

TM-Editor 2006

Question Design and Question Management

Very short user manual



TM-Editor™
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3.0 (2007)

Introduction

The new LPLUS TM-Editor2006 provides you with very powerful instruments to create different types of questions and to generate various examinations.

The main features are

- Question design and
- Question management

First you have to decide, if you need one or more databases for your question database. The answer depends on the subjects and on your *customers*:

Although the TM-Editor2006 has very effective functions to separate and to merge databases you should decide early about the management of your question bank(s).

If you do support different subjects like i.e. Mathematics, Sport, Biology etc. it is probably meaningful to store the questions in different databases. On the other side if you often want to produce examinations that includes questions of all subjects in i.e. one paper (or one [on-screen](#) session) it is better to store all subjects in one database.

Please consider that it is very important to work with the program in a systematic manner in order to get results very fast.

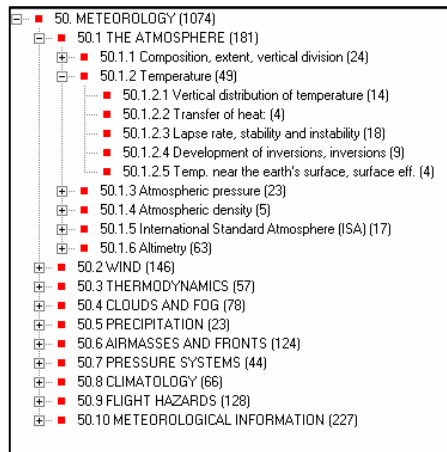
The main steps to create a question database are:

- Create a new empty database
- Create a [Syllabus](#) (topics)
- Create [target groups](#)
- Create questions
- Link the question to a topic
- Link the question to one or more target groups

Topics

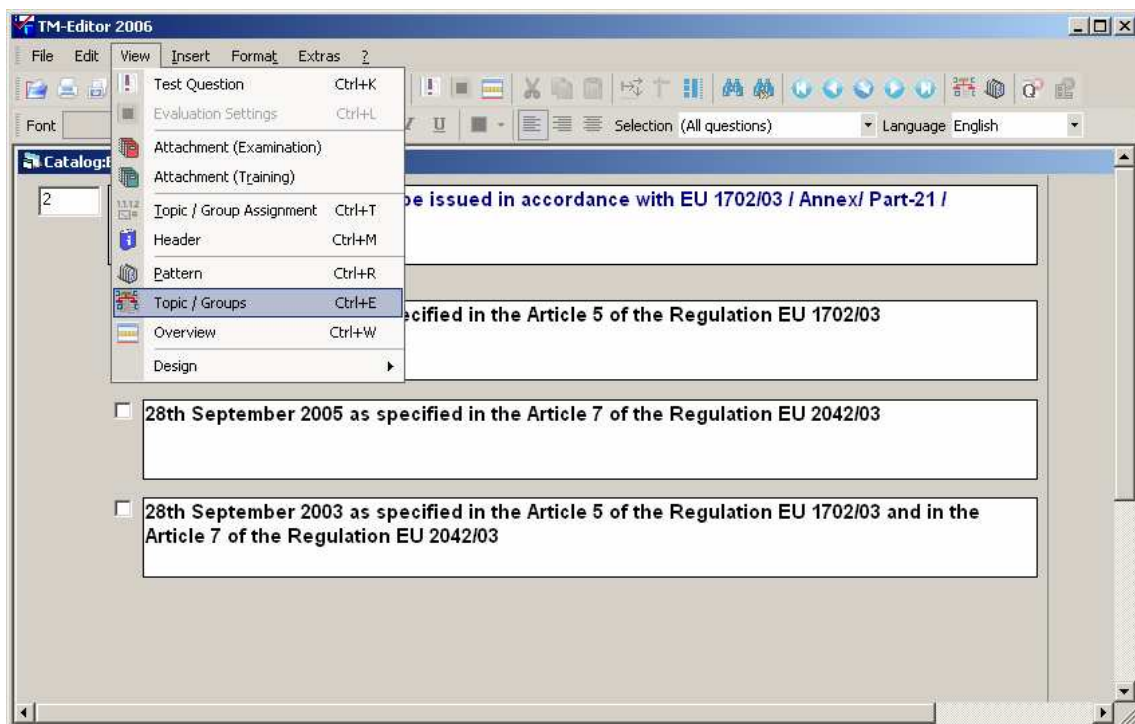
A Topic is the theme a questions belongs to.
 You must link a question to a topic in order to get some powerful possibilities to manage your database and have some statistic functions. The main advantages to have questions linked to topics are:

- Control the database (show only question of topic1,...)
- Get Information (how many questions do I have for topic1,... etc.)
- Generate examinations, exports, prints (use only questions of topic1,...)



