

SCORM 2004 - 3RD EDITION

Dot-Notation Binding	Data Type	Details
<i>cmi._version</i>	characterstring	Represents the version of the data model
<i>cmi.comments_from_learner._children</i>	characterstring: comment, location, timestamp	Listing of supported data model elements
<i>cmi.comments_from_learner._count</i>	Non-negative integer	Current number of learner comments
<i>cmi.comments_from_learner.n.comment</i>	localized_string_type (SPM: 4000)	Textual input
<i>cmi.comments_from_learner.n.location</i>	characterstring (SPM: 250)	Point in the SCO to which the comment applies
<i>cmi.comments_from_learner.n.timestamp</i>	time(second,10,0)	Point in time at which the comment was created or most recently changed
<i>cmi.comments_from_lms._children</i>	comment, location, timestamp	Listing of supported data model elements
<i>cmi.comments_from_lms._count</i>	Non-negative integer	Current number of comments from the LMS
<i>cmi.comments_from_lms.n.comment</i>	localized_string_type (SPM: 4000)	Comments or annotations associated with a SCO
<i>cmi.comments_from_lms.n.location</i>	characterstring (SPM: 250)	Point in the SCO to which the comment applies
<i>cmi.comments_from_lms.n.timestamp</i>	time(second,10,0)	Point in time at which the comment was created or most recently changed
<i>cmi.completion_status</i>	state (completed, incomplete, not_attempted, unknown)	Indicates whether the learner has completed the SCO
<i>cmi.completion_threshold</i>	real(10,7) range (0..1)	Used to determine whether the SCO should be determined complete
<i>cmi.credit</i>	state (credit, no_credit)	Indicated whether the learner will be credited for performance in the SCO
<i>cmi.entry</i>	state (ab_initio, resume, _nil_)	Asserts whether the learner has previously accessed the SCO
<i>cmi.exit</i>	state (timeout, suspend, logout, normal, _nil_)	Indicated how or why the learner left the SCO
<i>cmi.interactions._children</i>	characterstring: id, type, objectives, timestamp, correct_responses, weighting, learner_response, result, latency, description	List of supported data model elements

<i>cmi.interactions._count</i>	Non-negative integer	Current number of interactions being stored by the LMS
<i>cmi.interactions.n.id</i>	long_identifier_type (SPM:4000)	Unique label for the interaction.
<i>cmi.interactions.n.type</i>	state (true_false, multiple_choice, fill_in, long_fill_in, matching, performance, sequencing, likert, numeric, other)	Which type of interaction is recorded
<i>cmi.interactions.n.objectives._count</i>	Non-negative integer	Current number of objectives (i.e. objective identifier) being stored by the LMS for this interaction
<i>cmi.interactions.n.objectives.m.id</i>	long_identifier_type (SPM: 4000)	Label for objectives associated with the interaction
<i>cmi.interactions.n.timestamp</i>	time(second,10,0)	Point in time at which the interaction was first made available to the learner for learner interaction and response
<i>cmi.interactions.n.correct_responses._count</i>	Non-negative integer	Current number of responses being stored by the LMS for this interaction
<i>cmi.interactions.n.correct_responses.n.pattern</i>	Format depends on interaction type.	One correct response pattern for the interaction
<i>cmi.interactions.n.weighting</i>	real (10,7)	Weight given to the interaction relative to the other interactions
<i>cmi.interactions.n.learner_response</i>	The data type for the value varies depending on the type of interaction.	Data generated when a learner responds to an interaction
<i>cmi.interactions.n.result</i>	state (correct, incorrect, unanticipated, neutral, real(10,7))	Judgment of the correctness of the learner response
<i>cmi.interactions.n.latency</i>	timeinterval (second,10,2)	Time elapsed between the time the interaction was made available to the learner for response and the time of the first response
<i>cmi.interactions.n.description</i>	localized_string_type (SPM: 250)	Brief informative description of the interaction
<i>cmi.launch_data</i>	characterstring (SPM: 4000)	Data provided to a SCO after launch, initialized from dataFromLMS manifest element
<i>cmi.learner_id</i>	long_identifier_type (SPM: 4000)	Identifies the learner on behalf whom the SCO was launched
<i>cmi.learner_preference._children</i>	characterstring: audio_level, language, delivery_speed, audio_mapping	Listing of supported data model elements

