D7.1

Project website and internal 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 MATTHEW project internal 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 MATTHEW 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 built. This includes chat and mailing list servers (see Chapter 3.3 and 3.4) and a telephone conference system (see Chapter 3.5). Further an internal project handbook will be available from M04 on. This will be a collection of instructions for all tools, procedures and important contacts regarding the MATTHEW 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.

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Chapter 1   Introduction

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

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 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 picture presents the overall architecture of the IT infrastructure in MATTHEW:
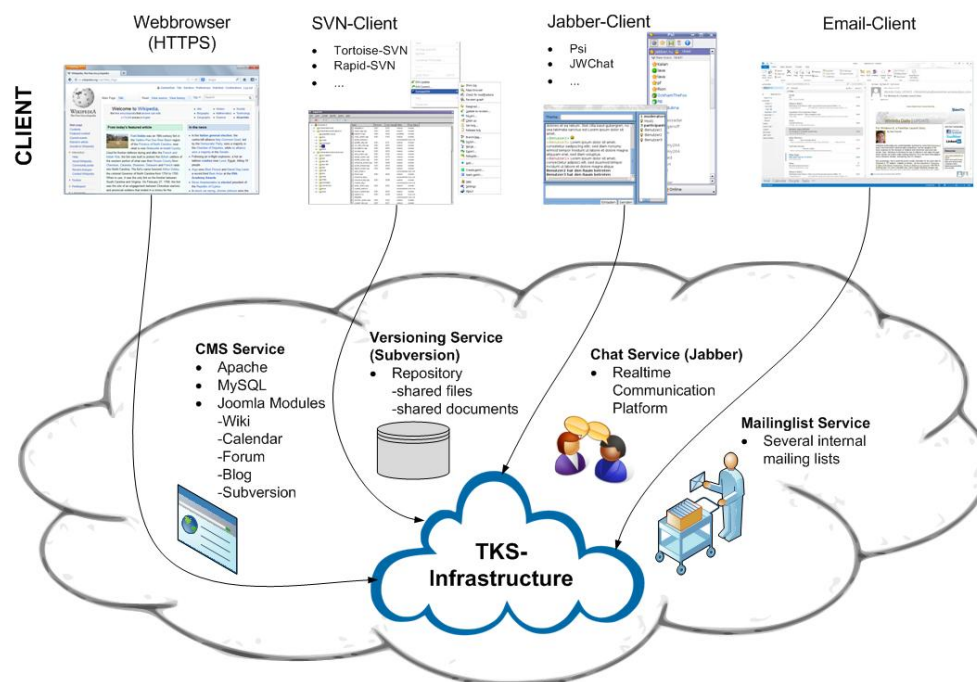

Figure 1: IT infrastructure

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[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 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.

In addition 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 list archives and SVN repository.

The MATTHEW project website is available on the following link:

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

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

Figure 2: MATTHEW Logo

2.1 Frontend

If a member of the consortium or a third party visits the MATTHEW 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 MATTHEW website it is also possible to log in with their username and password to unlock special features.
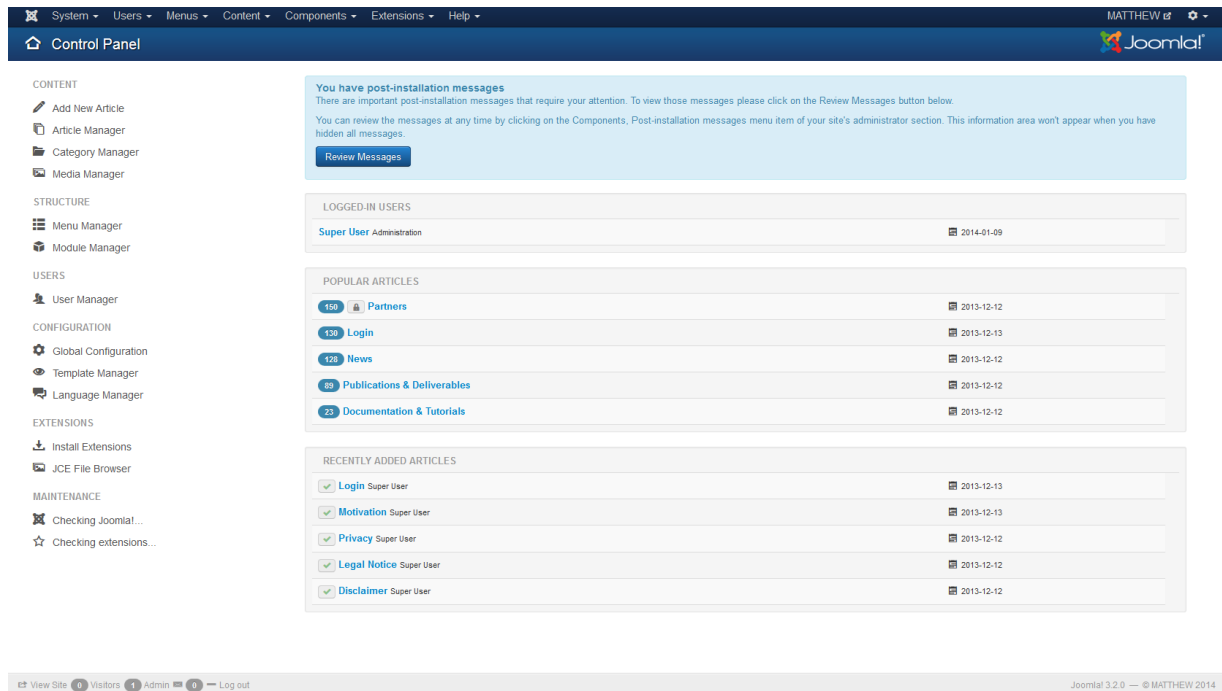
Figure 3: The frontpage of the website

Figure 3 shows the front page of the MATTHEW website. The front page contains general information about the MATTHEW project such as the mission, motivation and the project data. Further there are separate menus to list the latest News and Publications & Deliverables. Each page of the MATTHEW 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 at least 3 years afterwards.

2.2 Backend

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

Figure 4: Backend

Chapter 3 Collaborative tools

A set of collaborative tools are provided by the administrative lead 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.

To all users a registration link has been provided 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 reasons).

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 5 illustrates the content of the restricted area.
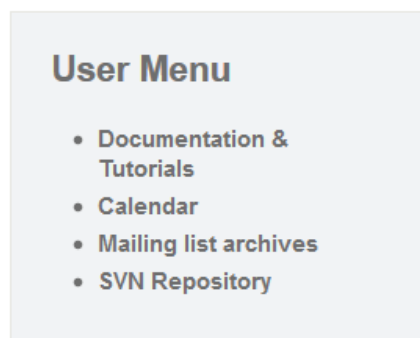

Figure 5: Content of restricted area

3.1.1 Documentation & Tutorials

In this section every registered user can download or view some documentation regarding the project, for example the IT-Infrastructure tutorial.

3.1.2 Calendar

The calendar shows upcoming events. The standard settings are the monthly overview but the user can view the calendar by year, month, 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.

Figure 6: Calendar

3.1.3 Mailing list archives

This menu allows users to have a look at the mailing list archives. This is helpful to quickly check if emails have been sent 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://matthew.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.

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\MATTHEW

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

Figure 7: SVN Checkout (a)

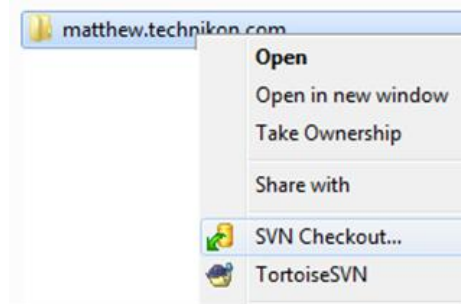- Use https://matthew.technikon.com as the URL of the repository. Everything else can be left as it is. Make sure that "HEAD revision" is checked.

