Import / export file formats

TestLink version 1.9

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Revision History

#	Description	Date	Author
0.1	Initial document	20070728	Francisco Mancardi
0.2	Added XLS format for test cases. Code contributed by lightbulb Added XML format for results	20071101	Francisco Mancardi
0.3	Notes about internal and external ID New tag supported for results on TL 1.8	20080911	Francisco Mancardi
0.4	Test Case XML – added support for custom fields	20090106	Francisco Mancardi
0.5	Test Case XML – added support for link requirements	20090207	Francisco Mancardi
0.6	Updated Format for version 1.9	20100227	Francisco Mancardi
1.0	Updated documentation layout, corrected license, merged information from User manual (docbook support,etc.)	04/03/10	Martin Havlat

1 Introduction

TestLink is web based **Test Management tool**. This manual describes a format of files for import and export data.

See the **User manual** and **Installation manual** for more information about tool. The latest documentation is available on web http://www.teamst.org .Feel free to use our forum if you have questions that the manual doesn't answer.

Table of Contents

2 Import and Export data

TestLink supports several ways to share data. See the next table for overview. In addition you can consider to use TestLink API to deliver supported data.

There is amount of file examples in directory `testlink/docs/file_examples/`.

Troubleshooting: No answer for import action? Check size of imported file. There are limits in TestLink configuration and web server settings. Check if DOM module is loaded for your web server.

Item	File format	Import	Export	Notes
Test project	XML	X	X	All test suites and test cases. You can choose if export also assigned keywords.
Test suite	XML	X	X	Test suite details, All test cases and child test suites and test cases. You can choose if export assigned keywords.
Test case	XML	X	X	Two types of exports can be done: • Just one test case • All test cases in test suite. Custom Fields and Requirements assigned are exported. Keywords export is optional.
Test case	XLS	X		Keywords import is NOT supported.
Keyword	CSV, XML	X	X	All test project's keywords
Requirement	CSV, XML	X	X	
Requirement	CSV DOORS, DocBook	X		
Results	XML	X		
Platforms	XML	X	X	New on 1.9
Custom Fields	XML	X	X	New on 1.9

Table 1: Items that can be exported/imported

Limitation: Attached files and custom fields[1] are not imported/exported.

Table format (CSV) is not directly supported in some cases. You should convert it into XML before import. See below for more.

Definition for **Internal** and **Documentation Identifiers**

• Every object has its internal ID , this ID is value of ID column in database table

• Test cases and requirements are special case because they have internal and document ID.

• Every time you see keyword ID in xml format it indicates INTERNAL ID.

2.1 All Test Project

User can import or export Test Project including Description of the project, Test Specification and Keywords. The next two pictures show tree menu with data and the same data as XML file.

Warning: You can rich a server memory limit for larger amount of Test cases.

---

1 CF except Test cases.

```
<?xml version="1.0" encoding="UTF-8"?>
<testsuite name="">
  <details><![CDATA[]]></details>
  <testsuite name="Communications">
    <details><![CDATA[<p>Communication Systems of all
types</p>]]></details>
    <testsuite name="Hand-held devices">
      <details><![CDATA[]]></details>
      <testcase name="10 G shock">
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><!
[CDATA[]]></expectedresults>
      </testcase>
        <testcase name="Gamma Ray Storm">
          <summary><![CDATA[]]></summary>
          <steps><![CDATA[]]></steps>
          <expectedresults><![CDATA[]]></expectedresults>
        </testcase>
    </testsuite>
    <testsuite name="Subspace channels">
      <details><![CDATA[<p>Only basic subspace features</p>]]></details>
      <testcase name="Black hole test">
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><![CDATA[]]></expectedresults>
      </testcase>
    </testsuite>
  </testsuite>

  <testsuite name="Holodeck">
    <details><![CDATA[]]></details>
    <testcase name="Light settings">
      <summary><![CDATA[]]></summary>
      <steps><![CDATA[]]></steps>
      <expectedresults><![CDATA[]]></expectedresults>
    </testcase>
  </testsuite>
  <testsuite name="Propulsion Systems">
    <details><![CDATA[]]></details>
    <testsuite name="Main engine">
      <details><![CDATA[]]></details>
      <testcase name="Emergency stop">
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><![CDATA[]]></expectedresults>
      </testcase>
    </testsuite>
  </testsuite>
</testsuite>
```