<i>cmi.learner_preference.audio_level</i>	real(10,7), range (0..*)	Specifies an intended change in perceived audio level
<i>cmi.learner_preference.language</i>	language_type (SPM 250) or empty characterstring	The learner's preferred language for SCOs with multilingual capabilities
<i>cmi.learner_preference.delivery_speed</i>	real(10,7), range (0..*)	The learner's preferred relative speed of content delivery
<i>cmi.learner_preference.audio_captioning</i>	state (off, no_change, on)	Specifies whether captioning text corresponding to the audio is displayed
<i>cmi.location</i>	characterstring (SPM: 1000)	The learner's current location in the SCO
<i>cmi.max_time_allowed</i>	timeinterval (second,10,2) - a time interval with resolution to 0.01 seconds	Amount of accumulated time the learner is allowed to use a SCO
<i>cmi.mode</i>	state (browse, normal, review)	Identifies one of three possible modes in which the SCO maybe presented to the learner
<i>cmi.objectives._children</i>	characterstring: id, score, success_status, completion_status, progress_measure, description	Listing of supported data model elements
<i>cmi.objectives._count</i>	Non-negative integer	Current number of objectives being stored by the LMS
<i>cmi.objectives.n.id</i>	long_identifier_type (SPM: 4000)	Unique label for the objectives
<i>cmi.objectives.n.score._children</i>	characterstring: scaled, raw, min, max	Listing of supported data model elements
<i>cmi.objectives.n.score.scaled</i>	real (10,7) range (-1..1)	Number that reflects the performance of the learner for the objectives
<i>cmi.objectives.n.score.raw</i>	real (10,7)	Number that reflects the performance of the learner, for objectives, relative to the range bounded by the values of min and max
<i>cmi.objectives.n.score.min</i>	real (10,7)	Minimum Number that reflects the performance of the learner
<i>cmi.objectives.n.score.max</i>	real (10,7)	Maximum Number that reflects the performance of the learner
<i>cmi.objectives.n.success_status</i>	state (passed, failed, unknown)	Indicates whether the learner has mastered the objectives
<i>cmi.objectives.n.completion_status</i>	state (completed, incomplete, not_attempted, unknown)	Indicates whether the learner has completed the

		associated objective
<i>cmi.objectives.n.progress_measure</i>	real (10,7) range (0..1)	Measure of the progress the learner has toward completing the objective
<i>cmi.objectives.n.description</i>	localized_string_type (SPM: 250)	Provides a brief informative description of the objective
<i>cmi.progress_measure</i>	real (10,7) range (0..1)	Measure of the progress the learner has toward completing the SCO
<i>cmi.scaled_passing_score</i>	real(10,7) range (-1 .. 1)	Scaled passing score required to master the SCO
<i>cmi.score._children</i>	characterstring: scaled, min, max, raw	Listing of supported data model elements
<i>cmi.score.scaled</i>	real (10,7) range (-1..1)	Number that reflects the performance of the learner
<i>cmi.score.raw</i>	real (10,7)	Number that reflects the performance of the learner relative to the range bounded by the values of min and max
<i>cmi.score.min</i>	real (10,7)	Minimum value in the range for the raw score
<i>cmi.score.max</i>	real (10,7)	Maximum value in the range for the raw score
<i>cmi.session_time</i>	timeinterval (second,10,2) - a time interval with resolution to 0.01 seconds	Amount of time that the learner has spent in the current learner session for this SCO
<i>cmi.success_status</i>	state (passed, failed, unknown)	Indicates whether the learner has mastered the SCO
<i>cmi.suspend_data</i>	characterstring (SPM: 64000)	Provides space to store and retrieve data between learner sessions
<i>cmi.time_limit_action</i>	state (exit_message, continue_message, exit_no_message, continue_no_message)	Indicates what the SCO should do when <i>cmi.max_time_allowed</i> is exceeded
<i>cmi.total_time</i>	timeinterval (second,10,2) - a time interval with resolution to 0.01 seconds	Sum of all the learner's session times accumulated in the current learner attempt
<i>adl.nav.request</i>	(restricted) characterstring (continue, previous, choice, exit, exitAll, abandon, abandonAll, and _none_), and a potential target delimiter represented as a characterstring.	Navigation request to be processed immediately following Terminate()
<i>adl.nav.request_valid.continue</i>	state (true, false, unknown)	Used by a SCO to determine if a Continue navigation request will succeed



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<i>adl.nav.request_valid.previous</i>	state (true, false, unknown)	Used by a SCO to determine if a Previous navigation request will succeed
<i>adl.nav.request_valid.choice</i>	state (true, false, unknown)	Used by a SCO to determine if a Choice navigation request for a particular activity will succeed