LEARNER RECORD:

TIPS FOR IDENTIFYING PROBLEMS

Understanding the background

1 Gather relevant data and information.

It's important that you start by gathering some information about the problem before you start your investigation.

This might/should include:

- Is this an isolated incident or have other people experienced the problem?
- What browser was the learner using and what is the browser version number?
- Where was the learner when they completed the module?
    - Home
    - Office
    - Off site
- What happened when they used the module?
    - Have they completed it and then returned?
    - Did they get part way through and then resumed?
    - Did they see any onscreen warnings?
- Can they provide a screenshot of the screen in module or the LMS information?
- Where were they in the module when the problems occurred (if relevant).

Based on this information you can establish if there is a problem, a potential network related issue or perhaps user error.

For example:

- If only one person has experienced the problem, it would be worth checking the course logs to establish if or when they access the module.
- If lots of people have had problems and all were unable to move forward from a particular slide it would be worth checking the SCORM package hasn't got a development bug.
- If only one person had the problem and they were completing the module on a train, this might indicate a network issue.

Source file and SCORM

2 Check the completion settings in the development tool.

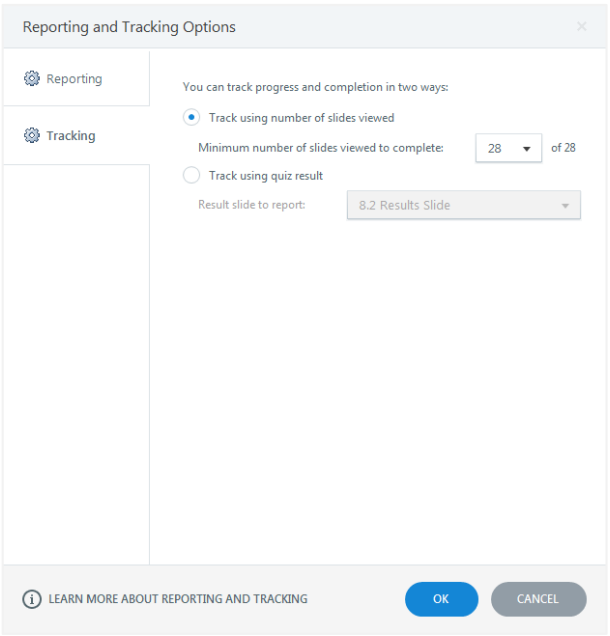
Issues relating to the correct updating of learner records often relate in the development source file rather than Moodle itself. The wrong criteria set here can mean the learner can't do what is necessary to complete the module.

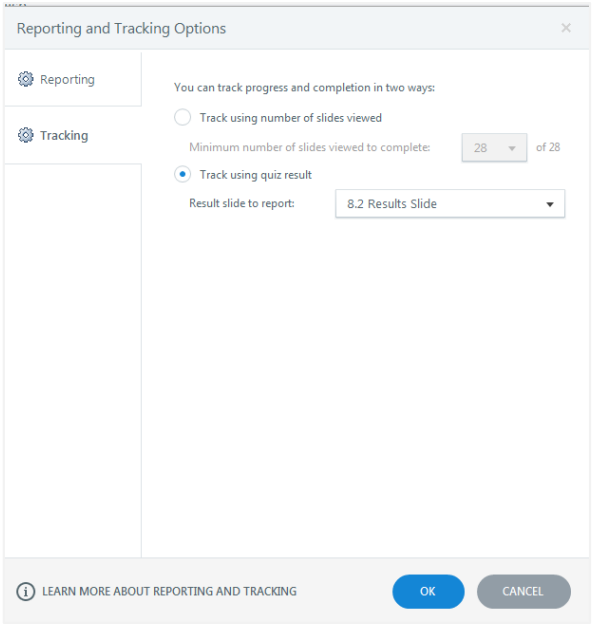
Storyline Completion Settings

Within Articulate Storyline, the completion settings can be found in the Reporting and Tracking Options when publishing to the LMS.