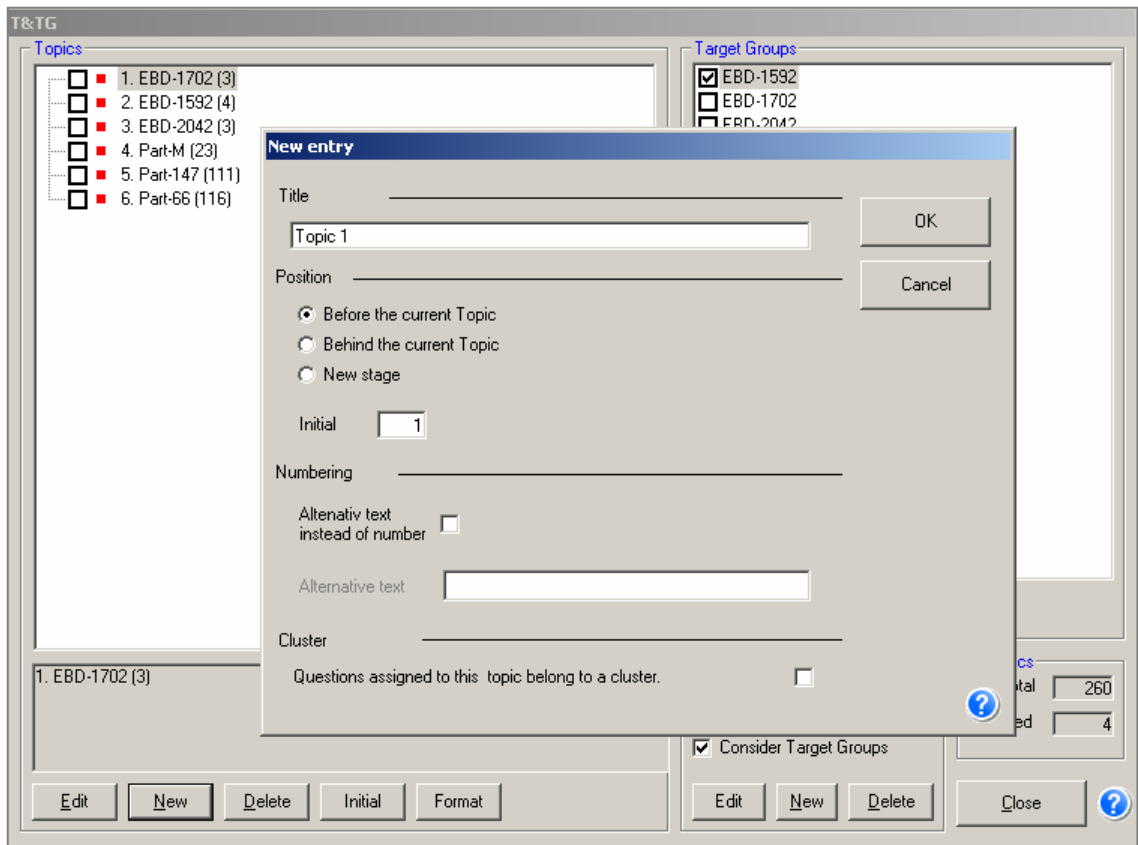
Define topics (create a syllabus)

Menu: View → Topic /Groups



Create a new Topic

1. Menu: View → Topic /Groups
2. (In the case of existing entries mark the position you want to insert a new topic(level))
3. In the left area select **New**
4. Type a title in the upper field
5. Decide if you want the new entry before the marked topic, behind the marked topic or if you want to open a new stage (level) under the marked entry
6. Press Ok



Note: It is important to position the cursor before you press **New** at the correct place in the existing syllabus.

