

D06.1

Project Website and Internal IT Communication Infrastructure

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Abstract:	This deliverable briefly describes the tools provided within the IT infrastructure to facilitate cooperation and coordination
Keywords:	Collaborative tools, infrastructure, internal communication



Table of Contents

- 1 INTRODUCTION 3
- 2 THE PROJECT WEBSITE 5
- 3 COLLABORATIVE TOOLS 7
 - 3.1 PROTECTED WORKSPACE 7
 - 3.1.1 *Calendar*..... 8
 - 3.1.2 *Wiki*..... 8
 - 3.1.3 *Discussion forum*..... 8
 - 3.2 SVN SERVER..... 8
 - 3.3 JABBER CHAT SERVER 12
 - 3.4 MAILING LIST SERVER 13
- 4 CONCLUSION 14
- 5 LIST OF ABBREVIATIONS 15

List of Figures

- FIGURE 1: DRAGON PROJECT IT INFRASTRUCTURE 3
- FIGURE 2: FRONTPAGE OF THE DRAGON WEBSITE 5
- FIGURE 3: CALENDAR WITHIN THE PROTECTED WORKSPACE..... 7
- FIGURE 4: DRAGON SVN FOLDER ON LOCAL DISK 9
- FIGURE 5: SVN CHECKOUT 9
- FIGURE 6: SVN CHECKOUT 10
- FIGURE 7: DOWNLOAD CONTENT FROM REPOSITORY 10
- FIGURE 8: SVN UPDATE 11
- FIGURE 9: SVN COMMIT 11
- FIGURE 10: JABBER - BROWSER-BASED CLIENT VS. WINDOWS CLIENT..... 12

1 Introduction

This deliverable provides an overview of the DRAGON project IT infrastructure: the project website as well as the whole set of tools that foster the project cooperation, coordination and dissemination. Technikon has especially developed this system for distributed project collaboration in the last years. This trusted collaborative toolbox was awarded the ICT innovation prize for its security and completeness in Austria in November 2006.

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

- Content Management System incl. Public Website and internal area (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). The versioning tool requires a client side program (SVN client) or WebDAV functionality for uploading data but all other functions are directly accessible using a browser with java-script support.

