

Veterans Affairs Enterprise Architecture

Technical Note

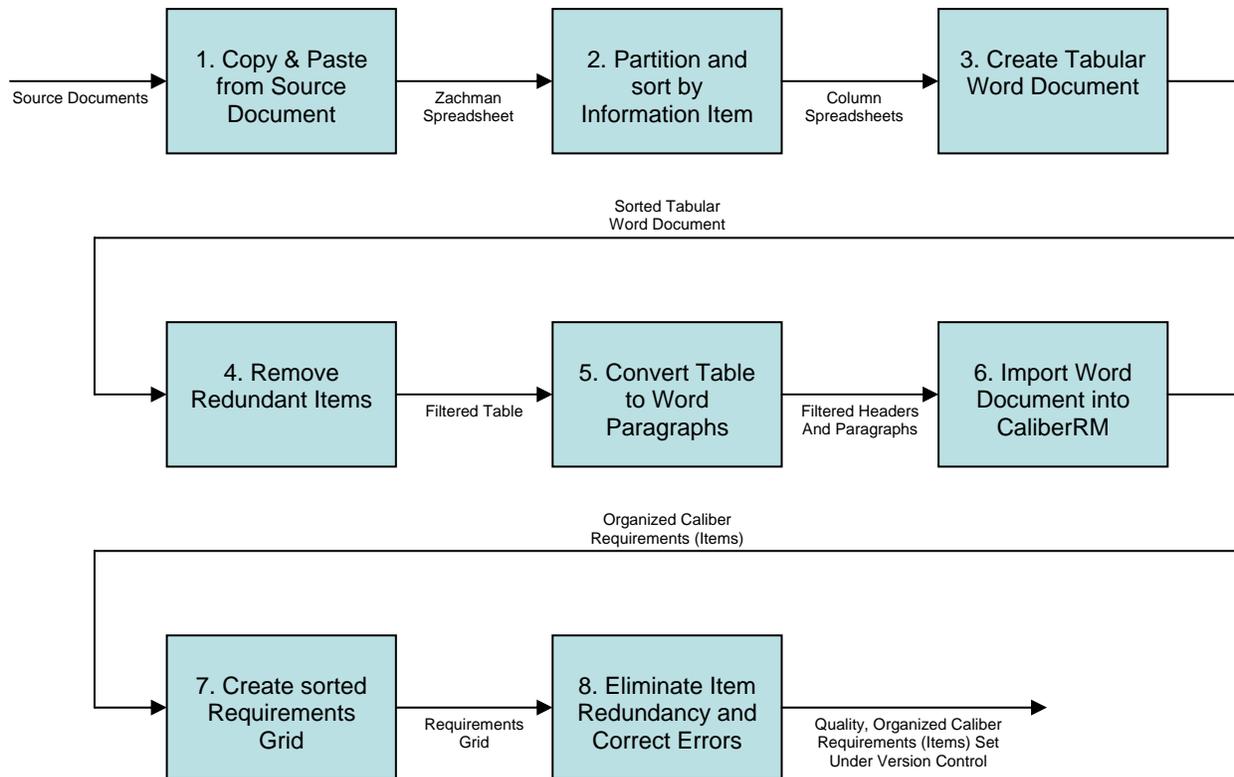
The Process of Capturing Information from Enterprise Architecture 2.1

The startup phase for the Veterans Affairs (VA) Enterprise Architecture (EA) version 3.0 includes the capture of previous EA information currently available in VA EA version 2.1. Version 2.1 exists as a set of Microsoft Word or corresponding Adobe PDF documents. The goal is to capture this information item-by-item and put it into a requirements management tool, CaliberRM, under full version control. Ultimately, the information managed in CaliberRM is destined to be expressed in a visual model (Metis, Data Model (e.g., Entity-Relationship diagrams, UML models, spreadsheets, IDEF0, ad hoc, and so on). The driving requirements for this process include:

1. Information capture must be complete.
2. Redundant information should be reduced.
3. Information should be partitioned and organized according to the rules of the Zachman Framework, as slightly modified by the VA Office of EA Management (OEAM).
4. The process must organize the Caliber information so that it directly supports the required visual models.
5. Relationships between elements should be retained (e.g., the relationship between things and activities).
6. The capture process must be easily reproducible.
7. The capture process must be efficient (although every item must be separately considered and verified).
8. The process must validate the final result to ensure that inaccuracies are minimized.