2.2 Import/Export Test suite

XML Example – Test Suite without keywords

```
<?xml version="1.0" encoding="UTF-8"?>
<testsuite name="Hand-held devices">
  <details><![CDATA[]]></details>
  <testcase name="10 G shock">
    <summary><![CDATA[]]></summary>
    <steps><![CDATA[]]></steps>
    <expectedresults><![CDATA[]]></expectedresults>
  </testcase>
      <testcase name="Gamma Ray Storm">
```

```
          <summary><![CDATA[]]></summary>
          <steps><![CDATA[]]></steps>
          <expectedresults><![CDATA[]]></expectedresults>
        </testcase>
</testsuite>
```

XML format example: Test Suite with keywords

```
<?xml version="1.0" encoding="UTF-8"?>
<testsuite name="Hand-held devices">
  <details><![CDATA[]]></details>
  <testcase name="10 G shock">
    <summary><![CDATA[]]></summary>
    <steps><![CDATA[]]></steps>
    <expectedresults><![CDATA[]]></expectedresults>
    <keywords>
      <keyword name="Klyngon">
         <notes><![CDATA[Klyngon keyword notes]]></notes>
      </keyword>
    </keywords>
  </testcase>
  <testcase name="Gamma Ray Storm">
    <summary><![CDATA[]]></summary>
    <steps><![CDATA[]]></steps>
    <expectedresults><![CDATA[]]></expectedresults>
    <keywords>
      <keyword name="Klyngon">
         <notes><![CDATA[Klyngon keyword notes]]></notes>
      </keyword>
      <keyword name="Moon rocks">
         <notes><![CDATA[Moon rocks keyword notes]]></notes>
      </keyword>
    </keywords>
  </testcase>
</testsuite>
```

2.3 Just one Test Case

ID 78 :: Test Case Black hole test

Version 1

Summary

This procedure must be done once a week, with this safety device disabled:

1. X45HH
2. YY89-000-JI

Steps

Preset bias to 0

Enable long range communications control

Simulate black hole interference

Expected Results

Main Results	
Spin value	9.9
Opposite Angle	18 rad

Keywords: Moon rocks

Created on 27/07/2007 15:16:52 by admin
Last modified on 27/07/2007 16:16:33 by admin

Example of XML file: Test case with keyword

```xml
<?xml version="1.0" encoding="UTF-8"?>
<testcases>
  <testcase name="Black hole test">
    <summary>
        <![CDATA[<p>This procedure must be done once a week, with this safety device
disabled:</p>
        <ol><li>X45HH</li><li>YY89-000-JI</li></ol>]]>
    </summary>
    <steps><![CDATA[
        <p>Preset bias to 0</p>
        <p>Enable <strong>long range</strong> communications control</p>
        <p>Simulate black hole interference</p>]]> </steps>
    <expectedresults><![CDATA[
<table width="200" cellspacing="1" cellpadding="1" border="1">
    <caption>Main Results</caption>
    <tbody>
        <tr><td>Spin value</td><td>9.9</td></tr>
        <tr><td>Opposite Angle</td><td>18 rad</td></tr>
        <tr><td> </td><td> </td></tr>
    </tbody>
</table>]]>
</expectedresults>
  <keywords>
    <keyword name="Moon rocks">
        <notes><![CDATA[Moon rocks keyword notes]]></notes>
    </keyword>
  </keywords>
  </testcase>
</testcases>
```

Example : XML – Test Case with custom fields

```xml
<?xml version="1.0" encoding="UTF-8"?>
<testcases>
  <testcase name="Black Hawk test">
    <summary>
        <![CDATA[<p>This procedure must be done once a week, with this safety device
disabled:</p>
        <ol><li>X45HH</li><li>YY89-000-JI</li></ol>]]>
```

```
        </summary>
        <steps><![CDATA[
          <p>Preset bias to 0</p>
          <p>Enable <strong>long range</strong> communications control</p>
          <p>Simulate black hole interference</p>]]>
        </steps>
        <expectedresults><![CDATA[
          <table width="200" cellspacing="1" cellpadding="1" border="1">
          <caption>Main Results</caption>
          <tbody>
              <tr><td>Spin value</td><td>9.9</td></tr>
              <tr><td>Opposite Angle</td><td>18 rad</td></tr>
              <tr><td> </td><td> </td></tr>
          </tbody>
          </table>]]>
        </expectedresults>
        <custom_fields>
          <custom_field>
            <name><![CDATA[CF_SKILLS_NEEDED]]></name>
            <value><![CDATA[QA Engineer]]></value>
          </custom_field>
          <custom_field>
            <name><![CDATA[CF_ESTIMATED_EXEC_TIME]]></name>
            <value><![CDATA[12]]></value>
          </custom_field>
        </custom_fields>
      </testcase>
    </testcases>
```