Storyline allows **two** methods to track a learner's completion:

1. Number of slides viewed (Image 1)
2. Quiz result slide (Image 2)





1. Number of slides viewed

If the module is set to the total number of slides viewed, you need to consider if there are any optional slides (like help, additional information etc) that they may not select. If there is, and you haven't amended the number required in the drop-down then any learner that does not view that slide will be unable to get a completed status. If you have any optional slides you will need to amend the setting for 'Track using the number of slides viewed' to take these out of the calculation.

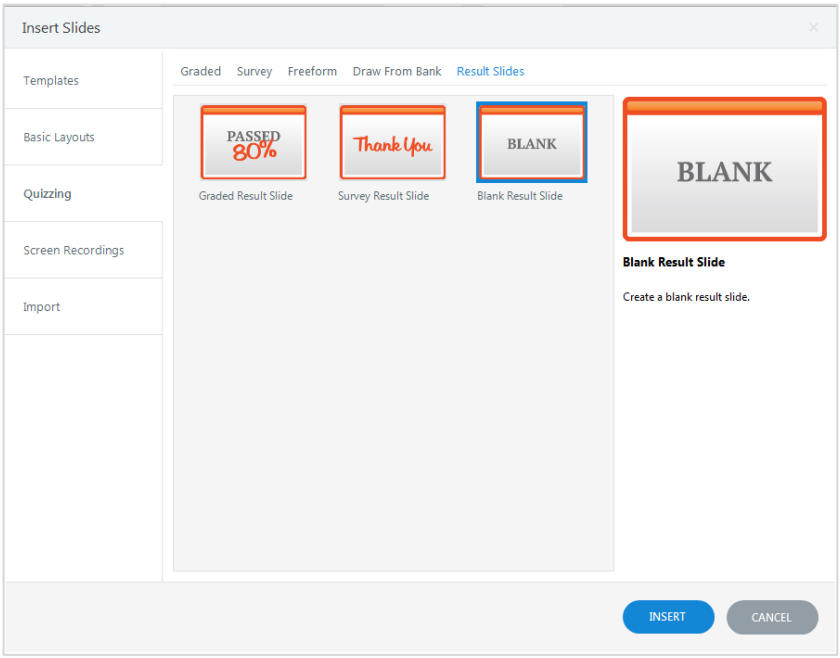
This may cause problems if you have specific routes for learners (for example, staff do a different section to volunteers). If one route is shorter than another you will need to set this path to the shortest route overall. This will mean the person with the longest route may have their completion status updated as complete before they reach their last slide. In this instance consider using the Quiz Result slide option as a solution instead (see next section for instructions).

2. Quiz result slide

If you have a result slide at the end of your module it is normally preferable to use this. Please note that Storyline will use this option as default if it finds a result slide, so take care if this result slide is not at the end of the module, as it may show a false positive on you LMS.

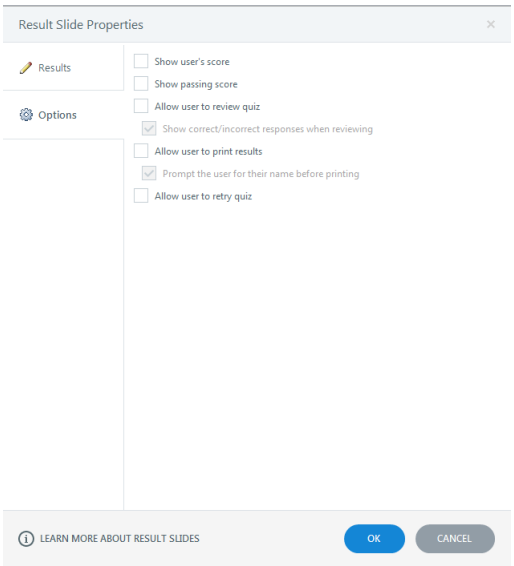
If you do not have a quiz, or your quiz is not at the end of the module (for example a pre-assessment) it may be worth considering putting in a fake result slide for tracking purposes.

To do this, go to insert slide and from the result slide tab and select BLANK (Image 3).