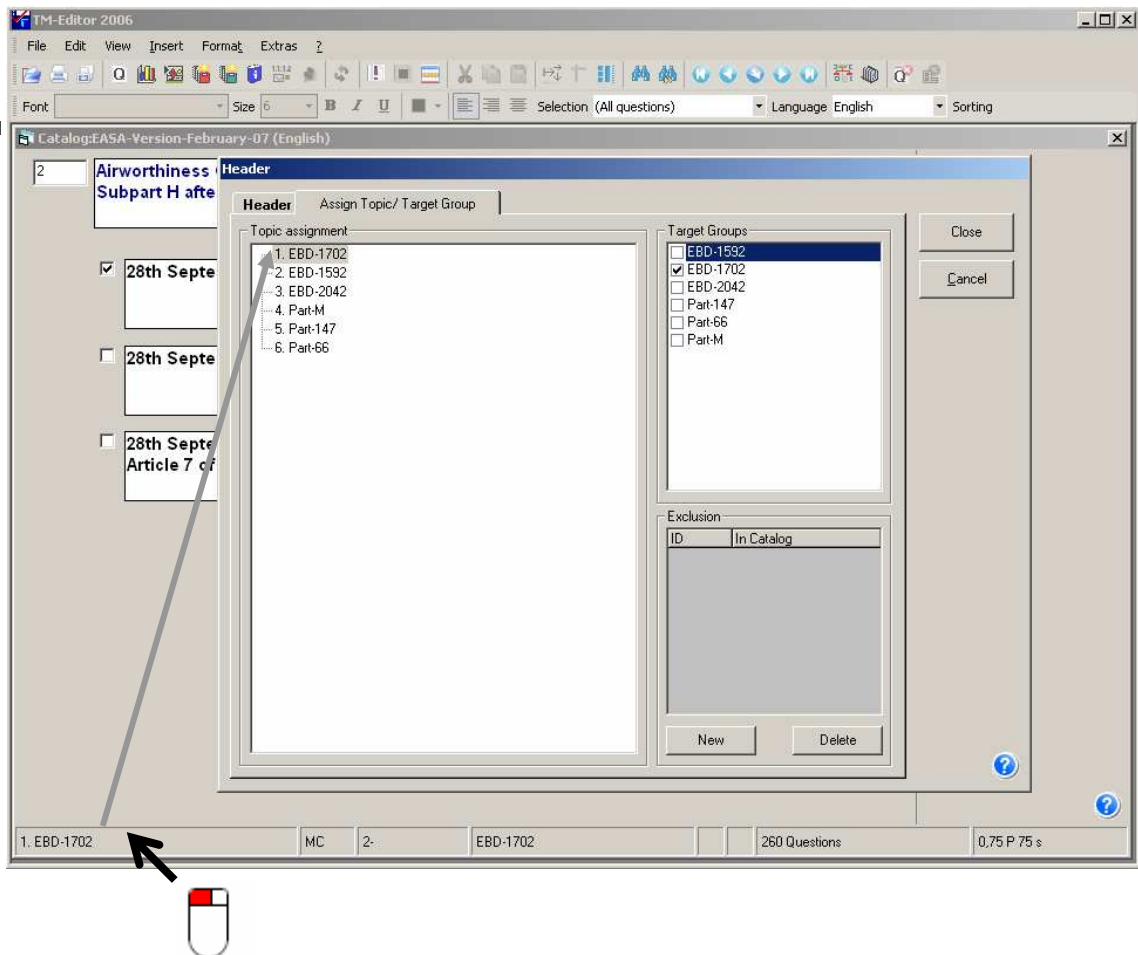
Rules & limits about the use of the syllabus

- You can use different formats for the view of the syllabus
- You can link just one theme to a question
- You can create up to 5 levels in a syllabus
- You should always link questions to the lowest level
- You can always edit entries
- You can not delete an entry with existing links to questions

Link a question to a topic

The **simplest** way to link a question to a topic is to use a left mouse click in the left area of the status bar of the question window.

You



Target Group

A Target Group is a very powerful additional element you can use to manage your database.

You define Target Groups for special training or examination groups, i.e. you have a licence PPL-A (private –pilot for aeroplane). Then you define a Target Group PPL-A and every question that is good for this licence gets a link to PPL-A.

In addition you can create Target Groups for other purposes, like using different status flags Target Groups. In the development process you can link the questions to a matching status (like “has to be reviewed” or “Question is ok” etc.). Later it is very easy to set i.e. a filter to all questions needs to be reviewed or are ok.

Please note:

Whenever there is a need of identification of a sample of questions not only by using the Topic you should create Target Groups.

Example:

To use only questions from the Topic Air Law you set a filter to Air Law. If you now want to know how many questions of Air Law a valid for PPL-A you need an additional filter. With the target Group PPL-A you can define the filter as:

Show or use all questions valid for **Air Law AND PPL-A**.

