

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Scenario #: 2

Scenario Description: Import Test Items

- Import Test Items via HTTPS
- Import Items via SFTP
- Add items to Test Item Bank collections

Version Control

Version #	Date	Author	Description
1.0	01/14/2013	Russ Hammond	Initial Draft
1.1	01/25/2013	Russ Hammond	Altered to check testing results using Test Item Bank API's rather than using database queries

Test Scripts

The following scripts will cover this scenario:

- 2.1 Import Single Item via HTTPS
- 2.2 Import Single Item via SFTP
- 2.3 Import Multiple Items via SFTP
- 2.4 Import Item Missing Required Metadata
- 2.5 Import Unreadable File
- 2.6 Import Missing Manifest file
- 2.7 Import Item Missing Resource
- 2.8 Import Item with wrong status
- 2.9 Import Item missing Metadata File
- 2.10 Import a file where all items fail to load
- 2.11 Attempt file import with database error

Test Components/Requirements

This test scenario covers the following high-level test requirements (see scripts below for specific requirements covered by each test script):

- Test Item Bank
- Test Item Bank Requirements RADTIB.1.x, RADTIB.2.x, RADTIB.7

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

User Groups

- Item Bank Authors

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.1 – Import single item via HTTPS

Script Description

This script tests the addition of a single item to the Test Item Bank using the HTTPS interface. The item is correctly constructed with required metadata fields and status.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1.1
- RADTIB.1.1.4
- RADTIB.1.2
- RADTIB.1.3
- RADTIB.1.4
- RADTIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Single test item must be created and placed in a zip file on a cloud site

Teardown

- None – imported item can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the HTTPS import API in Rest Client, https://{server-context}/uploadFile select the single test item to be imported – Use folder Script 2.1	None	
3	Press Send	<ul style="list-style-type: none">• Item will be added to MongoDB item collection• Item will be stored with a timestamp	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
		<ul style="list-style-type: none">An alert is generated that says 1 Item was added to the Test Item BankSearchable metadata will be available in a MongoDB collection	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none">Time and status of the import will be displayed	
5	Search for the item in the database using http://{server-context}/item/apipitem_SQA001	<ul style="list-style-type: none">Metadata for item will be displayed.	
6	View MongoDB to see if item metadata is stored in a separate collection	<ul style="list-style-type: none">A collection will hold the item metadata	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.2 – Import single item via SFTP

Script Description

This script tests the addition of a single item from an SFTP site. The item is correctly constructed with required metadata fields and statuses, and packaged correctly.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1.1
- RADTIB.1.2
- RADTIB.1.3
- RADTIB.1.4
- RADTIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- A package of a single test item must be created and stored on a cloud-based FTP site. The Item Number must differ from the item added in previous scripts.

Teardown

- None – imported item can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	<p>Enter the URL for the SFTP import API in Rest Client, select the test item package to be imported.</p> <p>http://{server-context}/sftpFileImport</p> <p>Item Payload, as Json:</p> <pre>{ "importFiles": [{ "pathName": "fileName.zip" }] }</pre>	None	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
	<pre>] } </pre> <p>Use folder Script 2.2</p>		
3	Press Send	<ul style="list-style-type: none"> Item will be added to MongoDB item collection Item will be stored with a timestamp An alert is generated that says 1 Item was added to the Test Item Bank Searchable metadata will be available in a MongoDB collection 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed 	
5	Search for the item in the database using http://{server-context}/item/apipitem_SQA011	<ul style="list-style-type: none"> Metadata for item will be displayed. 	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.3 – Import multiple items via SFTP

Script Description

This script tests the addition of a package of items from an SFTP site. The items are correctly constructed with required metadata fields and statuses, and packaged correctly.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1.2
- RADTIB.1.2
- RADTIB.1.3
- RADTIB.1.4
- RADTIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- A package of a multiple test items must be created and stored on a cloud-based FTP site. The Item Numbers must differ from the item added in previous scripts.

Teardown

- None – imported item can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, select the test item package to be imported http://{server-context}/sftpFileImport Item Payload, as Json: { "importFiles": [{ "pathName": "fileName.zip" }] }	None	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
	User folder Script 2.3		
3	Press Send	<ul style="list-style-type: none"> Items will be added to MongoDB item collection Items will be stored with a timestamp An alert is generated that says 15 Items were added to the Test Item Bank Searchable metadata will be available in a MongoDB collection for each item 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed Number of items imported will be displayed – should be 15 	
5	Search for the items in the database using http://{server-context}/item/apiitem_SQA001	<ul style="list-style-type: none"> Metadata for item will be displayed. 	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.4 – Import item missing required Metadata

Script Description

This script tests that if required metadata is missing from the metadata XML file for an item, the item is rejected and an alert is raised. One item from a multi-item transmission should not cause failure of all items in the transfer.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1
- RADTIB.1.2
- RADTIB.1.4
- RADTIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- A package of a multiple test items must be created and stored on a cloud-based FTP site. Some items in the package will be missing required metadata items.

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, select the test item package to be imported http://{server-context}/sftpFileImport Use folder Script 2.4	None	
3	Press Send	<ul style="list-style-type: none">• Items with missing metadata will be rejected.• No searchable metadata will be added for rejected items	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
		<ul style="list-style-type: none"> An alert is logged for each item that is rejected due to missing metadata 40,50 – missing item type 41, 51 – missing item id 42, 52 – version 43, 53 – status 44, 54 – keywords 45, 55 – grade 46, 56 – subject 47, 57 – subcategory 48, 58 – writer 49, 59 – source 60 – okay 61 – id, grade 67 – status, author 62-66 okay 68, 69 okay Items with no missing metadata will be added to the Test Item Bank Searchable metadata will be stored in a separate collection for stored items An alert is generated that says 7 items were added 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed Number of items imported will be displayed 	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA001 . Only items 62-66 and 68, 69 should be present.	<ul style="list-style-type: none"> Metadata for item will be displayed. 	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.5 – Import unreadable file

Script Description

If a file is not structured as a zip file, or cannot be opened, an alert is created.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.6

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Copy a *.PNG or *.JPG file and give it a .ZIP suffix

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client. http://{server-context}/sftpFileImport Use Folder Script 2.5, with BadFile.zip	None	
3	Press Send	<ul style="list-style-type: none">• An alert is created that provides the file name, and states that the format is invalid• No items are added to the database• No alert message is generated to indicate items have been added.	
4			

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.6 – Import missing manifest file

Script Description

If the imported file does not contain the file “imsmanifest.xml”,

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Remove the imsmanifest.xml file from a package of items.

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client. http://{server-context}/sftpFileImport Use folder Script 2.6	None	
3	Press Send	<ul style="list-style-type: none">• An alert is created that provides the file name, and “No Manifest File”• No items from the file are added to the database• No searchable metadata is added.	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none">Time and status of the import will be displayedNo items should be imported, the import should fail.	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA070 . Items SQA070-79 should NOT exist in the database	<ul style="list-style-type: none">No matching items are found.	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.7 – Import item missing resource

Script Description

If an item is to be added to the Test Item Bank but a resource file is not found in the item package, reject the item and issue an alert

This script is also used for Script 3.1 – verify results for both scripts after running this import.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.8
- RADTIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Remove a resource file from a package of items.
- Script 2.7, SQA086, SQA088 missing resources. SQA082 has misspelled resource file name.

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, http://[server-context]/sftpFileImport Use folder Script 2.7	None	
3	Press Send	<ul style="list-style-type: none">• Items SQA086 and SQA088 are missing resources and will not be added• SQA082 has misspelled resource file name.	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
		<ul style="list-style-type: none"> An alert is generated for the item which is missing a resource "Item Resource Missing" No searchable metadata is added for rejected items Any well-formed items from the item package are added to the Test Item Bank An alert is issued stating 7 items added to the item bank Searchable metadata for the added items is stored in a separate collection. 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed Number of items imported will be displayed. Should be 8 items 	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA### . Items SQA086 and SQA088 should not be stored..	<ul style="list-style-type: none"> Metadata for stored items will be displayed. Items missing resources will not be found. 	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.8 – Import an item with the wrong status

Script Description

If an item is to be added to the Test Item Bank but a resource file is not found in the item package, reject the item and issue an alert

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.8
- RADTIIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Set the status of an item to values other than “OT” or “FT” in the metadata file

