D33.1

Project website and internal and external IT communication infrastructure

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Abstract:	This deliverable briefly describes the website and its functionality. Further it describes the tools provided within the IT infrastructure to facilitate cooperation and coordination.
Keywords:	Collaborative tools, infrastructure, website, homepage, internal communication

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Disclaimer

Executive Summary

This deliverable provides an overview of the PRACTICE project internal and external IT infrastructure and consists of two main parts. It includes the project website which has been designed to provide a user-friendly and informative environment (see Chapter 2) and the collaborative tools to facilitate the cooperation within the project and to assist in the coordination work (see Chapter 3).

A protected workspace, including a set of collaboration services has been set up for the PRACTICE project. The project partners log in to the workspace and have then access to all information regarding the project (see Chapter 3.1). A very important tool in this project is the Subversion server (SVN). The SVN allows easy synchronization of documents between the server and a participant's local file storage for sharing documents within a project. It is a central file repository where all project partners can get access to the required documents (see Chapter 3.2).

In all projects, communication is one of the most essential points. For that reason a communication network was build. This includes chat and mailing list servers (see Chapter 3.3 and 3.4) and telephone conference systems (see Chapter 3.5). Further an internal project handbook is available. This is a collection of instructions for all tools, procedures and important contacts regarding the PRACTICE project (see Chapter 3.6).

This established environment with all its tools will help to maximize the benefit to participants and the impact of the project.

Disclaimer

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Chapter 1   Introduction

This deliverable provides an overview of the PRACTICE project internal and external 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 prize[1] for its security and completeness. The toolbox was incorporated into the architecture which was initiated and configured for PRACTICE.

The main components of the knowledge management infrastructure include the following:

- Content Management System incl. Public Website and internal areas (CMS server – based on Joomla!)

- A file versioning server (Subversion server)

- Jabber chat server

- Mailing list server

All four tools use encrypted communication paths and can be configured to work through corporate firewalls that allow encrypted web traffic (SSL[2]). The versioning tool requires a client side program (SVN client) for uploading data but all other functions are directly accessible using a browser with java-script support.

The following figure presents the overall architecture of the IT infrastructure in PRACTICE:
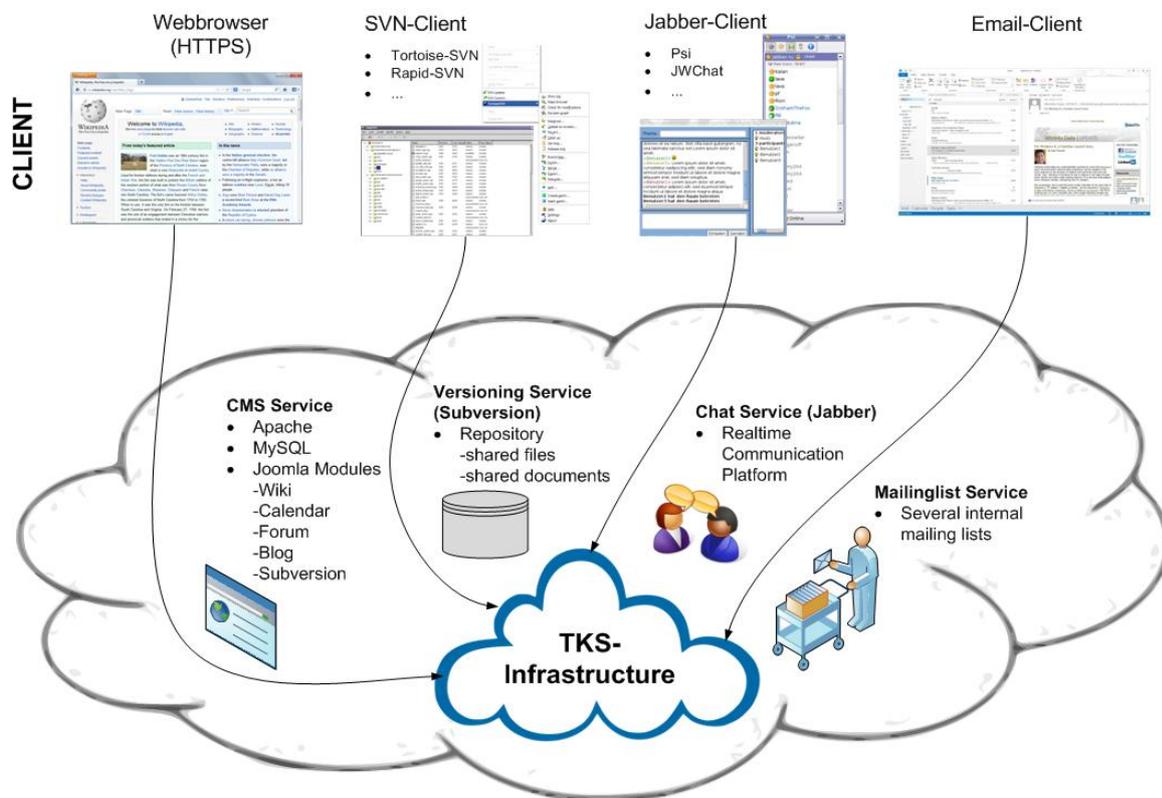
Figure 1: IT infrastructure