Example: XML – Test Case with requirements

```
<?xml version="1.0" encoding="UTF-8"?>
<testcases>
<testcase internalid="12644" name="High speed">
        <node_order><![CDATA[0]]></node_order>
        <externalid><![CDATA[182]]></externalid>
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><![CDATA[]]></expectedresults>
        <requirements>
                <requirement>
                        <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                        <doc_id><![CDATA[ENG-0002]]></doc_id>
                        <title><![CDATA[Main Deflector]]></title>
                </requirement>
                <requirement>
                        <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                        <doc_id><![CDATA[DOC-009]]></doc_id>
                        <title><![CDATA[James Bond]]></title>
                </requirement>
        </requirements>
</testcase>

<testcase internalid="12646" name="Half speed stop">
        <node_order><![CDATA[0]]></node_order>
        <externalid><![CDATA[183]]></externalid>
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><![CDATA[]]></expectedresults>
        <requirements>
                <requirement>
                        <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                        <doc_id><![CDATA[ENG-0002]]></doc_id>
                        <title><![CDATA[Main Deflector]]></title>
                </requirement>
                <requirement>
                        <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                        <doc_id><![CDATA[DOC-009]]></doc_id>
```

```
                <title><![CDATA[James Bond]]></title>
            </requirement>
        </requirements>
</testcase>

<testcase internalid="12648" name="Jump start">
        <node_order><![CDATA[0]]></node_order>
        <externalid><![CDATA[184]]></externalid>
        <summary><![CDATA[]]></summary>
        <steps><![CDATA[]]></steps>
        <expectedresults><![CDATA[]]></expectedresults>
        <requirements>
            <requirement>
                <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                <doc_id><![CDATA[ENG-0002]]></doc_id>
                <title><![CDATA[Main Deflector]]></title>
            </requirement>
            <requirement>
                <req_spec_title><![CDATA[RSPEC-001]]></req_spec_title>
                <doc_id><![CDATA[DOC-009]]></doc_id>
                <title><![CDATA[James Bond]]></title>
            </requirement>
        </requirements>
</testcase>
</testcases>
```

2.4 All Test Cases in test suite


```
<?xml version="1.0" encoding="UTF-8"?>
<testcases>
  <testcase name="10 G shock">
    <summary><![CDATA[]]></summary>
    <steps><![CDATA[]]></steps>
    <expectedresults><![CDATA[]]></expectedresults>
  </testcase>
        <testcase name="Gamma Ray Storm">
          <summary><![CDATA[]]></summary>
          <steps><![CDATA[]]></steps>
          <expectedresults><![CDATA[]]></expectedresults>
        </testcase>
  </testcases>
```

Test cases in XLS format

Every row must have four columns:

Column number	Contents
1	Test case name
2	summary
3	steps

	4	Expected results	

First row will be skipped, because is supposed it contains column descriptions.

Example:

Name	Summary	Steps	Expected results
Engine fast start up	Start up on 5 second	Too fast write steps	Kind nothing
Engine emergency stop	Engine stop due to panic button.	1. Unlock panic button 2. Press panic button 3. Press confirm	Engine must stop right now
Etc.	Etc.	Etc.	Etc.

