

# Next Generation Integration Scorecard Assessment Functional Area

The Assessment Functional Area defines the means to create, access, and take assessments. An Assessment may represent a quiz, survey, or other evaluation that includes assessment Items. Assessment Items are extensible objects to capture various types of questions, such as a multiple choice or an asset submission.

### Item

An Item is an individual assessment item such as a question to be included in a test. Items always have Questions parts and may also have one or more Answer parts

Also known as: Question

□ Read Operations for *Items:* 

Score

Get Items given unique ids

Get all the Items in a system or Catalog

Query (Search) Items based on attribute-based query terms or keywords

**D** Register for notifications that Items have been created, updated or deleted

U Write Operations for *Items:* 

Create, Update and Delete Items
 Add an alias Id to reference an existing Item
 Organize Items into AssessmentBanks

Minimally Supported Attributes of Items:

•	A unique and permanent identifier
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- The name of the Item
- A description of the Item
- The question type of the Item (multiple choice, short answer, essay submission, connect the dots, etc.)

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- Learning Objectives corresponding to the Item
- The Question associated with this Item
- Answers associated with this Item, if available. Questions may have more than one acceptable Answer

Minimally Supported Attributes of *Questions:* 

- A unique and permanent identifier
- The name of the Question (which may be the same as for the Item)
- A description of the Question (which may be the same as for the Item)
- The type of the Question, which corresponds to the Item type
- Attributes of the Question that are unique to the particular question Type

Minimally Supported Attributes of Answers:

- A unique and permanent identifier
- The name of the Answer
- A description of the Answer
- The type of the Answer, which corresponds to the Item type
- Attributes of the Answer that are unique to the particular question Type

### Assessment

An Assessment is a sequence of assessment items. Basic Assessment authoring functionality for simple Assessments (those without Sections or Parts and which do not support Sequencing rules) should also be supported. More complete and advanced Assessment authoring is covered in the Assessment Authoring Functional Area.

Also known as: Test, Quiz, Survey, Assignment, Evaluation, Rubric

□ Read Operations for *Assessments*:

Score

Get Assessments given unique Ids	
Get all the Assessments in a system or Catalog	
Query (Search) Assessments based on attribute-based query terms or keywords	
Register for notifications that Assessments have been created, updated or deleted	

#### □ Write Operations for *Assessments*:

Create, Update and Delete Assessments	
Add an alias Id to reference an existing Assessment	
Organize Assessments into AssessmentBanks	

#### Basic Assessment Authoring Operations:

- □ Add an existing Items to an Assessment being authored
- □ Remove Items from an Assessment being authored
- □ Sequence/order Items in an Assessment being authored

Minimally Supported Attributes of Assessments:

- A unique and permanent identifier
- The name of the Assessment
- A description of the Assessment
- The type of the Assessment, test, quiz, survey, assignment, rubric
- The level corresponding to the assessment difficulty, perhaps as a Grade
- A Rubric associated with the Assessment, if available

### AssessmentOffered

An AssessmentOffered is an Assessment available for taking. Usually includes information about when the assessment can be taken and additional rules like when an Assessment can be taken, its duration, whether Items can be shuffled, etc.

Also known as: Test, Quiz, or Survey (if they are available for taking)

□ Read Operations for *AssessmentsOffered*:

Score

Get AssessmentsOffered given unique Ids	
Get all the AssessmentsOffered in a system or Catalog	
Get AssessmentsOffered for Assessments	
Query (Search) AssessmentsOffered based on attribute-based query terms or keywords	

- Register for notifications that AssessmentsOffered have been created, updated or deleted
- □ Write Operations for *AssessmentsOffered*:

Score

- □ Create AssessmentOffered for an Assessment
- Update and Delete AssessmentsOffered
- □ Add an alias Id to reference an existing AssessmentOffered
- □ Organize AssessmentsOffered into AssessmentBanks

Minimally Supported Attributes of AssessmentsOffered:

- A unique and permanent identifier
- The name of the Assessment Offered
- A description of the AssessmentOffered
- The type of the AssessmentOffered
- The Assessment associated with this AssessmentOffered
- The level corresponding to the Assessment difficulty, perhaps as a Grade
- Boolean test whether the Items or Parts in the Assessment are taken sequentially
- Boolean test whether the Items or Parts appear in a random order
- The start time for the Assessment, if available
- The deadline, or end time of the Assessment, if available
- The Duration of the Assessment, if available
- The GradeSystem for the score, if the Assessment will be scored
- The GradeSystem for the Grade, if the Assessment will be scored

### AssessmentTaken

An AssessmentTaken is an AssessmentOffered that has been completed or in progress by a Taker (typically a student).