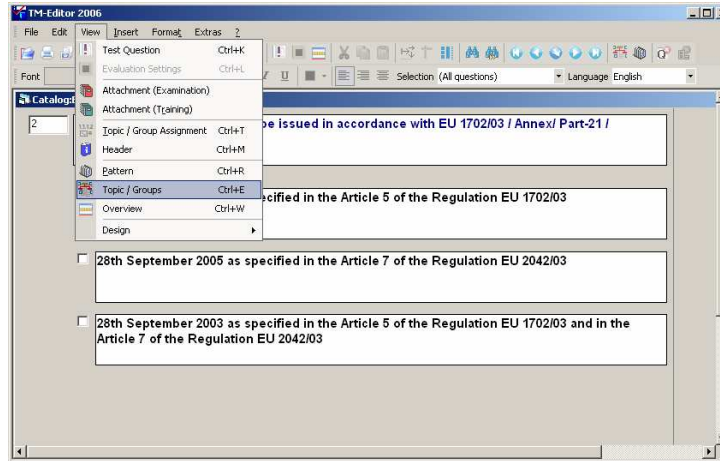
You must link a question to at least **one** Target Group in order to create a pattern for an examination. In order to get some more powerful possibilities to manage your database and have some statistic functions you should create and use as many Target Groups as you wish.

The most important advantages in using Target Groups are:

- Create examinations, exports, prints (use only questions of PPL-A,...)
- Control the database (show only question of PPL-A,...)
- Get information (how many questions do I have for PPL-A,... etc.)

Defining Target Groups

Menu: View → Topic /Groups



Create a new Topic

1. Menu: View → Topic /Groups
2. (In the case of existing entries mark the position you want to insert a new topic(level))
3. In the right area select **New**
4. Type a name for the group in the upper field

Decide if you want ...

Pattern

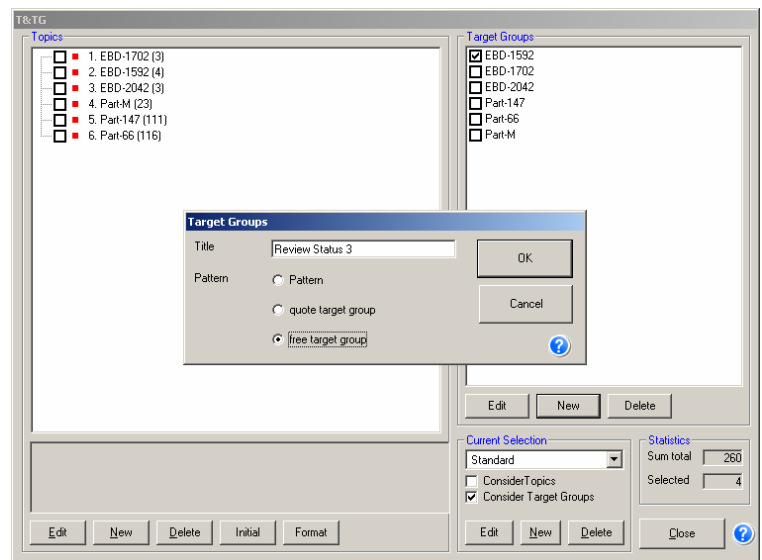
(this group is certain for a presentation for an examination).

Quote target group

This category is used for the additional control of the examination compilation. In this way it becomes possible not to control the dynamic compilation of examinations only over the subject areas but you can in addition set the wanted percentage parts of the Quoted Target Groups. It is important that enough questions are where appropriate sufficiently assigned to the Quoted Target Groups.

