

## Moodle Assignment Submission file types

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The 'File submissions' submission type is to be enhanced with functionality to allow specifying which file types may be uploaded by students for submission.

This document acknowledges the Moodle tracker issue <https://tracker.moodle.org/browse/MDL-39913> and the related discussion, though it further refines the design proposed there as at 2013-10-15.

### Assignment module global configuration

The predefined file type sets will be globally configurable and initialised with a default configuration as given below.

| Display description                       | File extensions                         |
|-------------------------------------------|-----------------------------------------|
| Office Documents (doc, docx, rtf)         | doc, docx, rtf                          |
| Office Presentations (ppt, pptx)          | ppt, pptx                               |
| Office Spreadsheets (xls, xlsx)           | xls, xlsx                               |
| Office Databases (mdb, accdb)             | accdb, mdb                              |
| PDFs (pdf)                                | pdf                                     |
| Archives (zip, rar)                       | rar, zip                                |
| Video (mpg, mp4, flv, mov, avi)           | avi, flv, mov, mp4, mpeg, mpg           |
| Audio (mp3, mp2, aac, m4a, wma, wav, aif) | aac, aif, aiff, m4a, mp2, mp3, wav, wma |
| Images (jpg, png, gif, tif, bmp)          | bmp, gif, jpeg, jpg, png, tif, tiff     |
| Other documents (odt, txt)                | odt, txt                                |
| Other presentations (odp)                 | odp                                     |
| Other spreadsheets (ods)                  | ods                                     |
| Other databases (odb)                     | odb                                     |
| Other archives (tar, tar.gz, tar.bz2)     | tar, tar.bz2, tar.gz, tbz2, tgz         |
| Other video (mkv, ogv, ogg)               | mkv, ogg, ogv                           |
| Other audio (ogg, oga, flac, spx)         | flac, oga, ogg, spx                     |

Configuration should be added to the 'Plugins ► Activity modules ► Assignment ► Submission plugins ► File submissions' admin page to add/edit/remove entries. It is suggested to use the sort of presentation demonstrated by emoticon configuration (see class `admin_setting_emoticons`). For example:

**File submissions**

Enabled by default ☒ Default: Yes  
assignsubmission\_file | default  
 If set, this submission method will be enabled by default for all new assignments.

Maximum submission size  Default: 1MB  
assignsubmission\_file | maxbytes  
 Maximum file size

| Allowed file types<br><small>filetypes</small> | Display description                       | File extensions                         |
|------------------------------------------------|-------------------------------------------|-----------------------------------------|
|                                                | Office Documents (doc, docx, rtf)         | doc, docx, rtf                          |
|                                                | Office Presentations (ppt, pptx)          | ppt, pptx                               |
|                                                | Office Spreadsheets (xls, xlsx)           | xls, xlsx                               |
|                                                | Office Databases (mdb, accdb)             | mdb, accdb                              |
|                                                | PDFs (pdf)                                | pdf                                     |
|                                                | Archives (zip, rar)                       | zip, rar                                |
|                                                | Video (mpg, mp4, flv, mov, avi)           | mpg, mpeg, mp4, flv, mov, avi           |
|                                                | Audio (mp3, mp2, aac, m4a, wma, wav, aif) | mp3, mp2, aac, m4a, wma, wav, aif, aiff |
|                                                | Images (jpg, png, gif, tif, bmp)          | jpg, jpeg, png, gif, tif, tiff, bmp     |
|                                                |                                           |                                         |

[Reset file types setting to default values](#)

This form defines the file type sets presented as checkbox options for filtering submission files. To remove a row from the table, save the form with an empty value in any of the required fields. To register a new type set, fill the fields in the last blank row. To reset all the fields into default values, follow the link above.

The 'File extensions' fields will:

1. Accept a case-insensitive list of types, each separated by commas, whitespace, or semicolons.
2. Ignore any leading full-stop or '\*' sequence from each file type.
3. Be reformatted on form submit into a lower-cased 'typea, typeb, typec' pattern, sorted alphabetically with no leading full-stops or asterisks on each listed type.
4. Present the original user input back for corrections if any further formatting errors are detected following the prior reformatting exercise.

The extensions listed in the display description are purposely different to the accepted type list used for filtering because some file types have common extension variants that don't necessarily need to be presented as examples on-screen, but will still be accepted. Examples include .mpeg vs .mpg, .jpeg vs .jpg, .tiff vs .tif.

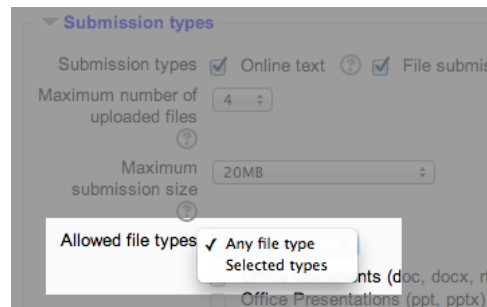
*Side note:* MS Office document types are listed separate from other less common types to avoid confusing teachers unfamiliar with, for instance, OpenDocument formats. These users can then easily elect to only choose the common Office extensions.