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[1] http://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 project website

The project website has been designed to provide a user-friendly and informative environment. It is based on the Joomla! Content Management System which has been adapted to divide the site in to an open area for the public and a closed area for the project partners.

Additional to the information spreading platform, plug-ins and other services are available for the website on request. In detail we provide the following preinstalled functionality: documentation & tutorials, calendar, mailing lists, Mailing list archives and SVN repository.

The PRACTICE project website is available on the following link:

http://www.practice-project.eu/

The design of the website is based on the colours of the PRACTICE Logo.

Figure 2: PRACTICE Logo

2.1 Frontend

If a member of the consortium or a third party visits the PRACTICE 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 for the PRACTICE website, it is also possible to log in with their username and password to unlock special features.

Figure 3: The frontpage of the website

Figure 3 shows the front page of the PRACTICE website. The front page contains general information about the PRACTICE project such as the mission, motivation and the project data. Further there are separate menus to list the latest NEWS and PUBLICATIONS & DELIVERABLES. In addition a dedicated PRACTICE Blog has been foreseen, where project relevant information can be posted by consortium members.

Below you find a screenshot of the first official PRACTICE project blog post (Figure 4). The blog is the discussion or informational site that should be used in PRACTICE to publish news, workshops, conferences, publications, presentations etc to the public. All partners are

