



YouTestMe

Automating the Integration with AGILE and Allow Updating
User Profiles when Importing CSV Files

File name	Automating the Integration with AGILE and Allow Updating User Profiles when Importing CSV Files
Author	YouTestMe
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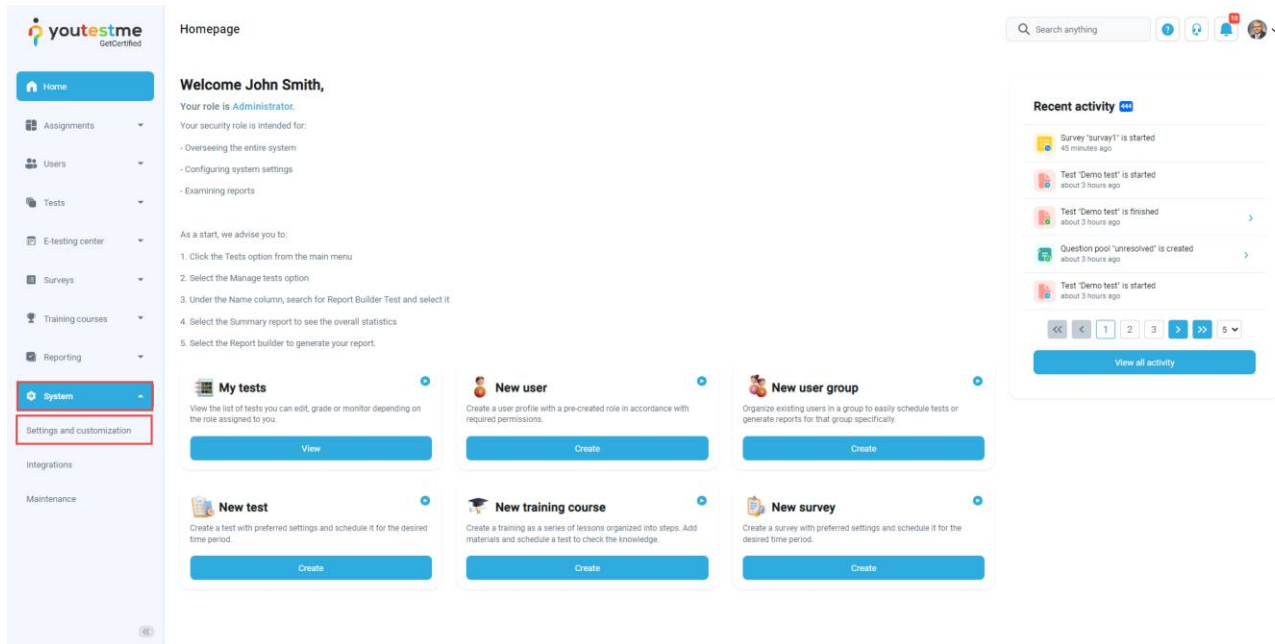
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1 Introduction

