

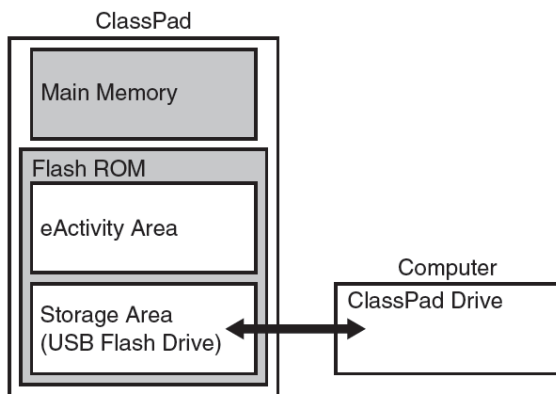
# **Data Management on the CASIO ClassPad II**

**A guide to simplify the management of data on your ClassPad,  
and to easily share CLASSPAD resources.**



## Before we start – a brief overview of your ClassPad and its storage.

A ClassPad has memory divided into four parts, which together provide 24Mb of storage: main memory, a data storage area called the USB Flash Drive and an eActivity storage area which together are called FLASH ROM, and RAM used to execute the required calculations. The ability to understand the movement of data between these areas and to transfer such data to and from external storage devices will enhance your experience in utilising your ClassPad in teaching environments.



## Commonly required tasks

### Backup of your ClassPad.

Return to your main menu by tapping the Menu key  $m$  on the icon panel.

From the Menu, tap 'MENU' on the top bar to reveal a drop-down list of options as shown:

Select 'Save As'

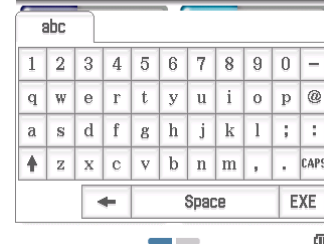
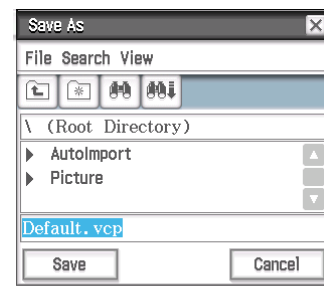
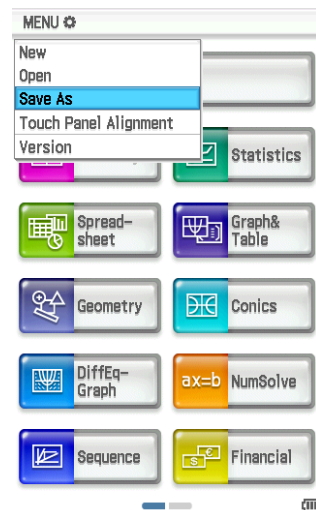
You will now be presented with a view of your FLASH memory directory, with folders identified by small black triangles which expand to reveal folder contents. A default file name is given as Default.vcp.

Perhaps overwrite the name to something more meaningful to you, then tap 'Save'. In the examples that follow, the standard adopted is the word 'backup' followed by the date, such as backup06052014.vcp .

This backup now exists in your CLASSPAD Flash memory, from where it might be transferred to a connected computer and hence safely stored or migrated onto another CLASSPAD.

vcp files are a CASIO proprietary file format, where vcp is an acronym for Virtual ClassPad.

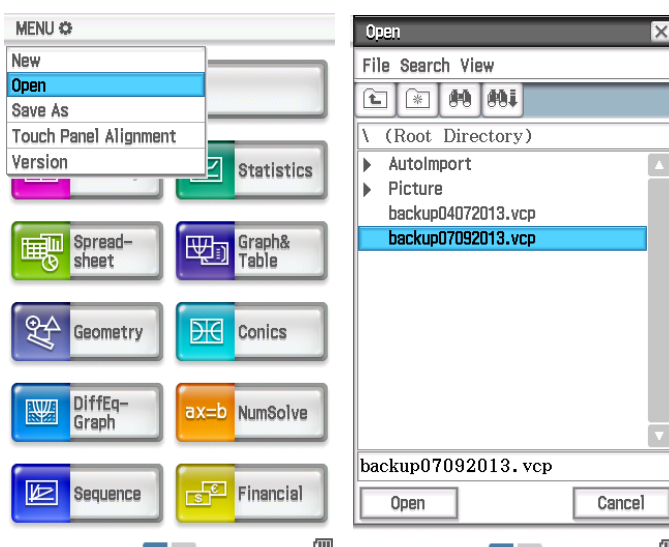
Note that you can create your own folders within FLASH memory, and indeed subfolders if you wish.



