Revision History		
Update Date	**Updated By**	**Summary**
3/27/2018	TLH	Package ID description
8/7/2018	TLH, AAE	Clarify receipt messages, no message received
9/16/2019	TLH	Updated branding
3/4/2021	TLH	Updated accommodations listing
6/16/2021	JRD	Added optional data field including date of birth, school code, school name, retake status, and provided password
7/13/2021	AAE	Added wording to Error messages.
1/25/2022	MK	Added client registration id and json endpoint
3/2/2022	MK	Candidate demographic update
4/5/2022	MK	Noted optional fields in candidate data
5/18/2022	TLH	Updated accommodations listing
10/10/2022	SN	Updated to use Meazure learning logos and references
10/19/2023	RAS	Added a new ADA
08/05/2024	Pranav	Updated to accept meta and tags inputs

CANDIDATE REGISTRATION DATA EXCHANGE

The candidate registration format outlined below is used to submit eligibility records to Meazure Learning. Once an eligibility is submitted successfully to the system, the candidate will receive an email with detailed instructions in order to schedule their examination.

This web service was intended to handle each registration individually to handle a more "real time" scenario as opposed to a "batch" format.

Notes:
When submitting a candidate's registration file, you will need to ensure that the content type is set to "text/xml" or "json".

Also, a valid static server IP address will need to be submitted to Meazure Learning so that we can add the IP address to our whitelist to secure communication between clients and Meazure Learning.

A username and password will be generated for the client in order to use the web service.

Development Service URL:
https://stg.assessments.meazurelearning.com/Services/Registration/Service.svc/Register

Production Service URL:
https://assessments.meazurelearning.com/Services/Registration/Service.svc/Register

Json format:
Development Service URL:
https://stg.assessments.meazurelearning.com/Services/Registration/Service.svc/RegisterJS

Production Service URL:
https://assessments.meazurelearning.com/Services/Registration/Service.svc/RegisterJS

Sample Message Post Interface:
/Services/Registration/Test/Send.htm

REGISTRATION

The registration head section of the document contains a "transaction ID" and a "package ID." The transaction ID, should be a unique "message ID" from the client to Meazure Learning. Subsequent messages (even for the same candidate) should contain new transaction IDs.

The package ID is the number given to the client that maps the candidate to a particular exam that they are registering for. It is possible for a client to have multiple package IDs, usually, one for every one of their programs.

Name	Type	Description
transaction_id	Number	Unique Message ID, even if same candidate is sent over, this should be unique.
Package_id	Number	Corresponds to the program for which the candidate has eligibility
begin_eligibility_date	Date, optional	The begin eligibility date. This value needs to be less than the end_eligibility_date. Should be in the format MM/DD/YYYY
end_eligibility_date	Date, optional	The end eligibility date. Should be in the format MM/DD/YYYY
client_registration_id	String, optional	This is a unique identifier tied to the eligibility attempt number or scheduling instance.

Note: if neither begin or end eligibility dates are included, then the begin eligibility date is assumed as the date we received the message (today), and the end eligibility date is one year from the submission date or what the configured time (in days) is for the exam purchase.

CANDIDATE

The "candidate" section of the document contains mostly demographic data, such as name, mailing address, email address, and other contact information. The "client ID" and "candidate ID" are also contained in this section. The "client ID" refers to the unique identifier for the candidate in the client's database. The "castle ID" is the unique identifier for the same candidate, but in Meazure Learning's database. The "castle ID" is optional for the first submission of a "new" candidate, but should be used for future messages to ensure that the candidate is mapped correctly in both databases.

Name	Type	Description
client_id	String	Candidate's unique identifier from the client database.
Castle_id	Number, optional	Meazure Learning's unique identifier for the candidate. This field only optional for "new" candidates, should be included in subsequent messages/updates.
City	String , optional	City name from the candidate's address.
Country	String , optional	Country name from the candidate's address.
First_name	String	Candidate's first name.
last_name	String	Candidate's last name.
middle_name	String , optional	Candidate's middle name.
name_suffix	String, optional	Candidate's name suffix. For example: "MD", "PhD." Etc.
street_address	String , optional	Candidate's address line.
Street_address2	String , optional	Additional address line.
State_province	String , optional	Two character abbreviation for state (if in the US), otherwise the full province name.
postal_code	String , optional	The postal/zip code for the address. Should be sent as string to retain any leading zeros, if any.
Home_phone	String, optional	Home telephone number for the candidate.
Work_phone	String, optional	Work telephone number for the candidate.

