

Revision History		
Update Date	Updated By	Summary
3/19/2018	TLH, AAE	Total score explanation
5/11/2018	AAE	Clarifying that results are batched 1-N results in a transfer.
9/16/2019	TLH	Rebranded
8/21/2020	JRD	Added time spent data to the Exam Summary and Answer sections. Added new optional No Show section.
1/27/2021	AAE	Clarifying that the optional username/password is used through HTTP Basic Authentication.
10/10/2022	SN	Updated to use Meazure learning logos and references

CLIENT RESULTS DATA EXCHANGE

The document below defines the data structure that is transferred for a candidate's results. The transfer is performed using a POST method to a client's specified URL. A **Basic Authentication** username and password is also supported to POST the results to the URL.

The XML message for a result file consists of several different sections. A sample of a full message is included in the index, so that you can see the relationship between the different sections and the hierarchy of the message.

The "results" message can contain any number of "result" elements, with a "result" consisting of all of the data pertinent to one candidate. When processing the document, the developer will need to account for 1-N result records, inside of the "results" wrapper.

CANDIDATE

The candidate element consists of three parts. If there was a "purchase" associated with the candidate, a transaction number is included. This field can help if there is any associated accounting reconciliation that might be needed. The "client ID" is the unique identifier that is used by the client, regardless of how many times they've taken the exam. For some clients, this can be a number, for others, it can be an email address, and for other clients it's a combination of letters and numbers.

Name	Type	Description
transaction_id	Optional, Number	Unique message ID
client_id	String	Unique ID for the candidate
castle_id	Number	Meazure Learning's ID for the candidate

EXAM SUMMARY

The "exam summary" section contains five fields. The package ID is linked to the exam that was administered for the candidate. This is the same ID for the exam combination that is used during the registration process. The "examid" maps to a high level "program ID". The "formid" maps to the specific "hard copy" of the exam that the candidate took. An example of the difference between the Exam ID and Form ID would be: Exam ID of 100, which maps to a program called "Algebra", and a Form ID of 1000 that maps to "Algebra 101 – Spring 2014 Midterm."

The "exam date time" field is the date and time that the candidate started their exam. The "exam status" field is a "P" or "F" which signifies a passing result or a failing result.

The "possible score" field is the maximum allowable points that someone can score on the exam, of the items that are scored. For example, if a form has 150 items on it, but only 125 are scored (the other 25 are experimental items), then the possible score is 125. The "pass fail point" is the number which is the "cut score" for the exam. The candidate's score must be at, or above this number to be considered a passing score. The "total score" field is the candidate's score, which is the one compared to the cut score to determine

the pass/fail status. If the exam uses scaled or equated scores instead of raw scores, then these values will be populated with the scaled or equated equivalent of the raw values.

The “time spent” field is the total seconds the candidate spent in the examination – from start to submission or auto-submission (e.g., timer expired).

Name	Type	Description
packageid	Number	Corresponds to the program for which the candidate registered.
examid	Number	The specific examination taken.
formid	Number	The specific form taken.
exam_date_time	Date	The date and time the exam was taken.
exam_status	Char(1)	Single character that denotes pass or fail. Possible values are “P” or “F”.
possible_score	Number	This is the total possible points or "perfect" score.
pass_fail_point	Number	This is the cut score for the exam. Anything equal to, or above this number should be a “passing” score.
total_score	Number	This is the candidate’s final reported score, (e.g., scaled, equated, or raw) what he/she achieved on the exam.
time_spent	Number	This is the total seconds the candidate spent in the examination – from start to submission or auto-submission (e.g., timer expired).

LEVEL SUMMARIES

The “level summaries” section is an optional section to the result document, but does provide useful feedback, if a client or candidate is trying to determine areas of additional study.

This section can repeat 0, 1, or many times. For example, if an exam had five domains or areas of concentration in it, the result file would have five level summary sections.

The “level id” is a string, with an ID that corresponds to the domain in the blueprint (or classification system) of the exam. A common notation might be “010000” to signify “domain 1.” The “level description” field is the text from the classification system that describes what the domain encompasses. The “points scored” field is the number of points that the candidate received for this particular domain. The “possible points” field are the total number of scored items within the domain. If the exam uses scaled scores instead of raw scores, then the “points scored” and “possible points” values will be populated with the scaled equivalent of the raw values.

Name	Type	Description
level_id	String	The ID that corresponds to the location on the blueprint of the exam, at the “Domain” level. Typically, this is a string of numbers with leading zeros, for example: “010000”.
level_description	String	The text from the blueprint (or classification system) of the exam.
points_scored	Number	Actual points scored by the candidate.

Name	Type	Description
possible_points	Number	The total number of points possible within the level/domain. The "perfect" score.

ANSWER SECTION

The “answer section” is an optional section, but could be useful if the client is importing results strings, or providing additional diagnostic feedback to candidates. This “answer” elements can also be repeated 0,1 or many times.