2.5 Import/Export Keywords
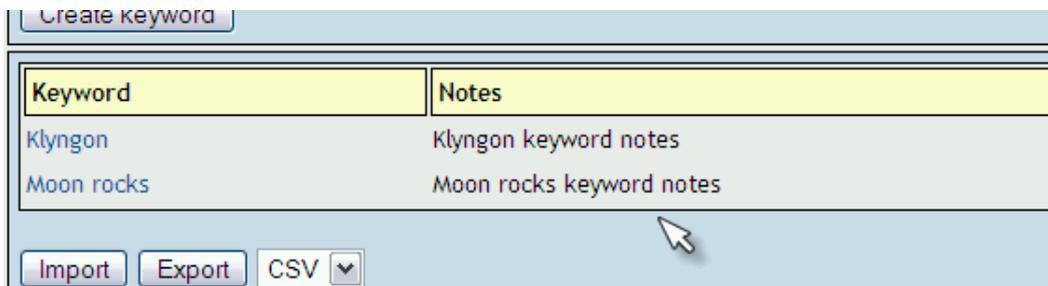
Illustration 1: Keywords frame includes buttons for import and export

Example of CSV "Keyword;Notes":

```
Klyngon;Klyngon keyword notes
Moon rocks;Moon rocks keyword notes
```

Example of XML with keywords:

```xml
<?xml version="1.0" encoding="UTF-8"?>
  <keywords>
   <keyword name="Klyngon">
     <notes>
       <![CDATA[Klyngon keyword notes]]>
     </notes>
   </keyword>
   <keyword name="Moon rocks">
     <notes>
       <![CDATA[Moon rocks keyword notes]]>
     </notes>
   </keyword>
  </keywords>
```

2.6 Import/Export Software Requirements
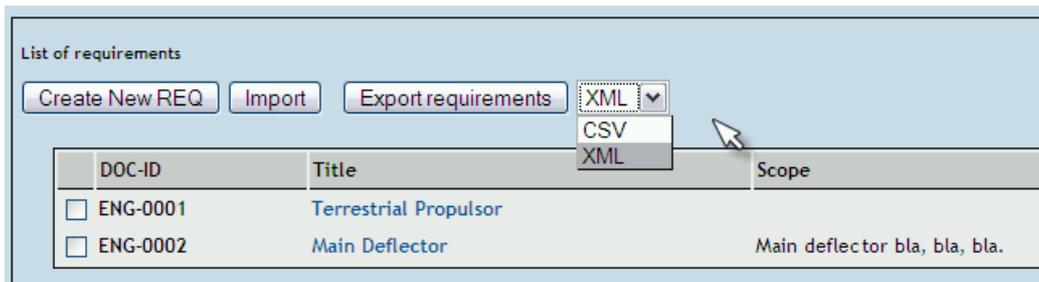
CSV file includes "Identifier of document, title, description".

Example of CSV file:

```
ENG-0001,Terrestrial Propulsor,
ENG-0002,Main Deflector,"<p>Main deflector bla, bla, bla.</p>"
```

Example of XML file:

```
<?xml version="1.0" encoding="UTF-8"?>
<requirements>
  <requirement>
   <docid><![CDATA[ENG-0001]]></docid>
   <title><![CDATA[Terrestrial Propulsor]]></title>
   <description><![CDATA[]]></description>
  </requirement>
  <requirement>
    <docid><![CDATA[ENG-0002]]></docid>
   <title><![CDATA[Main Deflector]]></title>
   <description><![CDATA[<p>Maindeflector bla, bla, bla.</p>]]></description>
  </requirement>
</requirements>
```

2.7 Import rich text format requirements via DocBook

There is limited support of import for documents in such formats as is MSWord or openoffice. You can export original document as DocBook (tested with openoffice2 and 3). Choose import button for your SRS in TestLink. Select type "DocBook".

The exported file is XML. Basic element for default settings could be the next:

```
 ...
<sect3>
  <title>Title</title>
  ...
  <para>Description</para>
  ...
  <orderedlist>
     <listitem>Item</listitem>
     ...
  </orderedlist>
  ...
  <informaltable>
    <tgroup>
      <thead>
        <row> ... <entry></entry> ...  </row>
      </thead>
      <tbody>
        <row> ... <entry></entry> ... </row>
      </tbody>
    </tgroup>
  </informaltable>
```

```
   ...
 </sect3>
```

TestLink uses such element as data for just one requirement. This element is defined via constant DOCBOOK_REQUIREMENT (check the code). i.e. <sect3> is default but could be modified.

