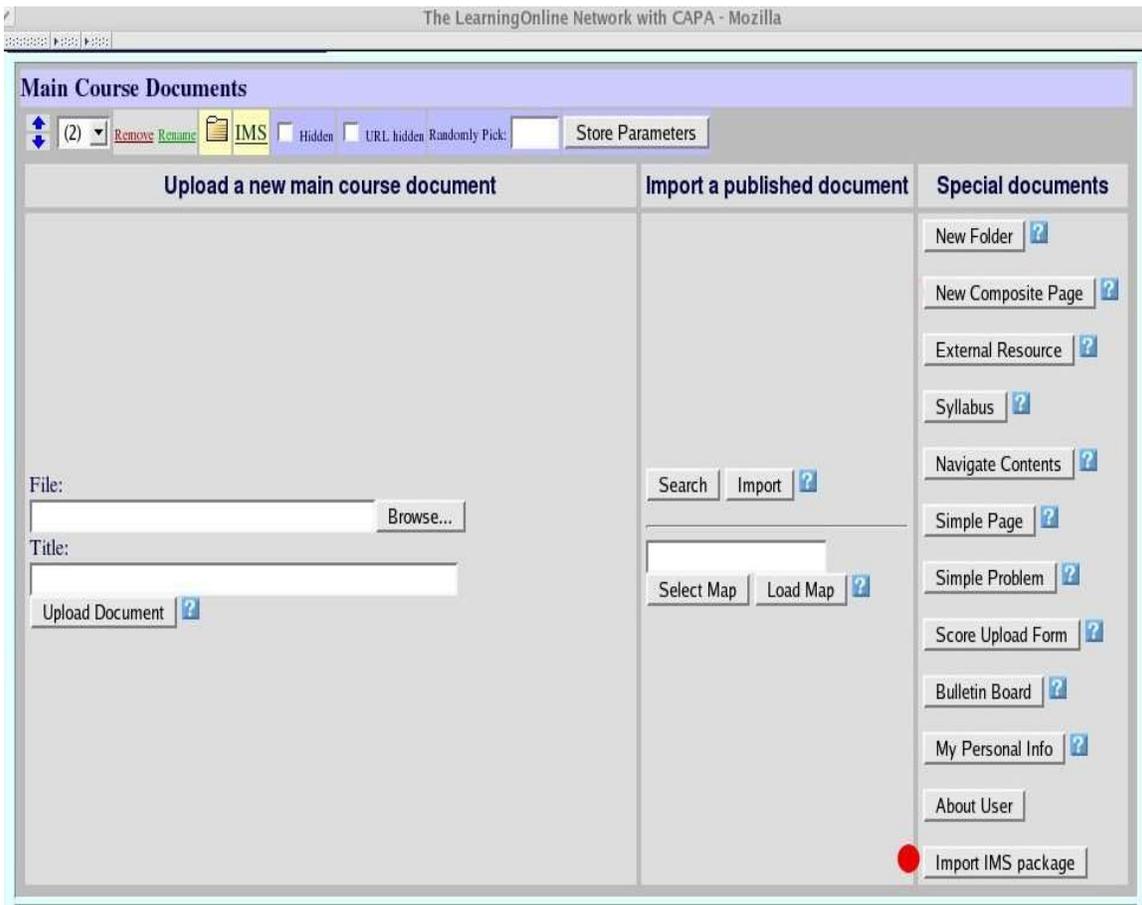


## Importing content from IMS packages created by other Course Management systems into LON-CAPA.

### 1. Import directly into a course (using DOCS -> Import IMS package)

- suitable for course content – (e.g., web pages, word documents, spreadsheets, power point files etc.)
- can also be used for simple assessments (as generated in Blackboard).
- only requires the user to have a Course Coordinator role

(a) Log-in and select the Course Coordinator role in a course. Click DOCS. You will make use of the “Import IMS package” button in the “Special documents” area.



(b) Import IMS package opens a separate window (so pop-up windows must be enabled either globally or for the specific server). Choose the CMS from which the IMS package was exported, and then click "Browse" to upload the IMS package (zip file).

**1 Specify the Course Management system used to create the package.**

Please choose the CMS used to create your IMS content package.

**2 Locate the IMS content package you wish to upload.**

If you have selected the CMS, and located the IMS package, you should click the 'Upload IMS package' button to upload the file to the server.

(c) The next step is to review the types of content found in the IMS package, and indicate which should be imported. In the case of discussion boards, a decision is required about whether to import topics, topics+postings (+ author), or topics+postings (-author). Similarly, for class enrollment, a choice can be made to import only students, or all users.