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

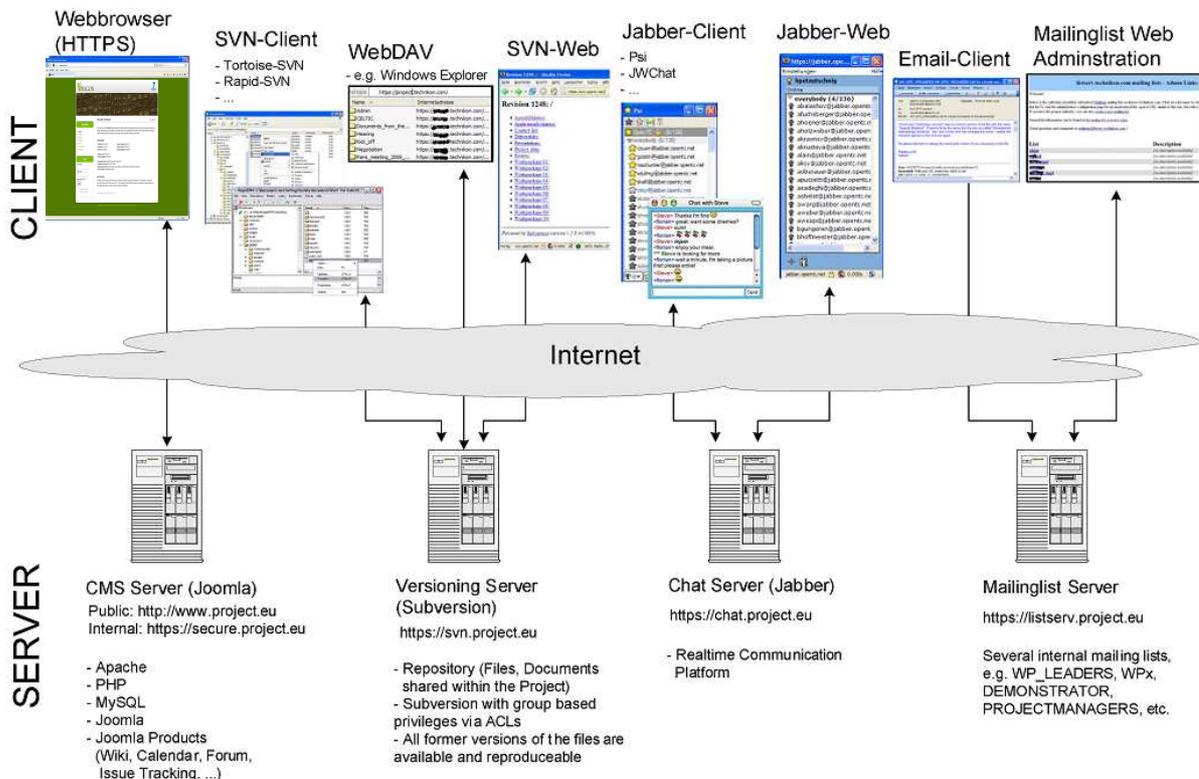


Figure 1: DRAGON project IT infrastructure (in the figure “project” is a placeholder for “dragon-project”)

All the features explained in the further document facilitate the collaboration work within the DRAGON project consortium. The IT infrastructure aims to support the communication

among the partners while offering an open and accessible infrastructure to allow continuing and progressive work.

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 into an open area for the public and a closed area for the project partners.

The Content Management System (CMS) “Joomla!” is a webserver which provides the public website of the project and additionally protected areas for members only. 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: A calendar, wiki, real time chat service, mailing lists and archives, SVN repository and a discussion forum. Using a readily available open source solution greatly reduces the overhead connected with maintaining the website as it integrates with the workspace. The chosen solution also includes a number of tools for online WYSIWYG editing and provides templates for publishing news and events.

The DRAGON project website is available on the following link:
<http://www.dragon-project.eu/>