## Restoring your CLASSPAD from a previously taken backup.

If the required backup is already on your CLASSPAD (as would be the case from the above instructions), simply select Open from the dropdown list of options from the Menu screen.

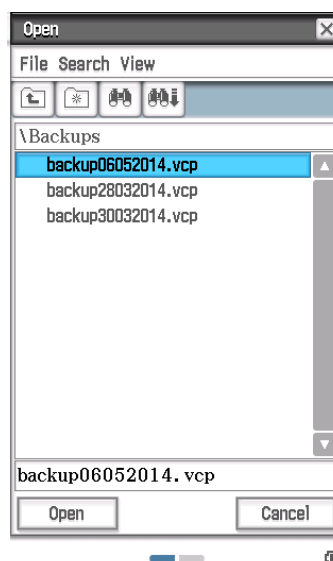
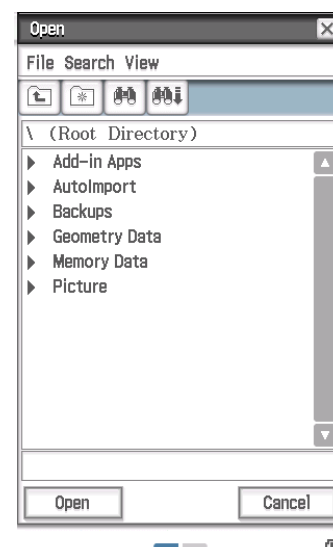
This will open a window from which you can see a file directory of your CLASSPAD flash storage area, including any folders you have defined.



Typically your backups will be in your top level folder (the default) as illustrated in the example above, but if you have many files in your storage area you may have organised them into subfolders. In the illustrative picture alongside, subfolders have been used. Tap the folder name to expand it – in this case, the folder will be the Backups folder.

Select the required backup from which you would like to restore, and then tap 'Open'.

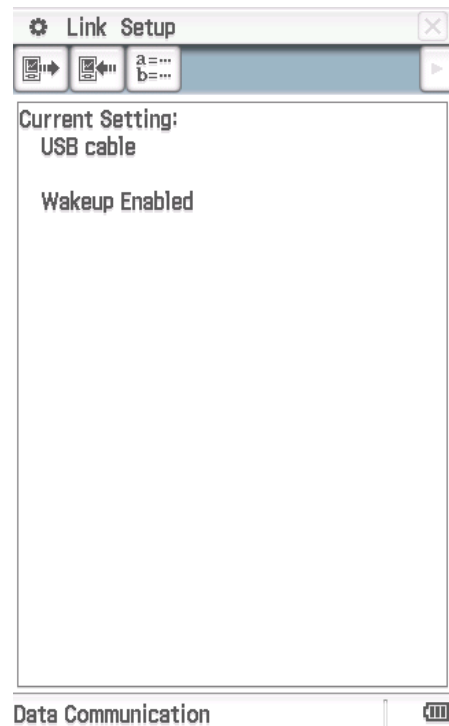
You will now be invited to completely replace the current contents with the backup data, or to merge (overwrite where necessary). The overwrite option may be useful for the mass importation of new activities and data files from a teacher calculator to a student calculator – this will be discussed later.