**3 Choose which content types you wish to import**

Import?	Content type	Additional options
<input type="checkbox"/>	Documents, pages, and folders - 131 item(s)	None
<input type="checkbox"/>	Links to external sites - 1 item(s)	None
<input type="checkbox"/>	Announcements - 7 item(s)	None
<input type="checkbox"/>	Staff information - 3 item(s)	None
<input type="checkbox"/>	Discussion Boards - 1 item(s)	<-- Check Import first
<input type="checkbox"/>	Quizzes - 5 item(s)	None
<input type="checkbox"/>	Surveys - 1 item(s)	None
<input type="checkbox"/>	Question pools - 1 item(s)	None
<input type="checkbox"/>	Enrollment - 1 item(s)	<-- Check Import first

**4 Choose display options for listing of contents of top level of package.**

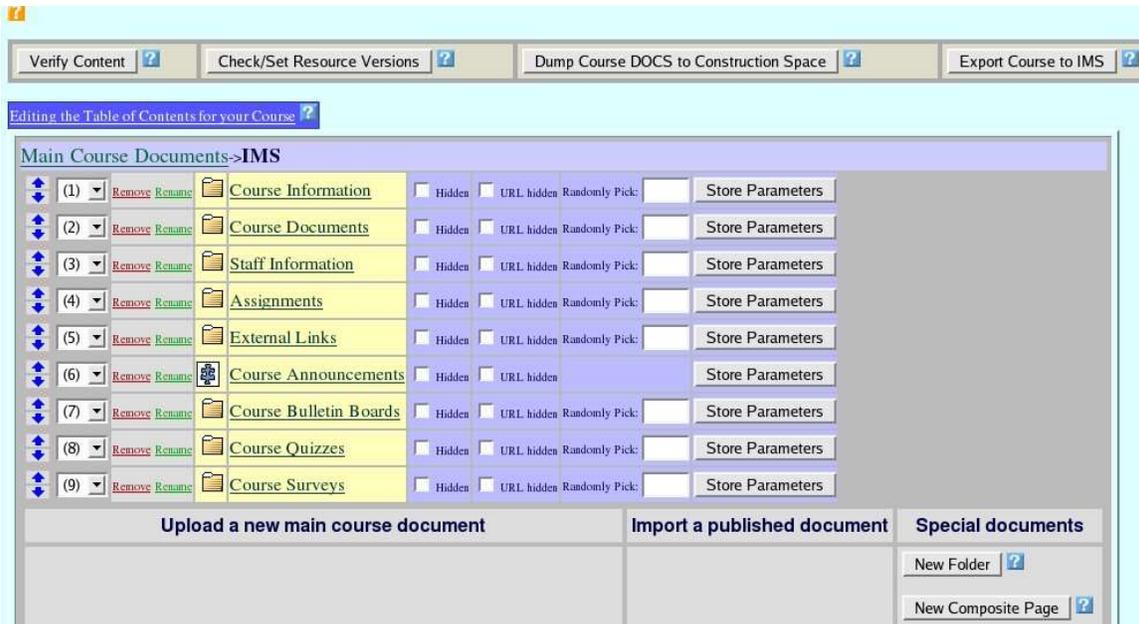
Display listing of contents in a new folder, with folder name:

Append listing of contents of top level of package to contents list for the current folder.

Once you have checked the checkboxes for all areas you wish to import from the IMS package, selected options (if available), and selected a display option for the package contents you should click the 'Complete Import' button.

A subsequent step (step 4) is used to specify the location within the course of the folders and/or files contained in the top level of the folder hierarchy described in the IMS package. Top level folders/files can either be accessed via a new folder, or appended to the list of items in the current folder.

(d) In the example shown here, items were imported into a folder called “IMS”.



(e) Two types of container are used to represent the hierarchy of folders and files described in the IMS package manifest. Folders behave as expected – they can contain other folders, files or pages. LON-CAPA “pages” are assemblies of files within a single web page. In general, LON-CAPA tries to reproduce the type of assembly displayed in the source CMS, so for example a Blackboard page which contained some text and uploaded image files will be translated into a LON-CAPA “page” with all text and images displayed in a single web page.

(f) Assessments

Use of DOCS -> Import IMS package results in the creation of LON-CAPA “Simple Problems”. These simple problems include a subset of the functionality of the problem creation available in Construction Space when authoring full-featured LON-CAPA problems. Simple Problems are of four types: radio, option, string and essay. Conversions adhere to the following scheme:

True/False -> radio, Multiple Choice -> radio, Multiple Select/Multiple Answer -> option, Fill-in-Blank -> radio, Ordering -> option, Matching -> option, Essay -> essay.

There is currently no numerical type available in Simple Problems. For these types of problem (not available in Blackboard or ANGEL, but present in WebCT) export to Construction Space should be used.

