## 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.

The LearningOnline Net	work with CAPA - Mozilla	
Main Course Documents	re Parameters	
Upload a new main course document	Import a published document	Special documents
File: Browse Title: Upload Document	Search Import 2 Select Map Load Map 2	New Folder       ?         New Composite Page       ?         External Resource       ?         Syllabus       ?         Navigate Contents       ?         Simple Page       ?         Simple Problem       ?         Score Upload Form       ?         Bulletin Board       ?         My Personal Info       ?         About User       Import IMS package

(b) Import IMS package opens a separate window (so pop-up windows must be enabled either globally of 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).

Specify the Course Management sys	tem used to create the p	backage.
Please choose the CMS used to create y	our IMS content package.	Please select 💌
Locate the IMS content package you	wish to upload.	
	Browse	
If you have selected the CMS, and locate package' button to upload the file to the s	d the IMS package, you s erver.	hould click the 'Upload IMS
Exit now		Upload IMS packag

(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.

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

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

C Display listing of contents in a new folder, with folder name: Type Name Here

C 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.

Exit now

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.

Verify Content	Check/Set Resource Versions	Dump Course DO	OCS to Construction Space	Export Course to IMS
iting the Table of Contents	for your Course 7			
Aain Course Docum	ents->IMS			
(1) <u>Remove</u> Renume	Course Information	uRL hidden Randomly Pick:	Store Parameters	
🔹 (2) 🗾 <u>Remove Rename</u>	Course Documents	uRL hidden Randomly Pick:	Store Parameters	
🗧 (3) 🗾 <u>Remove Renume</u>	Staff Information Hidder	uRL hidden Randomly Pick:	Store Parameters	
(4) 📩 <u>Remove Rename</u>	Assignments Fidder	uRL hidden Randomly Pick:	Store Parameters	
(5) <u> </u>	External Links Fielder	uRL hidden Randomly Pick:	Store Parameters	
(6) <u>Remove Rename</u>	🔹 Course Announcements 🗖 Hidder	uRL hidden	Store Parameters	
(7) <u> </u>	Course Bulletin Boards	uRL hidden Randomly Pick:	Store Parameters	
(8) <u> </u>	Course Quizzes Internet	uRL hidden Randomly Pick:	Store Parameters	
(9) 📩 <u>Remove Rename</u>	Course Surveys	uRL hidden Randomly Pick:	Store Parameters	
Uplo	ad a new main course docume	ent In	nport a published document	Special documents
				New Folder
				New Composite Page

(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.

✓ //MS	_Feb05/ - LON-CAPA Constructi	on Space - Mozilla	×					
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	Main Menu Launch Hemote Control LON-CAPA R							
Construction Space:	,		Stuart Raeburn					
/priv/sturaeburn/IMS_Feb05	<u>/</u>		Author					
	<u> </u>							
Actions for current directory Up	load a new document	Create a new directory or LON-CAPA	document					
Select action	Browse	Select Action Type Name He	re Go					
	Upload file							
Directory Contents:								
Type Actions Name Title Sta	atus Last Modified							
Go to Parent Directory	Wed Feb 9 15:52:37 2005							
*****								

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

✓ LON-CAPA Construction Space - Mozilla	= [ [ ] ] *
File Edit View Go Bookmarks Tools Window Help	
A Home Bookmarks 2 Red Hat Network 🖆 Support 🖆 Shop 🖆 Products 🖆 Training 2	
Main Menu Launch Remote Control LON-CAPA	<u>e</u> -
Upload file to Construction Space	Stuart Raeburn Author
Store uploaded file as /priv/sturaeburn/IMS_Feb05/us00ubw471001LATEST.zip	
Please indicate the type of file you are uploading. The possible types of file are as follows:	
<ul> <li>Regular file: A file that requires no special handling during upload. The "Regular file" designation applies to ht as well as to zip, tar or gzip files that you wish to decompress after upload. In the case of a zip/tar/gz file etc., on uploaded, a "Decompress" link will automatically be displayed adjacent to the name of the file in the display of d directory contents. You will be able to decompress this file by clicking the link.</li> <li>Testbank file: a testbank file containing plain text (ascii) questions and answers, which you plan to convert to L The following question types can be converted: 1 of N multiple choice questions, individual True/False question questions, Fill-in-the-blank questions, Ranking questions, and Essay/short answer questions. Specific informatio the questions, foils, and correct answers is available <u>here</u>, and is also included in the pages displayed during step the testbank. The original testbank file can be removed from your construction space later, once the testbank que converted.</li> <li>IMS package: a file containing course content from another Course Management System (e.g., Blackboard or A according to the IMS 1.1 specification. The original IMS package file can be removed from your construction space later, one bulletin bo html, image or movie files etc., as appropriate.</li> </ul>	ml files, image files etc., ce the file has been construction space ON-CAPA problems. is, groups of True/False n about the format of -by-step conversion of sistions have been ANGEL) packaged pace later, once the ward files, or stored as
Choose file type: Regular file	

(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.

