Test plan

Smarter Balanced Assessment Consortium Test Delivery System

Components:   
Administration and Registration Tools (ART)

Smarter Balanced Task Order 15

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision Description** | **Author** | **Reviewer** | **Date** |
| 0.1 – First Draft | Peter Tereshchenko |  | Mar. 7, 2016 |
| 0.2 – Second Draft | Peter Tereshchenko | Rami Levy | Mar. 14, 2016 |
| 1.0 – Final version | Peter Tereshchenko | Rami Levy | Mar. 21. 2016 |

Table of Contents

1 Introduction and Background of System 3

2 References 3

3 Scope of testing 3

4 Testing approach by Modification Group 4

4.1 Changes Related to Coordinator Access and Jurisdiction (Req. 1, 2, 3, 6) 4

4.2 Changes related to harmonizing export and import files (Req. 9) 6

4.3 Other Changes 7

Tables

Table 1: References 3

Table 2: Test Users 5

Table 3: Available Users 6

Figures

Figure 1: Testing Hierarchy Tree 5

# Introduction and Background of System

The purpose of this document is to define testing scope and approach for Task Order 15. This task order affects only certain functions of Administration and Registration Tools (ART) component. This test plan is focused on testing only the affected parts of the functionality of above component and is not intended to cover, either in part or in full, other functionality.

# References

|  | **Reference** | **Location** | **Version** |
| --- | --- | --- | --- |
| 1 | User Guide – Administration and Registration Tools | ART source code repository documentation folder | 1.0 |
| 2 | Task order 15 test cases | ART source code repository documentation folder | 1.0 |
| 3 | Requirements-ART-Task Order 15.docx | ART source code repository documentation folder | 1.0 |
| 4 | Administration and Registration Tools Backlog Document | ART source code repository documentation folder | 1.0 |

Table : References

# Scope of testing

Requirements for TO15 cam be divided in to 3 groups:

1. Changes related to modifying coordinator access depends on his jurisdiction (requirements 1, 2, 3, 6)
2. Changes related to harmonizing export and import file format (requirement 9)
3. Changes related to new page where users can update their profile (requirements 7, 8) bug fixes and other changes (requirements 4, 5)

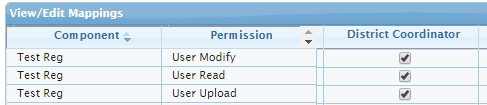
All these changes except bug fixes affect all ART users. Changes a), and b) implement significant modifications to the Registration section of ART. Since component’s pages will be affected by some of these modifications, it will be more efficient to organize testing based on groups above rather than by pages. But because of this, QA members will have to revisit some pages in ART several times, while they are testing different requirements.

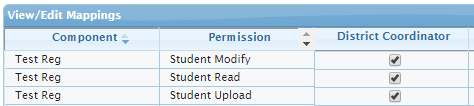
# Testing approach by Modification Group

## Changes Related to Coordinator Access and Jurisdiction (Req. 1, 2, 3, 6)

Level of access to features in ART is controlled by two parameters: 1) User’s role and 2) User’s jurisdiction. Each role can be assigned only at specific jurisdiction levels. Although system administrators can modify the standard setup using the Permissions component, this test plan will assume the standard setup is in place.

In the standard set up, there are different coordinator roles, each one of which have almost identical permissions but at a different jurisdiction level. For this section these permissions matter:

* Read/Modify/Upload user:  
  
* Read/Modify/Upload student:



Since all coordinators have these permissions, we need to define only user’s jurisdiction in this section. As an example, a user with jurisdiction AP will be a State Coordinator for AP State, while a user with jurisdiction Dis1 will be a District Coordinator for district Dis1.

To perform testing of this section, the QA team needs a list of users with different roles. It is important to note that since there is no restriction on the number of roles a user can have, combined with the fact that roles have an associated jurisdiction, the number of configurations is large and makes it prohibitive to test every combination. However, the design of ART is such that there is no logical difference between a coordinator for CA State and a coordinator for VA State.

The following two tables depict a sufficient data setup required for testing of this section. Entity names and emails are inserted there only as examples; The QA team can modify names and emails according to test environment restrictions.

**AIT\_TR\_CI**

**AP**

**AS**

**Dis1**

**Dis2**

**S1**

**S2**

**S3**

**Dis3**

**S4**

Entity level

Client

State

District

School

Entity name

Figure : Testing Hierarchy Tree

|  |  |  |
| --- | --- | --- |
| **#** | **User Email** | **User Jurisdiction** |
| 1 | ARTUser1@mailinator.com | S1 |
| 2 | ARTUser2@mailinator.com | S2 |
| 3 | ARTUser3@mailinator.com | S3 |
| 4 | ARTUser4@mailinator.com | S2, S3 |
| 5 | ARTUser5@mailinator.com | D1, S3 |
| 6 | ARTUser6@mailinator.com | S1, S2 |
| 7 | ARTUser7@mailinator.com | AP |
| 8 | ARTUser8@mailinator.com | AS |
| 9 | ARTUser9@mailinator.com | S4 |
| 10 | ARTUser10@mailinator.com | S4, D1 |
| 11 | ARTUser11@mailinator.com | D3, S3 |
| 12 | ARTUser12@mailinator.com | AS, S1 |

Table : Test Users

Testers will have to check each one of the above users to verify their level of access, by checking the “Create/Modify users” page of ART. The level of access is based on the requirements, and defined for this set up in a table below. As a reminder: each user should also be able to see himself in available list of users.

|  |  |  |
| --- | --- | --- |
| **#** | **User Email** | **Available Users** |
| 1 | ARTUser1@mailinator.com | 6, 12 |
| 2 | ARTUser2@mailinator.com | 4, 6 |
| 3 | ARTUser3@mailinator.com | 4, 5, 11 |
| 4 | ARTUser4@mailinator.com | 2, 3, 5, 6, 11, |
| 5 | ARTUser5@mailinator.com | 1, 2, 3, 4, 6, 10, 11, 12 |
| 6 | ARTUser6@mailinator.com | 1, 2, 4, 12 |
| 7 | ARTUser7@mailinator.com | 1, 2, 3, 4, 5, 6, 10, 11, 12 |
| 8 | ARTUser8@mailinator.com | 9, 10, 11, 12 |
| 9 | ARTUser9@mailinator.com | 10, |
| 10 | ARTUser10@mailinator.com | 1, 2, 4, 5, 6, 9, 12 |
| 11 | ARTUser11@mailinator.com | 3, 4, 5, 9, 10 |
| 12 | ARTUser12@mailinator.com | 1, 6, 8, 9, 10,11 |

Table : Available Users

## Changes related to harmonizing export and import files (Req. 9)

This group of modifications has many requirements specifications because most user-entered Registration information can be exported. The basic rule is that a user can export any data that is visible in the UI. For example, a District coordinator cannot export students from other districts because he can't see them in the UI. This rule is tested by section 4.1 in this document. Because of this, the testing doesn't need to be specific to different users and can be performed by the highest jurisdiction level user.

There are many changes in each export and import file, all of them was made to allow a user to import an exported file without changing the file’s structure. Apart from validating each and every change from requirements, testers also have to perform one general verification for all import files. They need to:

* export data related to current test case from ART (like export users)
* make changes to values in the exported file
* import it back into ART
* verify that values changed in the file are also changed in ART's UI

Successful execution of this scenario should prove that changes made to export/import files were sufficient. To execute these scenarios, some data must already exist in ART. There is data related to users and entities from section 4.1, and testers also need to create some students with eligibility and accommodations, as well as student groups. Additionally, to populate “Add/Modify Assessment Information” page, testers need to have some tests in the Test Spec Bank (TSB) component.

## Other Changes

Changes described in requirements 7, 8, 4, 5 and bug fixes meet existing general preconditions satisfied by testing 4.1 and 4.2. Specific information related to testing of this section can be found in the accompanying Test Cases document.