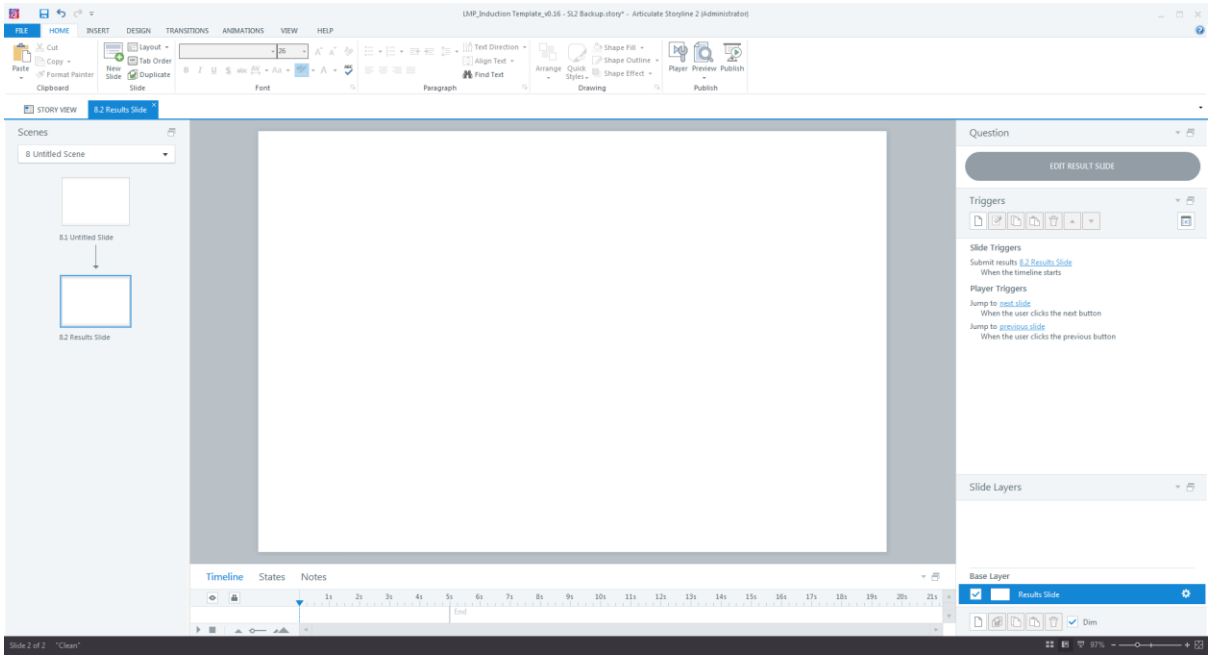
Inserting a blank result slide (Image 3)

In the options, untick everything to allow you to insert a blank slide (see Image 4).



Result slide options (Image 4)

This will insert a blank slide that you can use as your summary and close at the end of the module. You can then select this slide as the completion setting to ensure that the learner has reached the end of the module.



Blank result slide (Image 5)

3 Check the learners journey through the module.

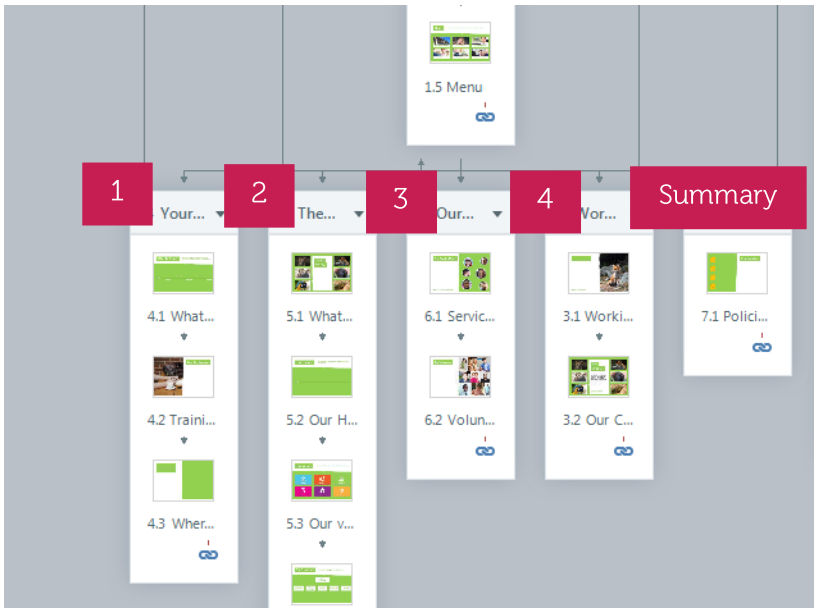
If the issue can't consistently be reproduced across learners or testers, (i.e. some learners get an issue and some don't, this may be a sign that the learner is able to inadvertently skip slides/sections.