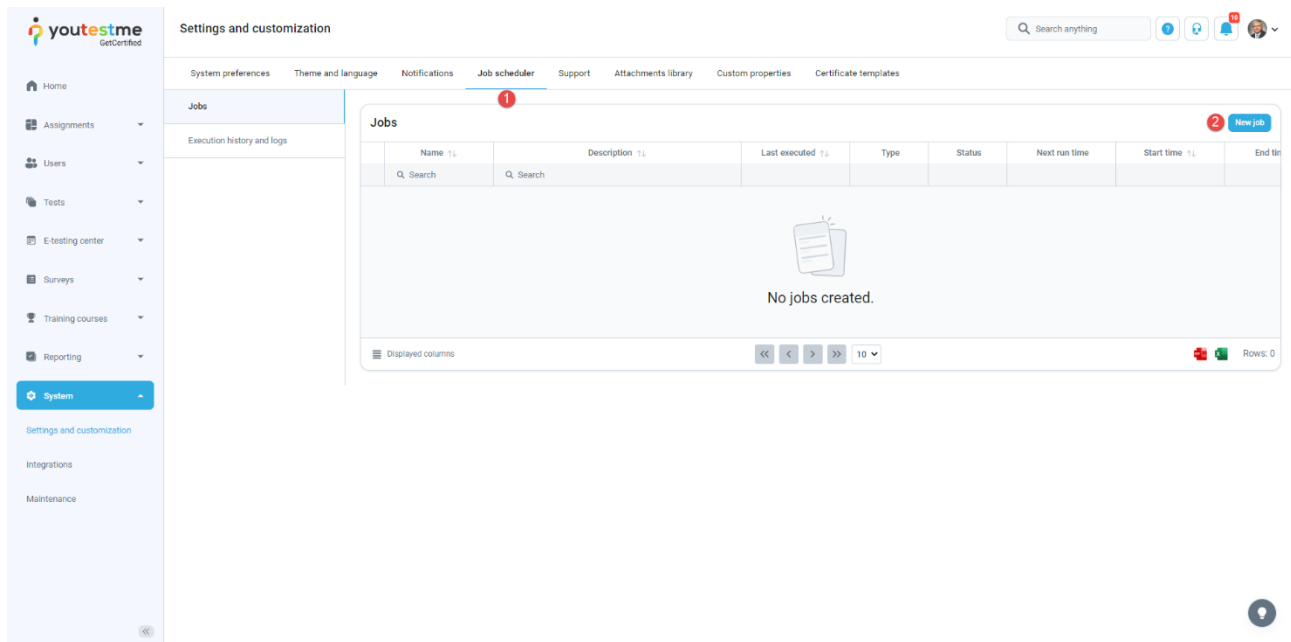
This document will explain how to create a job that will be repeated periodically to automate your work and import or export data.

2 Create a new job

Navigate to the **Settings** icon and choose the **Settings and customization** option.



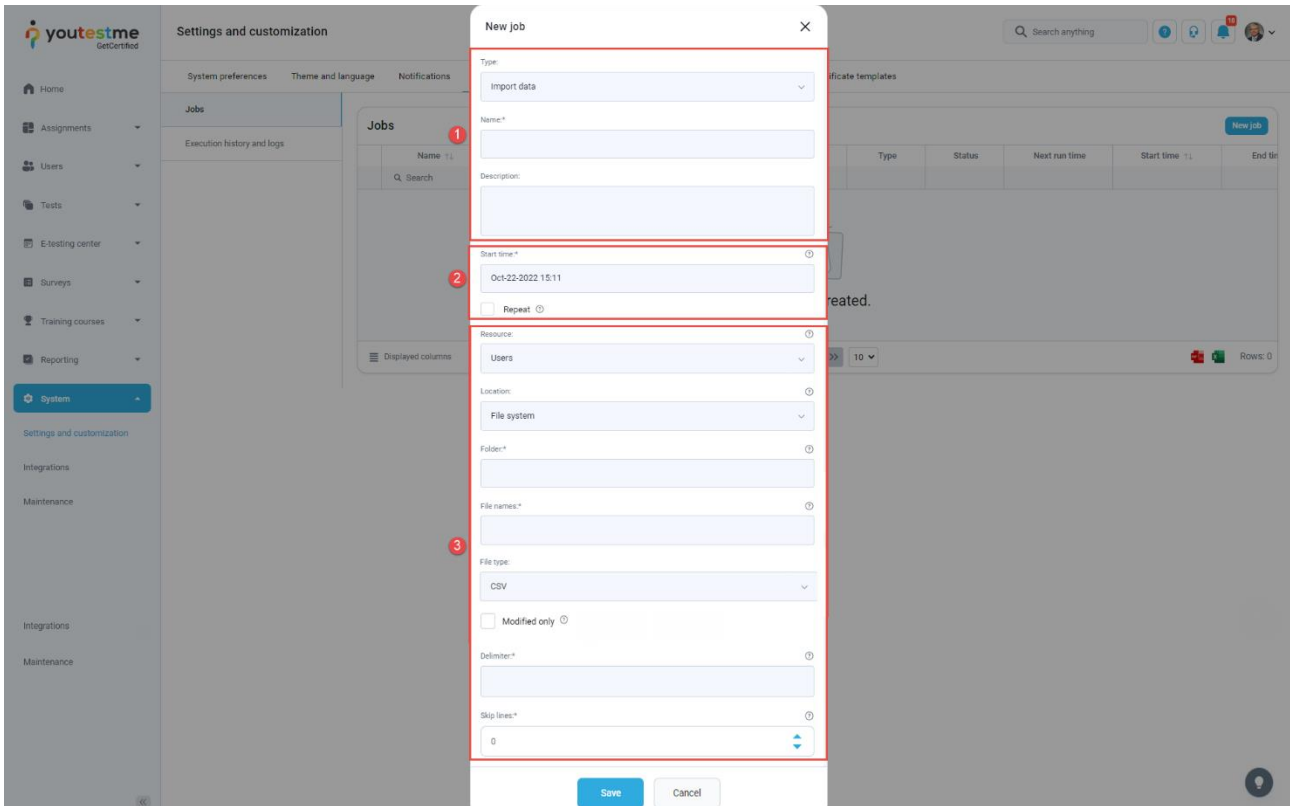
1. Click on the **Jobs scheduler** tab.
2. Click on the **New job** button.