Each requirement content is maintain the following way:

> **title** – receive text in tag <title>
>
> **req_doc_id** – parse title for the first two words and add counter. You can modify regular expression directly in code. Default is "[a-zA-Z_]*[0-9]*".
>
> **description** – parse following elements after title (<para>, <orderedlist>, <informaltable>, etc.). DocBook elements are modified to HTML tags. Unknown ones are ommited.

*Warning: the original code could be modified to fit your structure of DocBook. Check requirement.inc.php (**function** importReqDataFromDocBook($fileName)) and related constants.*

Warning: generated REQ_DOC_ID is danger for the case of update. Because it's generated from file content without relation to existing testlink data.

2.8 Results import

Results import is supported from TL 1.7.

Example 1: Results in XML format (using internal ID)

```
<?xml version="1.0" encoding="UTF-8"?>
<results>
  <testcase id="100"> <!-- ID: internal/DB id --->
    <result>p</result>
    <notes>functionality works great </notes>
  </testcase>
  <testcase id="200">
    <result>f</result>
    <notes>this case failed due to error </notes>
  </testcase>
  <testcase id="150">
    <result>b</result>
    <notes>this test case is blocked</notes>
  </testcase>
</results>
```

Example 2: Results in XML format (using external ID)[2]

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Comment -->
<results>
  <testcase external_id="POL-1" >
    <!-- if not present logged user  will be used -->
    <tester>u0113</tester>  <!-- tester LOGIN Name--->
    <!-- if not present now() will be used -->
    <timestamp>2008-09-08 14:00:00</timestamp>
    <result>p</result>
    <notes>functionality works great </notes>
  </testcase>

  <testcase external_id="POL-1" >   <!-- ANOTHER EXE for SAME test case --->
    <result>f</result>
    <notes>functionality works great KIMI</notes>
  </testcase>
```

---

2 Format supported on TL 1.8 beta 3 and UP

```
   <testcase external_id="1256" >   <!-- Using INTERNAL ID --->
     <result>f</result>
     <notes>Using INTERNAL ID as link </notes>
   </testcase>
 </results>
```

You can import several / multiple execution results using a single XML file

2.9 Import Test Cases from Excel via XML

Creating XML file to import in TestLink

Step 1. Export one or more dummy Test Cases from TestLink into a XML file.

Step 2. Open new blank spread sheet document file.

Step 3. Navigate through menu bar Data > XML > Import & select the sample XML file. It creates appropriate structure in Excel.
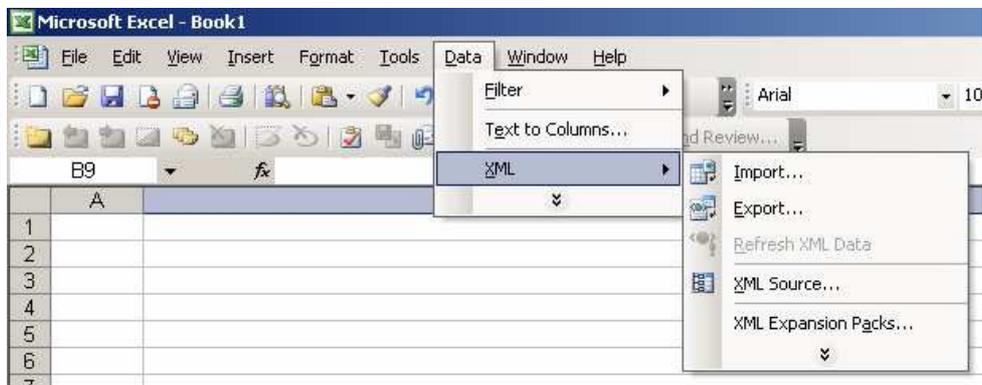
Step 4. Then we will get dialog box asking "Where do you want to put the data?"
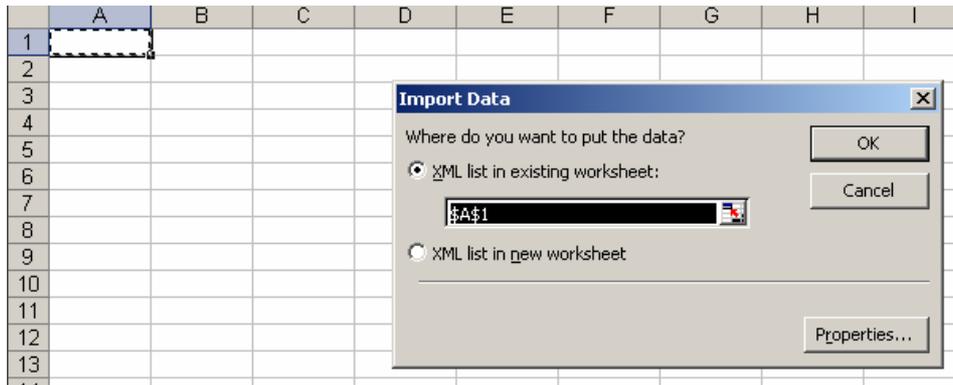
Step 5. Choose option one "XML list in existing worksheet" with first cell A1

Step 6. You will be able to see following columns : name, summary, steps & expected results

Step 7. Copy your data into this file accordingly & save the file in XML Data (*.xml) format

Step 8. Check your XML file for correctness by opening with the help of internet explorer.

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes" ?>
- <testcases>
  - <testcase name="ACC 1.1">
      <summary>Whether the user can view Accounts List View as
        a default view under Accounts screen.</summary>
      <steps>Pre-condition: A valid user has logged in the
        application. Navigate to 'Accounts' screen by clicking on
        the Accounts screen tab.</steps>
      <expectedresults>On navigating to 'Accounts' screen, the
        following view should be displayed. 'My Accounts List'
        view (By default this view should be displayed). 'All
        Accounts List' view.</expectedresults>
    </testcase>
  - <testcase name="ACC 1.2">
      <summary>Whether the user can view Accounts List View as
        a default view under Accounts screen.</summary>
      <steps>Pre-condition: A valid user has logged in the
        application. Navigate to 'Accounts' screen by clicking on
        the Accounts screen tab.</steps>
      <expectedresults>On navigating to 'Accounts' screen, the
        following view should be displayed. 'My Accounts List'
        view (By default this view should be displayed). 'All
        Accounts List' view.</expectedresults>
    </testcase>
  </testcases>
```

