



# Exploring - Matrix Reports

The EA Relationship Matrix is a great way to see and edit relationships between EA data. The eaDocX Relationship Matrix takes this further, and creates simple, readable tables.

**Version: 1.0.0.2**

**Note: ALL content in this document comes from an EA model or a Word document template. This text is stored in a tagged value in the eaDocX Document artefact**

Section: Introduction

## 1 Relationship Matrix

The EA Relationship Matrix is a great way to visualize two sets of related data.

In eaDocX, the EA "Relationship Matrix" becomes a "Matrix Report", which has **lots** of capabilities which extend what you can see in EA.

In this document you'll see:

- Creating an eaDocX Matrix Report from an EA Relationship Matrix, using just the default settings.
- Adding additional criteria
- Using Word paragraph styles
- Showing other attributes
- Using other cell contents
- Conditional Formatting
- Printing large reports
- Missing-out empty rows and columns
- An alternative layout for HUGE tables

All the examples here use the same set of related data: some Components and some Requirements.

End

Section: Defaults

### 1.1 All Components and Requirements

This is all the data which we will use in this example. If you choose to base the report exactly on the EA Relationship Matrix, then this is the report you'll get. The only changes eaDocX has made is to make the 'Target' text on the top heading row vertical, to save space, and print it on a Landscape page, as there is so much data.

	Requirement 001	Requirement 002	Requirement 003	Requirement 004	Requirement 005	Requirement 006	Requirement 007	Requirement 008	Requirement 009	Requirement 010	Requirement 011	Requirement 012	Requirement 013	Requirement 014	Requirement 015	Requirement 016	Requirement 017	Requirement 018	Requirement 019
Component 001		↑					↑						↑						
Component 002				↑						↑					↑	↑			
Component 003																	↑		
Component 004		↑	↑	↑	↑	↑				↑	↑	↑			↑				↑
Component 005				↑					↑				↑		↑	↑			↑
Component 006				↑					↑	↑	↑	↑	↑		↑		↑		↑
Component 007				↑					↑				↑		↑			↑	↑
Component 008		↑	↑	↑	↑	↑			↑				↑		↑				↑
Component 009																			
Component 010			↑																
Component 011											↑								
Component 012																			
Component 013								↑											

<b>Component 014</b>				↑								↑					
<b>Component 015</b>														↑			
<b>Component 016</b>							↑										
<b>Component 017</b>				↑				↑									
<b>Component 018</b>																	

End

Section: Filtered

## 1.2 Adding some Filtering

This is the same data, but with the addition of some filtering. Here there are just the 'Non-Functional' Requirements which are linked to 'blue' Components

	Requirement 004	Requirement 009	Requirement 010	Requirement 014	Requirement 015	Requirement 016	Requirement 019
<b>Component 002</b>	↑		↑		↑	↑	
<b>Component 007</b>	↑	↑			↑		↑
<b>Component 012</b>							
<b>Component 017</b>	↑	↑					

End

Section: WordTableStyle

## 1.3 Using Word table styles

This is the same data, but using a Word Table Style. With this, you can lots of additional formatting in Word, and use the same styling on lots of different tables.

	Requirement 004	Requirement 009	Requirement 010	Requirement 014	Requirement 015	Requirement 016	Requirement 019
Component 002	↑		↑		↑	↑	
Component 007	↑	↑			↑		↑
Component 012							
Component 017	↑	↑					

End

Section: MoreFormatting

### 1.4 Adding more titles and cell filling

Here we have added a new column to show the Alias of each Component, and changed the 'Arrow' symbol in cells to be a 'tick'.

		Requirement 004	Requirement 009	Requirement 010	Requirement 014	Requirement 015	Requirement 016	Requirement 019
<b>Ref</b>	<b>Component</b>							
CMP02	Component 002	✓		✓		✓	✓	
CMP77	Component 007	✓	✓			✓		✓
CMP12	Component 012							
CMP17	Component 017	✓	✓					

End

Section: RelationshipData

### 1.5 Using Relationship details

We have now used the stereotype of the relationship to add mode information to the table. Where the stereotype was 'planned' we have used some conditional formatting to replace this with 'P', and added some colour.

		Requirement 004	Requirement 009	Requirement 010	Requirement 014	Requirement 015	Requirement 016	Requirement 019
<i>Ref</i>	<i>Component</i>							
CMP02	Component 002	P		I		?	I	
CMP77	Component 007	P	P			P		I
CMP12	Component 012							
CMP17	Component 017	P	?					

End

Section: Sparse

### 1.6 Printing a Sparse Matrix

Sometimes the empty cells in a matrix are interesting: it shows where something is missing. Other times, empty cells aren't useful. So there's an option in eaDocX to remove empty rows and columns, to make it easier for readers to see the useful data. In this example, this table and the previous one aren't much different, but in a large matrix this can make a big difference.

		Requirement 004	Requirement 009	Requirement 010	Requirement 015	Requirement 016	Requirement 019
<i>Ref</i>	<i>Component</i>						

<b>CMP02</b>	<b>Component 002</b>	P		I	issue	I	
<b>CMP77</b>	<b>Component 007</b>	P	P		P		I
<b>CMP12</b>	<b>Component 012</b>						
<b>CMP17</b>	<b>Component 017</b>	P	issue				

End

Section: CompactMatrix

### 1.7 Alternate table style

This is a different way of viewing the data - called 'Compact' - , which works well when you have really really large matrices, which won't even fit into a Landscape page.

Requirement 001										
Requirement 002										
Requirement 003										
Requirement 004										
Requirement 005										
Requirement 006										
Requirement 007										
Requirement 008										
Requirement 009										
Requirement 010										
Requirement 011										
Requirement 012										
Requirement 013										
Requirement 014										
Requirement 015										
Requirement 016										
Requirement 017										
Requirement 018										
Requirement 019										
Component 001										
Component 002										
Component 003										
Component 004										
Component 005										
Component 006										
Component 007										
Component 008										
Component 009										
Component 010										

Component 011						↑														
Component 012																				
Component 013											↑									
Component 014						↑													↑	
Component 015				↑																
Component 016											↑									
Component 017										↑									↑	
Component 018																				

End

### Section: Sorting

## 1.8 Show some sorting

This version sorts the Source(column) and target (row) in a different order

		Requirement 004	Requirement 009	Requirement 010	Requirement 014	Requirement 015	Requirement 016	Requirement 019
<b>Ref</b>	<b>Component</b>							
CMP02	Component 002	✓		✓		✓	✓	
CMP77	Component 007	✓	✓			✓		✓
CMP12	Component 012							
CMP17	Component 017	✓	✓					

End

