

## Technical Details

When UpdateMaker builds a new document it first examines the old and the new files. It records their attributes, their resources, and the contents of their data forks (which are treated just like resources). It then generates difference information that specifies which resources should be added, deleted, copied, or modified to make the new file, given the old file. An UpdateMaker document consists of this difference information plus the new file's attributes and the added and modified resources.

UpdateMaker generates 32-bit checksums for every resource that is copied or modified from the original file. It will not allow an update to proceed if these are different. This guarantees that the file generated by an update is identical to the new file that was used to make the update document. However, UpdateMaker only requires those parts of the old file that are actually used to make the new file to be identical with those used to make the update.

SIZE 0 resources are always an exception. Because they are added to applications by the Finder when the user adjusts the preferred memory size, many users will have different SIZE 0's. UpdateMaker therefore defaults to always replacing SIZE 0 resources. The expert options in the Update Specifications dialog allow authors to override this behaviour and always copy the SIZE 0 from the original file without checking it, retaining whatever memory size the user preferred. If you use this option, be sure that the target applications will always have a SIZE 0.

The other expert options allow you to force replacement or unchecked copying for other resources or for the data fork. Both of these options allow for the user who has different resources in their old file from those in the old file that was used to build the update. The replacement options are safest as they can only make the update document larger, but they will override any changes that the user has made.

The Save As application option simply saves the UpdateMaker document together with a minimum set of resources needed to turn it into a custom application.

Developers may wish to use a facility in the custom applications that will display an alert, ID 1000, if it is added to the application. The alert will be displayed at startup, before the open file dialog. It should include the standard OK and Cancel buttons, but otherwise may have anything you like in it.