

## Arena Multi-Level BOM Redlines

Date	Modified By	Version	Modification
07/08/2022	D. Johnston	2.0	Added option to match unrelated items to each other e.g. variants. Greatly reduces child redlines that would otherwise all be treated as a DELETE and ADD. Also added background color to [a = b] button ... yellow means that at least one customer matching record has not been activated.
01/31/2018	D. Johnston	1.0	Added option to output only redlined BOM rows

### Overview

The Arena *Multi-Level BOM Redlines* tool was developed to provide a way to perform a **multi-level** BOM redline comparison between any two item versions. Features include the ability to specify whether the BOM comparison should be single or multi-level. Next, you can control whether BOM children should be referred to using their “as-referenced” or “working” revisions ... the latter allows you to compare working revision modifications across all BOM levels. You can also choose whether redlines should be rendered using word or character granularity. You can export the results of the BOM comparison which includes item specification and BOM meta data. By choosing to track version changes, differences with each item’s sourcing and file associations are also compared and highlighted. Finally, you can define (a=b) child item equivalencies to force the tool to compare a child item number from one BOM to a different child item number in another BOM. This is useful when comparing *variants* between two BOMs. Once the BOM comparison has completed, it will export the results to a Microsoft Word file in table format with redlines that identify additions, updates, deletes and version changes.

### Requirements

- Microsoft Windows operating system
- Microsoft Access or Microsoft’s free *Access Runtime*
- Microsoft Word
- Arena API feature is only required when using the **Latest (API)** DataExtract option  
*Note less than 10 API calls are used per session*
- Arena DataExtract feature

## Setup

If Microsoft Access is already installed on your computer, proceed to **step #2**

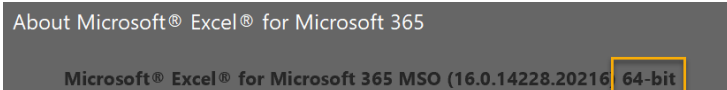
- 1) [Download](#) and install Microsoft's free *Access Runtime*

**Note** the x64 file is for 64-bit versions of MS Office, x86 for 32-bit

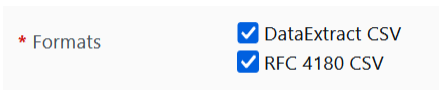
Choose the download you want

<input type="checkbox"/> File Name	64-bit (intuitive)	Size
<input type="checkbox"/> accessruntime_4288-1001_x64_en-us.exe		315.6 MB
<input type="checkbox"/> accessruntime_4288-1001_x86_en-us.exe	32-bit ... not so intuitive!!	236.5 MB

To confirm which version you need, look at the **About** for any other Office product installed on your computer e.g. Excel or Word. In the example below, the 64-bit version of Excel is installed so, you'd download and install the "x64" file:



- 2) Next, create a folder on your computer then copy the *Arena Multi-level BOM Redlines <version>.accdb* database into that folder.
- 3) Workspace Administrator needs to login to Arena workspace to configure DataExtract:
  - Navigate to Workspace Settings > DataExtract
  - Create a DataExtract if one does not already exist
  - Set **Maximum Text Attribute Length** = 32000 (for reference designators)
  - Select the format named **RFC 4180 CSV**. Although the **DataExtract CSV** format is not required by this tool, it is required if you are also subscribed to Arena's Analytics feature ... if that's the case, you would need to have both formats selected as shown below:



- In the filtering section, you need to select the superset of all objects required for all purposes, including Arena's Analytics feature. This tool only requires the following objects ... any other selected objects will be ignored by this tool:
  - Items > Summary
  - Items > BOM
- Configure the DataExtract [schedule](#) to run automatically once per day. Note, if you are already subscribed to Arena's Analytics, do not make any changes to the schedule without first consulting with Arena Support.

## Operation

- 1) Open the Access database then select whether to load the DataExtract from (**Latest (API)** or **Local**):

**Note** Only **Workspace Administrators** can get the latest DataExtract via Latest (API). So, to make this tool available for other users, the Workspace Admin can periodically download the latest DataExtract to a common folder on your network. This allows other users to select the **Local** option to access current workspace data. The Customer can also develop automation via our API to automatically download the most recent DataExtract each day to their network

Multi-level BOM Comparison with Redline Markups v2.0

**Multi-level BOM Comparison with Redline Markups** arena

Baseline BOM: [Dropdown] Comparison BOM: [Dropdown]

Name: [Text] Revision: [Text] Lifecycle: [Text] Status: [Text] Effective: [Text]

Child Revisions: ☒ As Referenced ☐ Working

Granularity: ☒ Word ☐ Character

Track Version Changes: ☒ No ☐ Yes

Custom Matching: a = b

Levels: ☐ Single ☒ Multi

Redlines ONLY: ☒ No ☐ Yes

Compare BOMs

Specifications Terms & Conditions

DataExtract: ☒ Latest (API) ☐ Local Get Exit

If you are a Workspace Administrator and choose the **Latest (API)** option ... you'll be prompted to enter your Arena credentials and workspace ID:

**Note** To get your workspace ID, login to Arena, switch to the desired workspace then navigate to **Workspace Settings**. The workspace ID will be displayed in your browser e.g. [https://app.bom.com/acct/detail-workspaces-settings?workspace\\_id=1234567890](https://app.bom.com/acct/detail-workspaces-settings?workspace_id=1234567890)

Arena - Sign In

Email Address

Password

☒ Remember my email

Workspace ID

API URL

https://api.arenasolutions.com/v1

ex. https://api.arenasolutions.com/v1

Sign In

**Note** for our EMEA environment, specify <https://api.europe.arenapl.com/v1> for the API URL. For GovCloud customers, specify <https://api.arenagov.com/v1>

2) After the data extract file has been loaded into the tool, you may select any of the following options before selecting your items for BOM redline comparison:

- **Child Revisions:** you can choose whether to refer to child items using their “as-referenced” or “working” revisions. For example, you can compare the effective revisions of one BOM to its working revisions to review and understand the entire scope of those modifications
- **Granularity:** choose between *Word* and *Character* granularity as to how redlines will be rendered
- **Track Version Changes:** the exported analysis of the BOM comparison includes *Item Specification* and *BOM* attributes. By choosing to track version changes, child items with sourcing or file association differences will also be highlighted >>
- **Levels:** allows you to choose whether to compare the BOMs in multi-level or single-level mode
- **Redlines ONLY:** when selected, only the BOM lines with redlines are displayed to quickly identify differences in very large BOMs
- **Custom Matching (a=b):** it’s sometimes useful to be able to treat one child item number as an equivalent to another for comparison purposes e.g. useful for comparing variants. This feature allows you to specify a list of item number equivalencies that can be activated/deactivated as needed