asked to exchange relevant information via the project blog on the website (http://www.practice-project.eu/blog).
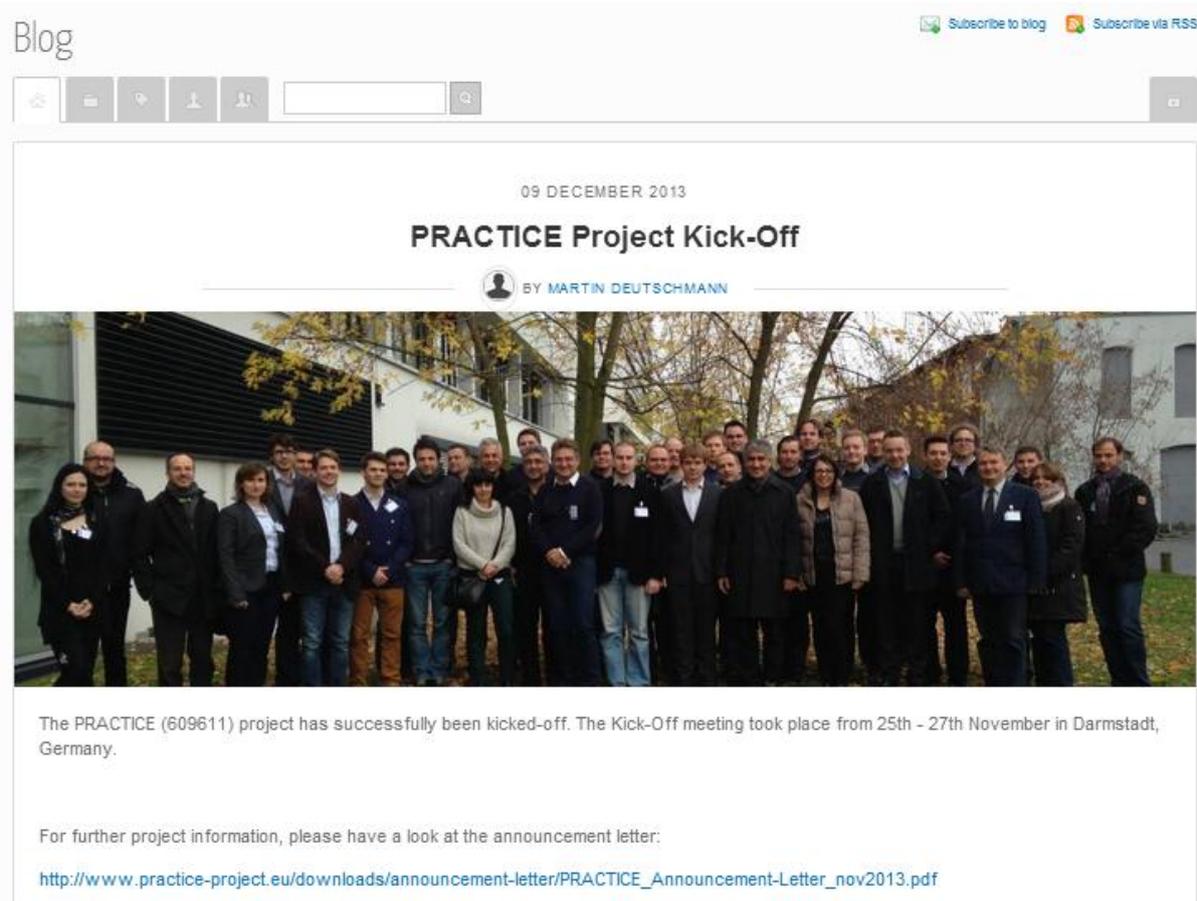
Figure 4: Practice Blog

Each page of the PRACTICE 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.

2.2 Backend

This is the interface to manage the frontend and is only accessible for administrators of the PRACTICE website. You can use it to create contents like new articles or to install new modules, manage your Joomla! extensions or apply regular system updates.

Figure 5: Backend

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 → Joomla! 3.2),
- 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.

All Users have provided a registration link via email at the beginning of the project. This link allowed them to set their password, which works for all tools. Further members can at any time retrieve a new link to reset their password (e.g. periodically update of password due to security issues).

3.1 Protected workspace

The collaborative workspace is using the same platform as the website. 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 menu item "Documentation & Tutorials" provides helpful links and documentation concerning the internal IT infrastructure and SVN. Figure 6 illustrates the content of the restricted area.
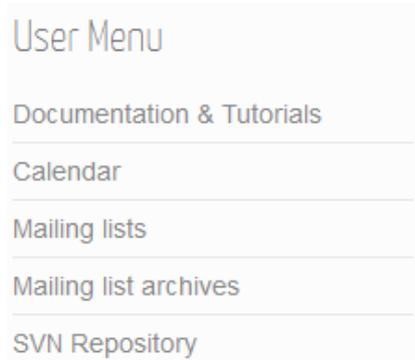
Figure 6: Content of restricted area

3.1.1 Documentation & Tutorials

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

- IT-Infrastructure Tutorial
- SVN-Relocate

3.1.2 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, week or by day and eventually search for an event.