## Access to your FLASH memory from a computer

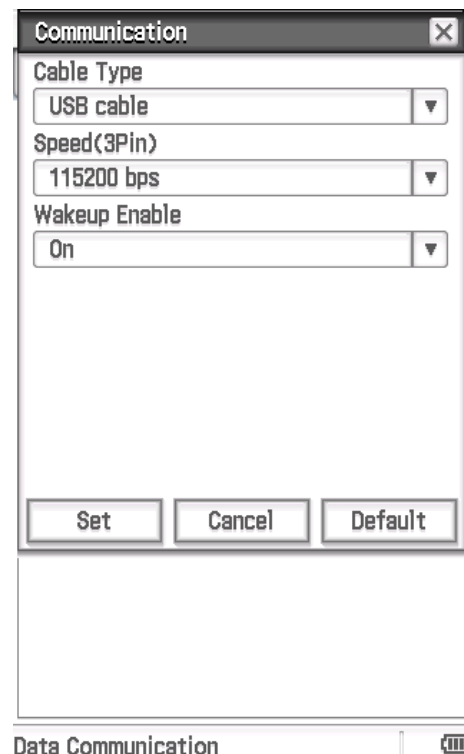
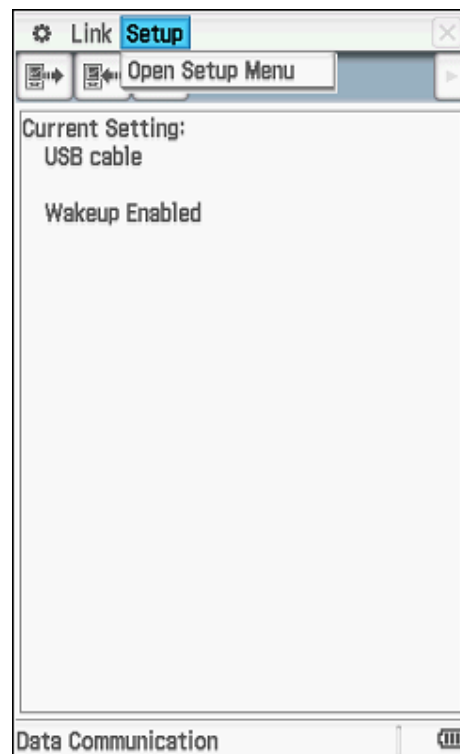
Prior to using the following instructions, it is worth checking that you are currently set up to connect via USB:

Use the Communication Menu icon (on the alternate set of menu icons).



If the Current Setting is not USB cable and Wakeup enabled, select 'Open Setup' from the Setup Menu.

You will be presented with the Communication screen alongside, from which you need to select 'USB Cable' as the Cable Type.

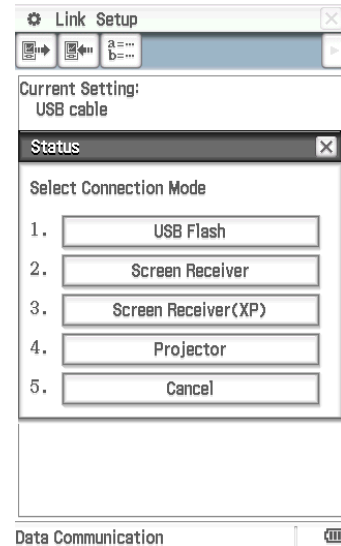


The Cable Type must be set to USB Cable to communicate with a computer, and 3-pin for communication between calculators.

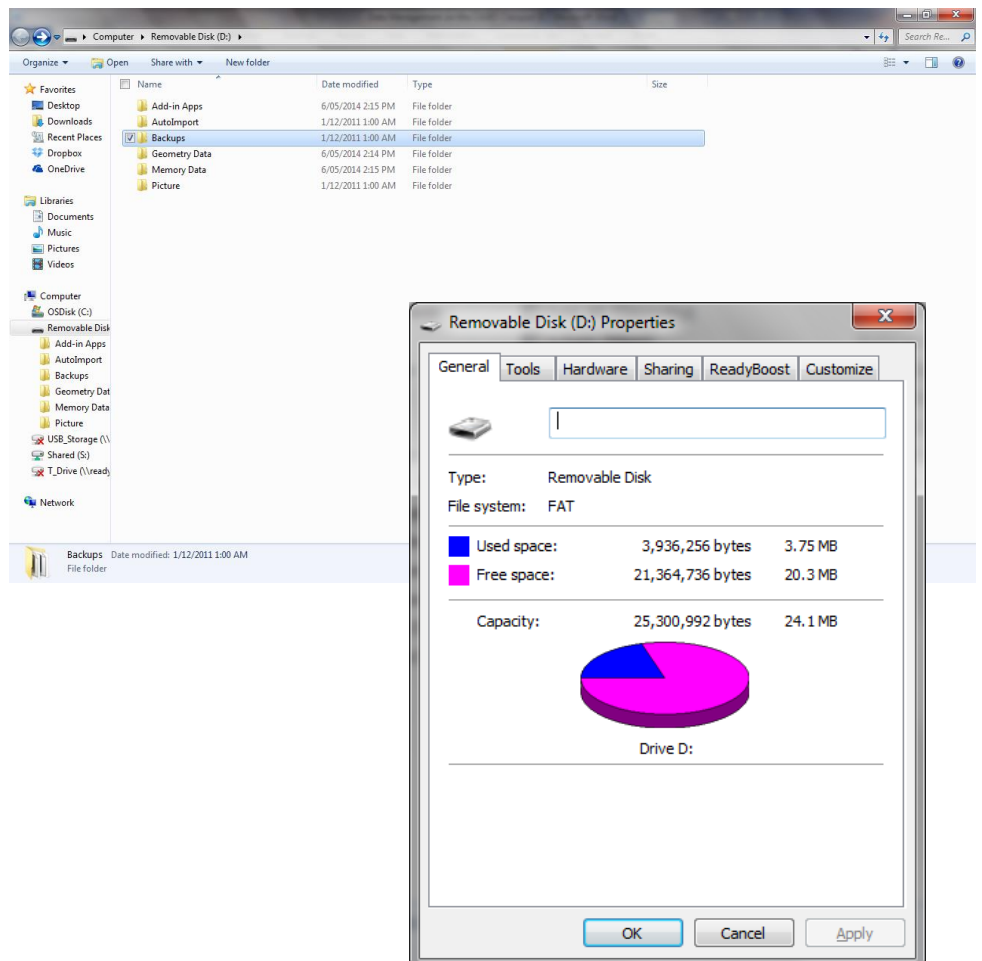
Connect your CLASSPAD to your computer by inserting the mini-USB.