A dialog will appear to enter all the necessary information to create and schedule a new job.

New job dialog consists of the following three sections:

1. **Job information** – General information about the job, including type, name, and description.
2. **Schedule settings** – Parameters of the schedule, start time, end time, repeat interval, and the number of repeats.
3. **Job parameters** – Specific job parameters related to the type of job.



2.1 Job information

This part of the dialog is the same for each job regardless of the type you choose.

1. Choose whether you want to import or export data.
2. Enter the job name.
3. Optionally enter the job description.

2.2 Schedule settings

This part of the dialog is the same for each job regardless of the type you choose.

1. Choose the start time, the time when the job will execute for the first time. If the chosen start time is in the past, the first execution will occur next time according to schedule (multiply of the repeat interval if job repeats) or will not occur if the job does not repeat.
2. Check the **Repeat** option to repeat the job periodically in equal time intervals after the start time. If it is unchecked job will execute only once at the start time.
3. Check the **Repeat forever** option to repeat the job indefinitely or until the end time if specified.
4. If **Repeat forever** is unchecked, chose the number of repeats after the first job execution at the start time. If you choose three times, the job will be repeated three times in equal intervals after the start time and executed four times in total.
5. Optionally, choose the **End time**. After the chosen time, the job will no longer execute, even if there are remaining repeats.
6. Specify the **Repeat interval**, the time between two consecutive job executions. It could be at least 1 minute.

Start time:* 1 ?

Oct-22-2022 15:11

Repeat 2 ?

Repeat forever 3 ?

Number of repeats: 4 ?

1

End time: 5 ?

Repeat interval: 6 ?

Days: 5 Hours: 3 Minutes: 15

2.3 Job parameters

2.3.1 Import job parameters

To create a new **Import data job**, do the following:

1. Choose the type of data to import. You can choose between:
 - a. Users (User accounts)
 - b. Tests (Items)
 - c. Testing sessions (Scheduled offerings)
 - d. Session candidates (User enrollments)
2. Choose the **Location** from which the files with data will be imported:
 - a. Choose **File system** to import data from files located in the folder on the server's file system.
 - b. Choose "SFTP server" to import data from files located in the SFTP server folder. For the SFTP server, additional parameters have to be specified.
 - c. SFTP server, additional parameters have to be specified.
3. Enter the absolute path to the folder in the chosen location to import files from.
4. Enter the regex expression to match the names of the files to import from the folder. For example, the regex expression **Users_.*\.csv** will match all the files whose name starts with **Users_** with the **.csv** extension.
5. The only supported File type currently is **CSV**.
6. Check the **Modified only** option to import only files created or modified after the previous job execution, or leave it unchecked to import all files from the folder satisfying the **File names** regex expression.
7. Enter the character to use for separating entries in the CSV file.
8. Enter the number of lines in the CSV file to skip before reading. Usually, it is set to one to skip the first line, which represents the header.

