# Getting Started with Mendeley Desktop CODE

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1 Introduction

As part of the European Commission funded CODE project (http://www.code-research.eu), Mendeley (http://www.mendeley.com/) has developed an experimental version of Mendeley Desktop that integrates a number of new and exciting features. This guide describes these features but feel free to also watch the screencast demo (http://www.youtube.com/watch?v=cG0cR0niAVU). These features have been developed in partnership with the University of Passau, the KNOW-Center (http://www.know-center.tugraz.at/en/) and MindMeister (http://www.mindmeister.com/).

They include:

- enhanced data extraction from pdfs;
- data visualisation tools;
- semantic lookups.

You can find links to download the new experimental version of Mendeley Desktop from the official CODE website’s results page (http://www.code-research.eu/results). This is an experimental version of Mendeley Desktop and the new features may not function correctly. If you are worried about corrupting your existing Mendeley account then please sign in with a different one when you run this experimental version.

Note that this guide describes the new CODE-related features. For information on Mendeley Desktop’s other features, please refer to the “Getting Started with Mendeley” guide (http://www.mendeley.com/getting-started/).
2 Enhanced Data Extraction from PDFs

2.1 Extracting the Table of Contents
Mendeley Desktop extracts out the table of contents from research articles. The headings in the table of contents become links that you can click on to take you directly to those sections in the pdf viewer.

1. Open up a pdf in Mendeley Desktop’s internal pdf viewer. In the right hand, there are three tabs: “Details”, “Notes” and “Summary”.
2. Click on the “Summary” tab. Mendeley Desktop will extract out the table of contents from the pdf in terms of the headings and subheading contained within it (Figure 1).
3. Click on one of the headings that has been extracted to jump directly to that point in the article.

![Figure 1: Shows table of contents automatically extracted from research article. Summary tab is selected. The table of contents extracted has one error in which a formula was incorrectly selected. Clicking on a heading will take you to that point in the article.](image)

2.2 Extracting Tables and Figures
Mendeley Desktop extracts out the tables and figures from research articles. The tables and figures become links that you can click on to take you directly to them in the pdf viewer.

1. Open up a pdf in Mendeley Desktop’s internal pdf viewer. In the right hand, there are three tabs: “Details”, “Notes” and “Summary”.
2. Click on the “Summary” tab. Mendeley Desktop will extract out the tables and figures that are contained within it (Figure 2). They will appear beneath the table of contents that has been extracted.
3. Click on one of the tables that has been extracted to jump directly to it in the article.

![Mendeley Desktop](image)

**Figure 2:** Shows tables automatically extracted from research article. Summary tab is selected. Clicking on a table will take you to that point in the article.
3 Data Visualisation Tools

3.1 Generating a Chart

We know that sometimes it can be difficult to interpret results that appear in big tables in papers. So we’ve build some tools that help you to quickly and visualise tabular data in charts.

1. Follow instructions in the Section 2.2 Extracting Tables and Figures to extract out a table from an article.
2. Click on the arrow on the upper right of a table and select the option to “Create Chart”. This will take you out of Mendeley Desktop to your default browser.
3. From the browser, select the data that you would like to visualise in a chart by left clicking on the appropriate columns. Select a single dimension column and a single observations column (Figure 3).
4. Click on “Create Chart” to create the chart based on the data selected. Your browser will be redirected to a Linked Data Visualisation Wizard where you can choose which type of graph to use to display you data. For example, you can choose to display the data in a bar chart (Figure 4).

![Figure 3: Chart wizard. Using the chart wizard, select one column as the dimensions and another column as observations. These will then be visualised in a chart when you choose to “Create Chart”.

<table>
<thead>
<tr>
<th>method</th>
<th>features</th>
<th>accuracy</th>
<th>precision</th>
<th>recall</th>
<th>F – measure</th>
</tr>
</thead>
<tbody>
<tr>
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<td>69.04</td>
<td>72.42</td>
<td>86.31</td>
<td>78.75</td>
</tr>
<tr>
<td>INIT</td>
<td>123</td>
<td>73.29</td>
<td>78.51</td>
<td>86.21</td>
<td>82.23</td>
</tr>
<tr>
<td>INIT+WN</td>
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<td>73.48</td>
<td>78.91</td>
<td>86.24</td>
<td>82.37</td>
</tr>
<tr>
<td>INIT+WN+DSP</td>
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<td>76.17</td>
<td>79.35</td>
<td>86.75</td>
<td>82.88</td>
</tr>
<tr>
<td>INIT+WN+DSP+FHC</td>
<td>7</td>
<td>73.86</td>
<td>75.14</td>
<td>90.67</td>
<td>82.18</td>
</tr>
<tr>
<td>INIT+WN+DSP+FBX</td>
<td>10</td>
<td>73.68</td>
<td>73.68</td>
<td>91.98</td>
<td>83.41</td>
</tr>
<tr>
<td>Finch et al.</td>
<td>–</td>
<td>74.96</td>
<td>76.58</td>
<td>89.80</td>
<td>82.66</td>
</tr>
<tr>
<td>Qi et al.</td>
<td>–</td>
<td>72.00</td>
<td>72.50</td>
<td>93.40</td>
<td>81.60</td>
</tr>
<tr>
<td>Wan et al.</td>
<td>–</td>
<td>73.00</td>
<td>77.00</td>
<td>99.00</td>
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</tr>
<tr>
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<td>–</td>
<td>71.90</td>
<td>74.30</td>
<td>88.20</td>
<td>80.70</td>
</tr>
</tbody>
</table>
Figure 4: Linked Data Visualisation Wizard. Allows you to chart the data extracted from the table in a graph. In this case, the data is presented in a bar chart.

3.2 Generating a Mindmap

Mindmapping software is popular for organising ideas in a visual space. Mendeley Desktop now connects to MindMeister, a mindmapping tool and can generate a mindmap based on the contents of a research article.

1. Open up a pdf in Mendeley Desktop’s internal pdf viewer. In the right hand, there are three tabs: “Details”, “Notes” and “Summary”.
2. Click on the “Summary” tab. At the bottom of the summary tab there is the option to export the article to MindMeister.
3. Click on “Export to MindMeister” to export the structure of the article, including any figures within it, to MindMeister (Figure 5).
Figure 5: Mind Map in MindMeister. Mind map takes the structure of the research article and visualises it in a mind map.
4 Semantic Lookups

4.1 Getting the Definition of a Term

Mendeley Desktop now connects to lots of open databases known as the Linked Open Data Cloud (http://www.linkeddata.org/). A massive amount of information is stored in this cloud in a machine readable format. Mendeley Desktop can pull out useful information from the cloud to help you when you’re reading an article.

1. Open up a pdf in Mendeley Desktop’s internal pdf viewer.
2. Using the “Select” text tool, select a term in the article. A pop-up menu will appear giving the options to “Copy”, “Add Note” and “Define” (Figure 6).
3. Select the option to “Define” which will give you the definition of the selected term. Mendeley Desktop gives you the most likely definition of the term (Figure 7).
4. Click through the alternative definitions for the term by clicking on the arrows in the upper right of the definition window.

![Mendeley Desktop](Figure 6: Accessing Term Definition. A term is selected in the article that causes a pop-up menu to appear with the options to copy the term, add a note to the term and get the definition of the term.)
4.2 Searching Mendeley’s Catalogue for Entities (i.e. Things)

If you find something in a paper (e.g. a group, algorithm, gene) and would like to know if it’s referenced in any other papers in Mendeley’s catalogue then now you can look it up. For the sake of clarity, we’ll call these things entities.

1. Open up a pdf in Mendeley Desktop’s internal pdf viewer.
2. Using the “Select” text tool, select a term in the article. A pop-up menu will appear giving the options to “Copy”, “Add Note” and “Define” (Figure 6).
3. Select the option to “Define” which will give you the definition of the selected term. Mendeley Desktop gives you the most likely definition of the term (Figure 7). That definition, in the Linked Open Data Cloud has a unique URI associated and is referred to as an entity. Mendeley Desktop will also tell you how many other papers in Mendeley’s Research Catalogue are known to reference this object.
4. Click on “Search Mendeley” to see which other papers reference this entity, “WordNet”.

Figure 7: Term Definition. The selected term “WordNet” is searched for in the Open Linked Data Cloud and it returns a likely definition of it.
Figure 8: Entity Search. Shows which papers from Mendeley’s Research Catalogue contain the entity “WordNet”.
5 Support

The features available in this version of Mendeley Desktop are experimental. As such, you will be warned not to use your live Mendeley account but to sign in with a different one. It is possible that some of the features will not work well, taking a long time to respond or returning incorrect results. We are actively working on improving these features but wanted to share them with you as soon as we could even though they are not yet fully polished. Please contact us through the CODE project via the channels described on the web site (http://www.code-research.eu).