Further there is an overview with upcoming events in the right navigation bar which shows the next five events.

Figure 7: Calendar

3.1.3 Mailing lists and Mailing list archives

This menu allows users to have a look at the set of available mailing lists, as well as on the mailing list archives. This is helpful to quickly check if emails have been send out to one of the dedicated mailing lists, when a user has no immediate access to an email client. Further the archives help to follow up email conversations and implicitly act as backup service.

3.1.4 SVN Repository

In this menu, registered users are forwarded to the subversion repository https://practice.technikon.com (see Chapter 3.2). As the repository is in this case accessed via browser, only read-access is given.

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. Two main tools are provided by the server. On the one hand there is the client access which provides the user reading and editing rights. On the other hand there is the browser access on which the user only has read-access to the data.

3.2.1 TORTOISE Client access

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 HTTPS[3] (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)

To get a feeling 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.tigris.org. 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\PRACTICE
- Right click on the folder and choose "SVN Checkout"
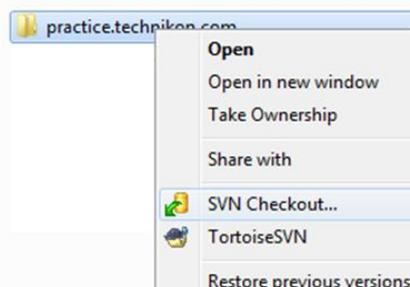
Figure 8: SVN Checkout (a)

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[3] Hypertext Transfer Protocol Secure – used for a secure connection between Browser and Web server

- Use https://practice.technikon.com as the URL of the repository. Everything else can be left as it is. Make sure that "HEAD revision" is checked.
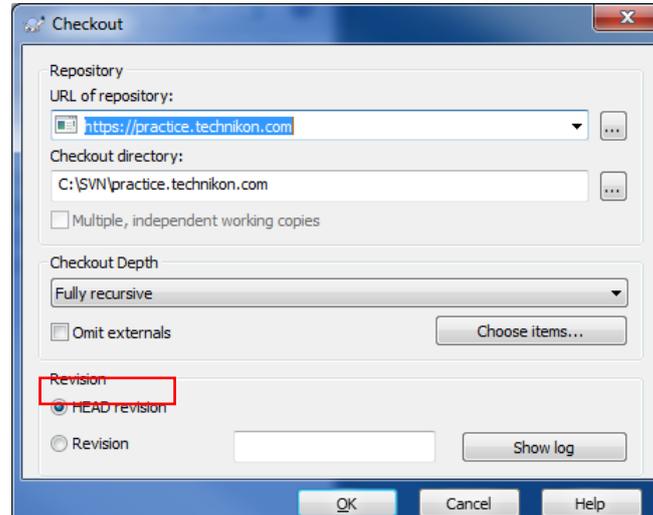
Figure 9: SVN Checkout (b)