Resource: **1** ?

Users ▼

Location: **2** ?

File system ▼

Folder:* **3** ?

/home/youtestme/Documents/Agile import

File names:* **4** ?

import_users_FileSystem.csv

File type: **5**

CSV ▼

Modified only ? **6**

Delimiter:* **7** ?

|

Skip lines:* **8** ?

1 ▲▼

1. Choose the type of data to export referred to as **Resource**. Currently, only the **Test results** (Completion statuses) option is available.
2. Check **Modified only** to export only records created or modified after the previous job execution. Otherwise, all records will be exported.
3. Choose the **Location** from which the files with data will be imported:
 - a. Choose the **File system** to export the file to the folder located on the server's file system.
 - b. Choose **SFTP server** to export the file to the SFTP server folder. For the SFTP server, additional parameters have to be specified.
4. Enter the absolute path to the folder in the chosen location to export data to.
5. Enter the file name prefix of the file to export. The name of the exported file will be in the format: `#{file_name}_#{timestamp}.#{file_type_extension}`.
6. The only supported File type currently is the CSV. 7. Enter the character to use for separating entries in the CSV file.

Resource: **1** ⓘ

Users

Location: **2** ⓘ

File system

Folder:* **3** ⓘ

/home/youtestme/Documents/Agile import

File names:* **4** ⓘ

import_users_FileSystem.csv

File type: **5**

CSV

Modified only ⓘ **6**

Delimiter:* **7** ⓘ

|

2.4 SFTP system parameters

Choose the “SFTP server.”

3. Enter the hostname of the SFTP server.
4. Enter the port of the SFTP server.
5. Enter the username of the SFTP server user.
6. Enter the password of the SFTP server user.

The rest of the options are the same for each location and type.