Name	Type	Description
Fax_number	String, optional	Facsimile number for the candidate.
Email_address	String	Candidate's email address. This should be unique to each candidate in the client's database.
Seeded_password	String, optional	Initial password for the candidate. If nothing is specified, the candidate will receive a randomly generated password.
Is_retake	String, optional	Candidate testing status as first-time candidate or retake candidate. Valid values are Y (retake) or N (not retake).
School_name	String, optional	Candidate's education affiliation by name, e.g., school.
School_code	String, optional	Candidate's education affiliation by code, e.g., school.
Date_of_birth	Date, optional	Candidate's date of birth. Should be in the format MM/DD/YYYY

ADA (SPECIAL ACCOMMODATIONS)

The "ADA" section is optional and can be used to specify the candidate's special accommodation requirements, if any, associated with the registration.

Name	Type	Description
ada_id	String, Optional	Unique Message ID, even if same candidate is sent over, this should be unique

The ADA section can consist of a list of unique ada_ids mapped to ADA requirements from the following generic list:

ID	Description
0	None
1	Private Room
2	Non-Saturday Testing
3	Reader
4	Writer
5	Time plus one-half exam time
6	Double time
7	Snack allowed
8	Calculator allowed
9	Large print exam
10	Sign language interpreter
11	One hour additional time
12	Spanish test requested
13	Circle response in test book
14	Semi-private room
15	Relief breaks as needed
16	Receives copy of instructions in writing
17	Other
18	Greek test requested
19	Thai test requested
20	Special Seating Accommodations
21	Turkish test requested
22	Indonesian test requested
23	Two hours additional time

ID	Description
24	Bahasa test requested
25	Half-hour additional time
26	Chinese test requested
29	Water allowed
30	Paper and Pencil Exam
31	Special headphones (due to hearing implants, etc.)
32	Special calculator (due to vision impairment, etc.)
33	Ergonomic chair or lumbar support
34	Allowed to test blood sugar
35	Divider
37	Small Group Setting
38	Instructions assistance – NO LONGER USED
39	Screen reader
40	Handicap accessible
41	Lithuanian test requested
42	Finnish test requested
43	Hungarian test requested
44	Hindi test requested
45	English test requested (international candidate version)
46	Text-only test requested
47	Deaf
48	Colored overlays
49	Large screen monitor
50	Health device monitor
51	Smart device monitor
52	Hearing aid
53	Service animal
55	eBooks

please note that all ADA Requirements may not apply to all clients

RECEIPT FORMAT

The receipt message is a confirmation from Meazure Learning to the client in response to a registration submission. In the receipt, the client will receive the "Castle ID" which is the unique identifier used internally for the candidate, and should be used in subsequent correspondence between the client and Meazure Learning when available. The "status" field will display a success or failure message depending on whether the transaction was processed successfully or not. An "OK" message indicates a successful transaction. For other error messages, please see the samples below. Should any exceptions occur, it will be up to the client to correct the document data or format, and resubmit the registration.

Name	Type	Description
castle_id	Number	As a receipt for the registration, the client will receive Meazure Learning's ID number for the candidate submitted.
status	String	This is the status message of the receipt. The status will return an "OK" if the message was received and successfully processed, otherwise, it will display the error that occurred during processing.

SAMPLE REGISTRATION XML and JSON DOCUMENT

1) Without ADA

```
<registration>
 <transaction_id>1234567890</transaction_id>
 <package_id>123</package_id>
 <candidate>
  <client_id>ACME007</client_id>
  <castle_id></castle_id>
  <city>Raleigh</city>
  <country>US</country>
  <first_name>John</first_name>
  <last_name>Smith</last_name>
  <middle_name>Zeri</middle_name>
  <name_suffix></name_suffix>
  <street_address>900 Perimeter Park Dr</street_address>
  <street_address2></street_address2>
  <state_province>NC</state_province>
  <postal_code>27612</postal_code>
  <home_phone>111-222-3333</home_phone>
  <work_phone>111-222-3333</work_phone>
  <fax_number></fax_number>
  <email_address>azsmith8@test.test</email_address>
  <seeded_password>3$djA2#pJ</seeded_password>
  < is_retake >Y</is_retake>
  <school_name>ACME School</school_name>
  <school_code>1234ACME</school_code>
  <date_of_birth>03/28/2001</date_of_birth>
 </candidate>
</registration>
```