When presented with the Status screen shown alongside (which will appear automatically on your calculator if the earlier settings were made), select 'USB Flash' – this option presents your CLASSPAD to your computer effectively as a USB drive does when inserted.

You should accept the Autoplay invitation on your computer to open a folder to view the contents of the inserted device, if asked.

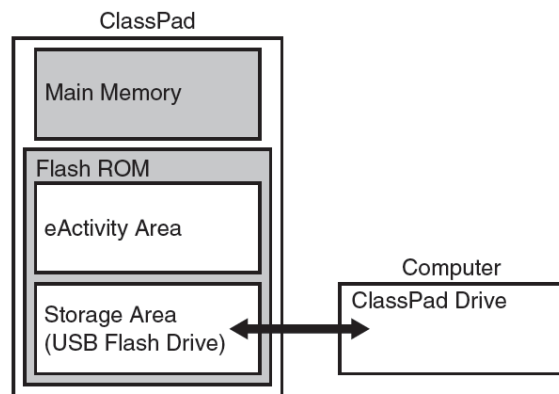


You will now be able to view the 'FLASH storage' section of your CLASSPAD (note in the example below that 24.1 Mb of secondary storage is available).



Now that you have a viewing window of your FLASH storage memory on your computer, you can transfer files around and maintain their organisation. Examples of this might be:

- to copy all folders from your CLASSPAD FLASH storage onto the computer for external backup security
- to reorganise the folders on your CLASSPAD FLASH storage and their contents using the computer
- To copy externally sourced backups onto your CLASSPAD FLASH storage from where they can be manually restored



By moving files from your CLASSPAD onto your computer, you can create external copies of your CLASSPAD contents, either complete backups (.vcp files) or individual variables (.xcp files – where xcp is an acronym for eXported ClassPad).

Your CLASSPAD can work with up to 200 files per folder, and can use up to 3 levels of folder hierarchy. This is easiest to maintain from your computer, but be mindful of the fact that your computer will have no such limitations on folder sizes and levels, so keep your folder structure simple with no more than three levels.

Once files exported from your CLASSPAD are available to your computer, they can be shared – you might envisage emailing a backup copy (or individual eActivities or Geometry constructions) to others in order that they might load their CLASSPAD with similar information to your own, or placing it in a shared network location where they could subsequently be loaded onto other CLASSPADs.

The technique described above, where the entire contents of one CLASSPAD might be used to populate another teacher or student CLASSPAD. Note that at the point when the restore is performed, you can choose to 'Merge' rather than overwrite – see page 4 of this document.

## Restoring your CLASSPAD from a previously taken backup stored on a computer.

After having connected your CLASSPAD to a computer, copy the required backup from the computer back into the CLASSPAD Flash storage – you can drag & drop them or copy & paste them (including folder hierarchies) easily.