- Authorization for PRACTICE 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.
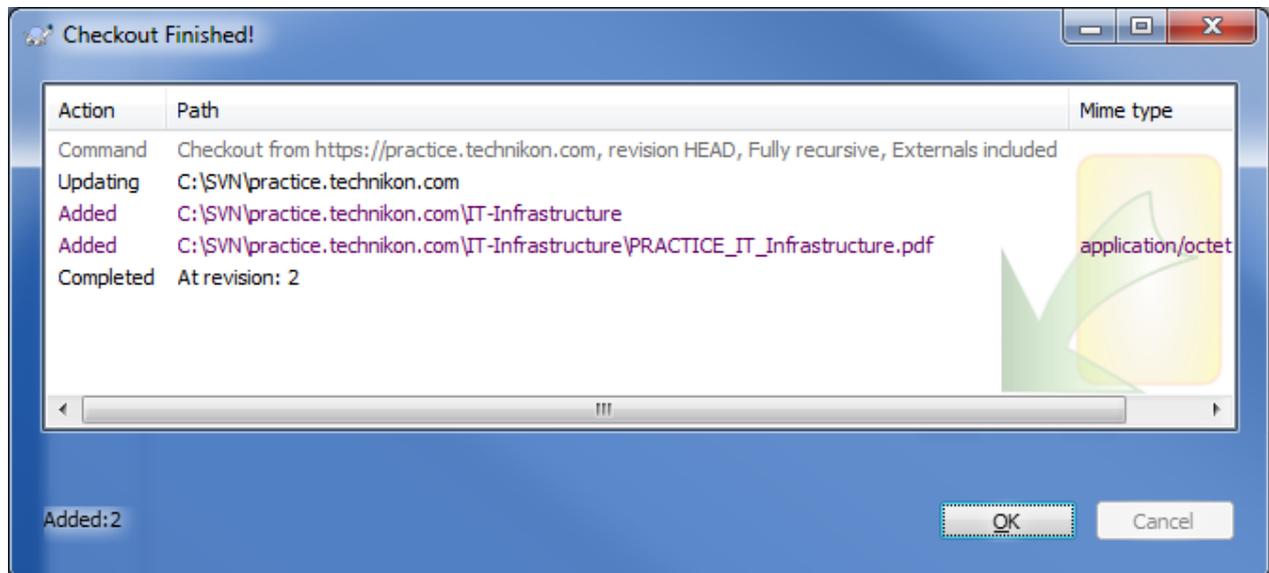
Figure 10: Download content from repository

b.) Keeping up to date:

- Right click on the folder and choose "SVN Update".
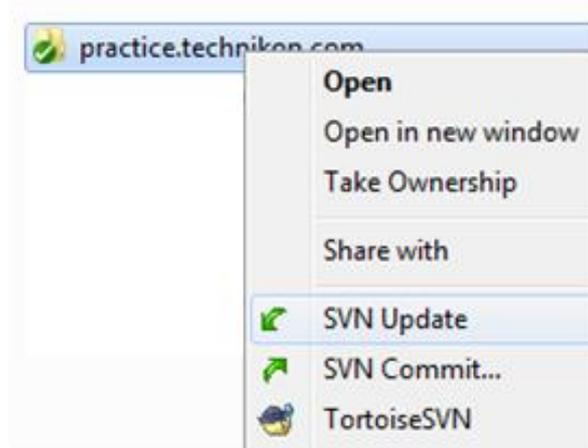
Figure 11: SVN Update

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..."
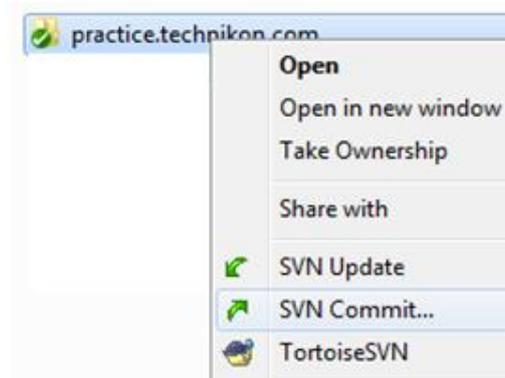
Figure 12: SVN Commit (a)