Note: if you import survey questions from Blackboard into a LON-CAPA course, using DOCS -> Import IMS package, the survey questions will be converted to simple problems, but some editing will be required before use, as LON-CAPA will report errors, because no correct answers have been identified. If these questions are to be used as survey items they should be imported into Construction Space, as the

(g) Editing imported items added to a course

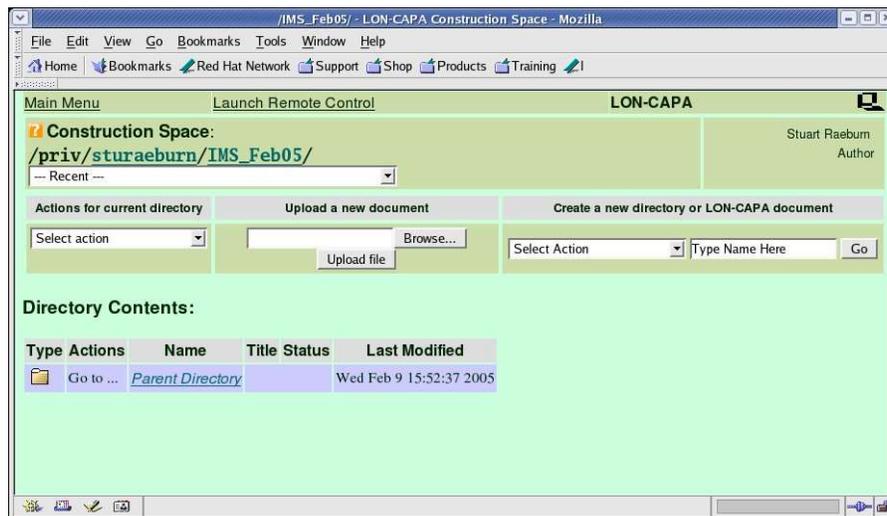
Once import is complete, folders and pages created by the import process can be renamed, deleted, or have items added to them or removed using the same tools available in the DOCS interface that are used to make changes to folders and/or pages added directly to a course.

## 2. Import into Construction space (using CSTR -> Upload file-> file type = IMS package)

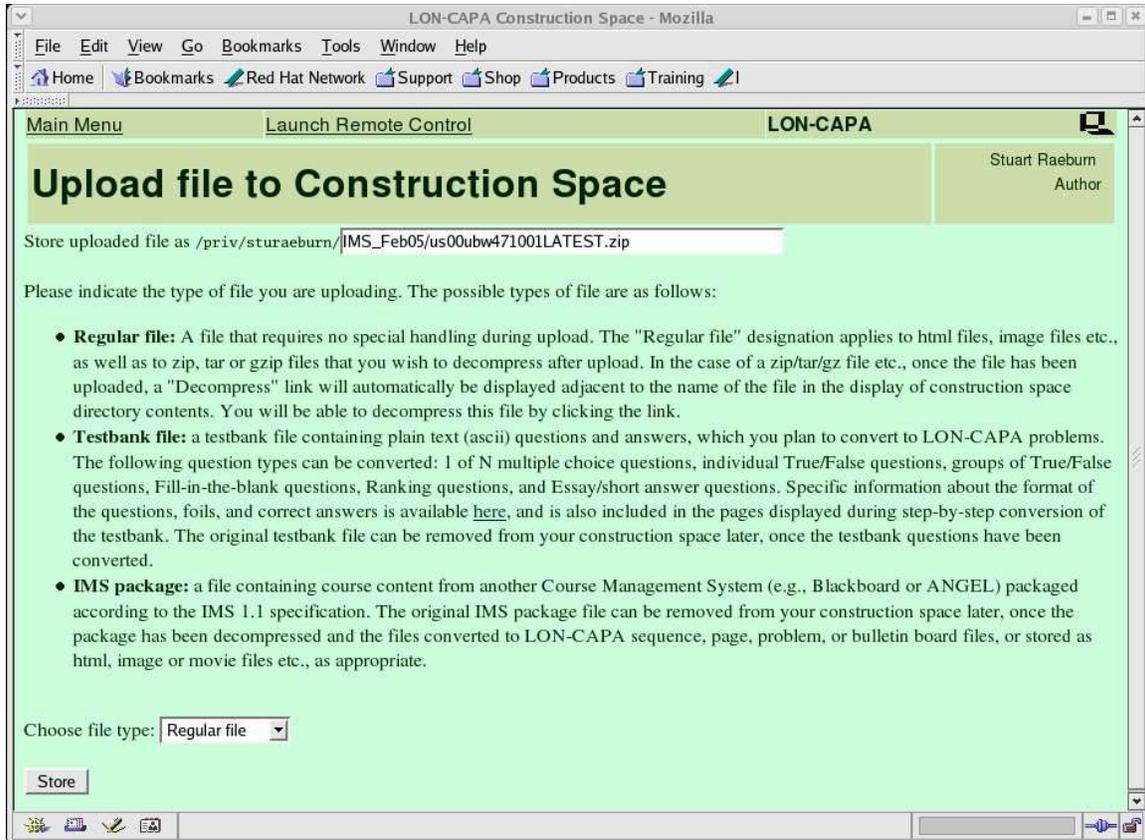
Import into CSTR can be used for all types of content, and is currently the only import option suitable for assessments that include numerical problems, with units, as generated in WebCT. IMS package contents will be divided into folders named: pages, problems, resfiles and sequences. The sequences folders contain LON-CAPA sequences that reproduce the original course hierarchy described in the IMS package. The .sequence files contained in these folders can be edited using the “Simple Editor”. This is also true for any .page files that have been stored in the pages folder. The .page files are containers that define an assembly of a number of resources that are to be displayed in a single page.