Location: ⓘ

SFTP server **1**

Host SFTP:* ⓘ

192.168.1.0 **2**

Port: ⓘ

22 **3**

Username:* ⓘ

admin| **4**

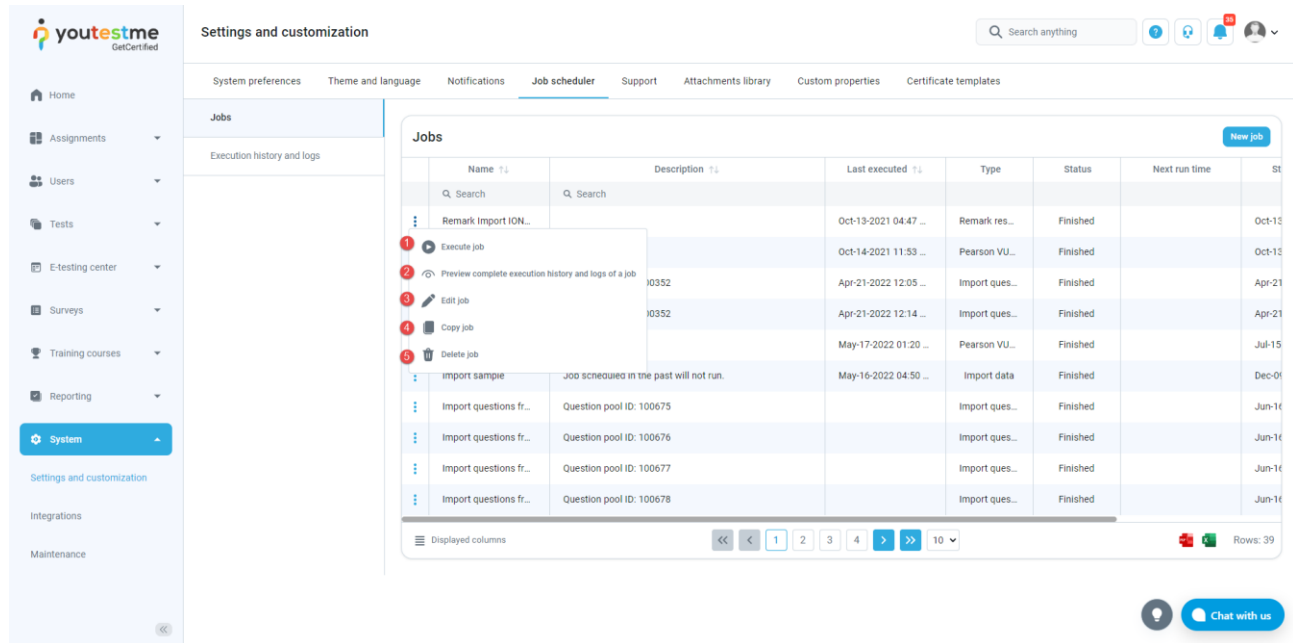
Password:* ⓘ

..... **5**

3 Job list

Once you create a Job, you will see it in the table where all created jobs are saved and details about each. For each job listed in the table, the following actions can be executed:

1. Execute the job immediately, disregarding the current schedule.
2. Preview complete execution history and logs of a job.
3. Edit job.
4. Use the previously created job as a template, so you can change only a few pieces of information and save it as a new job.
5. Delete the job.



The screenshot displays the 'Jobs' management page in the Youtestme system. The page title is 'Settings and customization' and the sub-section is 'Job scheduler'. The main content area shows a table of jobs with the following columns: Name, Description, Last executed, Type, Status, Next run time, and ST. A context menu is open over the first job, listing actions: Execute job, Preview complete execution history and logs of a job, Edit job, Copy job, and Delete job. The table contains several rows of job data, including 'Remark Import ION...', 'Import sample', and 'Import questions fr...'. The interface also includes a sidebar with navigation options like Home, Assignments, Users, Tests, Surveys, Training courses, Reporting, System, Settings and customization, Integrations, and Maintenance. A 'Chat with us' button is visible at the bottom right.

Name	Description	Last executed	Type	Status	Next run time	ST
Remark Import ION...		Oct-13-2021 04:47 ...	Remark res...	Finished		Oct-15
		Oct-14-2021 11:53 ...	Pearson VU...	Finished		Oct-15
	0352	Apr-21-2022 12:05 ...	Import ques...	Finished		Apr-21
	0352	Apr-21-2022 12:14 ...	Import ques...	Finished		Apr-21
		May-17-2022 01:20 ...	Pearson VU...	Finished		Jul-15
Import sample	Job scheduled in the past will not run.	May-16-2022 04:50 ...	Import data	Finished		Dec-01
Import questions fr...	Question pool ID: 100675		Import ques...	Finished		Jun-16
Import questions fr...	Question pool ID: 100676		Import ques...	Finished		Jun-16
Import questions fr...	Question pool ID: 100677		Import ques...	Finished		Jun-16
Import questions fr...	Question pool ID: 100678		Import ques...	Finished		Jun-16

4 Execution history and logs

To preview the complete execution history and logs for all jobs in the system:

1. Click on the “Execution history and logs” to see the details about executed jobs.
2. See the job type.
3. See the time when the job is executed.
4. See the number of errors that occurred during the execution.
5. Preview a log.