Free target group

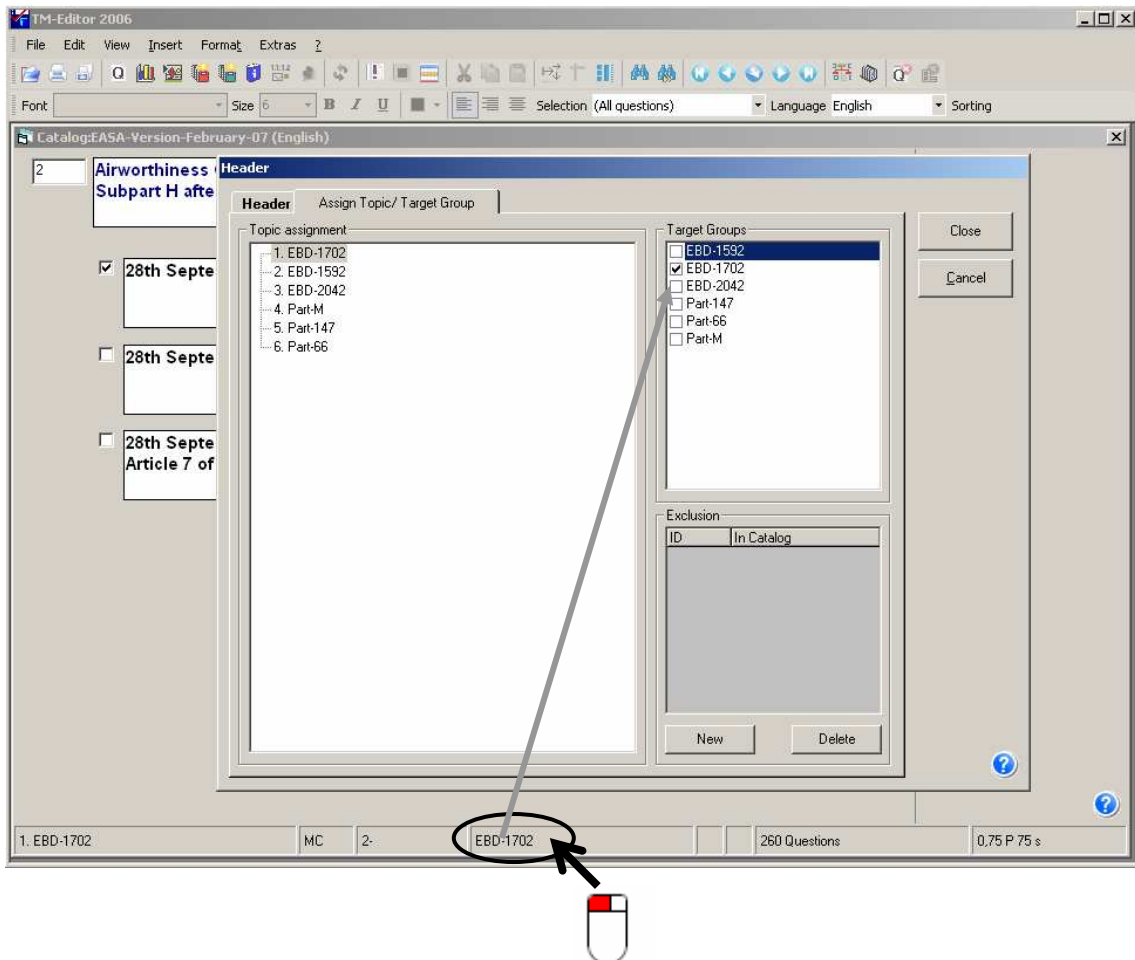
This kind of target groups is used for the attitude of additional filter possibilities.



5. Press Ok

Link a question to one or more Target Groups

The **simplest** way to link a question to a target groups is to use a left mouse click in the center area of the status bar of the question window.



You always can see the target group(s) of the current question in the center field of the status bar.

Use the symbol button **General** from Editors main command line or use **Right-Mouse-Click** in the grey area (General settings) or use **Left-Mouse-Click** in the left field of the status bar.

Open the Assignments Register

In the right area set the checkbox of the entry you want to have the question linked to.

Rules & limits

- You can define unlimited number of Target Groups
- You can link unlimited number of Target Groups to a question
- You should always link questions to a at least 1 target Group
- You can always edit or delete entries

Pattern

A pattern defines a preselection of questions in combination with the the syllabus. You always need to define a pattern if you want to generate a ON-LINE Examination just in the moment the candidate log-on to the examination.