One of the current limitations of the import process is that file names used for resource files may not be very descriptive. Unfortunately renaming a resource file, .page file or .sequence file will require editing of any .sequence or .page files which contain a reference to the renamed file. A post-IMS import cleanup tool, which would automatically propagate name changes (as required) would help with this process. The import procedure is as follows:

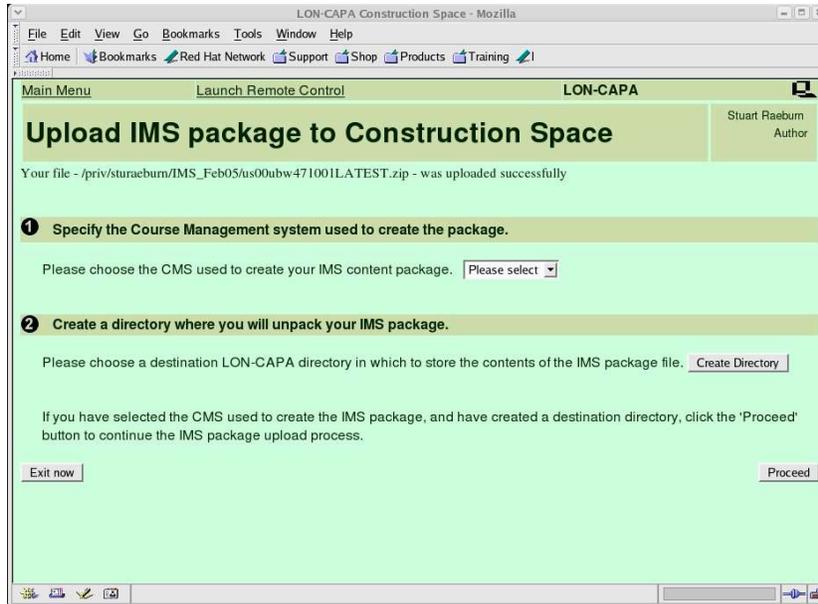
- (a) Log-in and select the Author role. Then use “Browse” in the middle “Upload a new document” column to locate an IMS package (in zip format) stored on your computer.



(b) Click upload file, and then select “IMS package” when prompted for the file type. Click “Store”.



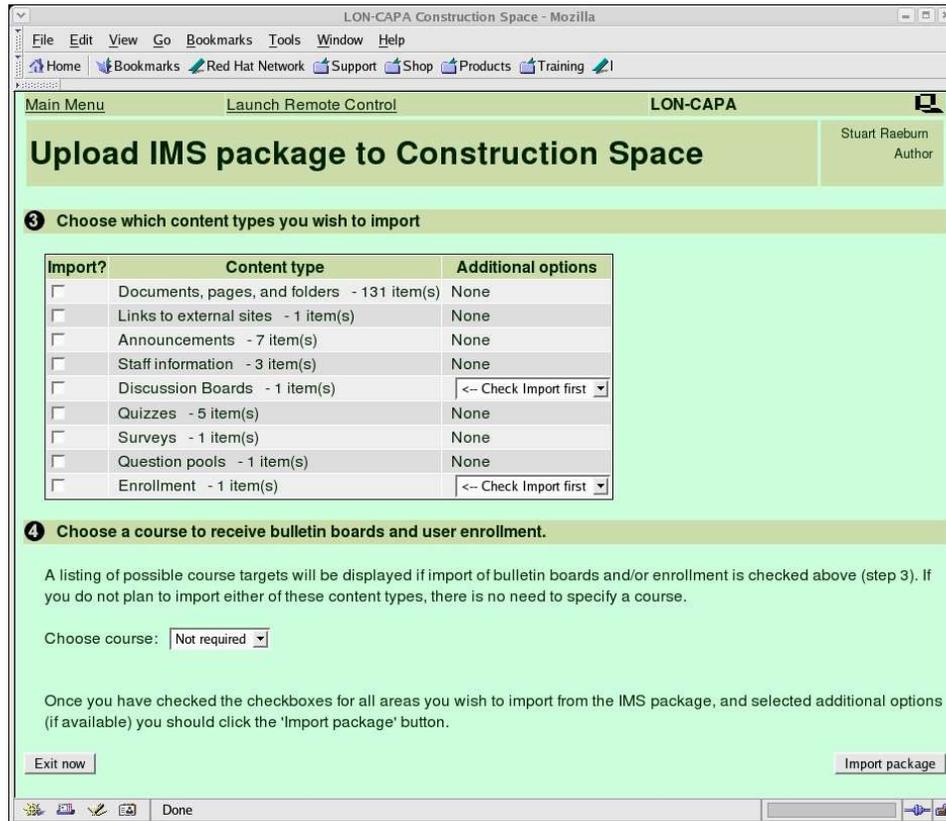
(c) Indicate which CMS was used to create the IMS package, and then click “Create Directory” to specify a directory to store the imported items.