2) With multiple ADAs

```
<registration>
 <transaction_id>1234567891</transaction_id>
 <package_id>123</package_id>
 <candidate>
  <client_id>ACME008</client_id>
  <castle_id></castle_id>
  <city>Raleigh</city>
  <country>US</country>
  <first_name>Bob</first_name>
  <last_name>Doe</last_name>
  <middle_name></middle_name>
  <name_suffix></name_suffix>
  <street_address>900 Perimeter Park Dr</street_address>
  <street_address2></street_address2>
  <state_province>NC</state_province>
  <postal_code>27612</postal_code>
  <home_phone>111-222-3333</home_phone>
  <work_phone>111-222-3333</work_phone>
```

```
 <fax_number></fax_number>
 <email_address>bob@test.test</email_address>
 <seeded_password>3$djA2#pJ</seeded_password>
 < is_retake >Y</is_retake>
 <school_name>ACME School</school_name>
 <school_code>1234ACME</school_code>
 <date_of_birth> 03/28/2001 </date_of_birth>
 </candidate>
<ada>
<ada_id>1</ada_id>
<ada_id>2</ada_id>
<ada_id>3</ada_id>
</ada>
</registration>
```

3) **With Begin and End eligibility dates**

```
<registration>
 <transaction_id>1234567891</transaction_id>
 <package_id>123</package_id>
 <begin_eligibility_date>5/27/2015</begin_eligibility_date>
 <end_eligibility_date>5/26/2016</end_eligibility_date>
 <candidate>
  <client_id>ACME008</client_id>
  <castle_id></castle_id>
  <city>Raleigh</city>
  <country>US</country>
  <first_name>Bob</first_name>
  <last_name>Doe</last_name>
  <middle_name></middle_name>
  <name_suffix></name_suffix>
  <street_address>900 Perimeter Park Dr</street_address>
  <street_address2></street_address2>
  <state_province>NC</state_province>
  <postal_code>27612</postal_code>
  <home_phone>111-222-3333</home_phone>
  <work_phone>111-222-3333</work_phone>
  <fax_number></fax_number>
  <email_address>bob@test.test</email_address>
  <seeded_password>3$djA2#pJ</seeded_password>
  < is_retake >Y</is_retake>
  <school_name>ACME School</school_name>
  <school_code>1234ACME</school_code>
  <date_of_birth> 03/28/2001 </date_of_birth>
 </candidate>
</registration>
```

4) **With Client Registration id**:

```
<registration>
 <transaction_id>1234567891</transaction_id>
 <package_id>123</package_id>
 <client_registration_id>testa</client_registration_id>
 <begin_eligibility_date>5/27/2015</begin_eligibility_date>
 <end_eligibility_date>5/26/2016</end_eligibility_date>
 <candidate>
  <client_id>ACME008</client_id>
  <castle_id></castle_id>
  <city>Raleigh</city>
  <country>US</country>
  <first_name>Bob</first_name>
  <last_name>Doe</last_name>
  <middle_name></middle_name>
  <name_suffix></name_suffix>
  <street_address>900 Perimeter Park Dr</street_address>
  <street_address2></street_address2>
  <state_province>NC</state_province>
  <postal_code>27612</postal_code>
  <home_phone>111-222-3333</home_phone>
  <work_phone>111-222-3333</work_phone>
  <fax_number></fax_number>
  <email_address>bob@test.test</email_address>
  <seeded_password>3$djA2#pJ</seeded_password>
  < is_retake >Y</is_retake>
  <school_name>ACME School</school_name>
  <school_code>1234ACME</school_code>
  <date_of_birth> 03/28/2001 </date_of_birth>
 </candidate>
</registration>
```

5) **Sample JSON data with client registration id and ADA:**

```
{
  "registration": {
    "transaction_id": "MK20220121_14",
    "package_Id": "10539",
    "client_registration_id":"test",
    "candidate":
      {
        "client_id": "MK20220121_14",
        "castle_id": "",
        "city": "Raleigh",
        "country": "US",
        "first_name": "MK20220121_14",
        "last_name": "MK20220121_14",
        "middle_name": "MK20220121_14",
        "name_suffix": "",
        "street_address": "900 Perimeter Park Dr",
        "street_address2": "",
```

```
            "state_province": "NC",
            "postal_code": "27612",
            "home_phone": "111-222-3333",
            "work_phone": "111-222-3333",
            "fax_number": "",
            "email_address": "MK20220121_14@test.com",
            "is_retake": "Y",
            "seeded_password": "1",
            "school_name": "test",
            "school_code": "test",
            "date_of_birth": "01/31/2000"
        },
      "ada":[
        {"ada_id":"1"}
      ]

  }
}
```