Importing XML file into TestLink

Step 1. Login in to TestLink > Select your project in dropdown list.

Step 2. Click on Specification > Create New Suite > Select Suite > Click on Import Test Cases
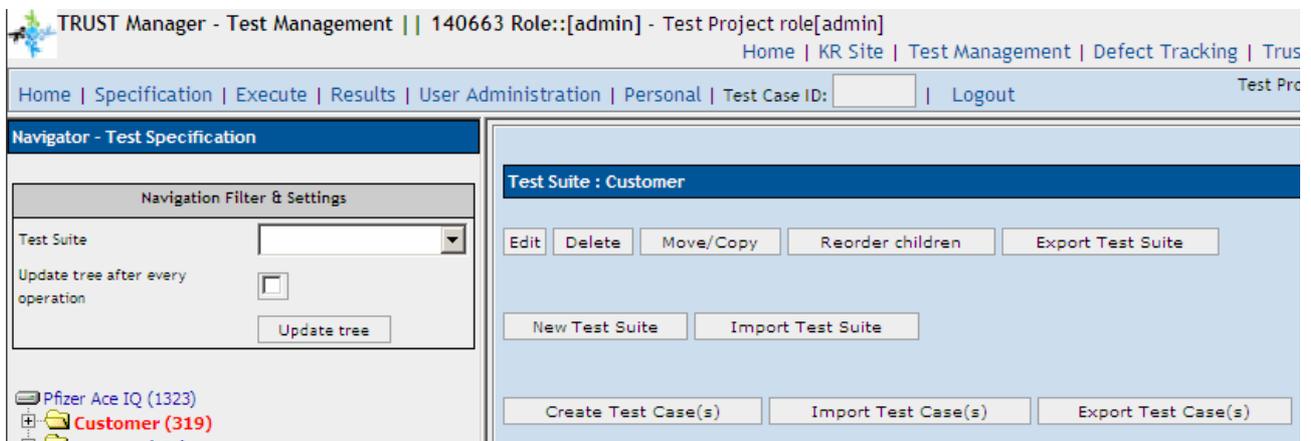
Step 3. Browse for the XML file, submit it and you are done with the Importing.