Y	LON-CAPA Construction S	Space - Mozilla	= = ×
<u>File Edit View G</u>	<u>ao B</u> ookmarks <u>T</u> ools <u>W</u> indow <u>H</u> elp		
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<u>Main Menu</u>	Launch Remote Control	LON-CAPA	Q
Upload I	MS package to Constr	uction Space	Stuart Raebum Author
Your file - /priv/sturae	eburn/IMS_Feb05/us00ubw471001LATEST.zip - wa	s uploaded successfully	
Specify the C	ourse Management system used to create the	e package.	
Please choose	the CMS used to create your IMS content packag	ge. Please select 💌	
O Create a direct	ctory where you will unpack your IMS package	e.	
Please choose	a destination LON-CAPA directory in which to sto	ore the contents of the IMS package file.	Create Directory
If you have sele button to contine	cted the CMS used to create the IMS package, a ue the IMS package upload process.	nd have created a destination directory, o	click the 'Proceed'
Exit now			Proceed
* • • •			-0-6

(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.

Create IMS import directory - Mozilla
The LearningOnline Network with CAPA
Location: /priv/sturaeburn/IMS_Feb05/
New Directory Enter the name of the new directory where you will store the contents of your IMS package.
/priv/sturaeburn/IMS Feb05/

(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.

Home 🛛 🔰	Bookmarks 🦧 Red Hat Network 📹 Support 📹 Shop (	🖆 Products 📺 Training 🥠 I		
in Menu	Launch Remote Control		LON-CAPA	
Iploa	ad IMS package to Co	nstruction S	Space	Stuart Raeb Aut
Choose	e which content types you wish to import			
Import?	Content type	Additional options		
Г	Documents, pages, and folders - 131 item(s)	None		
Г	Links to external sites - 1 item(s)	None		
Г	Announcements - 7 item(s)	None		
Г	Staff information - 3 item(s)	None		
Г	Discussion Boards - 1 item(s)	< Check Import first 💌		
Г	Quizzes - 5 item(s)	None		
Г	Surveys - 1 item(s)	None		
Г	Question pools - 1 item(s)	None		
Г	Enrollment - 1 item(s)	< Check Import first 💌		
Choose A listing o you do no Choose o	e a course to receive bulletin boards and us of possible course targets will be displayed if im of plan to import either of these content types, th course: Not required	er enrollment. port of bulletin boards an ere is no need to specify	nd/or enrollment is che a course.	ecked above (step 3)

(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:

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Main Menu Launch Remote Control LON-CAPA									
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Re	cent	1							
Actio	ons for current directory	Upload a ne	w document		Create a	new directory or LON-CAPA	document		
Selec	ct action		Browse.		Select Action	Type Name H	ere Col		
		Uploa	ad file		J Select Action	I hype wante h			
Direc	ctory Contents:								
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6	Go to	Parent Directory		Wed Feb 9	9 15:59:14 2005				
6	Select action	pages		Wed Feb 9	9 15:59:58 2005				
6	Select action	problems		Wed Feb 9	9 15:59:58 2005				
63	Select action	resfiles		Wed Feb 9	9 15:59:58 2005				
6	Select action	sequences		Wed Feb 9	9 15:59:58 2005				
63	Select action	temp		Wed Feb 9	9 15:59:14 2005				
-386 E	l 🌝 🖾 🛛								

(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.

$\mathbf{\mathbf{v}}$			111111	/IMS_Feb05/BB/	sequen	ces/ - LON-CAF	A Cor	struction Space - Mo	zilla		- = ×
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E	Back Forward Reload Stop 4 http://raeburn-4.user.msu.edu/priv/sturaeburn/IMS_Feb05/BB/sequences/ V Search Print V										
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1	Construction Space: Stuart Raeburn										
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	Red	ent	_	<b>_</b>							
100	Action	ns for current dire	ectory	Upload a	new do	ocument		Create a new	directory or	LON-CAPA docur	ment
	Selec	t action	-			Browse		Select Action	<b>-</b>   Ty	pe Name Here	Go
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(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.

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File Edit View Go Bookmarks Tools Window H	elp							
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🚮 Home 📲 Bookmarks 🖉 Red Hat Network 🖆 Support 🖆 Shop 🖆 Products 🖆 Training 🧷 I								
Main Menu Launch Remote Contro	<u>) </u>	LON-CAPA	<u>c</u>					
Construction Space: /priv/sturaeburn/IMS_Feb05/BB/sequences/Top.sequence Stuart Raeburn Recent								
LIST       List current directory       RTRY       Retriev         DEL       Delete this resource       PRT       Prepare         Image: Compared to the second	re old version e a printable document	Publish this	esource					
Temporary Assembly Workspace Search Import after selected		File: /~sturaeburn/IMS_Feb05/BB/seque	ences/Top.sequence					
Select Map Load Map		Move Up Move Down Rename						
Discard Selected Clear All View		Revert to Last Save Save View						
Import and Paste Area *	Cut selected	Target Edit Map     Course Information     Course Documents     Staff Information     Assignments     External Links						
×	Paste after selected	Course Announcements Course Bulletin Boards Course Quizzes Course Surveys						
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(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.