Some learners/testers will take the implied path while others won't. For example, if you have a process diagram showing four steps, the implied path would be taking the steps 1, 2, 3 then 4. However, another learner may not follow this path and instead click to see what the final step is first.

If they are then guided to the next section without returning to the process diagram they will miss slides and therefore may return an incomplete status. This will also not be obvious to the learner who will believe they have legitimately completed the module.

There are two main solutions to this issue outlined below. Both involve the use of variables and conditions in Storyline. The solution you select should be based on the purpose/objective of the module rather than the technical solution.

1. Direct their progress through the module. This will involve ensuring that they have to complete a section before the next section is released. In our earlier example this would mean instructing them to click option 1 AND ensuring that the remaining options are not available until this has been completed (i.e. the last slide has been viewed). The next button will be disabled until they have completed the final slide on the final option. In the screenshot below you can see that the learner is using the menu to branch off to each section in a set order before they can reach the summary section.



Example of directed branching scenario (Image 6)

2. You can 'ring fence' the content until they have finished that collection of work and then allow them to move forward. Again the next button on the menu is disabled but this time the learner can access any of the options in any order but they still can't click next until all sections have been completed.

Example of ring fence branching scenario (Image 7)

The key difference between these options is what is releasing the next button.

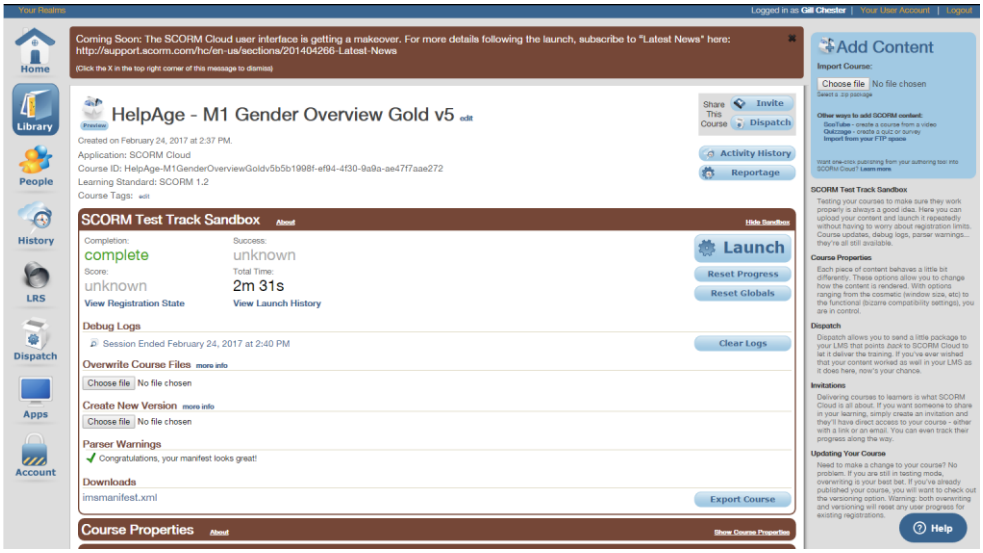
- In the first example the next button is released when the final slide in the final option is completed.
- In the second option the next button is realised when all the sections have been marked as completed.