The screenshot displays the 'Execution history and logs' section of the youtestme application. The interface includes a sidebar menu on the left with options like Home, Assignments, Users, Tests, E-testing center, Surveys, Training courses, Reporting, System, Settings and customization, Integrations, and Maintenance. The main content area shows a table titled 'Execution and log history' with the following columns: ID, Job ID, Job name, Job type, Started at, Finished at, Errors, and Actions. The 'Started at' and 'Finished at' columns are highlighted with a red box. The 'Errors' column shows a count of errors for each job. The 'Actions' column has a 'Preview' link for each job. The table contains 10 rows of data, including jobs like 'Import sample', 'Pearson Import', 'AJ import test', and 'PearsonVUE import Job 7...'. The interface also includes a search bar, navigation tabs, and a 'Chat with us' button at the bottom right.

ID	Job ID	Job name	Job type	Started at	Finished at	Errors	Actions
		Q Search	1	2		3	4
100000	100000	Import sample	Import data	Jan-28-2021 01:35 PM...	Jan-28-2021 01:35 PM...	1	Preview
100009	100005	Pearson Import	Pearson VUE ...	Jul-15-2021 05:19 PM ...	Jul-15-2021 05:19 PM ...	1	Preview
100010	100005	Pearson Import	Pearson VUE ...	Jul-15-2021 05:22 PM ...	Jul-15-2021 05:22 PM ...	0	Preview
101596	100008	AJ import test	Import data	Jun-20-2022 05:15 PM...	Jun-20-2022 05:17 PM...	1	Preview
101597	100000	Import sample	Import data	Jul-01-2022 01:40 PM ...	Jul-01-2022 01:40 PM ...	1	Preview
101598	100014	Pearson Import Job 29.10...	Pearson VUE ...	Jul-17-2022 06:03 PM ...	Jul-17-2022 06:03 PM ...	0	Preview
100014	100000	Import sample	Import data	Jul-15-2021 06:22 PM ...	Jul-15-2021 06:22 PM ...	1	Preview
101599	100037	Import questions from QT...	Import questi...	Jul-20-2022 03:25 PM ...	Jul-20-2022 03:25 PM ...	0	Preview
100024	100008	AJ import test	Import data	Jul-16-2021 02:42 PM ...	Jul-16-2021 02:44 PM ...	1	Preview
100025	100009	PearsonVUE import Job 7...	Remark result...	Jul-29-2021 12:48 PM ...	Jul-29-2021 12:48 PM ...	1	Preview

5 Job execution notification

After each job execution, the system administrators will receive the notification. To ensure that the system administrator will receive the notification, you need to enable it under the **Notifications** tab. Click the **Notifications** tab, select the “Job executed” notification and enable it.

Notification event name	Application notification		Email notification	
	Status	Template message	Status	Template message
Accommodation removed	Enabled	Edit	Enabled	Edit
Accommodation request	Enabled	Edit	Enabled	Edit
Accommodation request response	Enabled	Edit	Enabled	Edit
Activated account	Disabled	Edit	Enabled	Edit
Allowed test/survey continuation	Enabled	Edit	Enabled	Edit
An error occurred in the system	Disabled	Edit	Disabled	Edit
Assigned as a group manager	Enabled	Edit	Enabled	Edit
Assigned as a group user	Enabled	Edit	Enabled	Edit
Assigned as a pool manager	Enabled	Edit	Enabled	Edit
Assigned as a pool user	Enabled	Edit	Enabled	Edit

Send application and email notifications to users upon creation or publishing of global self-enrollment testing/survey sessions.

6 Import data jobs – File formats and import logic

6.1 CSV format

The first line represents the header specification. Set **Skip lines** to one to skip the headers line. Line entries are separated with the | delimiter. Set **Delimiter** to | to parse the entries.