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[3] Hypertext Transfer Protocol Secure – used for a secure connection between Browser and Web server
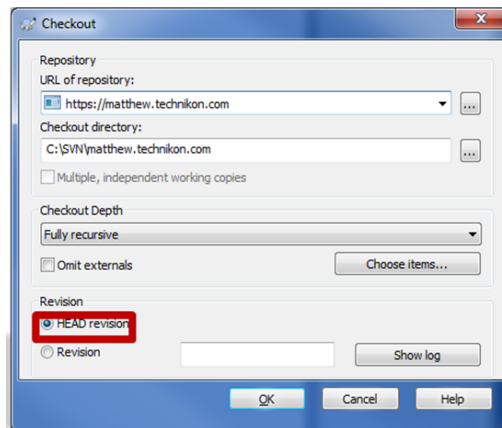
Figure 8: SVN Checkout (b)

- Authorization for MATTHEW 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.
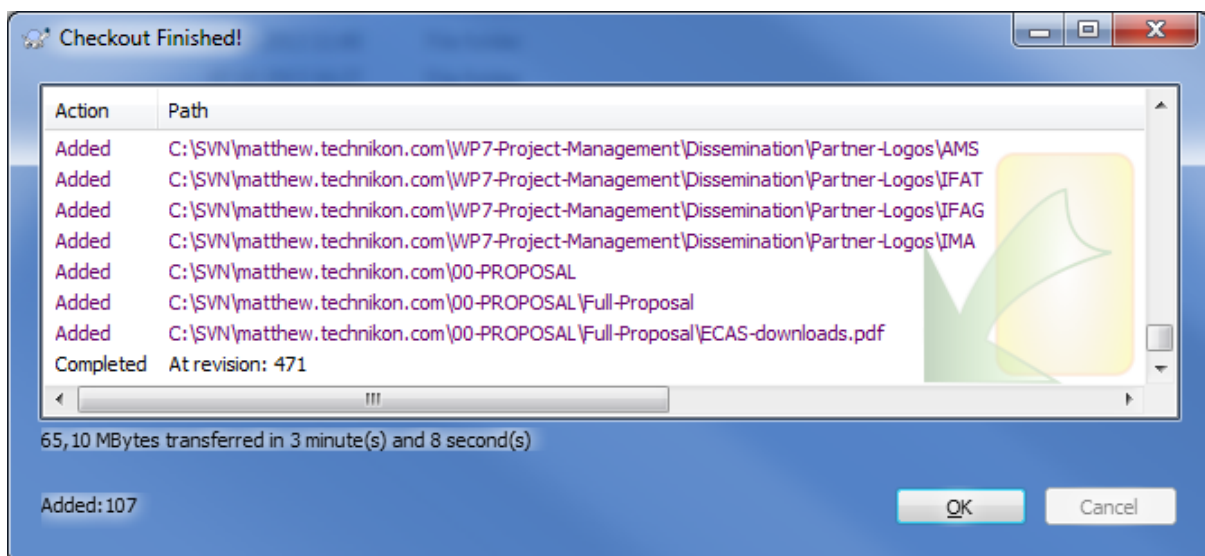

Figure 9: Download content from repository

b.) Keeping up to date:

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

Figure 10: SVN Update

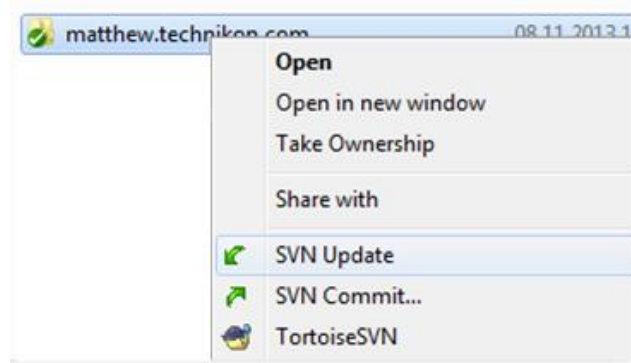### c.) Committing new documents (uploading)

- 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..."
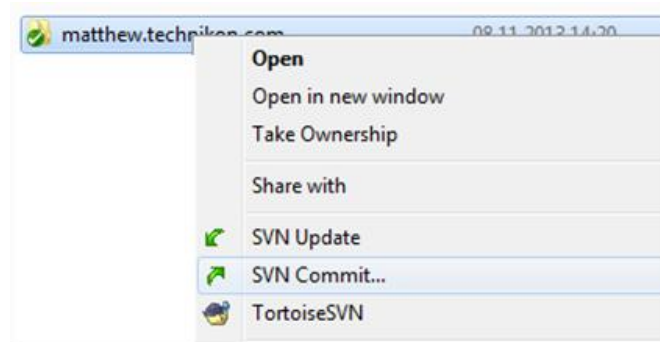

