

# Adding New File Formats to DevIL

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## Adding the .c or .cpp File

Make sure that the new .c or .cpp file is added to the Subversion repository using the *svn add* command.

### Microsoft Visual C++

The .c or .cpp file must be added to the Microsoft Visual C++ 9 projects *src-IL/projects/msvc9/ImageLib Unicode.sln* and *src-IL/projects/msvc9/ImageLib.sln*. The file must also be added to the MSVC++ 8 projects *src-IL/projects/msvc8/ImageLib Unicode.sln* and *src-IL/projects/msvc8/ImageLib.sln*.

### Linux, Cygwin and Mac OS X

For the Linux/Cygwin/Mac OS X makefile system, add the filename to the `libIL_la_SOURCES` line of `lib/Makefile.am`.

## configure.ac

Add the format to `configure.ac` around line 320, with a description.

## il.h

Add the appropriate `IL_XXX` define to `il.h` (around line 240). Make sure to include a commented description in Doxygen format.

## il\_internal.h

Add the function declarations to `il_internal.h` around line 224.

## il\_io.c

### Validation

If `ilIsValid*` functions are created for the new format, the function calls must be implemented in `ilDetermineTypeF`, `ilDetermineTypeL`, `ilIsValid`, `ilIsValidF` and `ilIsValidL`.

### Loading

The first thing that needs to be added is checks for the extensions in `ilTypeFromExt`.

Next add the appropriate function calls to `ilLoad`, `ilLoadF`, `ilLoadL` and `ilLoadImage`. Make sure to put the `IL_XXX` define in the Doxygen comment before the function!

## Saving

Add the function calls to **ilSave**, **ilSaveF**, **ilSaveL** and **ilSaveImage**. Make sure to put the `IL_XXX` define in the Doxygen comment before the function!

## Website

Add to the list of types the DevIL can load on the About page and the Features page.

## Summary of Changes to Make

- Run *svn ci*.
- Add to MSVC++ 8 projects.
- Add to MSVC++ 9 projects.
- Add to lib/Makefile.am sources line.
- Add to configure.ac with description.
- Add `IL_XXX` to `il.h`.
- Add function declarations to `il_internal.h`.
- Add validation functions if they exist.
- For loading functions:
  - **ilTypeFromExt**
  - **ilLoad**, **ilLoadF**, **ilLoadL** and **ilLoadImage**
  - Add Doxygen comments to **ilLoad**, **ilLoadF**, **ilLoadL** and **ilLoadImage**.
- For saving functions:
  - **ilSave**, **ilSaveF**, **ilSaveL** and **ilSaveImage**
  - Add Doxygen comments to **ilSave**, **ilSaveF**, **ilSaveL** and **ilSaveImage**.
- Add to website (about and features pages).