4 Test the module on SCORM cloud

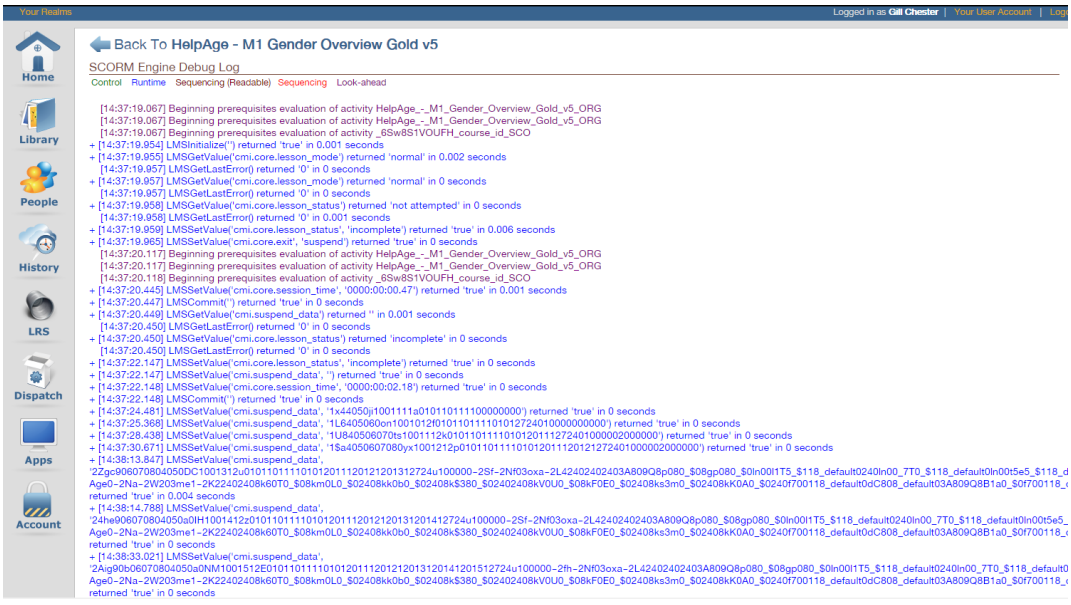
SCORM Cloud is a free online service that allows anyone with an Internet connection to upload a SCORM package quickly and simply. They can then run through the module as you would normally. After completing the module, you will have a summary of the SCORM information and access to debug logs making it easier to see if there are issues with the SCORM package before you consider if the issue sits with the LMS.

You can use this debug report to find red flags in the module that may be causing reporting issues. This may include the use of some Storyline quiz interactions. These can then be amended and the module uploaded to see if the problem has been resolved.

We would highly recommend all developers using this tool before they upload their modules to the LMS so they are confident that the module is reporting as expected.



Example of SCORM Cloud Summary Report (Image 8)



Example of SCORM Cloud Debug Report (Image 9)

Testing a SCORM on your LMS and checking Moodle settings.

Once you're confident that you've published your SCORM correctly it's time to check out how it behaves in the 'real world'. We've already talked about how to resolve issues with the design of the SCORM but what if you learners are still having issues? There could be some kind of conflict occurring within the LMS.

5 Testing in LMS

The first thing we'd always recommend is TEST First and then TEST AGAIN!

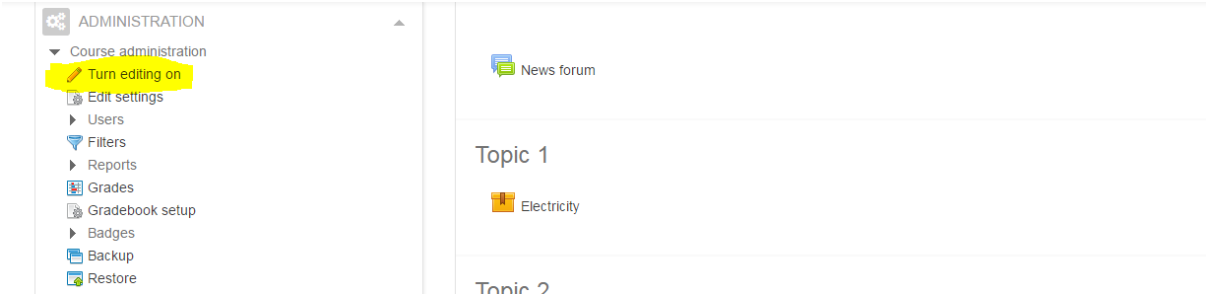
Does the SCORM behave as expected when accessed subsequent times? Sometimes a SCORM which behaves perfectly well on the first attempt may put you into 'Review Mode' when you try to resume your previous attempt or begin a new attempt.

