Abstract

This document is the Software Transfer Document (STD) of the Group QIS project. This project is part of the Software Engineering Project (2IP35) and is one of the assignments at Eindhoven University of Technology. The document complies with the SCMP from the Software Engineering Standard, as set by the European Space Agency [1]. This document contains information on the standards to be used for writing the documentation required for this project, as well as information about the processing and storage of these documents.

The document complies with the Software Transfer Document(std) from the Software Engineering Standard, as set by the European Space Agency.
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General

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<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author</th>
<th>Reason of change</th>
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<td>0.0</td>
<td>11-01-2010</td>
<td>gdireks</td>
<td>Initial version</td>
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<tr>
<td>1.0</td>
<td>14-01-2010</td>
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<td>First internally approved version</td>
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General

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Changes

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<thead>
<tr>
<th>Page</th>
<th>Paragraph</th>
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<tr>
<td>Various</td>
<td>various</td>
<td>Rewording of sentences for clarity.</td>
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<tr>
<td>5</td>
<td>1.4</td>
<td>Fix in references.</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>Removed some documents which won’t go to the client.</td>
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Chapter 1

Introduction

1.1 Purpose

The purpose of the Software Transfer Document (STD) is to describe the procedures to install the components of QIS and the results of this installation, as well as a list of all components. Also this document describes the reports of the acceptance tests that have been performed.

1.2 Scope

The QIS system supplies a web-based user interface for workload management. It is tailored to the needs of the Department of Mathematics and Computer Science and the Eindhoven University of Technology, but is designed to be extendable to other departments. Key features include assigning employees to tasks, the generation of reports and rights management.

1.3 List of definitions

<table>
<thead>
<tr>
<th>AT</th>
<th>Acceptance Test</th>
</tr>
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<tbody>
<tr>
<td>BCF</td>
<td>Bureau Computer Faciliteiten</td>
</tr>
<tr>
<td>Client</td>
<td>Natalia Sidorova</td>
</tr>
<tr>
<td>ESA</td>
<td>European Space Agency</td>
</tr>
<tr>
<td>URD</td>
<td>User Requirements Document</td>
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</table>

1.4 List of references


Chapter 2

Build procedure

QIS is interpreted and, in general, does not need to be built.
For further comments, please see Chapter 4 of the DDD[3].

2.1 Installation environment

The QIS application is to be installed on a webserver capable of running WSGI applications. The following requirements should be satisfied:

QIS depends on availability of the following services:

- A database server, either MySQL (≥ version 5.1), PostGreSQL (tested with version 8.4) or Oracle (not tested).
  - SQLite does not work due to parser stack overflows.
  - We have experienced stability issues with MySQL 5.0 servers.
- A webserver to serve both static content and requests through a WSGI application. For example Apache 2.2. To be configured according to the installation procedure as described in the SUM[6], section 3.1.
- Optionally: a domain controller running Active Directory.

QIS depends on the following packages.

- A Python interpreter (2.4 ≤ version < 3).
- The Python module ldap, provided by package python-ldap.
- The Python database modules, either mysqldb (for MySQL, package python-mysqldb), psycopg2 (for PostGreSQL, package python-psycopg2) or something related to Oracle.
- The Python module dns, provided by package python-dns or python-dnspython.
- The Python module ad, version 0.9, included in the deliverable.
- Django, version 1.1.1, included in the deliverable.
To use the automatic domain controller locating feature of the ad library, a largely unknown set of dependencies must be satisfied:\[1\]

- Python-LDAP (unknown version)
  - Support for paged results is required.
  - Ensure your OpenLDAP installation has support for SASL/GSSAPI. On Red Hat based distributions this means you need to install the cyrus-sasl-gssapi package.
- dnspython (unknown version). Used for looking up DNS SRV records.
- PLY (unknown version). PLY is used for parsing LDAP search filters.
- MIT Kerberos (version 1.3)
  - Version 1.6 or higher, which implements server-side canonicalisation, is greatly recommended.

In the situation that version conflicts with other installed software occur, we recommend a virtual environment to be set up such that the requirements mentioned here can be satisfied. In the case of conflicting Python modules, the virtualenv package can be used to set up such an environment. Please note that the webserver should then be configured to use this virtual environment. With Apache 2.2 with mod_wsgi in daemon mode for example, this can be done by configuring a VirtualHost with the WSGIPythonHome directive set to the virtual environment path.

### 2.2 Installation procedure

For installation instructions, please follow the installation procedure outlined in the SUM[6], (section 3.1).

### 2.3 Installation results

The application has not yet been installed on the servers of BCF.

Chapter 3

Configuration item list

The following documents will be delivered:

- ADD [2]
- ATP [7]
- DDD [3]
- SRD [4]
- STD [5]
- SUM [6]
- URD [8]

All code present in the SVN repository in /trunk/src/qis will be delivered. This represents a fully working system.

The data obtained from the old Access database will be delivered to the client.
Chapter 4

Acceptance test report summary

4.1 First AT

Location: Eindhoven University of Technology, HG 7.84 Date and time: 8th of January, 2010, 13:00 Held by: Natalia Sidorova, Kevin van der Pol, Sander Leemans

Only the tests which were not passed or have certain remarks are listed below:

<table>
<thead>
<tr>
<th>Test case</th>
<th>Result</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATR 4</td>
<td>Failed</td>
<td>Courses can not yet be clicked - there are no departments to which the user has enough rights.</td>
</tr>
<tr>
<td>ATR 6</td>
<td>Passed</td>
<td>For the same reason ATR 4 failed, this test could not be completed. It was included after ATR 11, where it passed.</td>
</tr>
<tr>
<td>ATR 7</td>
<td>Passed</td>
<td>For the same reason ATR 4 failed, this test could not be completed. It was included after ATR 11, where it passed.</td>
</tr>
<tr>
<td>ATR 24</td>
<td>Failed</td>
<td>The correct course instance could not be selected.</td>
</tr>
<tr>
<td>ATR 25</td>
<td>Failed</td>
<td>Weekly hours are displayed incorrectly.</td>
</tr>
<tr>
<td>ATR 38</td>
<td>Failed</td>
<td>No mail was sent.</td>
</tr>
<tr>
<td>ATR 49</td>
<td>Failed</td>
<td>Internal server error.</td>
</tr>
<tr>
<td>ATR 50</td>
<td>Failed</td>
<td>Internal server error.</td>
</tr>
<tr>
<td>ATR 51</td>
<td>Failed</td>
<td>Internal server error.</td>
</tr>
<tr>
<td>ATR 52</td>
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</tr>
<tr>
<td>ATR 54</td>
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<td>Internal server error.</td>
</tr>
</tbody>
</table>

4.2 Second AT

Location: Eindhoven University of Technology, HG 7.84 Date and time: 11th of January, 2010, 11:00 Held by: Natalia Sidorova, Roy Berkeveld, Sander Leemans
Only those tests which were not passed during the first AT were tested. All tests were passed.
Chapter 5

Software Problem Reports

Not applicable
Chapter 6

Software Change Requests

Not applicable
Chapter 7

Software Modification Reports

Not applicable