7 User (User accounts)

7.1 Example file

```
EXTERNAL_PERSON_KEY|USER_ID|EMPLID|FIRSTNAME|MIDDLENAME|LASTNAME|EMAIL|INSTITUTION_ROLE|DEPARTMENT|AFFILIATION|PHONE|SUPER|DATA_SOURCE_KEY|AVAILABLE_IND|opt_pki1|opt_pki2|opt_pki3
Tester08262020|12345|54321|SHAWN|T|TESTER|tester@dodiis.mil|student|Customer|Government|123-456-7890|D014834|AGILE|Y|Test1|Test2|Test3
```

7.1.1 Header mappings to YTM user fields

CSV Header	Expected header position	Expected type	YouTestMe field	YouTestMe required
EXTERNAL_PERSON_KEY	1	String, max length: 90	External id	No

USER_ID	2	String, max length: 900	Username	Yes
EMPLID	3	String, max length: 90	Employee id	No
FIRSTNAME	4	String, max length: 150	First name	No
MIDDLENAME	5	String, max length: 90	Middle name	No
LASTNAME	6	String, max length: 150	Last name	No
EMAIL	7	String, max length: 150, valid email format	Email	No
INSTITUTION_ROLE	8	String	External role name	No Default: Student
DEPARTMENT	9	String, max length: 90	External Id of the location within YTM to assign the user as a proctor.	No
AFFILIATION	10	String, max length: 90	Affiliation	No
PHONE	11	String, max length: 120	Phone number	No
SUPER	12	String	None	None
DATA_SOURCE_KEY	13	String, max length:	Data source	No

AVAILABLE_IND	14	Char, 'Y' or 'N'	User status (Y - Active, N - Inactive)	No Default: Active
opt_pki_1	15	String	None	None
opt_pki_2	16	String	None	None
opt_pki_3	17	String	None	None

7.1.2 Import logic

For every parsed line from the CSV file:

1. The system checks the existence of the YTM user account for the CSV record based on the EXTERNAL_PERSON_KEY's value mapped to the External Id of the YTM user account. If the YTM account exists, it will be updated. If not, a new user account will be created.
2. The YouTestMe account will be created or updated based on the processed CSV record and mapping between the CSV header (CSV Header) and the YouTestMe user account field (YouTestMe field) provided in the table above. In other words, EXTERNAL_PERSON_KEY maps to the YTM user account's External Id field, USER_ID maps to the YTM user account's username field, etc.
3. Based on the DEPARTMENT header's value, the corresponding YTM user account will be assigned as a proctor to the YTM location, which External Id is equal to the DEPARTMENT header's value. If such a location doesn't exist, the new location will be created with External Id and name equal to the DEPARTMENT header's value.

7.2 Tests (Items)

7.2.1 Example file

```
COURSE_ID|COURSE_NAME|PRIMARY_EXTERNAL_NODE_KEY|CLASSIFICATION|DATA_SOURCE_KEY
Test-08-26-2020|Test Course For YouTestMe|Customer|Unclassified|AGILE
```

7.2.2 Header mappings to YTM test fields

CSV Header	Expected header position	Expected type	YouTestMe field	YouTestMe required
COURSE_ID	1	String, max length: 90	Test external id	No
COURSE_NAME	2	String, max length: 300	Test name	Yes
PRIMARY_EXTERNAL_NODE_KEY	3	String, max length: 90	Location External Id, Location Name	No
CLASSIFICATION	4	String, max length: 90	Test label	No
DATA_SOURCE_KEY	5	String, max length: 50	Data source	No

7.2.3 Import logic

For every parsed line from the CSV file:

1. The system checks the YTM test's existence for the processed CSV record based on the COURSE_ID's value mapped to the YTM test's External Id. If the YTM test exists, it will be updated. If not, a new test will be created.
2. The YouTestMe test will be created or updated based on the processed CSV record and the mapping between the CSV header (CSV Header) and the YouTestMe test field (YouTestMe field) provided in the table above. In other words, COURSE_ID maps to the YTM test's External Id field, COURSE_NAME maps to the YTM test's name field, etc.
3. The new YTM testing location will be created with an External Id and Name equal to the PRIMARY_EXTERNAL_NODE_KEY's value if the testing location with that External Id doesn't exist.

