

Software Compatibility Issues with Microsoft Office

Risks?

Are you using software products or developing your own solutions within or connected to MS Office? If you are, then there are two primary methods for developing these solutions, either as a collection of macros or external source code connected to the Microsoft Office objects. Therefore, it becomes critical to understand the risks when Microsoft updates their Microsoft Office Object Model.

However, to evaluate your risks, you need to know the basic high-level principles of developing MS Office solutions/products.

Macro: "A macro is a series of commands and instructions that you group together as a single command to accomplish a task automatically."

Source Code: "A text listing of commands to be compiled or assembled into an executable computer program."

Microsoft utilizes MS Office objects, which are compiled source code libraries that make up application structures and features. Programmers who develop solutions that interface with MS Office, writes external source code and/or macros that connect to MS Office objects and then call functions with parameters (values). Some software products packages include both external source code and macros.

Every time Microsoft makes major upgrades to Word and Excel, Microsoft adds, changes, and removes objects from the Microsoft Word Object Model. Depending on their modifications, your software product/solution typically stops working.

Risk: "A weighted pattern of possible outcomes and their associated consequences."

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We know that when Microsoft updates MS Office their Object Model will change. But how will that affect you? Let us gain a better understanding of your risk by answering a few questions.

Do you have access to fix macros and/or source code?

- If your answer is "No", then you are at High-Risk, unless you have a quick and easy replacement.

Does this product/solution have many features and contains complex macros and/or source code?

- If your answer is "Yes", then you are at High Risk.
- If your answer is "No" for Question #1 and "Yes" for this question, then you are at Very High Risk.

How dependent are you on this product/solution?

- If your answer is "Yes", then you are at High Risk.
- If your answer is "No" for Question #1, Question #2 is "Yes" and "Yes" for this question, then you are at Extremely High Risk.

The purpose of this exercise was not to scare you, but to help make you aware of the risks and impacts of software products and solutions within or connected to MS Office.

Risk Mitigations:

1. Maintain your own macros and source code. Quite often this is not practical for many people due to time and skill requirements.
2. Replace your MS Office product/solution with a product with no or limited connections to MS Office.

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When Atebion LLC designed and developed their Document Analyzer, they wanted to greatly limit the interface with Microsoft Word and Excel. The reason was to reduce risk as discussed above. Currently, the Document Analyzer only makes a single generic call to Microsoft Word for converting word documents to either Plain Text or Rich Text Format (RTF). All the exports to MS Word and Excel are generated without any MS Office connections or calls. Additionally, this single MS Word call from Document Analyzer is so generic, it works from MS Word 2003 to 2016 (current version).

Atebion LLC believes in mitigating risk. For example, there are no external compiled source code libraries, except from Microsoft. Source code has been analyzed and tested for reliability and security. Every Document Analyzer release is submitted to Symantec for their approval and is placed in their Whitelist.