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, http://{server-context}/sftpFileImport Use folder Script 2.8	None	
3	Press Send	<ul style="list-style-type: none">• An alert is generated for the item which has the wrong status “Item cannot be added. Item not in ready status.”• Items SQA092 and SQA095 are wrong status• Any well-formed items from the item package are added to the	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
		Test Item Bank <ul style="list-style-type: none">An alert is issued stating 8 items added to the item bank	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none">Time and status of the import will be displayedNumber of items imported will be displayed. Should be 8 items	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA### . Items SQA092 and SQA095 should not be stored..	<ul style="list-style-type: none">Metadata for stored items will be displayed.Items missing resources will not be found.	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.9 – Import Item with Missing Metadata File

Script Description

If an item is to be added to the Test Item Bank but no corresponding metadata file is found, reject the item and issue an alert

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.9
- RADTIIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Create a package of items and delete the metadata file for one item.
- Import the item package.
- Script 2.9, missing metadata file SQA108

Teardown

- None – imported items can be retained

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, http://{server-context}/sftpFileImport Use folder Script 2.9	None	
3	Press Send	<ul style="list-style-type: none">• An alert is generated for any item which has no Metadata xml file "Item missing Metadata file."• Item SQA108 is missing metadata file	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
		<ul style="list-style-type: none"> Any well-formed items from the item package are added to the Test Item Bank An alert is issued stating 9 items added to the item bank 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed Number of items imported will be displayed. Should be 9 items 	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA### . Items SQA108 should not be stored..	<ul style="list-style-type: none"> Metadata for stored items will be displayed. Items missing metadata file will not be found. 	

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.10 – Import a file where all items fail to load

Script Description

Attempt to load a package of items where every item fails due to item errors.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1
- RADTIIB.7

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Create a package of items and create an error in each item
- Import the item package.
- Script 2.10
 - SQA110 – missing item type
 - SQA111 – wrong status
 - SQA112 – no metadata file
 - SQA113 – missing all metadata items
 - SQA114 – wrong status
 - SQA115 – no metadata file
 - SQA116 – missing grade, subcategory
 - SQA117 – missing resource file
 - SQA118, 119 – missing metadata file

Teardown

- None – no items should be imported

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import	None	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
	API in Rest Client http://{server-context}/sftpFileImport Use folder Script 2.10		
3	Press Send	<ul style="list-style-type: none"> An alert is generated for every item which is rejected. The following items should be identified as defective: <ul style="list-style-type: none"> SQA110 – missing item type SQA111 – wrong status SQA112 – no metadata file SQA113 – missing all metadata items SQA114 – wrong status SQA115 – no metadata file SQA116 – missing grade, subcategory SQA117 – missing resource file SQA118, 119 – missing metadata file No items are added to the database No alert is generated to indicate items have been added. 	
4	Save Import Set number from step 3. Execute API http://{server-context}/importSet/{ImportSet#}	<ul style="list-style-type: none"> Time and status of the import will be displayed Number of items imported will be displayed. Should be 0 items 	
5	Search for the items in the database using http://{server-context}/item/apipitem_SQA### . No items from SQA110-SQA119 should be stored	<ul style="list-style-type: none"> No items will have been stored 	

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Script #: 2.11 – Attempt file import with database error

Script Description

Attempt to load a package of items where every item fails due to item errors.

Testing Requirements

This test script covers the following specific testing requirements:

- RADTIB.1.1
- RADTIIB.1.5

Setup

- Test Item Bank must be deployed on CloudFoundry, with MongoDB operational
- QA staff must have Rest Client available to perform test
- Create a package of items Import the item package.
- Shut down or lock database

Teardown

- None – no items should be imported

Script Steps

Step #	Test Action	Expected Results	Pass/Fail
1	Access the Rest Client	Rest Client viewed in Browser	
2	Enter the URL for the SFTP import API in Rest Client, select the test item package to be imported Use any folder of items.	None	
3	Press Send	<ul style="list-style-type: none">• An alert is generated for which indicates a database error has occurred.• No items are added to the database• No alert is generated to indicate items have been added.	
4	Execute query against MongoDB to		

Smarter Balanced RFP #11/Test Item Bank

TIB Import Items

Step #	Test Action	Expected Results	Pass/Fail
	see if any items have been added. Verify that only the correct items were added.		

Test Execution

Date/Time	Tester	Test ID	Test Phase	Status
1/30/2013	RDH		1	Passed
1/30/2013	RM		1	Passed