

Contents

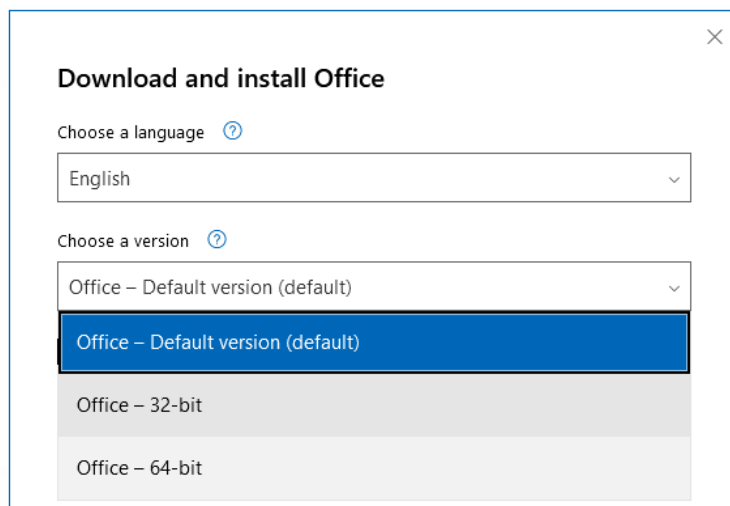
Purpose of this Patch	1
Requirements.....	1
Workflow.....	2

Purpose of this Patch

The original spreadsheet has compatibility issues with 64-bit systems. Although Declare statements can be modified for compatibility with the PtrSafe flag and associated data types, this spreadsheet macro cannot call the 32-bit CAFTA libraries from a 64-bit Excel installation. The CAFTA libraries do not support this method. Hence this patch makes small modifications to the macro to eliminate the separate result file location and allows for a workaround using a 32-bit Excel installation.

Requirements

- 32-bit Microsoft Office installation (Office 365 or 2016). See office.com 'Install Office' menu for the 32-bit option.



- Elevated Admin permissions for the PC running the spreadsheet
- Copy of patched spreadsheet and batch file downloaded from the project Github page
- CAFTA installed to default location (C:\Program Files (x86)\R&R\CAFTA)

Workflow

Due to the use of deprecated Declare statements and 32-bit libraries, this patch still requires a specific workflow to work around the peculiar limitations of legacy software support. The following steps allow the macro to run successfully in a Windows 10/Office 365 environment. Use of Office 2016 may allow for some steps to be skipped, but this has not been tested yet.

0. Run the included 'RegisterCAFTAlibs.bat' script to register the libraries. This script must be run as administrator, else an error occurs. **This step only needs to be done once per CAFTA library installation.**
1. Make all necessary changes to the spreadsheet in a separate location outside of the CAFTA install folder. This would entail model updates and any changes prior to running the macro
2. COPY the spreadsheet to the CAFTA install folder in C:\Program Files (x86). This requires admin privileges to complete.
3. Open Excel as an administrator and open the newly-copied spreadsheet by browsing to the CAFTA install folder. This requires admin privileges.
4. Run the macro. The .caf and result text file will be saved to the same folder that this spreadsheet is in (CAFTA install location).
 - a. If this spreadsheet and all remaining Excel instances are closed, this spreadsheet will yield error 53 if it is re-opened and the macro is run again (even if nothing was changed). However, this initially-opened spreadsheet can be modified and the macro re-run indefinitely as long as it has not been closed. I suspect that the Windows 10 background processes may be causing this strange issue due to how the FTapi32.dll library is loaded with Declare statements.
5. Make subsequent spreadsheet revisions to copies of the spreadsheet outside the CAFTA install location. Whenever a macro run is required, copy the spreadsheet to the CAFTA install location and repeat steps 2-4. Hence the CAFTA install location is only used as a holding area for spreadsheets that are actively being run. This is because the spreadsheet macro only works if the spreadsheet is saved in the same folder as the CAFTA libraries (again due to the original Declare statement being legacy code with little support).

Tips and Tricks

- To reduce the frequency at which the spreadsheet needs to be copied to the CAFTA install location, open Excel as administrator then immediately create a blank workbook. From there, open the newly-copied CAFTA spreadsheet. Again, this spreadsheet can be re-run indefinitely and modified as long as Excel remains open. Having the blank spreadsheet allows the CAFTA spreadsheet to be re-opened if closed accidentally and still work.
- Running Excel as administrator is not strictly necessary to run the macro. However, running it as a non-administrator will always open the spreadsheet in read-only mode. It's feasible to never run Excel as administrator, instead re-saving edited copies back to the outside folder after running the macro then copying them back to the CAFTA install location to run.
- If no instances of Excel are currently open and you then open a CAFTA spreadsheet to run the macro, check whether Excel automatically opens it in protected mode with macros disabled. If it starts in protected mode with macros disabled, the macro will probably run as this indicates Excel has loaded it as a fresh instance. If it opens with macros already enabled, Error 53 is likely to occur.
- Restarting the PC does NOT reset spreadsheets in the CAFTA install location, they would still need to be copied back in to run.