Clearly if a central teacher computer was to be used to propagate a CLASSPAD image to many students, one method might be to backup the required teacher CLASSPAD, then use the above method to place the .vcp image onto the student calculators from which they can manually open the backup to restore, either in its entirety or merging using the Overwrite option.

An alternate quicker method is to copy the required backup into the **Autoimport** folder. As soon as the file is copied into this folder on the computer, the link is disconnected and the CLASSPAD automatically imports the image. Once it is done, the backup .vcp file used is moved from the **Autoimport** folder to a folder called **SAVE-F** – it will create this folder if it does not already exist. The advantage of this method is that students need not be tasked with the job of selecting a backup image and opening it. The disadvantage is that the Overwrite option is unavailable, and all pre-existing data will be lost.



## Movement of CLASSPAD elements

Rather than backing up and restoring entire images, it is possible to migrate individual CLASSPAD elements, such as eActivities and variables (examples include expressions, lists, matrices, functions, geometry data and spreadsheet data).

These must be selected individually for backup by initially exporting them from your CLASSPAD Main Memory into FLASH storage, where they will appear as a .xcp file format in the folder of your choice.

This export is performed from the System  main Menu option.

Under the Storage tab shown at right, choose the type of element you wish to export –Variables or eActivities.

The selection will then list the folders on your CLASSPAD, and a tally of qualifying elements ( in the example alongside, it shows '19Vars').

All CLASSPADs will have a Main folder displayed. Potentially there may be a Library folder or User-defined folders also listed.

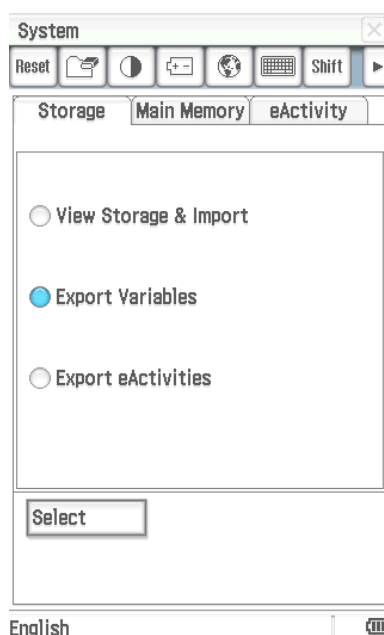
You may select the whole folder by ticking the box alongside.

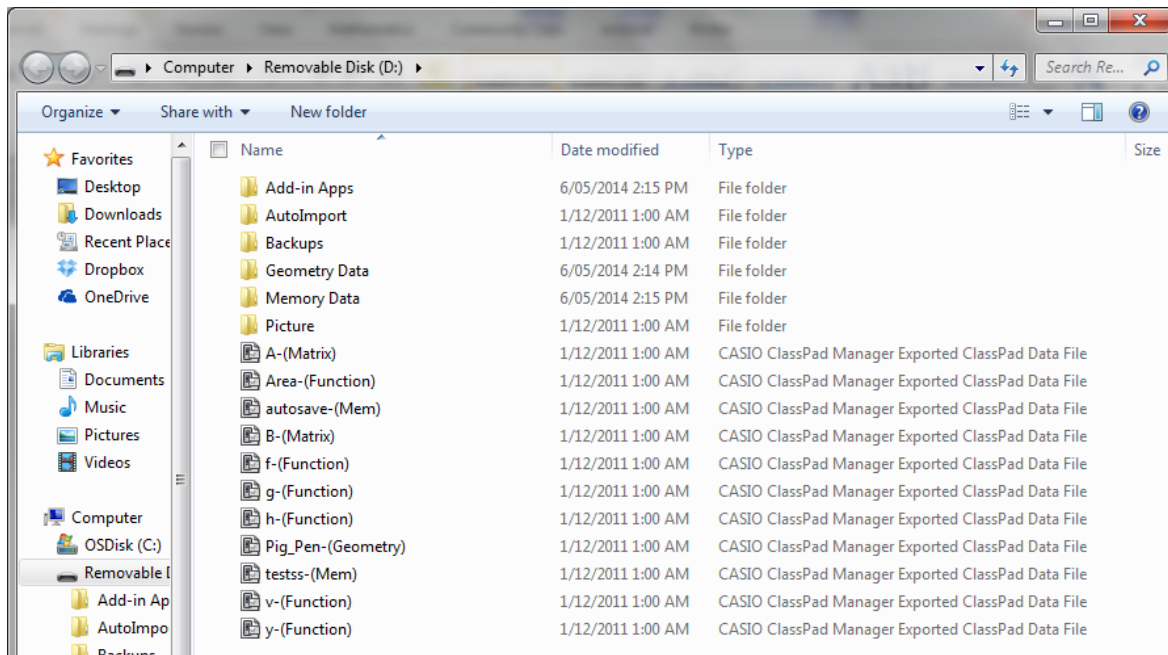
Alternately, if you wish to choose only some elements from the folder, then tap on the folder name and it will expand to provide a list of all qualifying elements in that folder from which you may select individual elements to Export.

