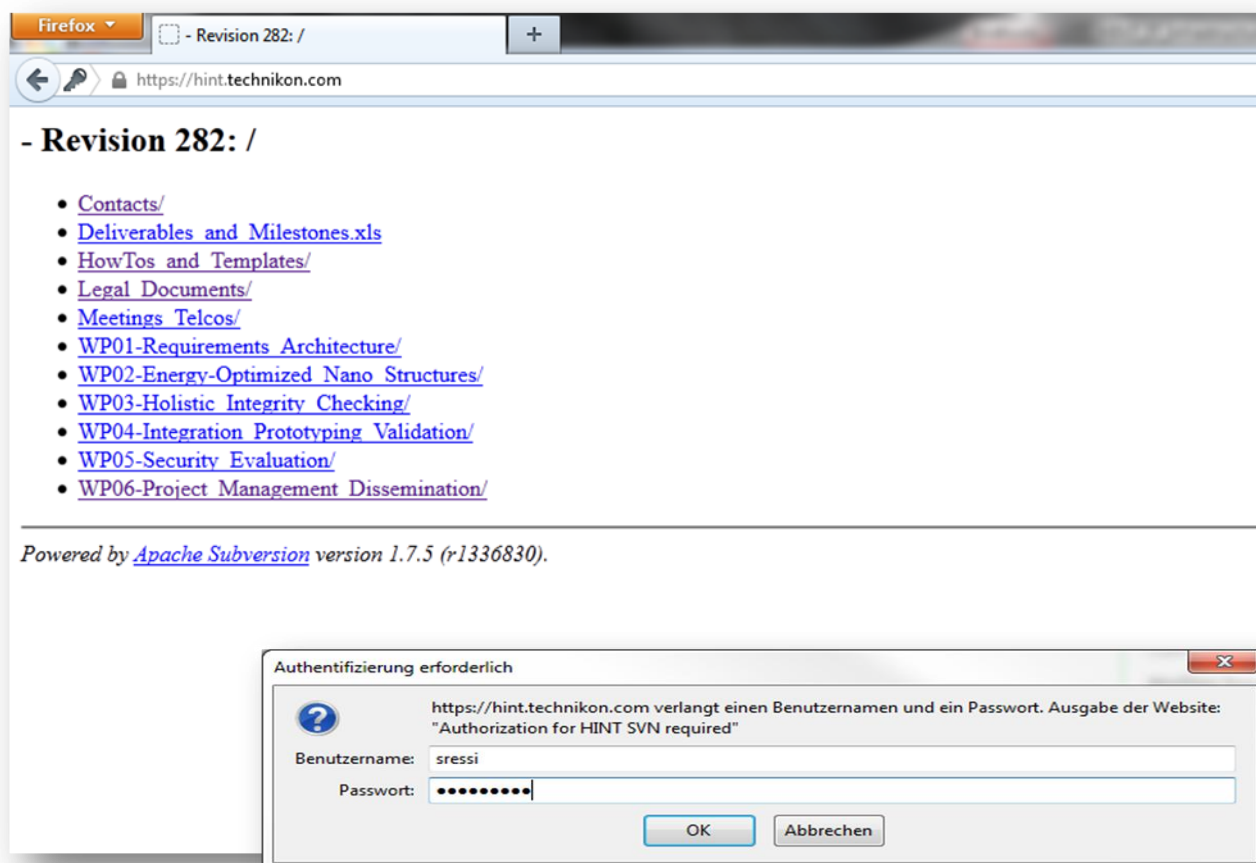


Figure 13: Browser access

3.3 Jabber Chat Server

An instant messaging server, based on the open Jabber protocol is maintained by the coordinator. The server provides a quick way to exchange a few words or transfer a file. It also supports multi-user conferences and has a built in User Directory. The service has been adapted to support access through corporate firewalls and a web client that will run on any recent java-script capable browser. Figure 14 shows the browser-based client, the login screen and a native Windows client called PSI (on the right).