The “question ID” field is the unique identifier for the question/item administered. The “answer given” is the response string that was submitted during the exam. In the case of a regular multiple-choice item (with four options) the “answer given” might contain one of the letters A-D. In the case of a “multi select” item (with four options) the string is a comma separated list of the responses selected. For example: “A” (the candidate only selected the first response), “B,C” (where the candidate selects responses B and C as being correct).

The “points scored” field is the candidate’s points scored or earned on the specific question ID. The “time spent” field is the total seconds the candidate spent on the specific question ID.

Name	Type	Description
form_order	Number	This is an optional field that will be included if the INCLUDEORDER value is set to true. This will display the order that the question was set up in relation to the form.
candidate_order	Number	This is an optional field that will be included if the INCLUDEORDER value is set to true. This will display the actual order that the question was taken (.e., if the questions were set to be random).
question_id	Number	A unique question id of the question administered. This ID ties back to the item bank.
answer_given	String	The candidate's response for this question.
points_scored	Number	Usually 0 or 1, this is the raw point value for a correct or incorrect response for this question.
time_spent	Number	Optional field that show time spent in seconds that the candidate used to answer the question.

NO SHOW RESULTS DATA EXCHANGE

The “no show” section is an optional section, but can be used for clients that want to report on candidates that missed their scheduled exam date. This section is very similar to the exam summary section, but without any scoring information.

Name	Type	Description
packageid	Number	Corresponds to the program for which the candidate registered.
exam_date_time	Date	The date and time of the scheduled exam appointment.
exam_status	String	For no shows, this will always be set to “No Show.”

SAMPLE XML MESSAGE

Below is a sample XML message that would be posted to the client's URL. This message has some possible values filled in for illustration purposes. Multiple results can be batched in one transfer. The client receiving the file will need to iterate for every "result" record contained in the "results" wrapper element.

```
<results>
<result>
  <candidate>
    <transaction_id />
    <client_id>AACD001</client_id>
    <castle_id>999999</castle_id>
  </candidate>
  <examsummary>
    <packageid>123(number)</packageid>
    <examid>1</examid>
    <formid>2</formid>
    <exam_date_time>2012-06-18T17:14:14</exam_date_time>
    <exam_status>F|P</exam_status>
    <possible_score>100 (sample)</possible_score>
    <pass_fail_point>70 (sample)</pass_fail_point>
    <total_score>71</total_score>
    <time_spent>7205</time_spent>
  </examsummary>
  <level_summaries>
    <level>
      <level_id>10000</level_id>
      <level_description>Level 1 Description</level_description>
      <points_scored>0</points_scored>
      <possible_points>0</possible_points>
    </level>
    <level>
      <level_id>20000</level_id>
      <level_description>Level 2 Description</level_description>
      <points_scored>0</points_scored>
      <possible_points>0</possible_points>
    </level>
    <level>
      <level_id>30000</level_id>
      <level_description>Level 3 Description</level_description>
      <points_scored>0</points_scored>
      <possible_points>0</possible_points>
    </level>
    <level>
      <level_id>40000</level_id>
      <level_description>Level 4 Description</level_description>
      <points_scored>0</points_scored>
      <possible_points>0</possible_points>
    </level>
    <level>
      <level_id>50000</level_id>
```

```

<level_description>Level 5 Description</level_description>
<points_scored>0</points_scored>
<possible_points>0</possible_points>
</level>
<level>
  <level_id>60000</level_id>
  <level_description>Level 1 Description</level_description>
  <points_scored>0</points_scored>
  <possible_points>0</possible_points>
</level>
</level_summaries>
<answers>
  <answer>
    <form_order>1</form_order>
    <candidate_order>1</candidate_order>
    <points_scored>1</points_scored>
    <answer_given>C</answer_given>
    <question_id>1001</question_id>
    <time_spent>36</time_spent>
  </answer>
  <answer>
    <form_order>2</form_order>
    <candidate_order>2</candidate_order>
    <points_scored>1</points_scored>
    <answer_given>B</answer_given>
    <question_id>1002</question_id>
    <time_spent>24</time_spent>
  </answer>
  <answer>
    <form_order>3</form_order>
    <candidate_order>3</candidate_order>
    <points_scored>0</points_scored>
    <answer_given>A</answer_given>
    <question_id>1003</question_id>
    <time_spent>43</time_spent>
  </answer>
</answers>
</result>
<result/>
<result/>
<result/>
...
...
...

<noshow>
  <candidate>
    <transaction_id />
    <client_id>AACD001</client_id>
    <castle_id>999999</castle_id>
  </candidate>

```

```
<examsummary>
  <packageid>123(number)</packageid>
  <exam_date_time>2012-06-18T17:14:14</exam_date_time>
  <exam_status>No Show</exam_status>
</examsummary>
</noshow>
<noshow />
<noshow />
<noshow />
...
...
...
</results>
```