See Page 12 for more information about Review Mode.

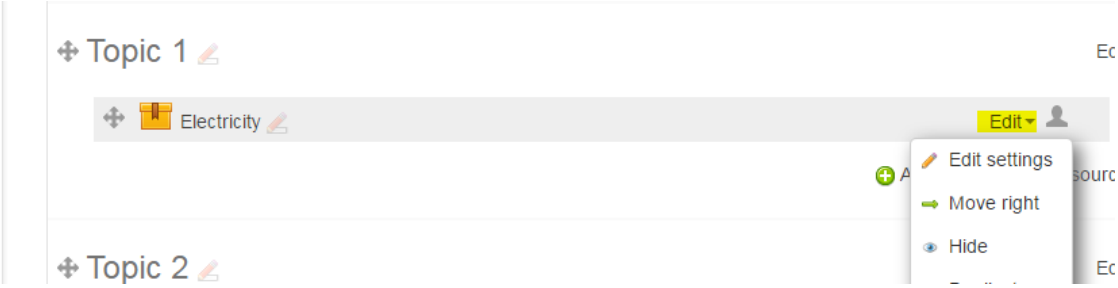
6 Moodle Settings Which Can Cause Review Mode

Force Completed - It's possible that the SCORM is registering as complete even though you're still in progress and would like to resume your previous attempt. The SCORM settings within Moodle might be forcing a status of 'Completed' so when you exit, it marks you as completed and then when you try to resume you're put into a state where you can only resume in Review Mode or start a brand new attempt from the beginning

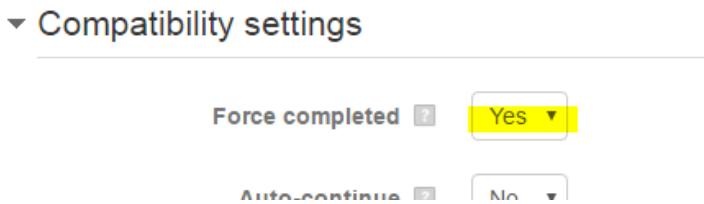
To check this setting go to the course page and ensure you have editing turned on:



Use the 'edit' drop down menu to go into 'Edit Settings'



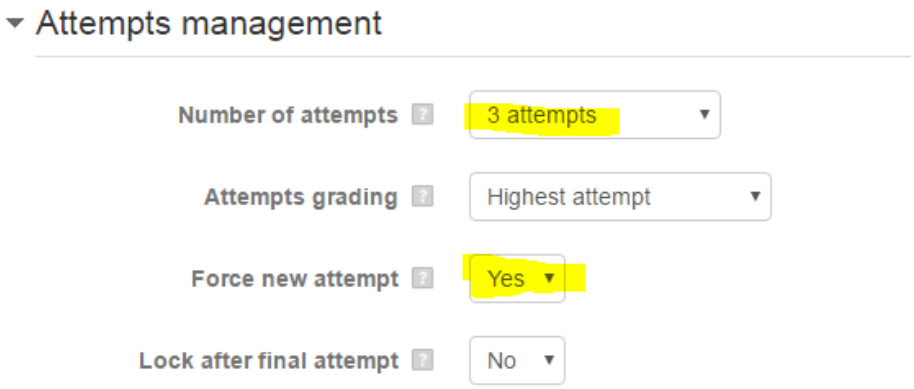
Go to Compatibility Settings and check for Force Completed



Force New Attempt/Max Number of Attempts – If the compatibility settings are OK, there may be problems within the 'Attempts Management' section. Again this can be found in the edit settings menu on the SCORM.