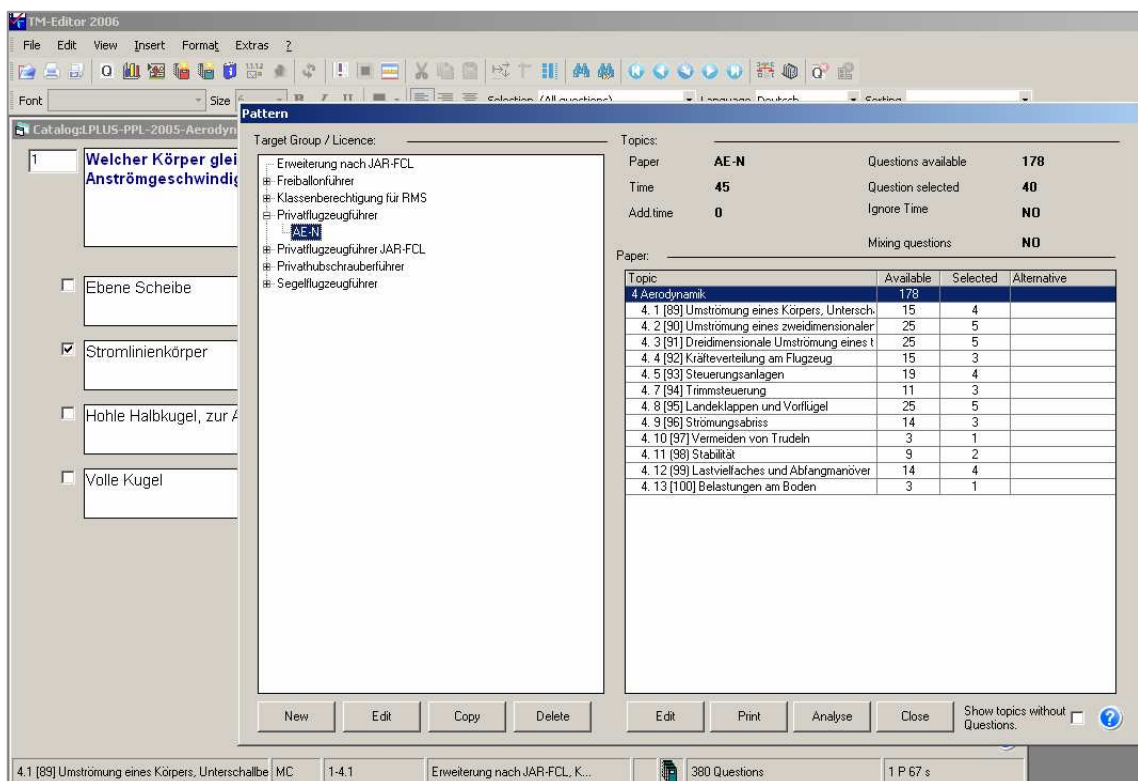
Example:

You always want to have...

- at least 10 questions from Air Law Part 1
- at least 12 questions from Air Law Part 2
- at least 15 questions from Air Law Part 3
- at least 04 questions from Air Law Part 4 ...

If every questions has 1 minute working time and your examination session should take one hour the system now will follow the above pattern to arrange the sample of questions and fill the rest (19 questions) by itself.

With using a pattern you will always get different questions sets by just defining a pattern only one time.



Topic	Available	Selected	Alternative
4 Aerodynamik	178		
4.1 [83] Umströmung eines Körpers, Untersch	15	4	
4.2 [90] Umströmung eines zweidimensionaler	25	5	
4.3 [91] Dreidimensionale Umströmung eines t	25	5	
4.4 [92] Kräfteverteilung am Flugzeug	15	3	
4.5 [93] Steuerungsanlagen	19	4	
4.7 [94] Trimmsteuerung	11	3	
4.8 [95] Landeklappen und Vorfügel	25	5	
4.9 [96] Strömungsabriss	14	3	
4.10 [97] Vermeiden von Trudeln	3	1	
4.11 [98] Stabilität	9	2	
4.12 [99] Lastvielfaches und Abfangmanöver	14	4	
4.13 [100] Belastungen am Boden	3	1	

You can define one or more paper(s) for each Target Groups

Paper

A paper is one walk-through examination period. It is a ON-SCREEN session without any normal break. After having finished one paper the candidate can have a pause before runing the next part of an examination.