Figure 11: SVN Commit (a)

- Enter a comment about the document and the updates you made.
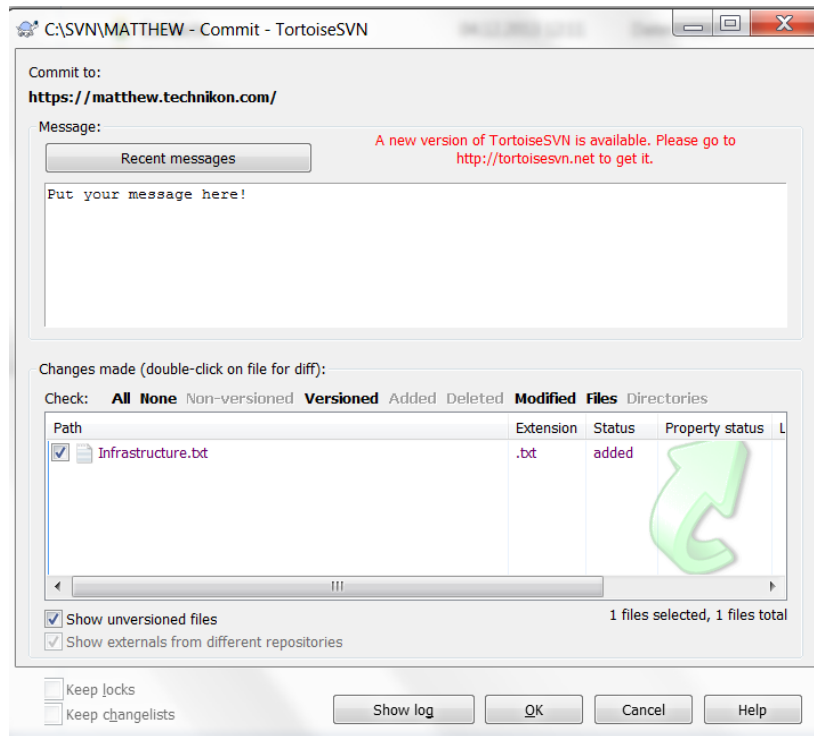
Figure 12: SVN Commit (b)

3.2.1   *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 administrative supporter. 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. Figure 14 shows the Psi-view.
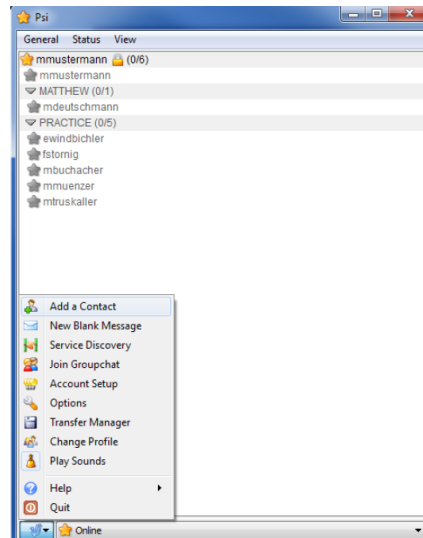

Figure 14: Jabber – Psi view

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 MATTHEW 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*

- 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 'MATTHEW'

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 administrative tasks it is necessary to write an email to support@matthew-project.eu. Access is controlled by the administrative supporter TEC to ensure the integrity of the lists.

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

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

List	Address	Description
Technical	matthew-technical@lists.technikon.com	Used for all technical correspondence
Legal	matthew-legal@lists.technikon.com	For legal discussions
SVN-Log	matthew-svnlog@lists.technikon.com	Used for SVN post commit messages

Table 1: Mailing lists

3.5   Telephone conference System

In addition to the planned physical meetings, we will perform regular telephone conferences within the MATTHEW project. Therefore the telephone conference system GotoMeeting is available for all partners. Alternatively a telephone conference system provided by the coordinator IFAT can be used.

This web conferencing tool GoToMeeting 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. GoToMeeting provides the possibility to share any application on your computer in real time. The tool is provided by the administrative supporter TEC.

3.6   Project Handbook

We are currently creating 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 MATTHEW 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   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