- Enter a comment about the document and the updates you made.
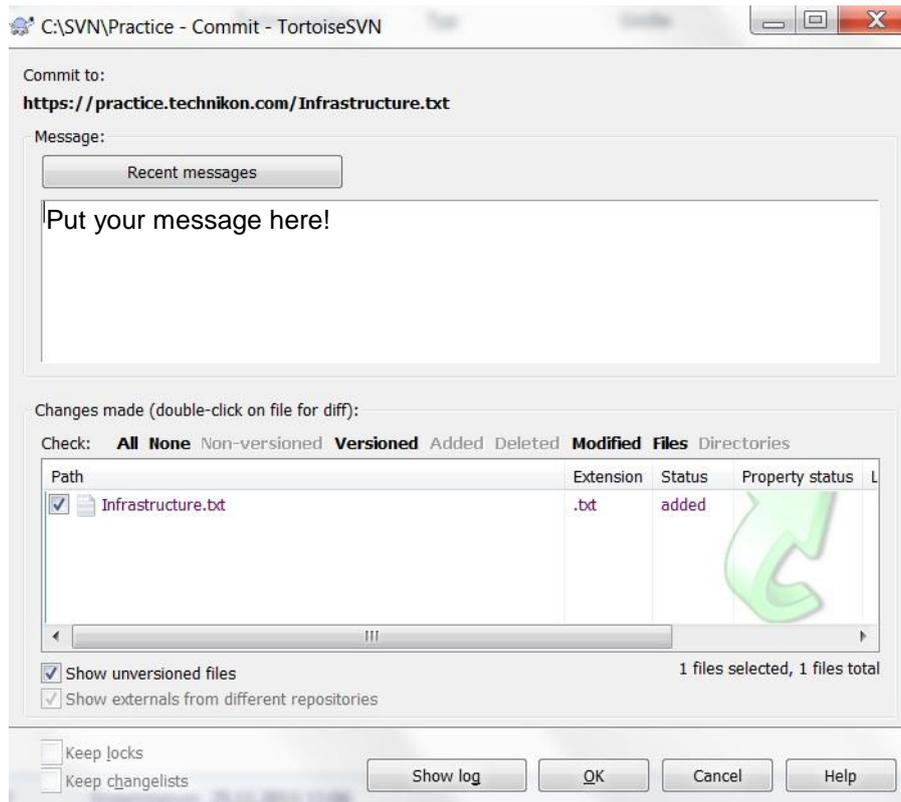
Figure 13: SVN Commit (b)

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.
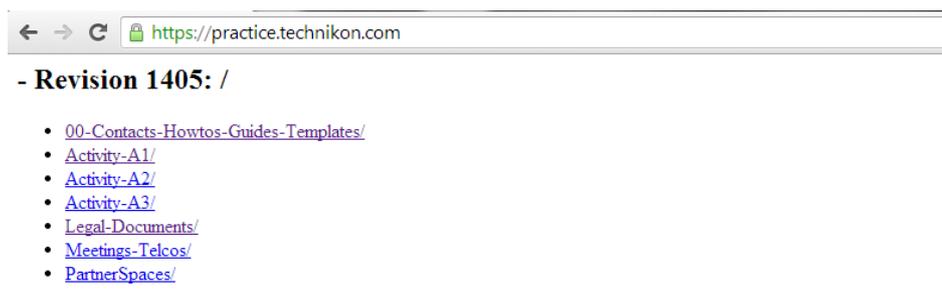
Figure 14: Browser access

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. Figure 15 shows the PSI-view.
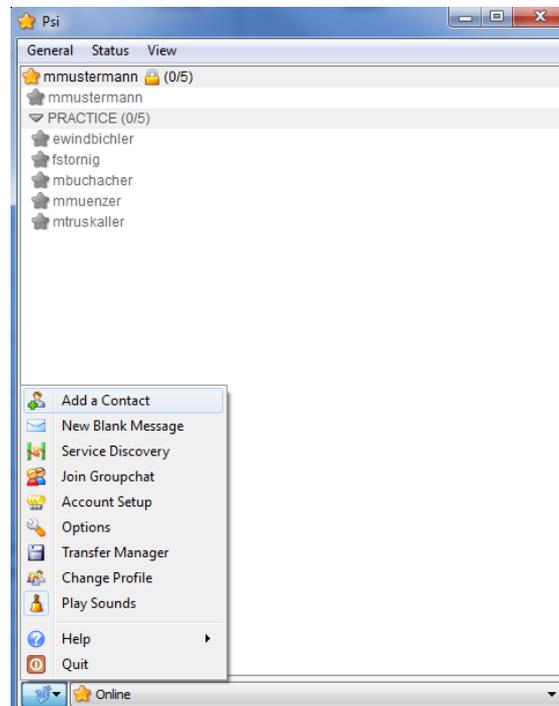
Figure 15: Jabber – PSI view

Jabber is a real-time communication tool, which allows chatting with online partners.