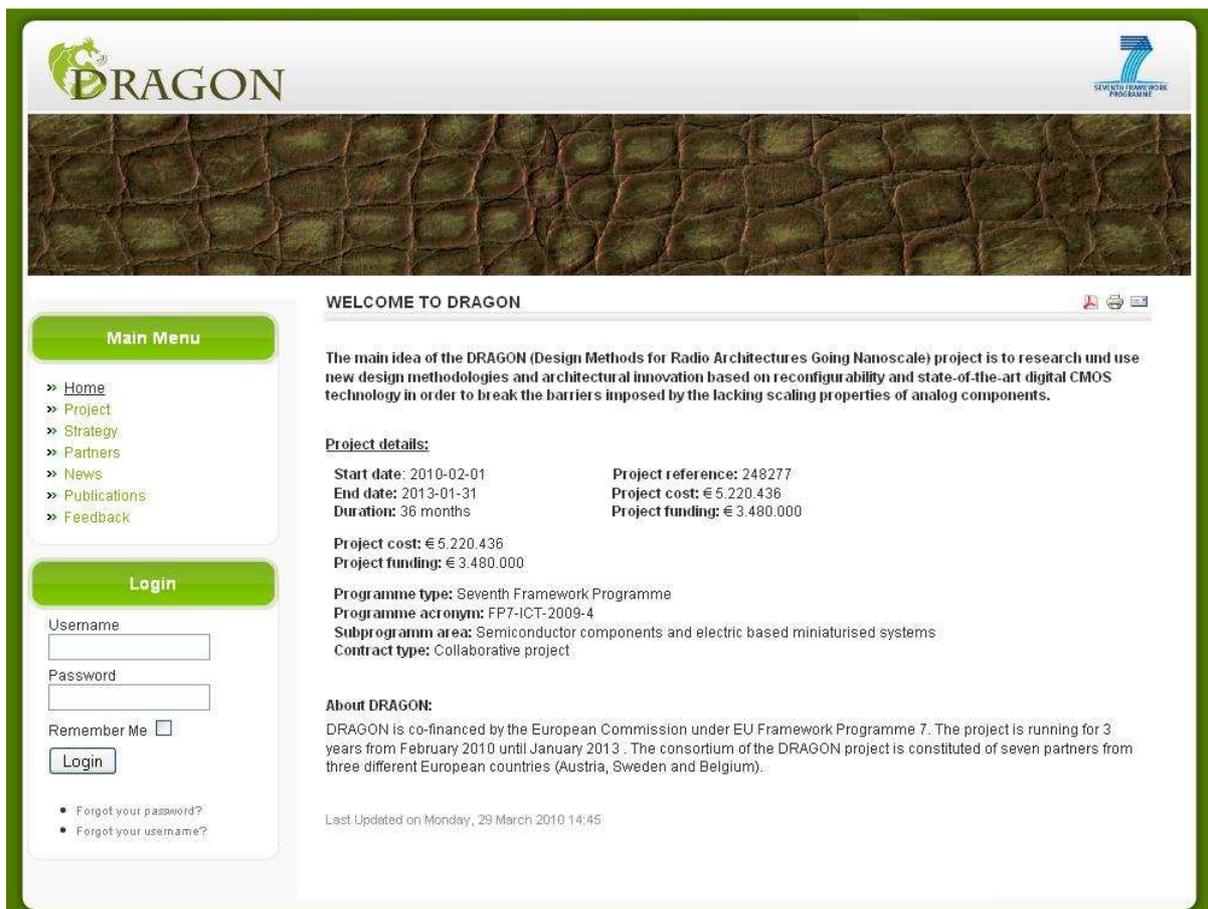


Figure 2: FrontPage of the DRAGON website

Figure 2 shows the actual first page of the DRAGON website. The left side has a navigation slot, while on the right side the content of the respective section is given. The website can be

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

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. The 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 same Joomla! 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 user has read and write access to several useful and practical features such as a Wiki, calendar, discussion forum or a real-time chat system. The “Change my details” functionality allows the user to change their email address 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.