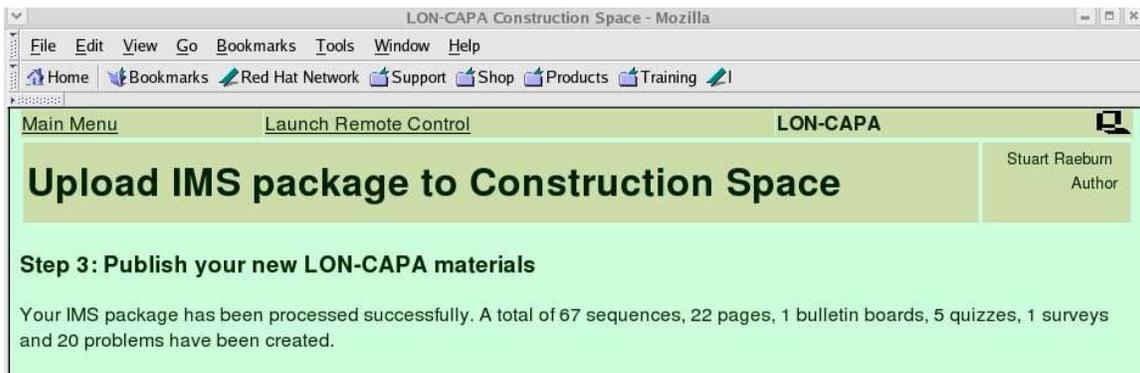
(d) A separate window will be launched in which you will specify the name of the directory in which the contents of the IMS package will be stored.



