

Questions and Answers regarding the government provided solution for the new CAPdL requirement for one set of content deliverables that provide the credit producing content and the non-credit content; the so call "Browse" instruction.

1. What is the "Browse" Instruction?

The Army seeks to establish a low benchmark for the cost to develop and implementation effort necessary after delivery to satisfy the requirement of a single instructional file set that will satisfy credit and non-credit instructional needs. The "Browse" instruction solution is presented as a baseline that establishes a reasonable and limited amount of contractor effort (development side) as well a reasonable amount of additional government effort (implementation side). One set of files that the government uses for both the credited access and non-credited access is the most important factor of a satisfactory end state.

2. What new functional requirements are necessary for the contractor to program?

All Army SCOs must be coded to recognize when the "Browse" instruction is sent. Three methods must be honored and each is illustrated here. When any one of the tests presented below is true, the SCO must interact with the learner in a non credit, non data recording manner whenever any one of the following is true:

- #1 – The SCO is passed a keyword only parameter of "browse".
- #2 – The SCO is passed the keyword parameter "mode" or "cmi.mode" equated to "browse". In other words, the SCO is passed "cmi.mode=browse" or "mode=browse".
- #3¹ – The LMS sets the SCORM data element cmi.mode to "browse". Immediately after initialization, the SCO must get the SCORM data element cmi.mode.

1 - When cmi.mode is "browse" the SCO must recognize it and operate following ARMY browse conditions. Army browse conditions must be noted since LMS may have set their own method of implementing browse mode which the Army is not aware of. The current Army implementation of browse is intended to be innocent and LMS agnostic. Innocent since the content is expected to not make any actual "connection" with the LMS. Army SCOs may get (request) data from the LMS but, at this time, SCOs operating in this mode should not set any data elements in the LMS.

3. What other new capability will need to be coded into Army SCORM content?

The contractors will have to suppress SCORM communication calls to the LMS and provide a design that has more sources for critical data than just learner interactions. Lesson will not be able to provide internal “jumps” that are based on SCORM data or other LMS sourced information. The page restrictions based on learner interactions will not be required to function – this could result in code necessary to suppress errors generated from code that depends on sequencing and forced learner interactions. Since logic for complex checks on learning cannot be dependent on learner supplied data, new sources of data critical to proper COL presentation will be required. The user will have a control available from the GUI that will allow page navigation, even if only numerical page numbers the user must be provided with free movement capabilities when browsing.

4. What are the Army comments to the typical solution which can be described as “When there is no LMS API present, operate as standalone non-credit content”?

Eliminating the required connection to an LMS is valuable but is just the beginning to the Army. Eliminating SCORM data calls is not terribly difficult, that functionality is already being done by many SCORM developers to support testing access, offline access, access without an LMS, etc. Typically this functionality is being triggered by the failure of the SCORM API search routine. The Army has an exaggerated need for accessing training material after gaining credit. The Army finds the common solution restrictive since the manifest is used to generate the links provided to the learner. The Army finds the common solution problematic since it will not satisfy the need to execute the non-credit material from within the LMS.

5. Is the standalone “html menu file” worth managing another file?

The Army finds much added value by using an “html menu file” to access formal credit producing content and play it disconnected for no credit. In fact, the Army “browse” instruction allows the off-line, non-credit content (and combination of its parts) to become LMS objects that can be used like any other non-required LMS resource/object. The “html menu file” provides off-line access to SCORM content; explode a SCORM package and use the browser to play the “html menu file” delivered to the target directory. The “html menu file” facilitates the deconstruction and reconstruction of SCOs into new collections, if a common storage area is established such manipulation would be as easy as creating a new “html menu file” without any other action. Random note: The fact that Army requirements would not be met by a typical solution is behind the name: The Army “Browse” Instruction.

6. What contractual requirements are necessary for the additional file used in the “Browse” instruction?

The contractor shall add a “Table of Contents” style HTML file to the root level of the SCORM package. This file shall be named appropriately, such as “PKG-Table_of_Contents.html” or “Title-TOC.html” and text presented should be similar (or match exactly) the LMS presented Table of Contents text. By duplicating Organization Section elements the standalone HTML menu will, by definition, use the same links as the Table of Contents generated by the LMS. Each HREF link in the standalone html menu file shall include a parameter as described in #1 or #2 presented above in the question “What new functional requirements are necessary?”

7. What are some pros and cons from using a standalone “html menu file” for access.

Pros	Cons
User/learners have direct access via a web link	New contractor task
LMS TOC replaced by html interface. Html easily presents an improved visual presentation, doors are open for “hidden functionality” and Easter eggs.	Additional file to process and manage
Most instructional functionality (Internal activities, links, accessing supporting material) is preserved	LMS supplied data is not available (student name, SCO name,...)
Off-line/disconnected playability (no credit)	
Content is available from other LMS loaded courses.	
LMS interface is removed.	LMS interface is removed.
Even loading into an LMS as a non-credit course is an option.	
Simple manipulation of numerous access schemes by adding and removing items	Additional files to manage
Simplifies the deconstruction and reconstruction of SCOs into new collections	
If content is built and stored with a logical naming and folder scheme, new collections/courses of sustainment and non-credited content can be created by simply creating a new “html menu file”	

8. Are contractors required to implement the “Browse” instruction as described here?

No. The “browse” instruction documentation has many goals. All tied to providing contractors with information that will assist and encourage their examination of innovative alternatives rather than providing “cookie cutter” and template driven responses to Army dL requests for bids.

1. Essentials provided for the contractors:
2. The minimum requirements necessary to fulfill a contract capability
3. The expected government effort towards setup and maintenance regarding the new capability
4. The government’s estimate of the contractor’s effort (or contractors cost) to successful meet the minimum requirements of the new capability.

And finally the “Browse” instruction is a case that the government has not directed the contractor “how to” satisfy this capability but has provided an example of a reasonable and usable implementation design. The government intends that contractors use the “Browse” instruction solution as a gauge of their innovative solutions to encourage tweaking that will make their solution stand out. If they so chose, contractors may provide their interpretation and implementation of the “Browse” instruction described here. It is hoped the contractors will be challenged to produce an improved solution compared to the specifics in the “Browse” instruction (or at least expand on the benefits and value).