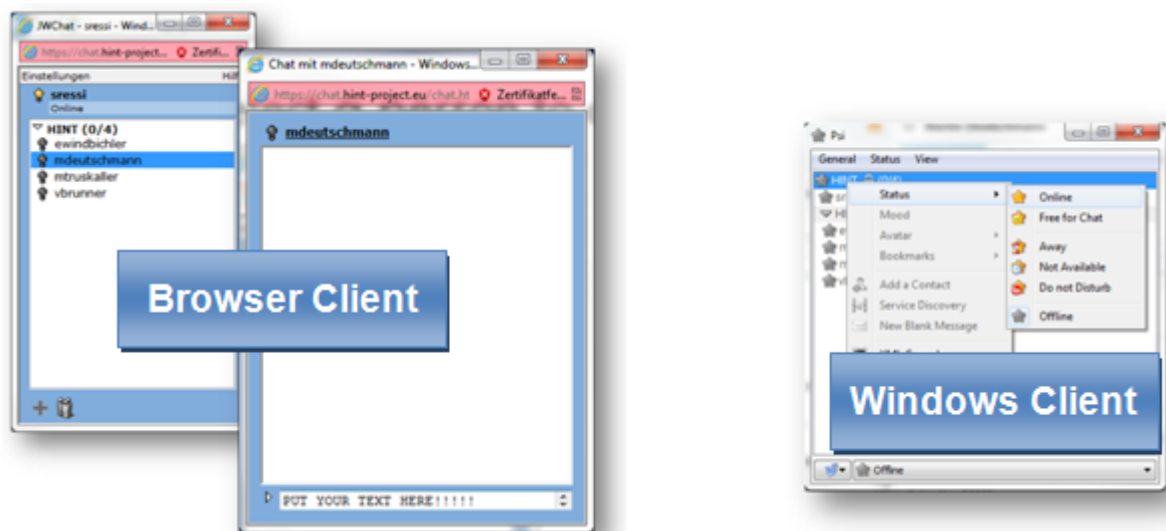


Figure 14: Jabber - browser-based Client vs. Windows client

The Jabber tool is reachable at the following link <https://chat.hint-project.eu>. Jabber is a real-time communication tool, which allows chatting with online partners.

Two different kinds of communications are possible:

- One-to-one chat: A group called "Everybody" will automatically appear on your roster when you connect to the service. This group contains all registered users. Simply double-click on a name to chat with that user.
- Group chat: choose join group chat in the PSI menu.
 - Host: **chat.hint-project.eu**
 - Room: this can be almost anything – if it does not exist it will be created

If you would like to use this communication tool with a client, it requires the following steps:

- Download and install a client
A list of clients is available at jabber.org - PSI is known to work in Windows and Pidgin is a cross platform solution used by some members of the consortium.
When choosing something else, it is important to make sure that it supports encrypted connections.
- Username and password
The username is the same as for the other HINT IT services.
- Connection to the server chat.hint-project.eu

3.4 Mailing List Server

A number of mailing lists are available to the project members for easy communication with a set of participants. Each Activity has its own mailing list and there are lists for the activity and work package leaders, legal personnel, activities etc. Subscriptions and other management tasks are done either via email commands or through the web interface in the protected workspace. Access is controlled by the coordinator to ensure the integrity of the lists.

Technikon has set up a mailing server with a wide range of different mailing lists, where all people who are responsible for the various sections are subscribed.

The different HINT mailing lists can be seen in the following table.

List	Address	Description
ALL	all@lists.hint-project.eu	All active team members
ADMINISTRATIVE	administrative@lists.hint-project.eu	Personnel with legal / financial / contractual responsibilities
TECHNICAL	technical@lists.hint-project.eu	Personnel with technical responsibilities
SVN-Log	svn-log@lists.hint-project.eu	Notifications for SVN activities

Table 1: Mailing lists