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

* Download and install Psi-Software: http://psi-im.org/

* Have your username and password for PRACTICE IT collaboration tools ready

* Add a new user account by using *Account Setup > Add* ; enter a name for your account (preferably your username) and click *Add*

* In the *Account Properties* window enter your XMPP address which has the form: <your-username>@chat.technikon.com (see Figure 16)

* Enter your password and click *Save*

* Connect to the server by changing your account's status to 'Online' and publish personal information you want

Now you can communicate with other users in the dedicated subgroup
'PRACTICE'
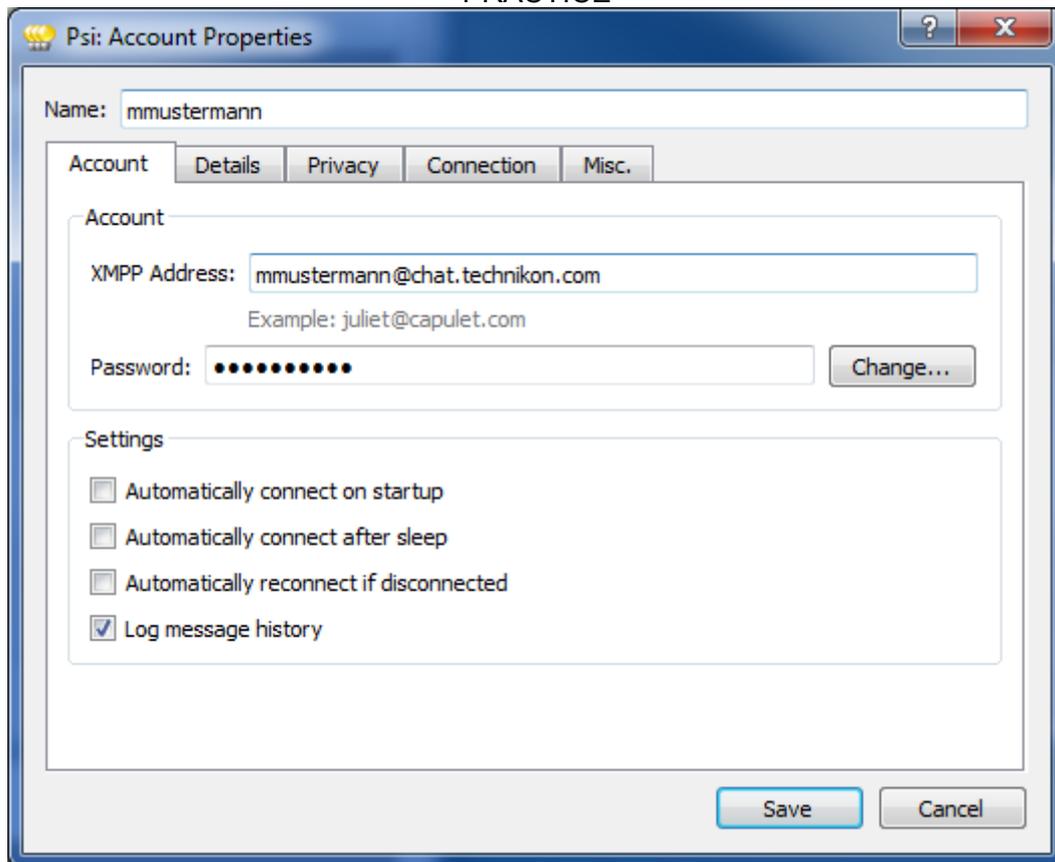
Figure 16: Jabber – Account Properties window

3.4   Mailing list server

A number of mailing lists are available to the project members for easy communication with a set of participants. For subscriptions and other management tasks it is necessary to write an email to coordination@practice-project.eu. 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 PRACTICE mailing lists can be seen in the following table.