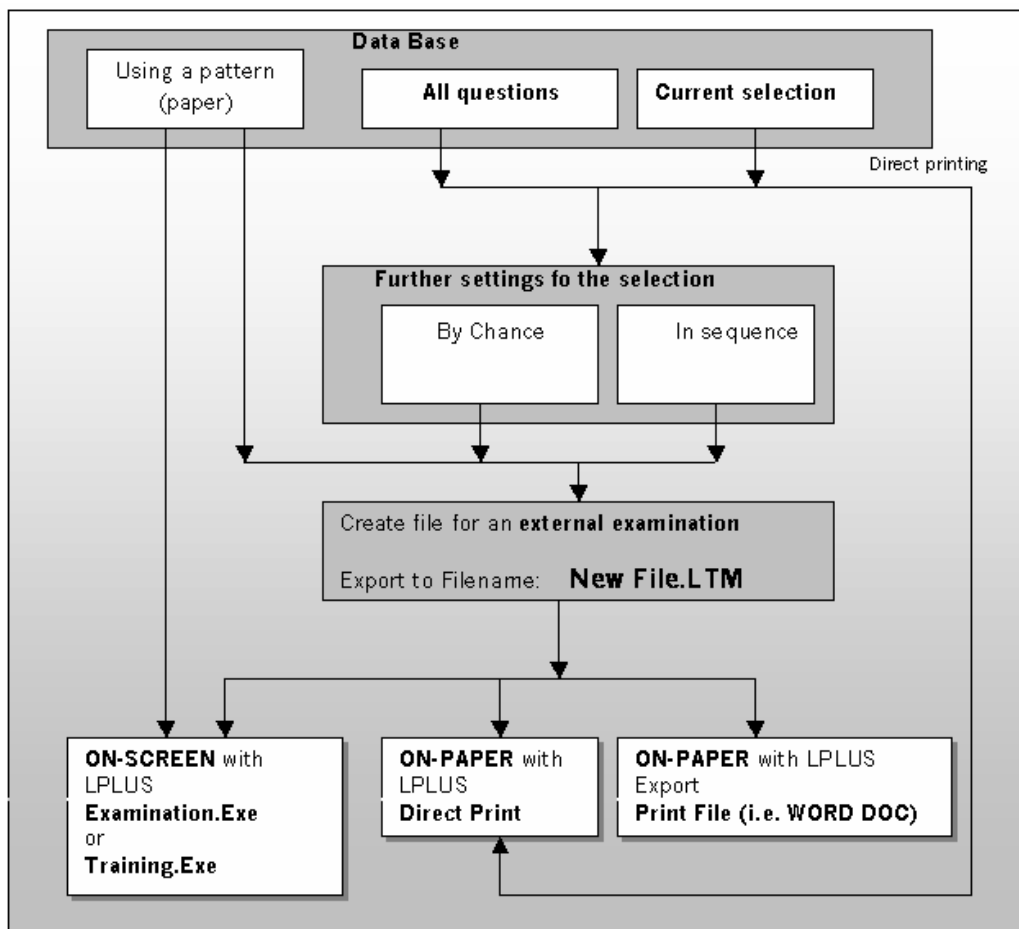
The automatic weighting happens after finishing one paper. The results of all papers produces the final result of an examination.

Overview

The LPLUS Editor gives you some different instruments to produce various examinations with minimum expenditure.

The main difference between the outputs is to decide whether you need printed examinations (ON-PAPER) or if you want to execute the examination on the PC (ON-SCREEN).

Please note in this context that you can not use each question type in both matters (a question in which the candidate must move something is not a good task to do on paper, a question with a video or any animation makes not a good impression on a piece of paper).



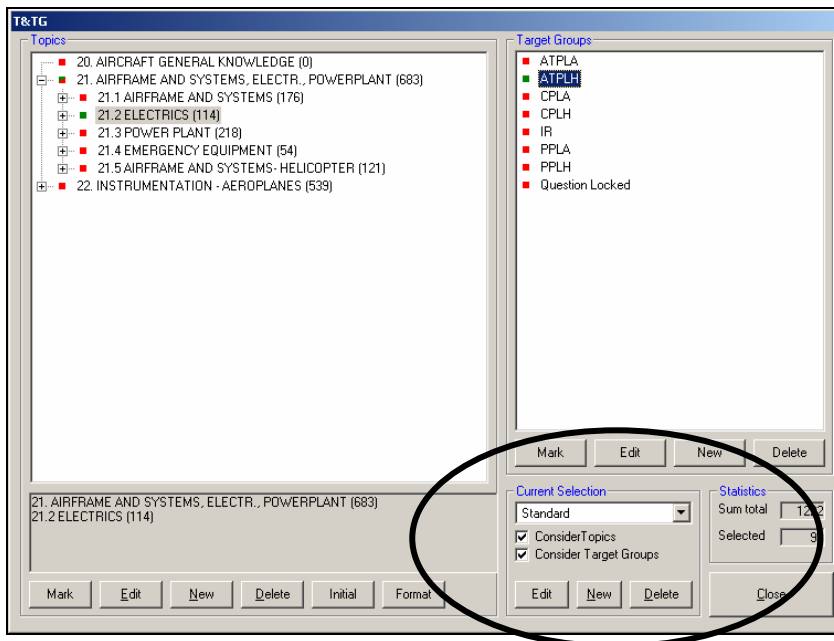
The above overview shows the different preparations for examinations. The fastest and most powerful and easiest way is going to use a pattern in combination with the LPLUS program **Examination.exe**.