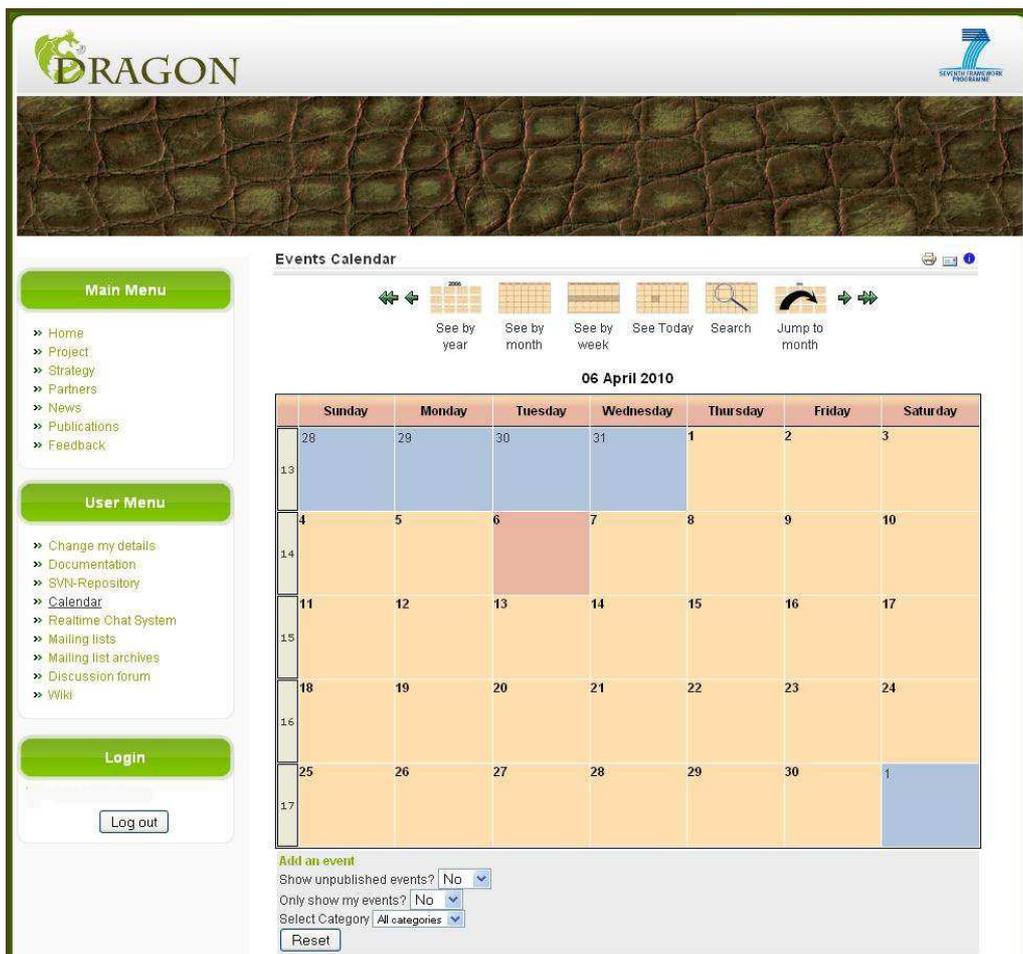


Figure 3: Calendar within the protected workspace

3.1.1 Calendar

The calendar can be used to announce important project-related dates, such as conferences, meetings, telephone conferences or deadlines.

3.1.2 Wiki

The Wiki is meant as an additional knowledge base for the project members, which can be used to share specialized knowledge between all partners if needed.

3.1.3 Discussion forum

Additionally to the mailing lists project partners can launch discussions on general project-related or on WP-related topics here.

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 HTTPS (Webbrowser)
- Read-Write Access via WebDAV Connection
- 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:

>> 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.dragon-project.eu:

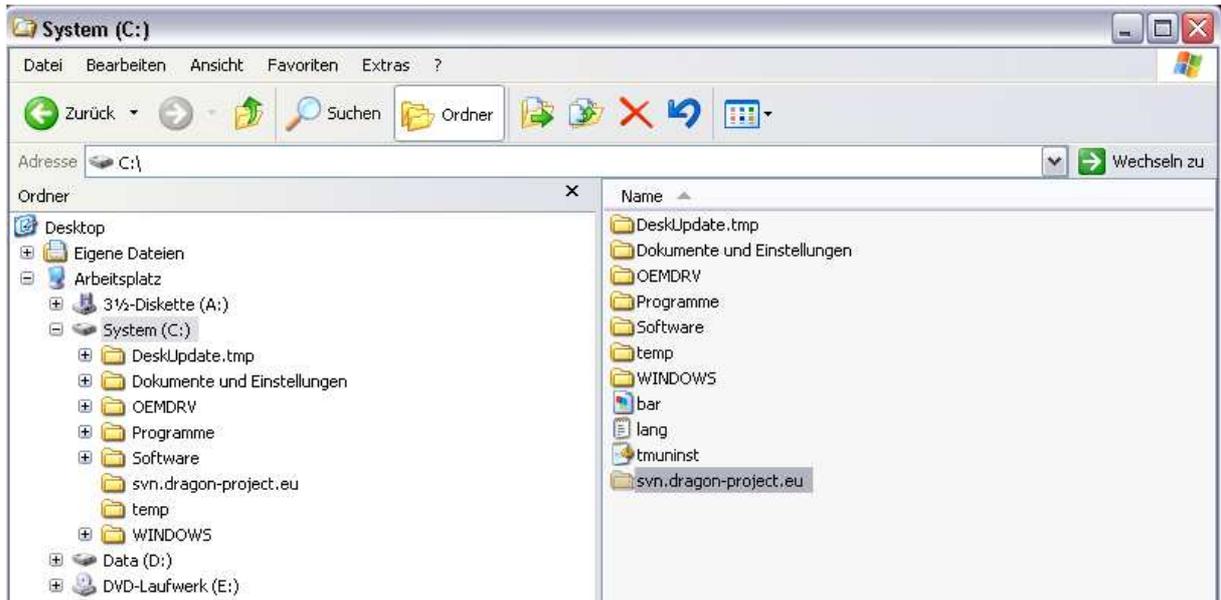


Figure 4: DRAGON SVN folder on local disk

- Right click on the folder and choose "SVN Checkout"

