Arena *Power Where-Used*

Date	Modified By	Version	Modification
10/19/2023	D. Johnston	8.5	Fixed Item Number drop-down list behavior (edge-case)
10/17/2023	D. Johnston	8.4	Replaced Group Owner with Owner "per" where-used row
10/05/2023	D. Johnston	8.3	Added capability to import a list of item numbers to analyze. Added Group Owner and Lifecycle Phase. Added capability to compact database on exit (auto-compacts when loading new data)
8/31/2023	D. Johnston	8.2	Added module to display hand cursor over +- buttons – without this module, hovering over those buttons results in an error
6/26/2023	D. Johnston	8.1	Additional UI layout changes
6/21/2023	D. Johnston	8.0	Enhanced UI
3/16/2023	D. Johnston	7.0	Added capability to include reference designators in exported results
01/09/2023	D. Johnston	6.5.3	Enhanced logic when including "Superseded Revisions"
07/23/2020	D. Johnston	6.5.2	Added Trans Type attribute to Items_Custom_Attributes table
06/25/2020	D. Johnston	6.5.1	Minor screen layout changes
05/01/2020	D. Johnston	6.5	Updated one query used to enumerate "active phase" parent counts
04/23/2020	D. Johnston	6.4.4	Added capability to select which lifecycle phases you choose to consider as *active*. The where-used output now includes a new column labelled "Active Parents Exist". If **Yes**, there is at least one *active* parent for that item. This can be used to identify *child items* that can be moved to Obsolete or Abandoned phases when no *active* parents exist.
03/23/2020	D. Johnston	6.4.3	Changed "Row" column heading to "Sort Order" in Excel/CSV output.
02/21/2020	D. Johnston	6.4.2	Changed Excel output format from XLS to XLSX to increase max output Excel rows from 64K to 1M

Overview

The Arena *Power Where-Used* tool was developed to provide a way to perform where-used analysis for many items all at once. Items can be specified one at a time, by selecting one or more item categories or by choosing to analyze all workspace items. Where-used data can be viewed graphically within the tool with a tree representation of each analyzed item. You can navigate up and down the tree by expanding and collapsing tree branches. You can also export the where-used data either to CSV or Excel format. Options include the ability to include superseded revisions as well as whether to include custom item attributes and/or BOM reference designators in the CSV/Excel output. Another feature allows you to view all lifecycle phases referenced in the data to then select which lifecycle phase(s) you want to define as *inactive*. Based upon those selections, each analyzed child item will be flagged as to whether it reports to at least one *active* parent item (Yes/No). This allows you to filter the output for all analyzed items that *do not* report to any *active* parents … those child items are then candidates to be moved to Abandoned or Obsolete phases.

Requirements

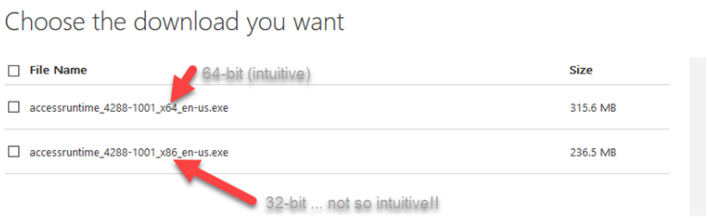
- Microsoft Windows operating system
- Microsoft Access or Microsoft's free *Access Runtime*
- Arena API feature is only required when using the **Latest (API)** DataExtract option
  Note *less than 10 API calls are used per session*
- Arena DataExtract feature

Setup

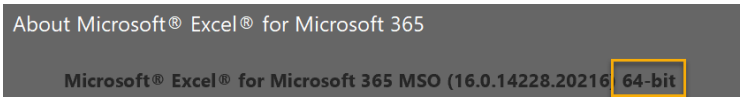
If Microsoft Access is already installed on your computer, proceed to ***step #2***

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*



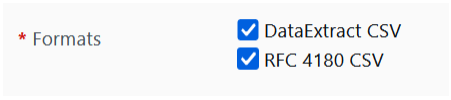
   To confirm which version you need, look at the **About** for any other Office product installed on your computer e.g. Excel or Word. In the example below, the 64-bit version of Excel is installed so, you'd download and install the "x64" file:



2) Next, create a folder on your computer then copy the *Arena Power Where-Used v8.0.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:



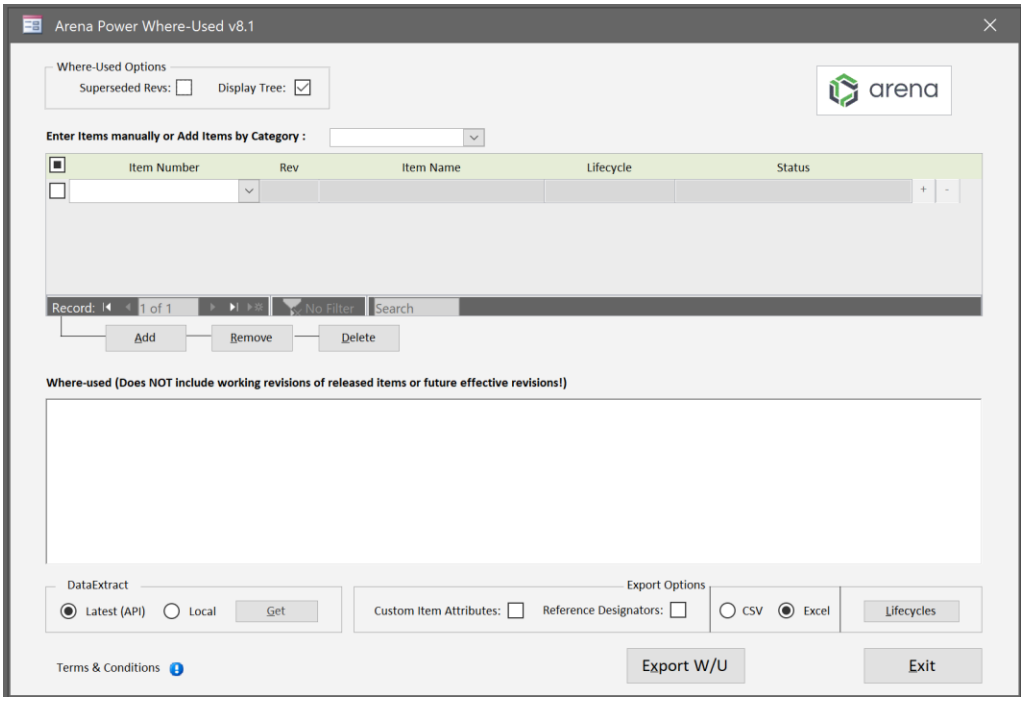
   - In the filtering section, you need to select the superset of all objects required for all purposes, including Arena's Analytics feature. This tool only requires the following three objects … any other selected objects will be ignored by this tool:
     - Items > Summary
     - Items > Custom Attributes
     - 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

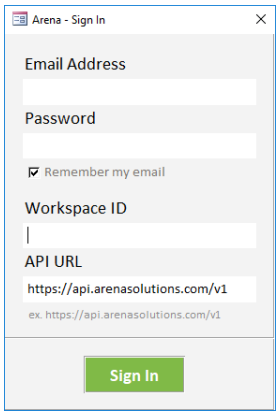
1) Open the Access database then select whether to load the DataExtract from (**Latest (API)** or **Local**):

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 current workspace data. The Customer can also develop automation via our API to automatically download the most recent DataExtract each day to their network*



If you are a Workspace Administrators 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*

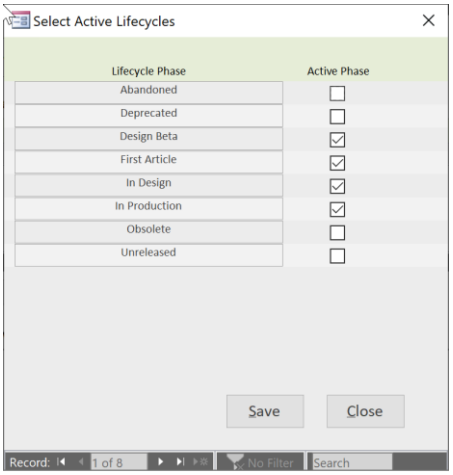


Note *for our EMEA environment, specify https://api.europe.arenaplm.com/v1 for the API URL. For GovCloud customers, specify https://api.arenagov.com/v1*

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 where-used analysis:
    - Include **Superseded Revs** of the where-used parents
    - Select **Display Tree** to view a graphic tree representation of the where-used results. If you only want to export and review the where-used results in CSV or Excel format, you can reduce "where-used" processing time by de-selecting **Display Tree**
    - Manually enter item numbers for analysis or add items in groups. Selecting a parent category automatically selects all child categories beneath it. You can also select **[ALL]** to select all workspace items at once

3) Once the where-used analysis has completed, choose whether to include **Custom Item Attributes** and/or **Reference Designators** then click **[Export W/U]** to **CSV** or **Excel**

   Optional: click on the **[Lifecycles]** button to view all lifecycle phases referenced in your data. Next, select which lifecycles you want to define as "Active". These choices are used by the tool when exporting where-used results to CSV or Excel. The exported results include a column named "Active Parents Exist" (Yes/No). If "No", the item does not report to any active parents and is therefore a candidate to be made Abandoned or Obsolete:



NOTE: This tool does **not** support the use of duplicate ***lifecycle phase names*** within the workspace!