A good possibility to get fast results with **prints** is to produce a **direct print** with the integrated print engine¹. If you have any need to format the print later you should use the possibility to generate a textfile like i.e. a word document).

¹ Please consider, that some catalogue with multiple-choice questions always uses the first answer as the right answer (as JAR/FCL). To randomise the answers you have to export such a selection with **activated checkbox randomising answers**. Then you can use the exported file for prints.

Analysis

An important task of your database management is to analyse the questionnaire. For that the LPLUS Editor uses the Topic & Target Group administration. To open the corresponding window press the symbol T&TG from Editors command line.



We will show how it works with some examples:

Question: How many questions has every entry of the syllabus?
 Answer: Look at the number in parenthesis behind the entry!

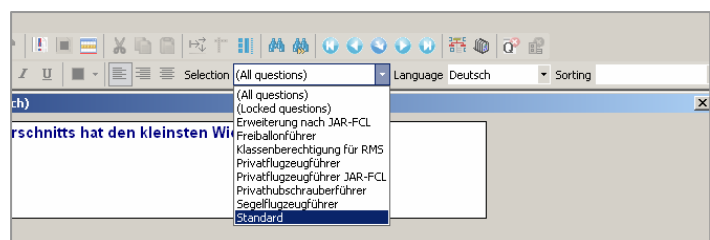
Question: How many questions do I have for ATPLH
 Answer: Mark the target Group ATPLH (click ATPLH, use **Right-Mouse-Click** to switch between marked(green)/not-marked(red) or use the button Mark. The square behind ATPLH must be green! Activate (**Left-Mouse-Click**) the checkbox **Consider Target Groups**. The program counts 789 questions for ATPLH

Question: How many questions do I have for ATPLH **and** for the Topic 21.2 *Electrics*...
 Answer: Mark the topic 21.2, **Right-Mouse-Click** to switch between marked(green)/not-marked(red) or use the button Mark. The square behind 21.2 must be green!
 Activate (**Left-Mouse-Click**) the checkbox **Consider Topics**
 The program counts **90** questions for ATPLH matching the topic 21.2

To view and scroll thru this 90 question you only need to use the current selection to control the questionnaire:

Close the T&TG Window.

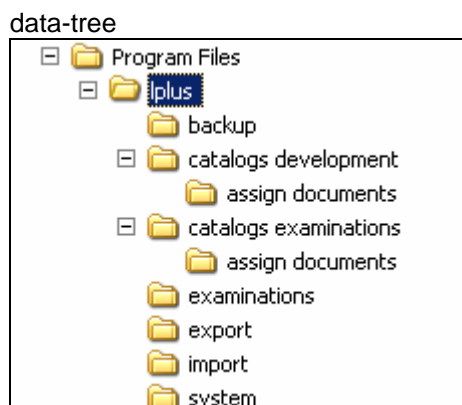
Select **Standard** in the List Field to limit the shown questions to the current filter.



General Data Management

After running the Editors SETUP your hard-disk (Server Network Drive or Local PC Drive) will contain the following new folders (called **data-tree**):

You can change the name of the main data tree folder (lplus), but in a network you have to make sure that all autors have access to that folder (you can use a share name for this).



<p>Catalogs development Assign documents</p>	<p>all your question databases are stored in this folder all multi-media files like graphics, videos etc. has to be stored in this folder</p>
<p>Catalogues examination examinations Assign documents examinations</p>	<p>all examination catalogues for ON-SCREEN all multi-media files like graphics, videos used in examinations</p>
<p>Examinations</p>	<p>all students files (result) are stored in the examination folder</p>
<p>Import interfaces)</p>	<p>import area for external databases (check for</p>
<p>Export</p>	<p>all exported files for external examinations</p>
<p>System</p>	<p>system folder with some system files</p>

The system LTMS takes automatic care for most of the procedures to generate ON-SCREEN examinations. After the system once is installed it becomes very easy to update programs and data-files as well very comfortable. The entire file-management is easy to understand and so it is also easy to change i.e. the server or other hardware.

End of Short Manual

For further Information contact LPLUS for training courses.