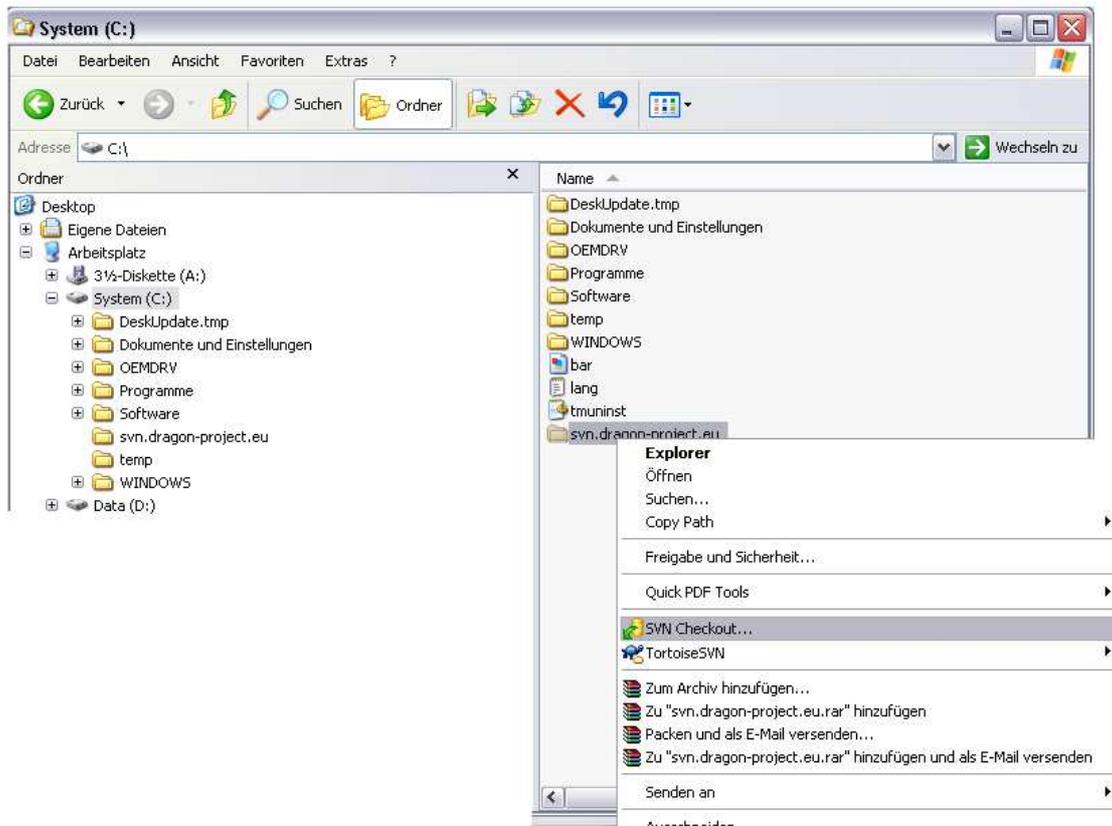


Figure 5: SVN Checkout

- Use <https://svn.dragon-project.eu> as the URL of the repository. Everything else can be left as it is. Make sure that “HEAD revision” is checked.