Mailing List Name	Members
practice-all@lists.technikon.com	All personnel actively involved in the project
practice-legal@lists.technikon.com	Personnel with legal/contractual responsibilities
practice-general-assembly@lists.technikon.com	General Assembly members and deputies
practice-executive-board@lists.technikon.com	members (representatives and deputies) of the Executive Board, plus persons who would like to follow the EB discussion
practice-a1a2@lists.technikon.com	Combined mailing list for Activity 1 and Activity 2
practice-wp31@lists.technikon.com	Personnel involved in WP31
practice-wp32@lists.technikon.com	Personnel involved in WP32
practice-financial@lists.technikon.com	Personnel responsible for financial questions and tasks, e.g. financial reporting
practice-publications@lists.technikon.com	Mailing list to be used to inform about publications – written notice about planned publications
practice-svnlog@lists.technikon.com	Email notification on SVN commits

Table 1: Mailing lists

3.5   Telephone conference System

In addition to the planned physical meetings, we will perform regular telephone conferences within the PRACTICE project. Therefore the following telephone conference systems are available for all partners:

a.) GoTo Meeting:

This web conferencing tool allows you to host an online meeting with up to 25 people. Users can dial in either via a Local client (VoIP) or use the dedicated country code, which is provided by the organizer. GoTo Meeting provides the possibility to share any application on your computer in real time. The tool is provided by the coordinator TEC.

b.) PowWowNow:

All clients have to dial a premium rate number (there are no installation costs for the initiator of the PowWowNow telephone conference). The costs of local charges for the dial-in numbers range from 7 to 77 EUR cents per minute. On average one should expect around 20 EUR per hour. The most recent Enhanced Access international dial-in numbers including the cost breakdown can be downloaded from the PowWowNow website: http://www.powwownow.com/Conference-Calls/EnhancedAccessNumbers/.

3.6   Project Handbook

We created an internal project handbook which is a collection of instructions and is intended to provide ready reference. The goal of the Project Handbook is to gather all important rules and procedures of the PRACTICE project such as initial registration, project infrastructure and structure, the hierarchy of bodies, the policy for meetings, information to submitting deliverables and the procedure for publishing scientific papers. The handbook is designed to easily consult and provides quick answers in the project area. The project handbook is available on the SVN.

In particular for new members of the consortium, the project handbook serves as a one-stop reference that documents all tools, procedures and important contacts.

Chapter 4   Conclusion

This document provides an initial documentation of the PRACTICE IT-related infrastructure and has been be included into the project handbook for subsequent maintenance.

The website was reviewed by two PRACTICE partners (CYBER and SAP) and very useful feedback has been received. Special attention was paid to the privacy. Now only logged in users have the possibility to have a look at the documents, tutorials and the calendar.

Through publishing all relevant public information of the project on the official PRACTICE website, the website will be kept lively and external visitors will immediately see the current news and activities. Further this allows more interaction and communication within and outside the PRACTICE Consortium.

The PRACTICE IT infrastructure provides an essential benefit for all project partners. One of the most important points is the Subversion Repository (SVN). All project partners are able to access all project relevant information and documents. Further the communication environment, including, Jabber Server, different mailing lists, conference call systems, create transparent efficient working conditions.

During the creation of this deliverable, new challenges and perspectives have been identified for all persons involved.

Chapter 5   List of Abbreviations

The following table shows the list of abbreviations.

ACL	Access Control List
CMS	Content Management System
HTTPS	Hypertext Transfer Protocol Secure
SSL	Secure Sockets Layer
SVN	Subversion
URL	Uniform Resource Locator
VoIP	Voice over Internet Protocol

Table 2: List of Abbreviations