The following process flow illustrates all the basic steps, their order, and the input/output documents required to implement the flow. The following is a high-level description of each process step:

1. **Copy & Paste from Source Document.** The process starts by copying items of information from a source document (e.g., Veterans Affairs Enterprise Architecture 2.1, Chapter 3) and pasting the information into an Excel spreadsheet. The spreadsheet is generally organized into the six columns defined by the Zachman Framework for a particular row. Usually the names and descriptions are quite short (tens of words). Longer descriptions (up to 4KB characters) are acceptable when required. If the source is a Word document, both source and text can be copied. This process is usually performed by an Engineer who can quickly identify the appropriate Zachman column for the item.
2. **Partition and Sort by Information Item.** The complete Zachman spreadsheet is partitioned into spreadsheets that each represents only one of the Zachman columns (motivation, stakeholder, things of interest, topology, etc.)



3. **Create Tabular Word Document.** The column spreadsheet is copied and inserted into a Microsoft Word document as a Word table. Column one is the Requirement Name and column two the Requirement Description. The column one style is set to Heading 1, and column two is set to Body Text. Change the font size of both styles to 12.
4. **Remove Redundant Items.** The sorted table is carefully perused for redundant requirements. Redundant information is deleted. Similar requirement descriptions may also be combined into one requirement. Only reduce redundancy where it is obvious. It is reasonable to discuss complex cases with VA experts. It is possible to wait until requirements are in Caliber to perform this process; however, it seems to be easier to spot and remove redundancies in Word tabular form than in Caliber formats.
5. **Convert Table to Word Paragraphs.** The filtered table is converted to paragraphs using Word menu **Table > Convert > Table to Text...** in the selected table. Choose to, **“Separate text with Paragraph marks”** and deselect **“Convert nested tables”**. Select OK and the table is neatly converted to headings and paragraphs, ready for import into CaliberRM.
6. **Import Word Document into CaliberRM.** Importing Word Documents into CaliberRM is described in detail in Chapter 25 of the CaliberRM User Guide. Here is a high-level description of a typical import: When the wizard appears, browse for and select the document with the filtered headers and paragraphs. Select **“Import to Description: Formatted text, tables, and images”** and click **“Next”**. Select Heading 1 as the **“Text to be requirements names”** and **“Import all text between the above selected text styles as the requirement description”**. Click **“Next”** and select **“Import all text, ignoring delimiters”**. Click **“Next”** again and CaliberRM will produce a tabular summary of the requirements found in the filtered Word document. This summary should be carefully perused to insure it is in synchronization with the names and requirements to be imported. Any problems must be fixed in the Word document (or

the import “**preview tree**”) before proceeding with the import. Click “**Next**” to access the CaliberRM requirement tree. Open and select the group requirement for the planned import (e.g., Z11 > As-Is Business requirements). Select “**Insert as children**” and CaliberRM provides a nice display of which requirements will be imported where. Once satisfied that this is correct, select “**Finish**” and the import will be accomplished.

7. **Create Sorted Requirements Grid.** Once the CaliberRM requirements have been imported, one can use CaliberRM capabilities to improve the quality of the imported data. The most effective tool is the CaliberRM Requirements Grid. Select the Group Requirement where the imported items (CaliberRM requirements) were imported. Select **Tools > Requirement Grid**. Select “**Specify search criteria**” and “**Retrieve Hierarchy Numbers**” and click **OK**. The easiest way to get all the requirements in the group is to search for a single space. Select “**Search**” and the requirements grid will be created. The grid can be sorted by any column by clicking in the column header. Undesired columns may be hidden.
8. **Eliminate Item Redundancy and Correct Errors.** The grid is easily searched for redundant information, missing, or incorrect data. Requirements may be moved, edited or even deleted. Changes can be synchronized with the CaliberRM database by selecting the **Refresh** button. The imported data quality should be improved before additional information (such as tracings, properties, or partitioning) is added to each new requirement.