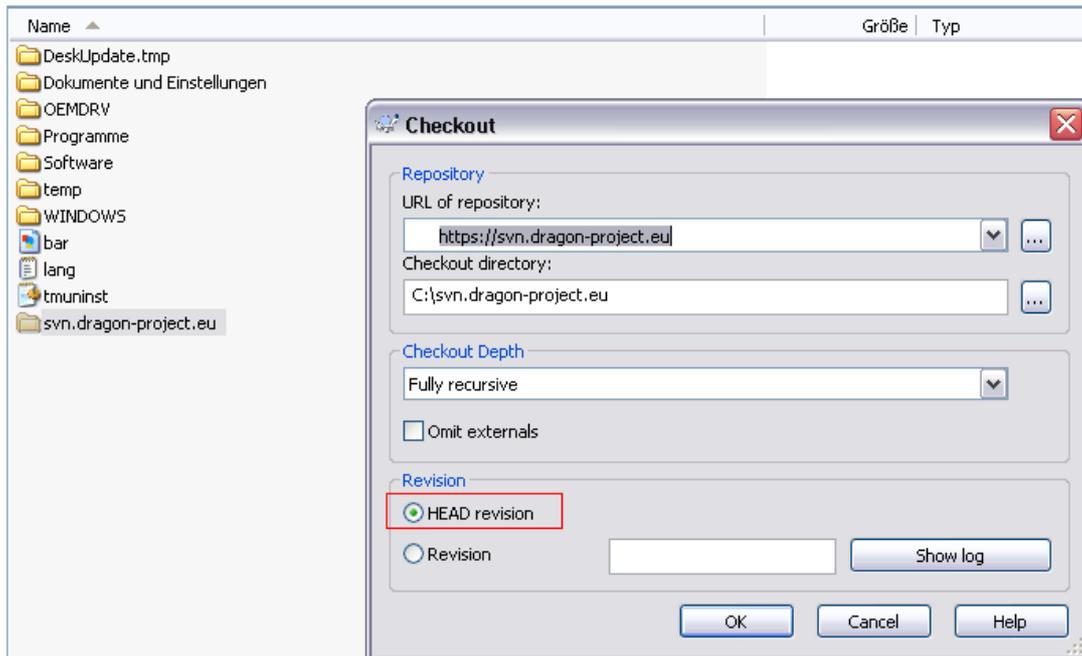


Figure 6: SVN Checkout

- 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.

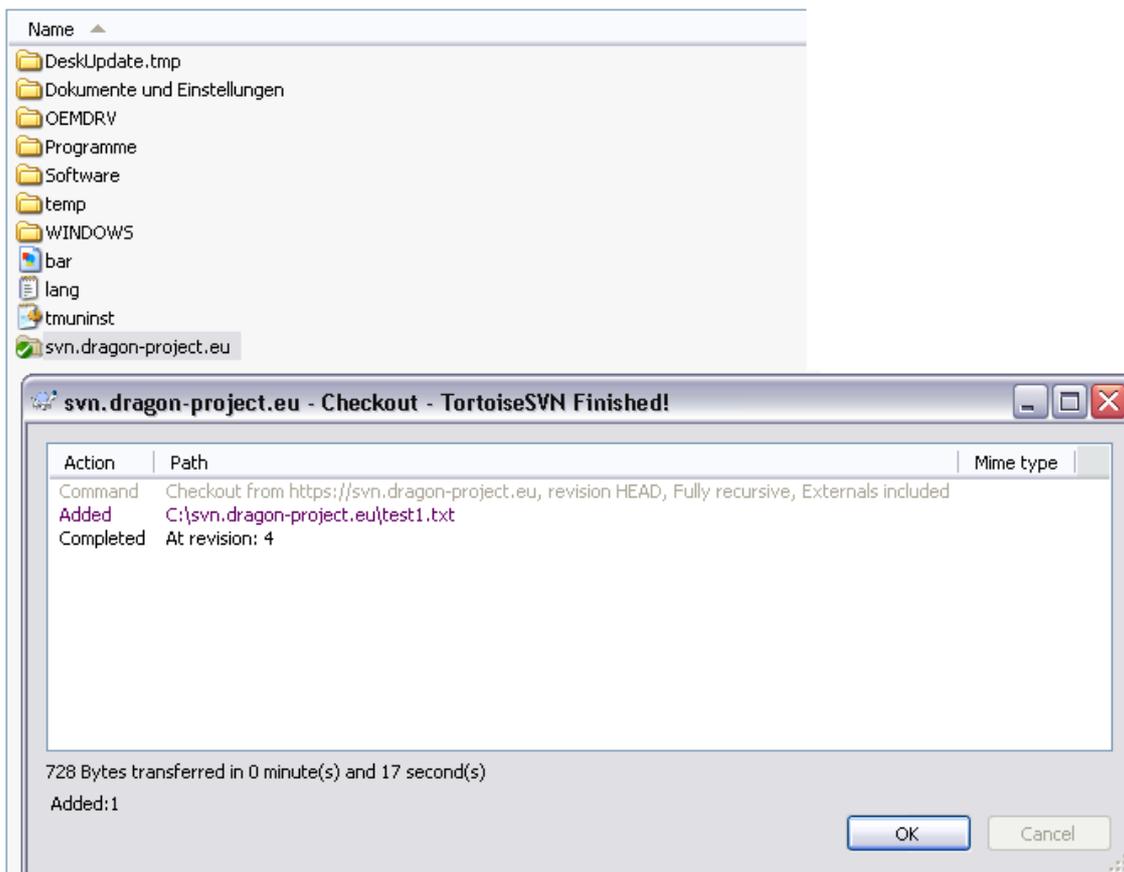


Figure 7: Download content from repository

>> Keeping up to date:

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



Figure 8: SVN update

>> Committing new documents (uploading)

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

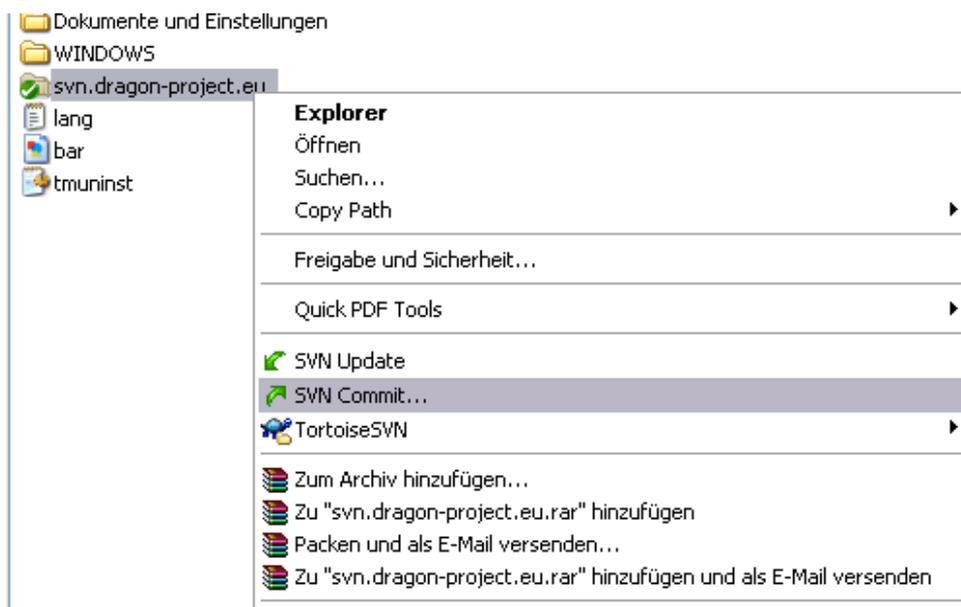


Figure 9: SVN Commit

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

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 10 shows the browser-based client (on the left), the login screen (center) and a native Windows client called Psi (on the right).