2.10 Platforms

Platforms can be both imported and exported. The feature is available from TL 1.9

Example of data:

```xml
<?xml version='1.0' encoding='UTF-8'?>
<platforms>
        <platform>
                <name><![CDATA[MAC OS]]></name>
                <notes><![CDATA[]]></notes>
        </platform>
        <platform>
                <name><![CDATA[Solaris 10]]></name>
                <notes><![CDATA[New Solaris]]></notes>
        </platform>
        <platform>
                <name><![CDATA[Solaris 8]]></name>
                <notes><![CDATA[]]></notes>
        </platform>
        <platform>
                <name><![CDATA[Solaris 9]]></name>
                <notes><![CDATA[]]></notes>
        </platform>
        <platform>
                <name><![CDATA[Windows 2008]]></name>
                <notes><![CDATA[]]></notes>
        </platform>
        <platform>
                <name><![CDATA[Windows 7]]></name>
                <notes><![CDATA[New MS OS]]></notes>
        </platform>
</platforms>
```

2.11 Custom Fields

Definition of custom field can be both in imported and exported since TL 1.9.
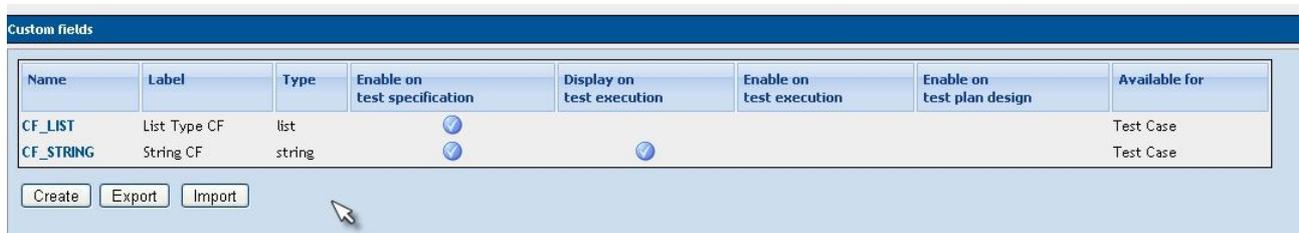
Illustration 2: Custom field management window with Import and Export actions

Example of definition file:

```xml
<?xml version='1.0' encoding='ISO-8859-1'?>
<custom_fields>
        <custom_field>
                <name><![CDATA[CF_STRING]]></name>
                <label><![CDATA[String CF]]></label>
                <type><![CDATA[0]]></type>
                <possible_values><![CDATA[]]></possible_values>
                <default_value><![CDATA[]]></default_value>
                <valid_regexp><![CDATA[]]></valid_regexp>
                <length_min><![CDATA[0]]></length_min>
                <length_max><![CDATA[0]]></length_max>
                <show_on_design><![CDATA[1]]></show_on_design>
                <enable_on_design><![CDATA[1]]></enable_on_design>
                <show_on_execution><![CDATA[1]]></show_on_execution>
                <enable_on_execution><![CDATA[0]]></enable_on_execution>
                <show_on_testplan_design><![CDATA[0]]></show_on_testplan_design>
                <enable_on_testplan_design><![CDATA[0]]></enable_on_testplan_design>
                <node_type_id><![CDATA[3]]></node_type_id>
        </custom_field>
        <custom_field>
                <name><![CDATA[CF_LIST]]></name>
                <label><![CDATA[List Type CF]]></label>
                <type><![CDATA[6]]></type>
                <possible_values><![CDATA[Deep Purple|Yes|Queen]]></possible_values>
                <default_value><![CDATA[]]></default_value>
                <valid_regexp><![CDATA[]]></valid_regexp>
                <length_min><![CDATA[0]]></length_min>
                <length_max><![CDATA[0]]></length_max>
                <show_on_design><![CDATA[1]]></show_on_design>
                <enable_on_design><![CDATA[1]]></enable_on_design>
                <show_on_execution><![CDATA[0]]></show_on_execution>
                <enable_on_execution><![CDATA[0]]></enable_on_execution>
                <show_on_testplan_design><![CDATA[0]]></show_on_testplan_design>
                <enable_on_testplan_design><![CDATA[0]]></enable_on_testplan_design>
                <node_type_id><![CDATA[3]]></node_type_id>
        </custom_field>
</custom_fields>
```