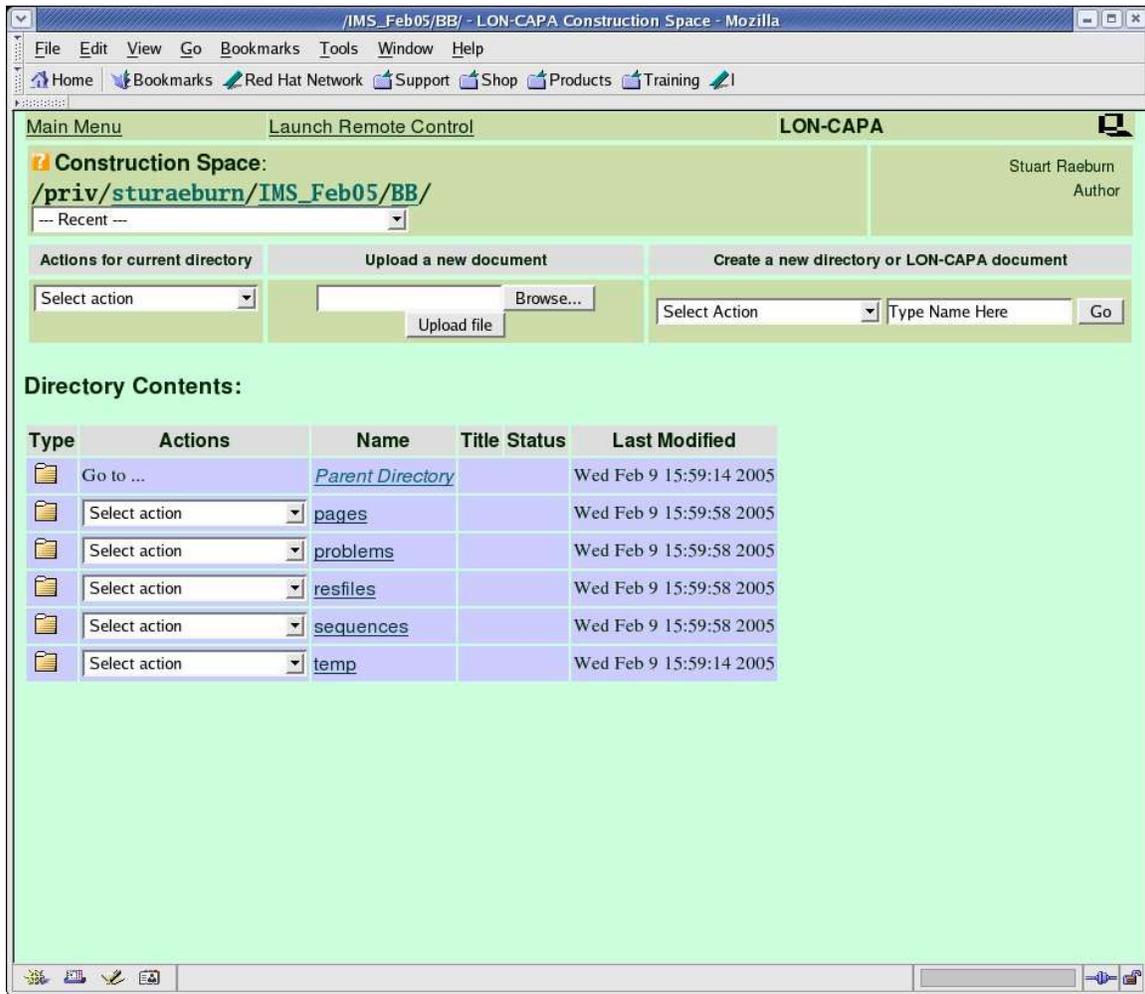
(e) Next specify which components described in the manifest for the IMS package, should be imported. In the case of discussion boards and class rosters you will need to specify additional options, and also identify a course (in which you have a Course Coordinator role) in which discussion boards should be stored.



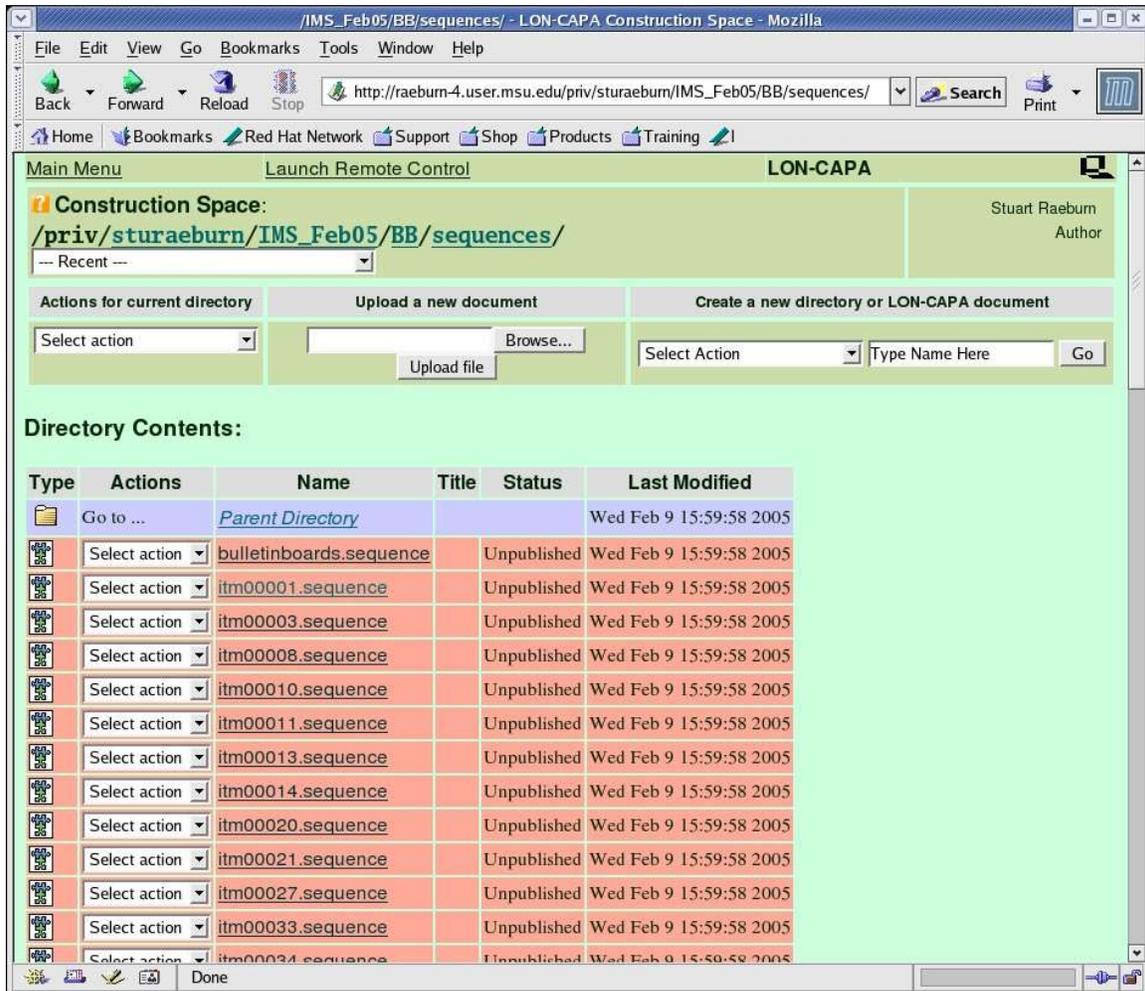
(f) Click “Import package” to complete the process.