Also known as:

Read Operations for *AssessmentsTaken*:

Score

Get AssessmentsTaken given unique Ids

- Get all the AssessmentsTaken in a system or Catalog
- Query (Search) AssessmentsTaken based on attribute-based query terms or keywords
- Register for notifications that AssessmentsTaken have been created, updated or deleted
- □ Write Operations for *AssessmentsTaken*:
  - □ Create, Update and Delete AssessmentsTaken
  - □ Add an alias Id to reference an existing AssessmentsTaken
  - □ Organize AssessmentsTaken into AssessmentBanks
- □ Operations for taking an Offered Assessment:

Get the first Section of an AssessmentOffered for taking	
Get next Section of an AssessmentOffered for taking	
Get all Sections of an AssessmentOffered for Taking	
Test if an assessment Section has begun or is over	
Test whether an assessment Section requires synchronous Responses	
Get the first Question of an assessment Section for taking	
Get the next Question in an assessment Section for taking if possible	
Get a Question for taking based on its Item Id	
Get all Questions in an assessment Section for taking if possible	
Skip a Question in an assessment Section if possible	
Submit a Response to a Question in an assessment Section	
Test whether a Question has been answered	
Get unanswered Questions in an assessment Section	
Get the currently submitted Response to an assessment Item	
Clear the currently submitted Response to an assessment Item if possible	
Declare that an assessment Section has been finished	
Check if an answer is available for an assessment Item	
Get the acceptable answers to an assessment Item if available	
Declare that an Assessment has been finished	
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• Operations for reviewing one's own Taken Assessments:

Get all the AssessmentTakens started by the user during a given period of time

Get all the AssessmentTakens started by the user

Get all the AssessmentTakens in progress by the user during a given period of time

Get all the AssessmentTakens in started but not completed by the user

### Get all the AssessmentTakens completed by the user

Operations for reviewing Items and Responses in Taken Assessments:

Get the Items questioned in an AssessmentTaken

Get the submitted Responses from an AssessmentTaken

Get a list of grade entries for this AssessmentTaken if available

Minimally Supported Attributes of *AssessmentsTaken*:

- A unique and permanent identifier
- The name of the AssessmentTaken
- A description of the AssessmentTaken
- The type of the AssessmentTaken
- The taker associated with the AssessmentTaken
- The AssessmentOffered associated with the AssessmentTaken

Minimally Supported Attributes of Responses:

- The assessment Item to which this Response was submitted
- Attributes of the Response that are unique to the particular question Type

## AssessmentBank

A directory or other kind of organizational construct for managing the entities of assessment. Such a grouping serves to separate assessment related entities for a different course, organizations, departments, etc, and to scope searches.

Also known as: Catalog

□ Read Operations for *AssessmentBanks*:

Score

- Get AssessmentBanks given unique Ids
  Get all the AssessmentBanks in a system or Catalog
  Query AssessmentBanks based on attribute-based query terms or keywords
  Traverse Hierarchical relationships between AssessmentBanks
  Register for notifications that AssessmentBanks have been created, updated or deleted
  Begister for patifications that biorarchical relationships between AssessmentBanks
  - Register for notifications that hierarchical relationships between AssessmentBanks have been created, updated or deleted
- □ Write Operations for *AssessmentBanks*:
  - Create, Update and Delete AssessmentBanks
    Add an alias Id to reference an existing AssessmentBank
    Manage Hierarchical relationships between AssessmentBanks

Minimally Supported Attributes of AssessmentBanks:

- A unique and permanent identifier.
- The name of the AssessmentBank
- A description of the AssessmentBank
- The type of the AssessmentBank
- The provider of this AssessmentBank
- Any available branding for this AssessmentBank, for example, an organizational logo
- Any licensing (terms of usage) associated with this AssessmentBank