7.3 Scheduled Offering (Testing session)

7.3.1 Example file

EXTERNAL_COURSE_KEY|COURSE_ID|PRIMARY_EXTERNAL_NODE_KEY|START_DATE|END_DATE|DATA_SOURCE_KEY

Test-08-26-2020|1769|Customer|20200901|20200901|AGILE

7.3.2 Header mappings to YTM session fields

CSV Header	Expected header position	Expected type	YouTestMe field	YouTestMe required
EXTERNAL_COURSE_KEY	1	String, max length: 90	Test external id (used to resolve the reference to the test)	Yes
COURSE_ID	2	String, max length: 50	Session external id, Session Name	Yes
PRIMARY_EXTERNAL_NODE_KEY	3	String, max length: 90	Session location external id (used to resolve the reference to the testing location)	No
START_DATE	4	String, Date format: yyyyMMdd	Session start date	Yes
END_DATE	5	String,	Session end date	Yes

		Date format: yyyyMMdd		
DATA_SOURCE_KEY	6	String, max length: 50	Data source	No

7.3.3 Import logic

1. The system checks the YTM session's existence for the processed CSV record based on the COURSE_ID's value mapped to the YTM session's External Id. If the YTM session exists, it will be updated. If not, a new session will be created. Test External Id field is not updatable.
2. The YouTestMe session will be created or updated based on the processed CSV record and the mapping between the CSV headers (CSV Header) and the YouTestMe session fields (YouTestMe field) provided in the table above. In other words, EXTERNAL_COURSE_KEY maps to the YTM session's Test External Id field, COURSE_ID maps to the YTM session's External Id field and name, etc.
3. The new YTM testing location will be created with an External Id and Name equal to the PRIMARY_EXTERNAL_NODE_KEY's value if the testing location with that External Id doesn't exist.

7.4 Session candidates (User enrollments)

7.4.1 Example file

```
COURSE_ID|EXTERNAL_PERSON_KEY|DATA_SOURCE_KEY|AVAILABLE_IND
1769|Tester08262020|Customer|Y
```

7.4.2 Header mappings to YTM session candidate fields

CSV Header	Expected header position	Expected Type	YouTestMe field	YouTestMe required
COURSE_ID	1	String	Session external id	Yes
EXTERNAL_PERSON_KEY	2	String	User external id	Yes
DATA_SOURCE_KEY	3	String	None	None
AVAILABLE_IND	4	String "Y" or "N"	The candidate can start the test	No

7.4.3 Import logic

For every parsed line from the CSV file:

1. The system checks for the user enrollments CSV record if the YouTestMe user specified by EXTERNAL_PERSON_KEY is registered for the YTM session specified by COURSE_ID. If yes, update the registration field for AVAILABLE_IND. If not, a new registration will be created.
2. We assume that one user cannot be registered for two or more scheduled offerings of the same item at the same time since that is not supported for YTM tests and sessions. If the user is already registered for another session of the same item, the user will be unregistered and registered for the new one. If this case is not possible, we can treat this as an error, as we currently treat it.

8 Import data jobs – File formats and import logic

8.1 CSV import

The first line represents the header.

Line entries are separated with the “|” delimiter. Set “Delimiter” to “|” in as the export job parameter

8.2 Completion statuses

8.2.1 Example file

UserEPK|CourseEPK|StatusDate|Status

Tester08262020|1769|20200902|Pass

8.3 Test results (Completion statuses)

CSV Header	Expected header position	Agile Type	Agile Required	YouTestMe field
UserEPK	1	String, max length: 90	Yes	User external id
CourseEPK	2	String, max length 38 Number format	Yes	Session external id
StatusDate	3	String, Date format: yyyyMMdd	Yes	Test attempt report date
Status	4	String, “Pass” or “Fail”	Yes	Test attempt result