6) **XML input with Meta and Tags**: (Only applicable for Caveon test engine)

```
<registration>
 <transaction_id>1234567891</transaction_id>
 <package_id>123</package_id>
 <client_registration_id>testa</client_registration_id>
 <begin_eligibility_date>5/27/2015</begin_eligibility_date>
 <end_eligibility_date>5/26/2016</end_eligibility_date>
 <candidate>
  <client_id>ACME008</client_id>
  <castle_id></castle_id>
  <city>Raleigh</city>
  <country>US</country>
  <first_name>Bob</first_name>
  <last_name>Doe</last_name>
  <middle_name></middle_name>
  <name_suffix></name_suffix>
  <street_address>900 Perimeter Park Dr</street_address>
  <street_address2></street_address2>
  <state_province>NC</state_province>
  <postal_code>27612</postal_code>
  <home_phone>111-222-3333</home_phone>
  <work_phone>111-222-3333</work_phone>
  <fax_number></fax_number>
  <email_address>bob@test.test</email_address>
  <seeded_password>3$djA2#pJ</seeded_password>
  < is_retake >Y</is_retake>
  <school_name>ACME School</school_name>
  <school_code>1234ACME</school_code>
  <date_of_birth> 03/28/2001 </date_of_birth>
 </candidate>
 <tags>["tag1","tag2"]</tags>
 <meta>{"meta_label1":"value1", "meta_label2":"value2"}></meta>
</registration>
```

7) **JSON input with Meta and Tags**: (Only applicable for Caveon test engine)

```
{
  "registration": {
    "transaction_id": "MK20220121_14",
    "package_Id": "10539",
    "client_registration_id":"test",
    "candidate":
      {
        "client_id": "MK20220121_14",
        "castle_id": "",
        "city": "Raleigh",
        "country": "US",
        "first_name": "MK20220121_14",
        "last_name": "MK20220121_14",
        "middle_name": "MK20220121_14",
        "name_suffix": "",
        "street_address": "900 Perimeter Park Dr",
        "street_address2": "",
        "state_province": "NC",
        "postal_code": "27612",
        "home_phone": "111-222-3333",
        "work_phone": "111-222-3333",
        "fax_number": "",
        "email_address": "MK20220121_14@test.com",
        "is_retake": "Y",
        "seeded_password": "1",
        "school_name": "test",
        "school_code": "test",
        "date_of_birth": "01/31/2000"
      },
    "tags": ["tag1","tag2"],
    "meta": {"meta_label1":"value1","meta_label2":"value2", "meta_label3": "value3"}
  }
}
```

Candidate demographic update:
If the same registration request is sent again either via XML or JSON and the candidate record already exists, then the application will update the existing candidate demographic information.

Response:

Status: "DEMOGRAPHICS UPDATED. NO OTHER CHANGES ALLOWED." This indicates only demographic information was updated.

```
{
  "RegisterJsonResult": {
    "castle_id": 858788357,
    "status": "DEMOGRAPHICS UPDATED. NO OTHER CHANGES ALLOWED."
  }
}
```

SAMPLE RECEIPT MESSAGES

Below are sample messages that might occur during successful transmission, or also in the case that an error occurs. Any messages returned that are not in the "OK" format should be considered errors and will need to be corrected and re-attempted.

Successful Registration: OK Message returned. Client communication will be sent out.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id>857086933</castle_id>
<status>OK</status>
</registration>
```

Invalid XML: Incorrect XML format. Message should be fixed and re-attempted.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id i:nil="true"/>
<status>VALIDATION_ERRORS : The 'element_name' element is not declared.</status>
</registration>
```

Incorrect PackageId: A Package ID that is not mapped to your organization was attempted and is incorrect.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id>123</castle_id>
<status>ERROR: INCORRECT PACKAGE_ID</status>
</registration>
```

Duplicate Submission: No updates have been made, no new messages to the candidate have been sent.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id>123</castle_id>
<status>NO_CHANGES_MADE</status>
</registration>
```

Exception Occurred: General processing error, message was not processed.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id i:nil="true"/>
<status>ERROR: PROCESSING ERROR</status>
</registration>
```

Invalid Eligibility Date: Incorrect date range or format, data should be corrected and re-attempted.
```
<registration xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<castle_id i:nil="true"/>
<status>ERROR: ELIGIBILITY DATE IS NOT VALID</status>
</registration>
```

If you do not receive any receipt message, you can attempt the call again or contact Meazure Learning directly to troubleshoot the issue.