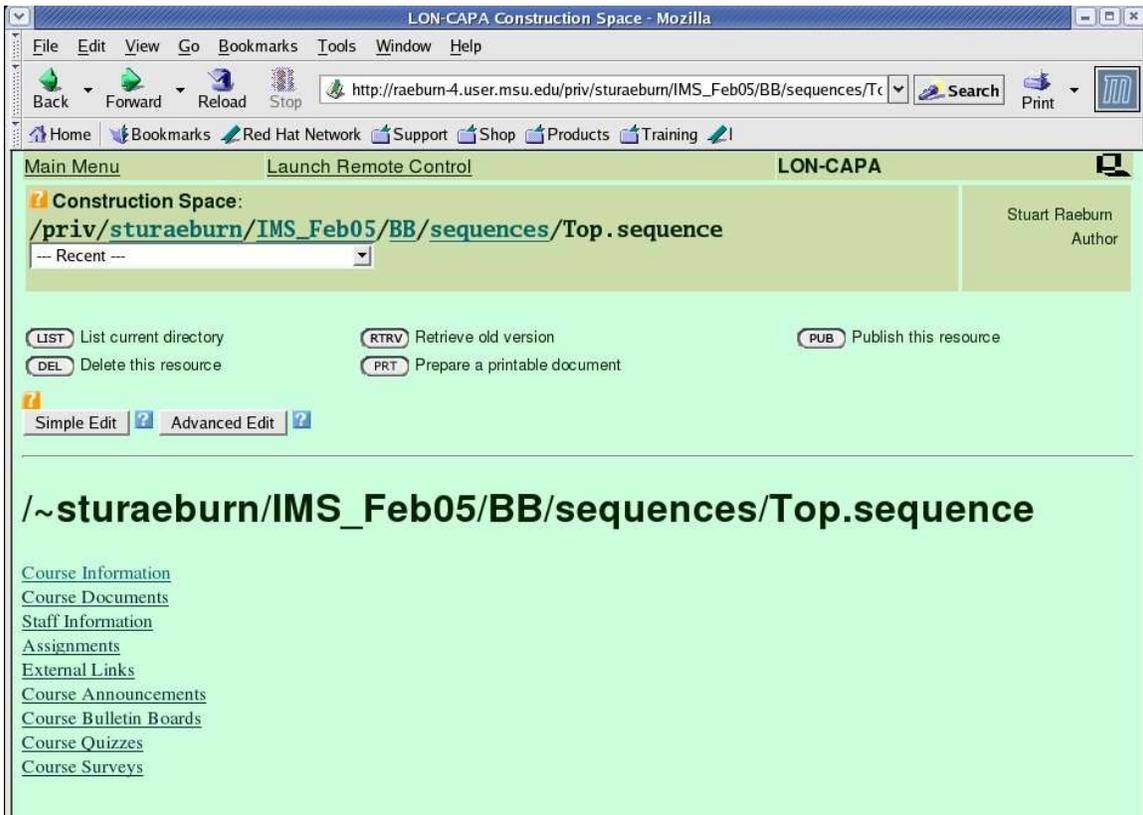
(g) Then click Main Menu and CSTR to return to the top level of your construction space. Navigate to the new directory created to store the contents of the IMS package and you will see the following:



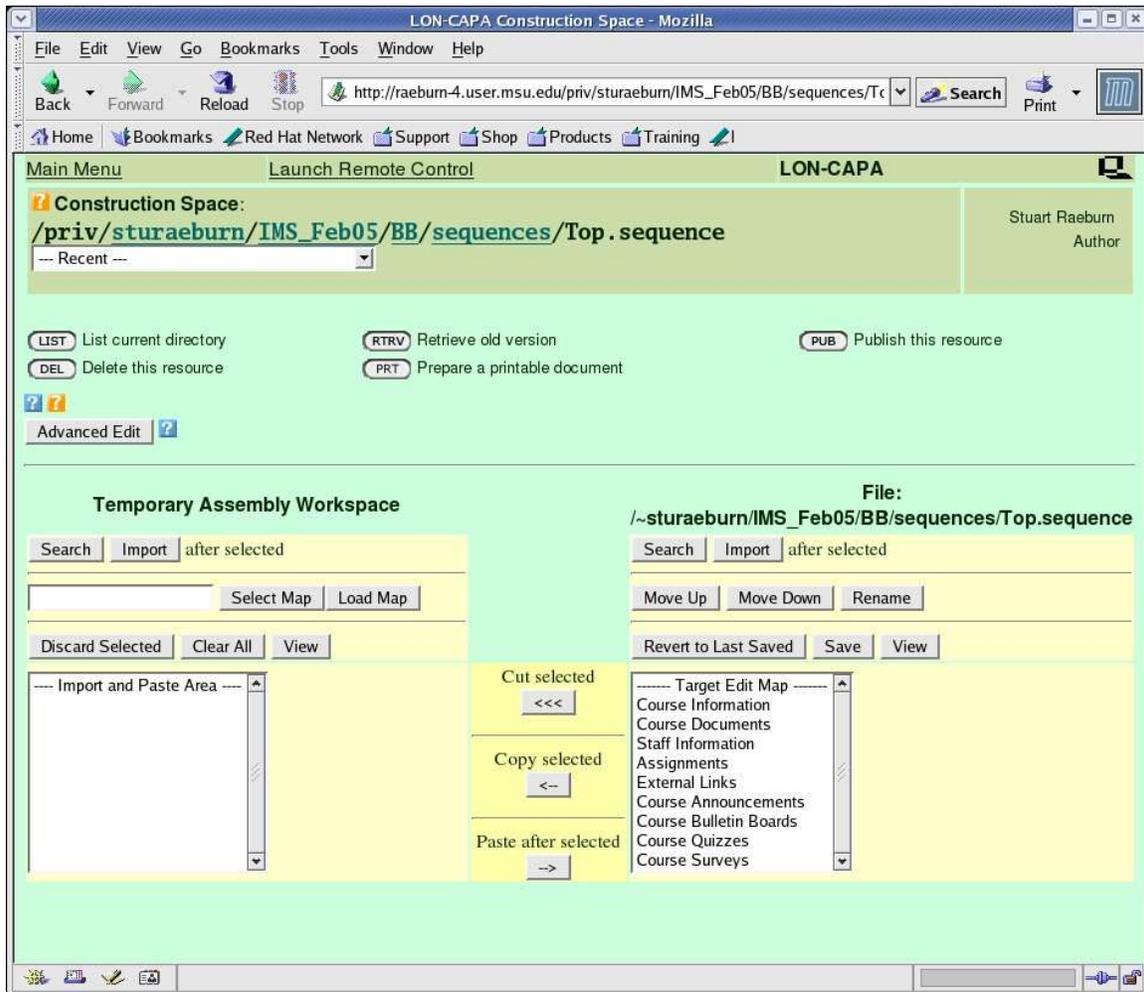
(h) Clicking on the sequences folder will display list of .sequence files created to replicate the hierarchy of folders used in the original course. There is a special sequence file called “Top.sequence” which is the top level of the course hierarchy. If this is imported into a course (after publication), then entire original course (as deployed in the source CMS) will be available in the LON-CAPA course.



(i) Clicking on any of the .sequence links in the sequences folder will display the contents of the assembled sequence. The order of the items can be changed using the “Simple Edit”.



(j) Items can be selected in the “Target Edit map” and moved open and down, or cut to change the ordering and to delete items from the .sequence. Click the “Save” button to save changes.



(k) Any sequences, pages, problems or resource files generated by the IMS import process must be published before they can be used in a LON-CAPA course.. However, once a file has been published, its file name may not be changed. It is of course possible to edit the file, change its access rights etc., but the file name will be set in stone. Another limitation is that directories may not be deleted. Although it is possible to move files between directories prior to publication, the caveat mentioned above about the consequent need to make additional changes to .page files or .sequence files that contain a reference to the file you moved will apply.

Publication can apply to an entire directory, or a directory and all its subdirectories (and their contents) recursively, or alternatively to individual files one at a time.