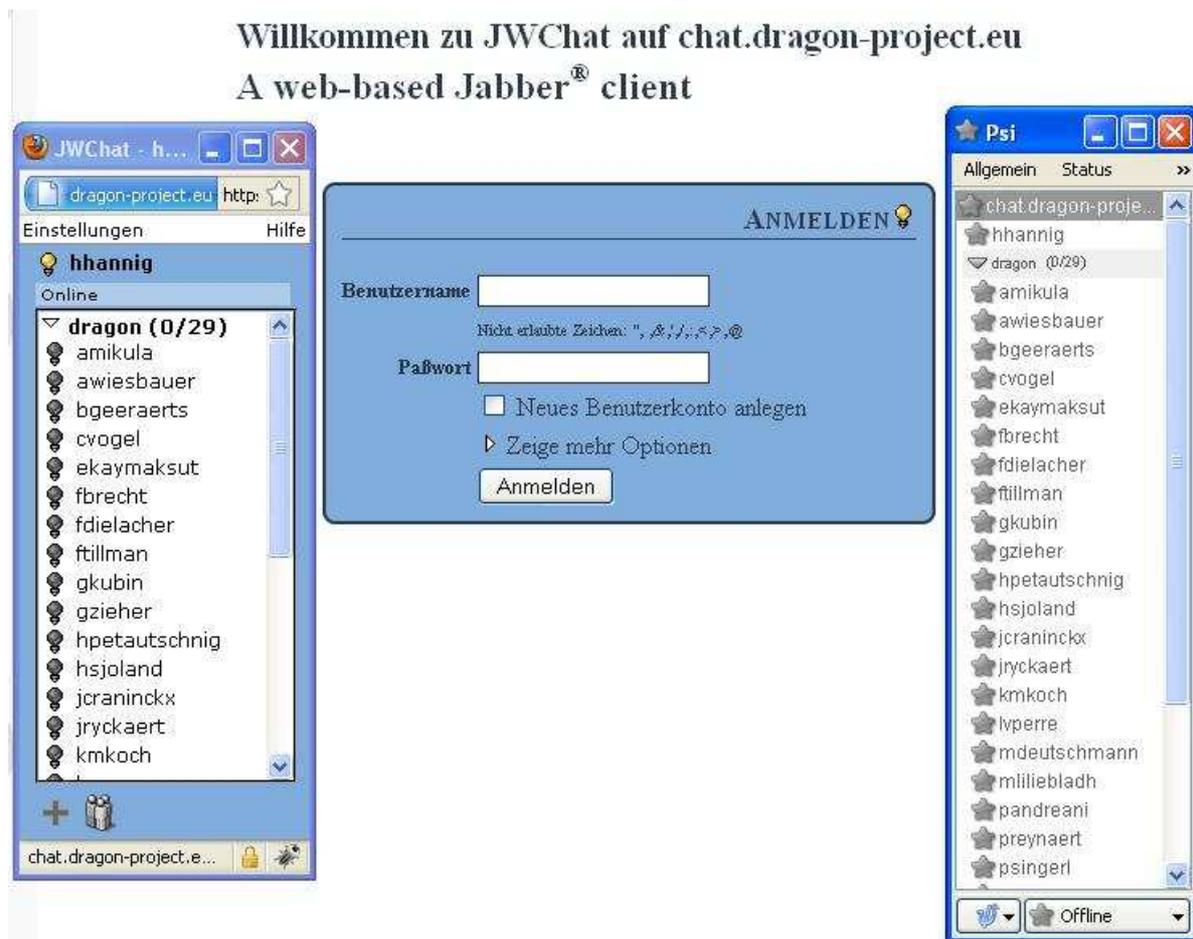


Figure 10: Jabber - browser-based Client vs. Windows client

The Jabber tool is reachable at the link <https://chat.dragon-project.eu>. Jabber is a real-time communication tool, that allows to chat with online partners.

There are two different kinds of communication available:

- 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 doubleclick on a name to chat with that user.
- Group chat: choose join group chat in the PSI menu.
 - Host: chat.dragon-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 DRAGON IT services.

- Connection to the server chat.dragon-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 Workpackage has its own mailing list and there are lists for the project managers, workpackage leaders, legal personnel 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 mailinglists, where all the people who are responsible for the various sections are subscribed.

Following mailinglists are available:

all@lists.dragon-project.eu	All personnel actively involved in research
general-assembly@lists.dragon-project.eu	General Assembly members and deputies
legal@lists.dragon-project.eu	Personnel with legal/contractual responsibilities
wpleaders@lists.dragon-project.eu	The workpackage leaders and deputies (Executive Board)
svn-all@lists.dragon-project.eu	Email notification on SVN commits
svn-wp1@lists.dragon-project.eu	Email notification on SVN – WP1 commits
svn-wp2@lists.dragon-project.eu	Email notification on SVN – WP2 commits
svn-wp3@lists.dragon-project.eu	Email notification on SVN – WP3 commits
svn-wp4@lists.dragon-project.eu	Email notification on SVN – WP4 commits
svn-wp5@lists.dragon-project.eu	Email notification on SVN – WP5 commits
svn-wp6@lists.dragon-project.eu	Email notification on SVN – WP6 commits
wp1@lists.dragon-project.eu	Discussions within workpackage 1
wp2@lists.dragon-project.eu	Discussions within workpackage 2
wp3@lists.dragon-project.eu	Discussions within workpackage 3
wp4@lists.dargon-project.eu	Discussions within workpackage 4
wp5@lists.dragon-project.eu	Discussions within workpackage 5
wp6@lists.dragon-project.eu	Discussions within workpackage 6

4 Conclusion

This document describes the IT related infrastructure and will be updated throughout the lifetime of the DRAGON project.

5 List of Abbreviations

CMS	Content Management System
SVN	Subversion
SSL	Secure Sockets Layer
HTTPS	Hypertext Transfer Protocol Secure
WebDAV	Web-based Distributed Authoring and Versioning