Once you tap the 'Export' icon, a list of available folders is presented, from which you must select the destination folder for the export (into which the created .xcp file(s) will be placed).

One .xcp file will be created for each exported element.

The name of each .xcp file will be the individual element name followed by a data type, such as f-(Function) or Pig\_Pen-(Geometry).





The exported files will now appear in .xcp format in the folder view on your connected computer, as illustrated above. They may now be transferred to your computer, in the same method as before by connecting the USB cable and selecting the USB Flash option on your CLASSPAD.

Once any such .xcp files have been transferred to a computer, they are fully transportable to any other CLASSPAD, as are any vcp files created from backup functions (see earlier for backup creation and transfer to a computer) . Simply copy them into a connected CLASSPAD folder in its USB Flash memory, then select the Communication option from the Main Menu.



Select 'View Storage & Import', and tick each element you wish to import prior to tapping the Import icon. You will then be asked to nominate your destination of choice – typically you will choose 'main'.

If an element you have nominated to import already exists in the chosen destination folder, you will be prompted for a decision to overwrite.

## Equivalent processes on CLASSPAD Manager.

Your CLASSPAD Manager uses a 'Home Folder' on your computer to replicate the USB Flash memory area of the handheld. This is defined during the software installation. If you are unsure of its location, choose 'File -> Change Home folder' from your CLASSPAD Manager session.

This folder can be used in an equivalent manner to that described above for a connected handheld. You may import .xcp variables and eActivities from it, or export equivalent information into it for backup or transfer to other devices.

Note that the concept of a .vcp backup does not exist for CLASSPAD Manager – but is unnecessary anyway. Individual data types may be transferred as above.



## ClassPad to CLASSPAD exchange of information.

Using the 3-pin (smaller cable with an end similar to a set of headphones) two CLASSPAD devices can communicate with each other.

Each calculator must be set to a Cable Type of 3pin from the 'Setup' menu under the Communication menu icon.

On each calculator proceed to the Link menu area.

Set the ClassPad receiving information to Receive, either by using the icon or via the 'Link -> Receive' dropdown menu. .



Set the ClassPad sending information to Transmit, either by using the icon or via the 'Link -> Transmit' dropdown menu.



Firmly plug the cable into the receiving device, and then the sending device. The sending device will automatically present a list of main memory folders for you to transmit. You can select items by tapping the tick box alongside a folder, or by expanding the folder by tapping its name, and then ticking individual elements within the folder. Tap the transmit icon when all elements to be transferred have been selected.

## Other file types.

Addins (such as Algy2 or Physium) have a file type of c2a. These can be transferred from your computer to your CLASSPAD (having connected your device using the mini-USB cable as before) by copying the c2a file into the root directory on your CLASSPAD.

Pictures to be used as background images to graphing windows have a file type of c2p. Such pictures must be generated using CASIO's Picture Conversion Engine software, available by contacting Casio Education Division (URL [http://www.casio.edu.shriro.com.au/app/contact\\_us.php](http://www.casio.edu.shriro.com.au/app/contact_us.php)) if you are a Prime Schools PLUS member. Once your pictures have been converted to the proprietary c2p format, they can be moved onto your CLASSPAD in the same manner as other CLASSPAD elements.

## Importing Elements from CLASSPAD 330 series.

Pre-existing elements on a Classpad 330, such as programs or eActivities, can be exported as .xcp files from the ClassPad 330 and then can be imported into a ClassPad 400 series in the same manner as elements exported from a ClassPad 400. Note, however, that the screens of the two machines have a different resolution – any elements placed at particular positions on the screen of a 330 model may not work to your liking on the 400 model.