The key things to look for here are:

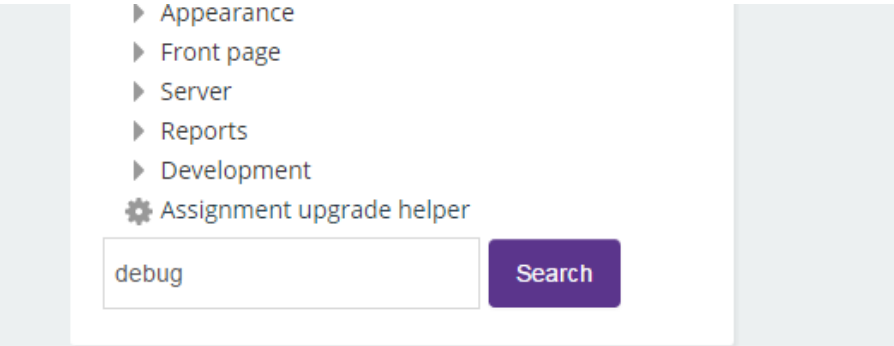
- Force New Attempt – If set to Yes, the learner will be unable to resume an incomplete attempt
- Number Of Attempts – If a value has been set (rather than unlimited) the user will not be able to record any further progress once they've reached the maximum allowed attempts and can only access in Review Mode



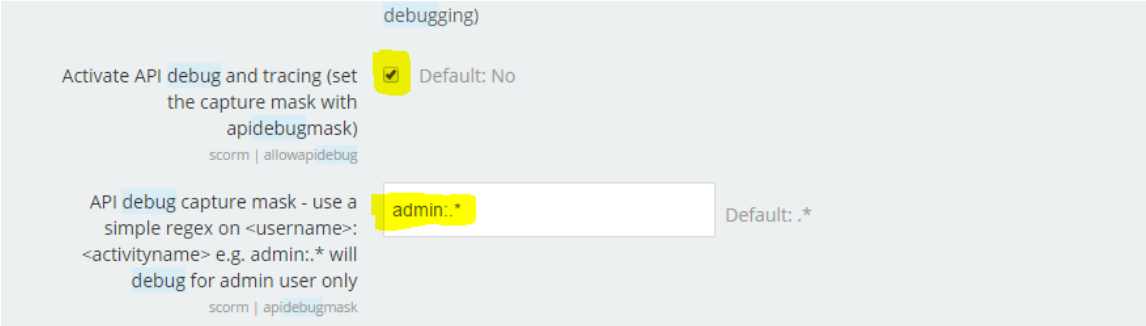
7 Activating the SCORM API Tracking Log

This useful tool allows you to 'track' in real-time the communication between the SCORM and the LMS. It's particularly useful to see when the SCORM sends a lesson status and what status is sent.

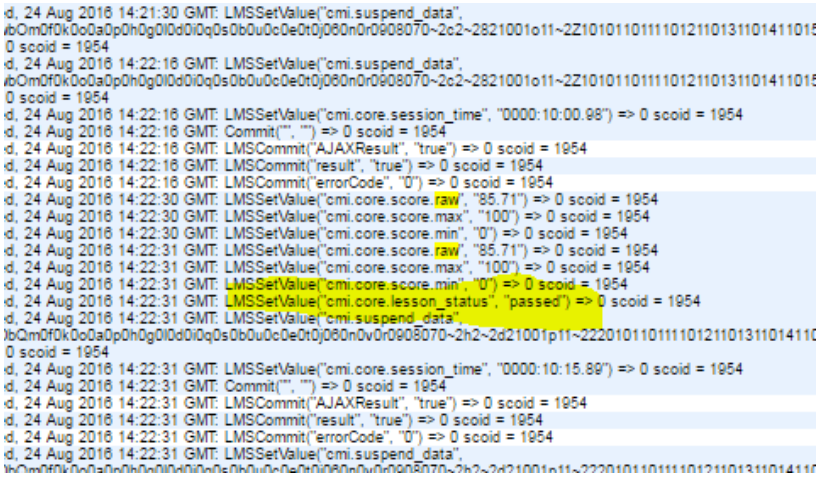
The Site Administration menu has a 'Search' feature. Type debug into this box and click on Search:



Activate the API log by ticking the box and set your username. Note that the username must be followed by a colon then a full stop and then an asterisk as per the example below:



Whilst the API log is active, it will display as a separate pop-up window whenever you launch a SCORM but only for the user you've indicated in the debug settings above. Here's an example extract from the API tracking log showing a SCORM then sends both lesson status and score information

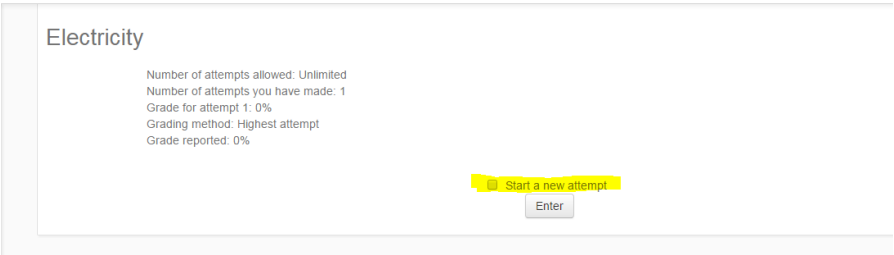


Understanding Review Mode

Sometimes users may see the words "Review Mode" in the top left hand corner of a course screen. It's important to know that when in Review Mode your progress will NOT be saved. Review Mode is triggered by your previous lesson status and its functionality serves two purposes:

1. To prevent accidental overwrite of a previous completed or passing status.
2. To allow users to Review or Practice a course without registering an official attempt.

The Review Mode works in conjunction with an option that may sometimes appear when launching a course module. This option is to "Start New Attempt" and is a tick box that when selected, instructs the system you're intending to record a brand new attempt.



The tick box won't always appear but is triggered by the previous lesson status as follows:

Incomplete - if you're attempting a module for the first time or are resuming an incomplete attempt then you will be allowed to resume from your last saved point or start from the beginning. Note that this is NOT a new attempt but resuming the existing attempt at a point of your choosing. The tick box for "Start New Attempt" will not be shown.

Failed - For assessment modules (such as tests and quizzes) where a score is recorded you will receive the lesson status of Failed if you don't achieve the required grade. When you next launch the course the option to Start New Attempt is shown.

If you select this option your previous attempt remains recorded in the system and a new attempt is recorded (attempt 2, attempt 3 etc). This is important for compliance and reporting purposes. It may be that you only allow a maximum number of attempts on a test and need to record this to highlight where users may need further guidance or learning. If you do NOT select the option to start new attempt, then Review Mode is triggered.

The user will be allowed to progress through the course but the attempt will not be recorded. This prevents their previous Fail being overwritten and also gives users a chance to practice or review the test before committing to another attempt.

Passed - For Test style modules where a score is recorded you will receive the lesson status of Passed if you achieve the required grade. When you next launch the course the option to Start New Attempt is shown. If you select this option your previous attempt remains recorded in the system and a new attempt is recorded (attempt 2, attempt 3 etc). If you do NOT select the option to start new attempt, then Review Mode is triggered.

The user will be allowed to progress through the course but the attempt will not be recorded. This prevents their previous Pass being overwritten and also gives users a chance to practice or review the test before committing to another attempt

Completed - If you have previously completed the module, you won't want to accidentally overwrite your previous completed status. When you next launch the module the Start New Attempt option is shown. If you do NOT select the option to start new attempt, then Review Mode is triggered.

The user will be allowed to progress through the course but the attempt will not be recorded. This prevents their previous completed status being overwritten and also gives users a chance to practice or review the module before committing to another attempt