## Module instance configuration

In the Assignment module settings screen, new settings will be available to choose:

1. whether any type filtering is to be applied to uploaded submission files.
2. which pre-defined file type sets are to be accepted.
3. which additional, teacher-specified types are to be accepted.

## Activity instance configuration – Enabling file type filtering



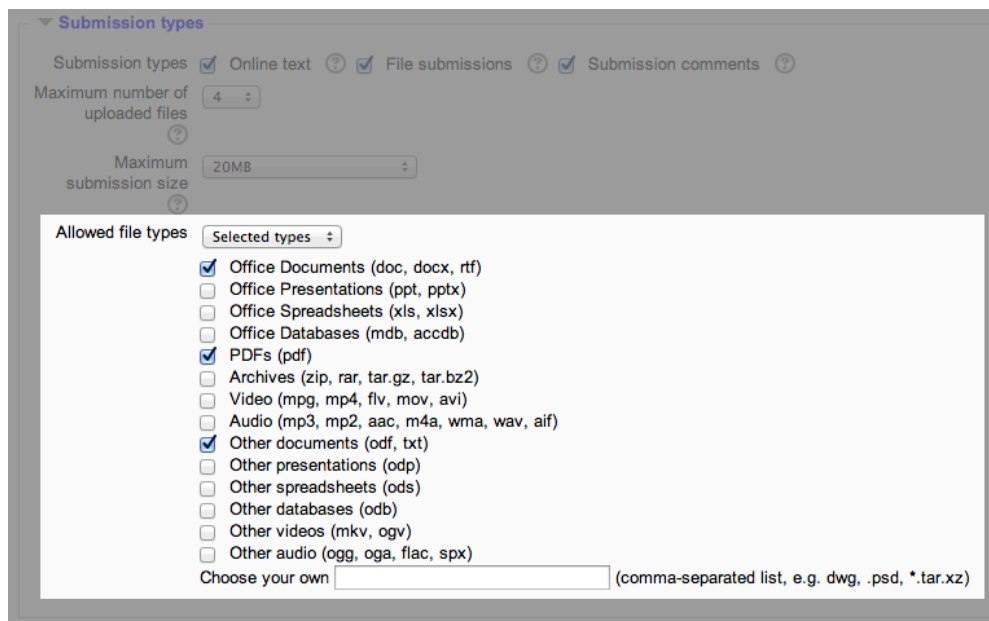
The 'Allowed file types' setting is to have two options:

1. Any file type
2. Selected types

The default is to be 'Any file type' with the checkboxes to select specific type sets to be disabled.

Upon selection of 'Selected types', the file type checkboxes become available for use.

## Activity instance configuration – Choosing file types



Initially, no checkboxes will be selected.

At least one file type checkbox must be selected, or a valid 'Choose your own' list must be provided for the form to validate and save while 'Selected types' is chosen.

The 'Choose your own' field will:

1. Accept a case-insensitive list of types, each separated by commas, whitespace, or semicolons.
2. Ignore any leading full-stop or '\*' sequence from each file type.
3. Be reformatted on form submit into a lower-cased 'typea, typeb, typec' pattern, sorted alphabetically with no leading full-stops or asterisks on each listed type.
4. Present the original user input back for corrections if any further formatting errors are detected following the prior reformatting exercise.
5. Be written to the database with whitespace stripped (e.g. typea,typeb,typec). On presenting the stored value to users, whitespace will be added back in for

legibility.

The settings will be written to the `assign_plugin_config` table under these names.

| plugin | subtype          | name           | value                                                                   |
|--------|------------------|----------------|-------------------------------------------------------------------------|
| file   | assignsubmission | filetypeslimit | 0 ('any file type') or 1 ('selected types')                             |
| file   | assignsubmission | filetypeslist  | set0typea,set0typeb;↵<br>set1typea,set1typeb;↵<br>othertypea,othertypeb |

↵ indicates a continuation with the next line.

The list of types from each file type checkbox will be concatenated, separated by semicolons, including the 'Choose your own' types.

To display the settings form, the list will be split on the semicolons and each substring matched against the global set of options to tick/untick the relevant checkboxes on the form. Any substrings that cannot be matched to a global setting should be appended to the 'Choose your own' field.

The purpose of this is to allow the global configuration to change while preserving existing activities' configuration, and yet still present a clean configuration page so long as each record matches an existing configured type set. A side effect of this is that adding a new type to an existing type set will not absorb that new type into existing configurations. There are ways to resolve this that could be explored in future development.

## Assignment submission

The submission page's file manager component will be initialised with acceptable file types specified according to the configuration of the activity. The accepted type list should also be presented to users like so:

