



Guide 52

Version 3.0

Introduction to NVivo

This document describes the qualitative analysis software NVivo, which can be used to assist in the analysis of qualitative data such as interviews, focus groups and questionnaires.

A basic ability with Windows and with Microsoft Word is assumed.

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Conventions:

In this document, the following conventions are used:

- A typewriter font is used for what you see on the screen.
- A **bold typewriter font** is used to represent the actual characters you type at the Keyboard.
- A *slanted typewriter font* is used for items such as filenames which you should replace with particular instances.
- A **bold font** is used to indicate named keys on the keyboard, for example, **Esc** and **Enter**, represent the keys marked Esc and Enter, respectively.
- A **bold font** is also used where a technical term or command name is used in the text.
- Where two keys are separated by a forward slash (as in **Ctrl/B**, for example), press and hold down the first key (**Ctrl**), tap the second (**B**), and then release the first key.

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1 Introduction

1.1 What is NVivo?

NVivo is a software package designed to assist in the analysis of qualitative data. The package can enable a researcher to rapidly and accurately analyse research items such as questionnaires, transcripts of interviews and focus groups and other literature. NVivo 9 can also help analyse audio and video recordings as well as digitized pictures.

1.2 About this Guide

This guide is an introduction to using NVivo. It is not a manual for using NVivo in a particular project. It is important to realise that analysing qualitative data is an iterative process. You will need to do some initial analysis, then some reflection on the work you have done, then more analysis and so on until you have refined both the analysis and the research question you are attempting to answer.

1.3 Useful Websites

<http://www.qsrinternational.com>

This is the website of QSR International, the owners and developers of NVivo. It contains news, updates, tutorials, FAQs and online fora for discussion of the software and its uses.

<http://www.researchsupport.com.au>

This is the website of Pat Bazeley, an Australian researcher and trainer. It contains sample projects, hints and ideas for using NVivo in social science research.

<http://caqdas.soc.surrey.ac.uk>

This is the website of the Computer Assisted Qualitative Data Analysis Network. It contains advice, suggestions and online articles about a range of qualitative data analysis tools.

<http://onlineqda.hud.ac.uk/Introduction/index.php>

The website of OnlineQDA, which discusses qualitative data analysis, computer aided qualitative data analysis software and other related topics.

1.4 Useful Books

Bazeley, P., (2007) *Qualitative Data Analysis with NVivo*, London: SAGE Publications.

Lewins, A. & Silver, C., (2007) *Using Software in Qualitative Research*, London: SAGE Publications.

2 Starting a New Project

To launch NVivo on an NPCS machine, select **Start | All Programs | Statistical Software | NVivo 10**.

NVivo is a large program and can take a few minutes to launch.

The initial window the user is confronted with is shown below

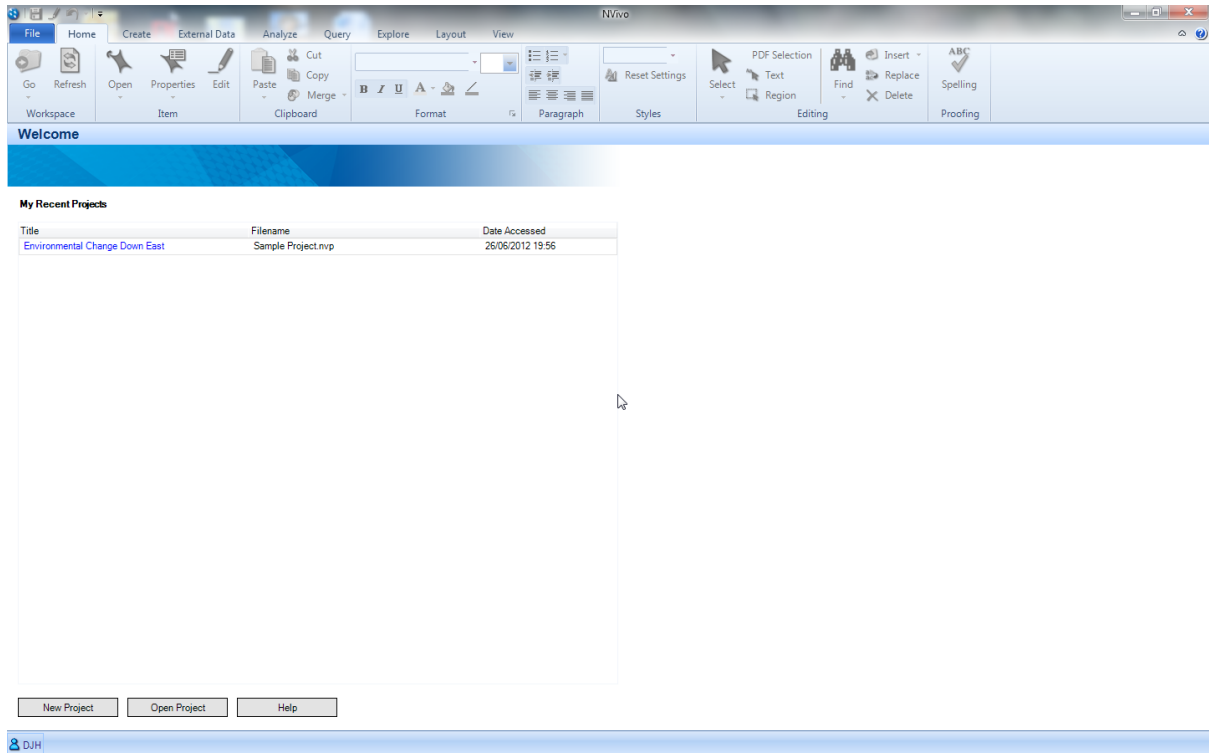


Figure 1: NVivo Initial Screen

The screen displays a list of recent projects. Clicking on one of the links will open that project.

2.1 Creating a New Project

To create a new project, click on **New Project** on the NVivo initial screen.

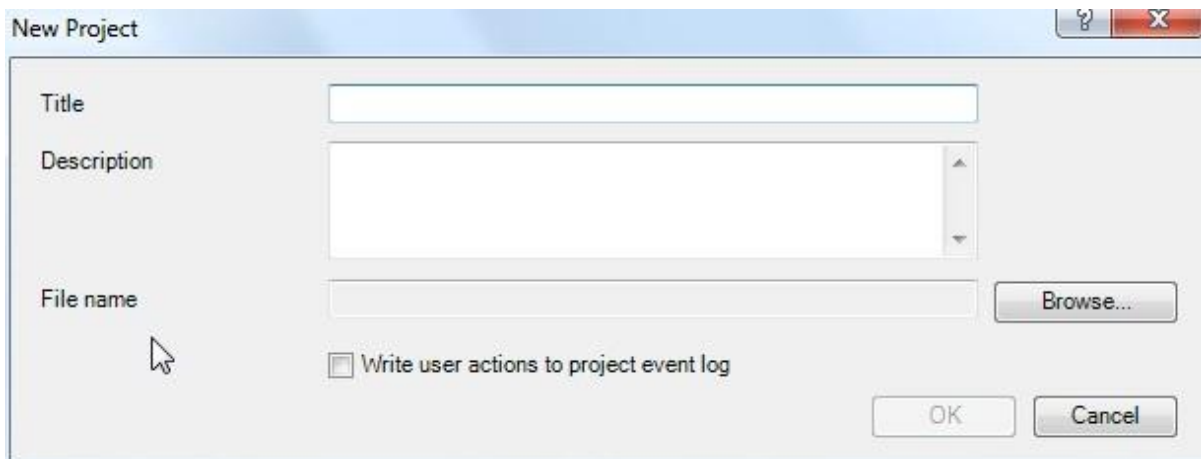


Figure 2: New Project Dialog Box

In the *Title* text box, type the name of the project. The NVivo file associated with the project will be called *[your title].nvp*. You can also enter a description of the project, but note that this is optional.

When you have selected you title, click **OK** and the main NVivo project window will open (Figure 3).

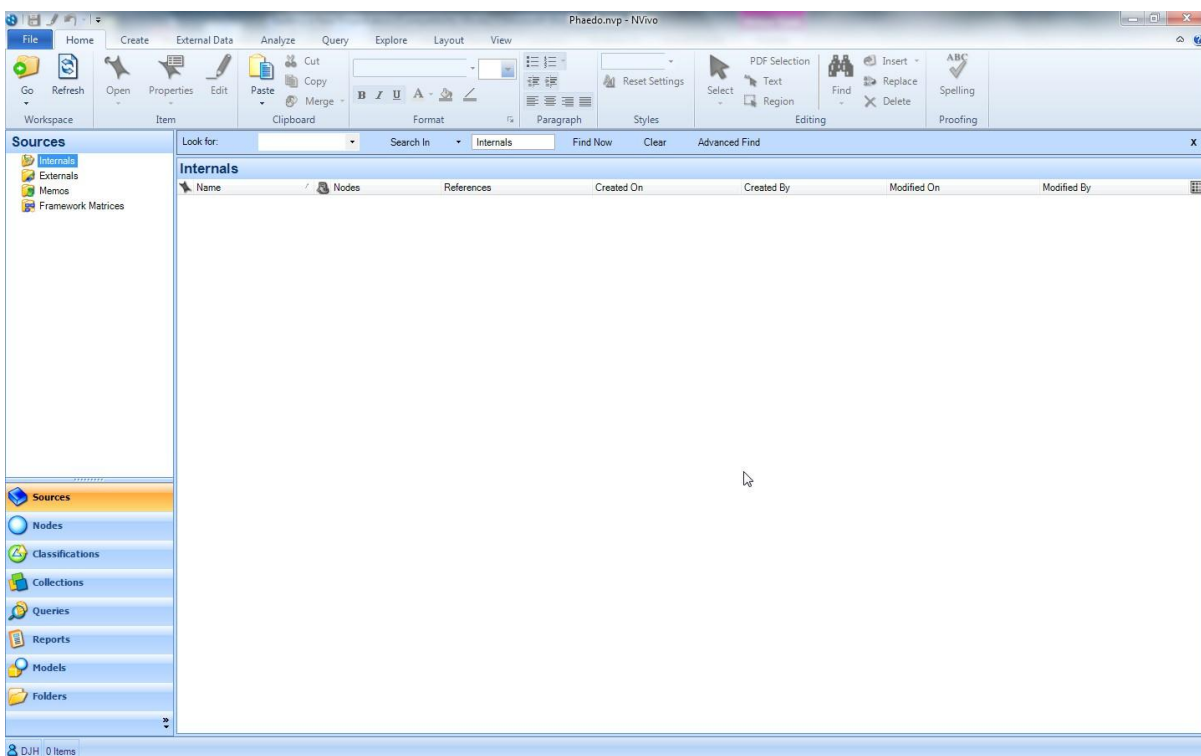


Figure 3: NVivo Main Project Window

The main window is divided into three parts. The top has toolbars which are used for the analysis of data. The left hand column is for navigation around the project. The main part of the window is for the details of the project. For example, the project documents are listed at the top of this section if the **Sources** button is clicked. If a detailed view of one of the documents is needed, it appears in the lower portion of this window.

2.2 The Environmental Change Project

The NVivo distribution includes a demonstration project related to environmental change. This can be accessed via the link on the NVivo initial screen (Figure 1). The project contains documents in a fairly advanced state of analysis, and it is useful to have a look at this to see how a project can be developed.

2.3 A Sample Project

In this guide, a small sample project will be used, relating to the philosopher Plato's dialog *Phaedo*. It is not necessary for you to use these example documents, but if you wish to they are available on the T:\ITS\nvivo example folder.

3 Loading Documents

The key information in any project is usually contained in documents. These may include transcripts of interviews, questionnaires, audio and video files from focus groups, research papers and web sites.

NVivo is capable of importing documents in a variety of formats.

Text documents in Microsoft Word 97 – 2003 format (.doc), Microsoft Word 2007 & 2010 (.docx), Adobe Portable Document Format (.pdf), rich text (.rtf) and plain text (.txt) formats can all be imported directly.

Video files and media clips in .mpg, .mpeg, .mpe, .wmv, .avi, .mov, .mp4 and .qt formats are all supported.

Audio files in .mp3, .wma or .wav can be imported.

Video and audio files up to 20 MB in size are imported into NVivo. Larger files are treated as externals (page 9).

Digital photographs and pictures can be imported if they are in .bmp, .gif, .jpg, .jpeg, .tif or .tiff formats.

It is important to realise that imported files are copied to your NVivo project. This means that the file size of your project can increase rapidly, particularly as audio and video files tend to be many megabytes in size. You are advised to run NVivo on a computer with a significant quantity of hard disk space available.

3.1 Internal Documents

To import a file, click on the **Sources** button. To create a folder to store internal documents in, right click on the **Internals** folder.

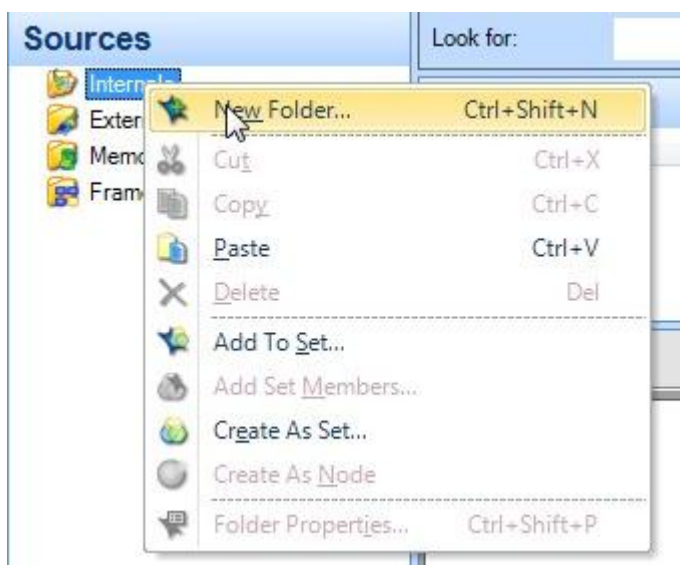


Figure 4: Internal Source - New Folder
Guide 52 Introduction to NVivo

Select **New Folder**, name the folder and click **OK**.

Move to the new folder by clicking on it.

To import documents, right click in the list area (top of the main window).

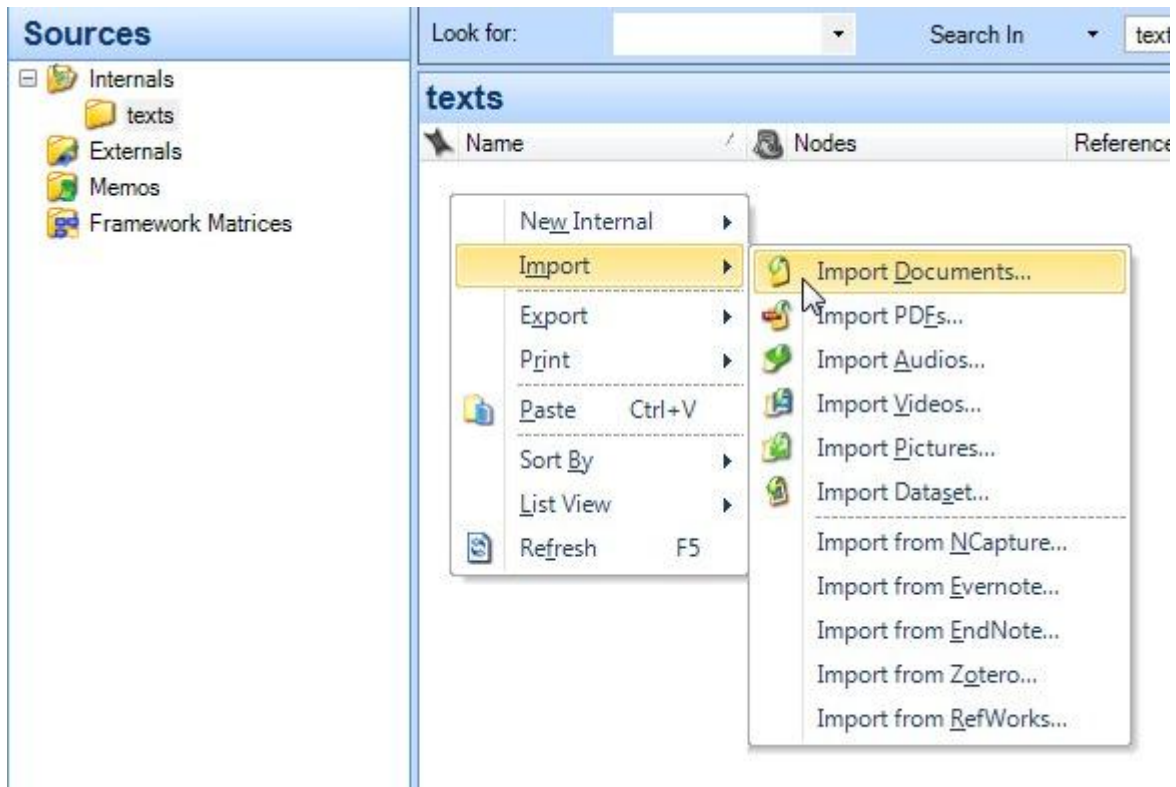


Figure 5: Importing Documents

Select **Import Internals... | Import Documents** from the menu. The Import dialog box will display.

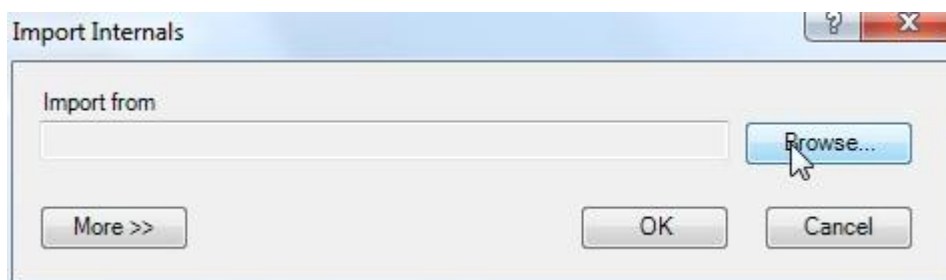


Figure 6: Import Internals Dialog Box

Use the **Browse** button to locate the files you wish to import.

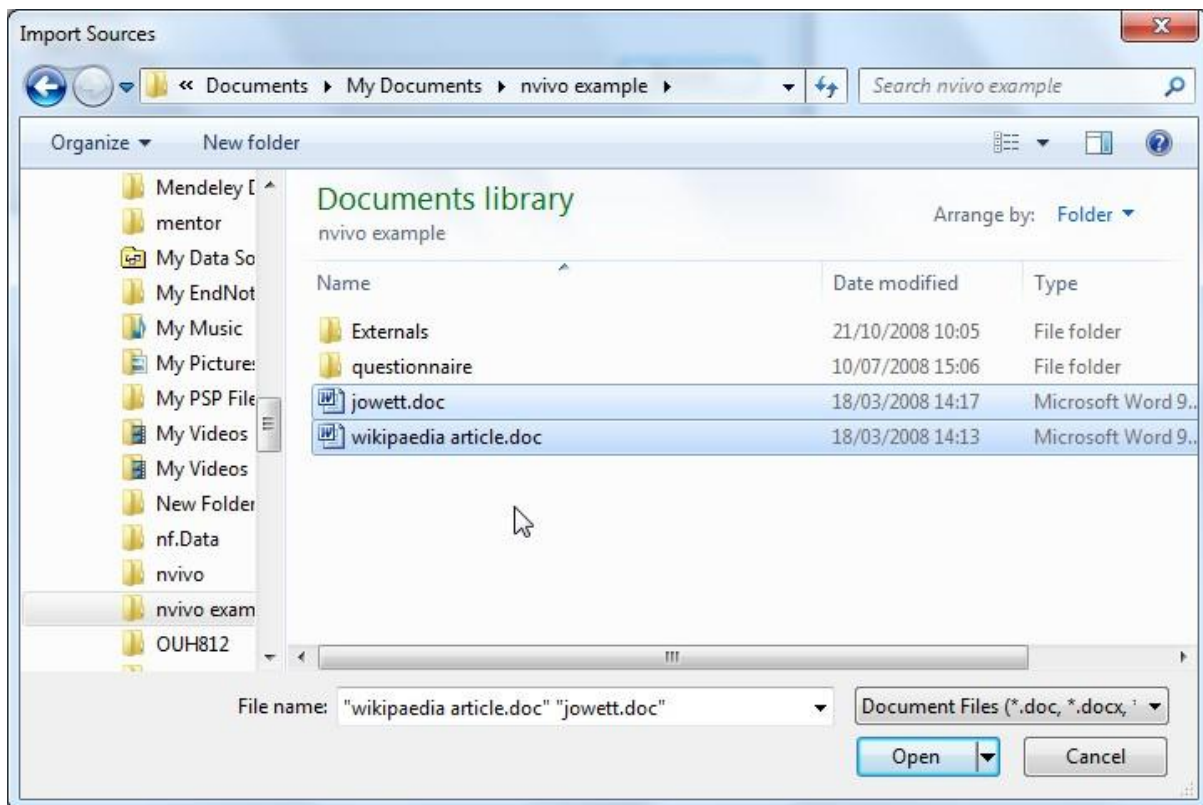


Figure 7: Importing Documents

Click on **Open** and then **OK** and the documents will be imported and displayed on the list view part of the main window.

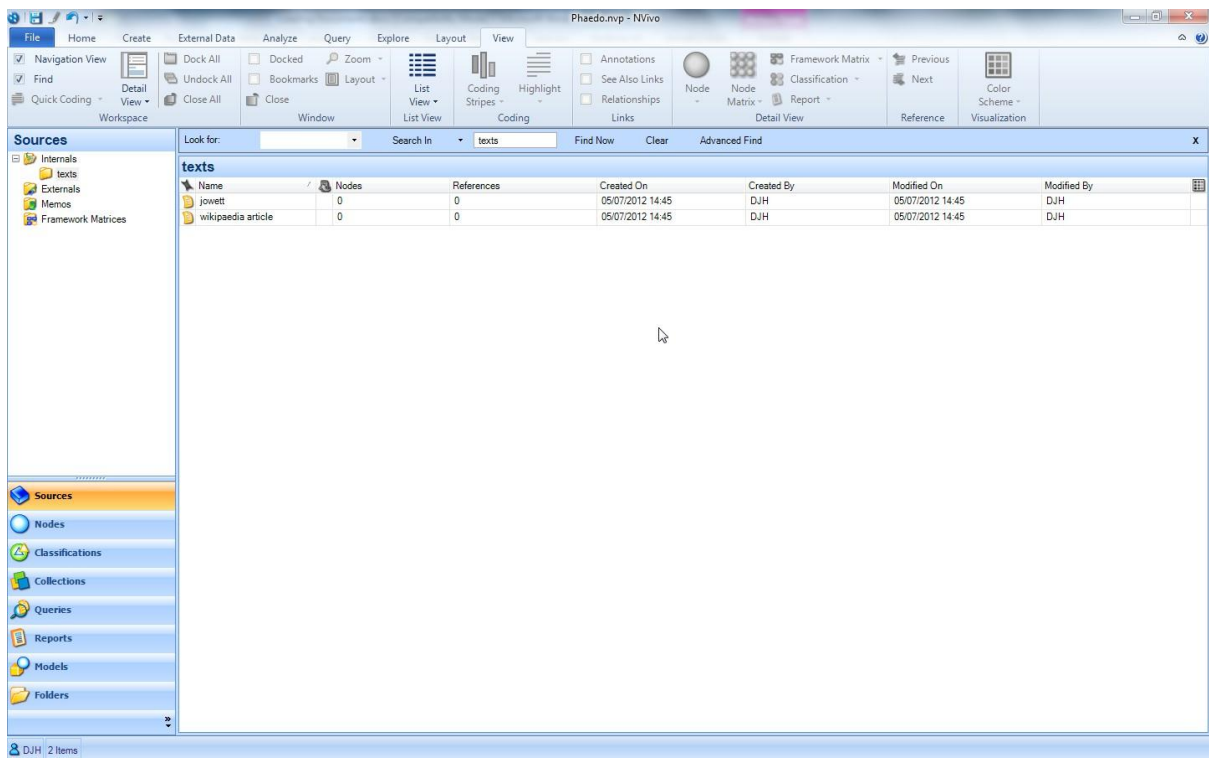


Figure 8: Imported Files

The files can be examined by double clicking on the file row. The detailed view of the document opens in the lower part of the window.

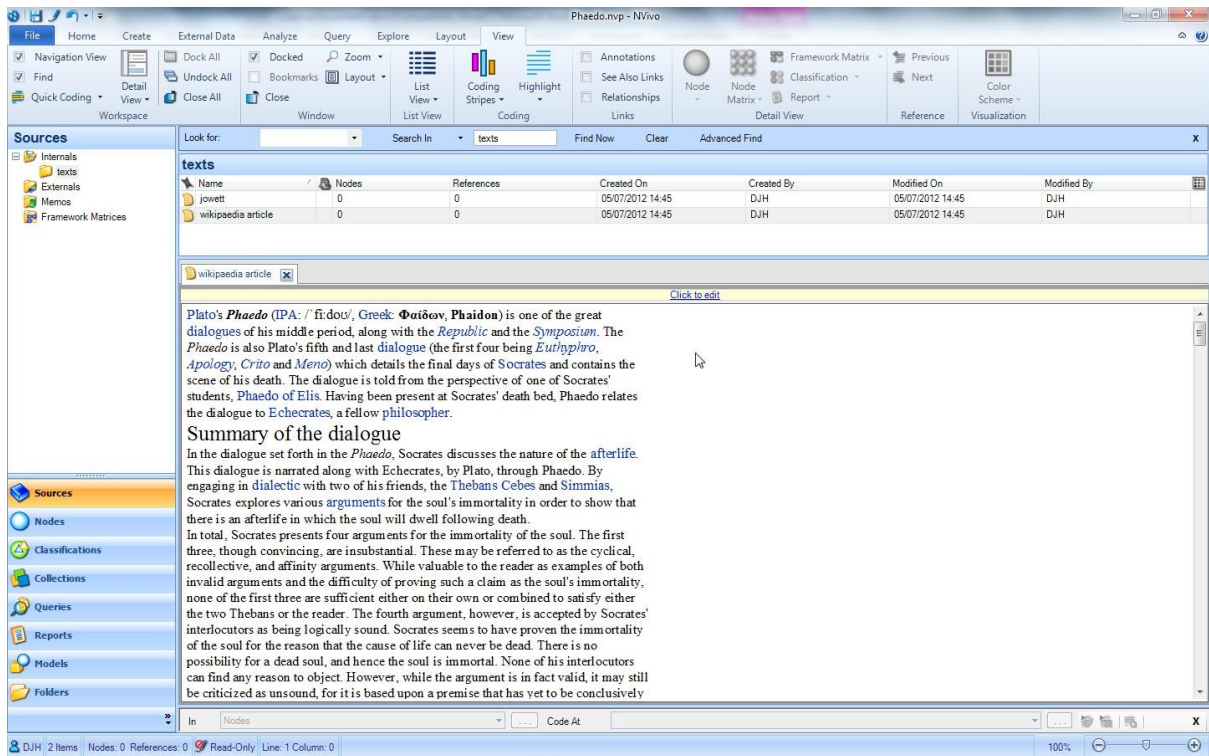


Figure 9: Project Showing Imported Documents and Detailed View

Audio, video and digital pictures can be imported in the same way, although you are advised to keep separate sources in separate folders.

3.2 Externals

Externals are proxy sources to represent material that cannot be imported, such as books and web sites. They can also be used for material that you do not wish to import, such as large video files of which you already have a transcript of the relevant parts.

To set up an external source, click on the **Externals** folder of the sources window. Right click on the main window and select **New External...**

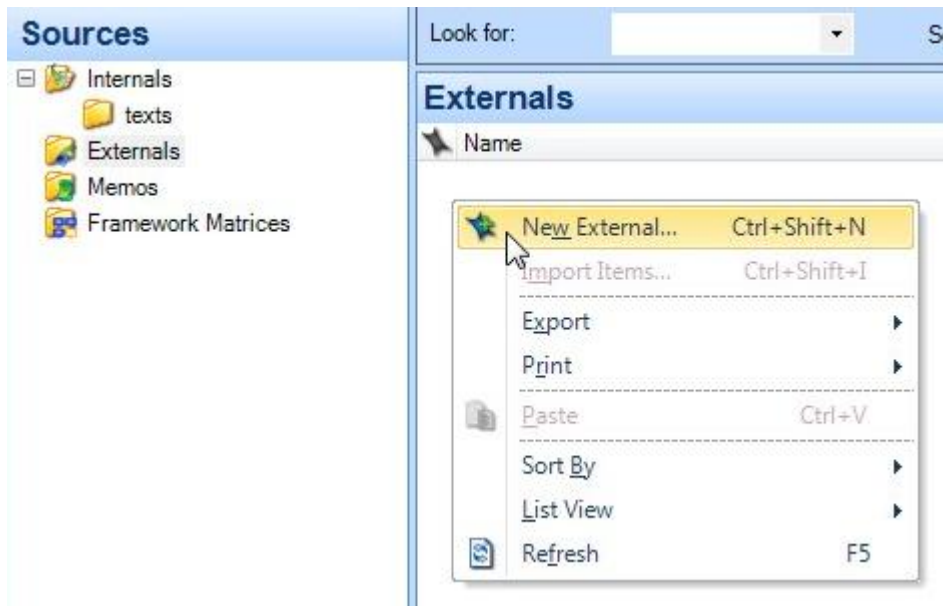


Figure 10: Loading an External Source

This displays the New External dialog box.

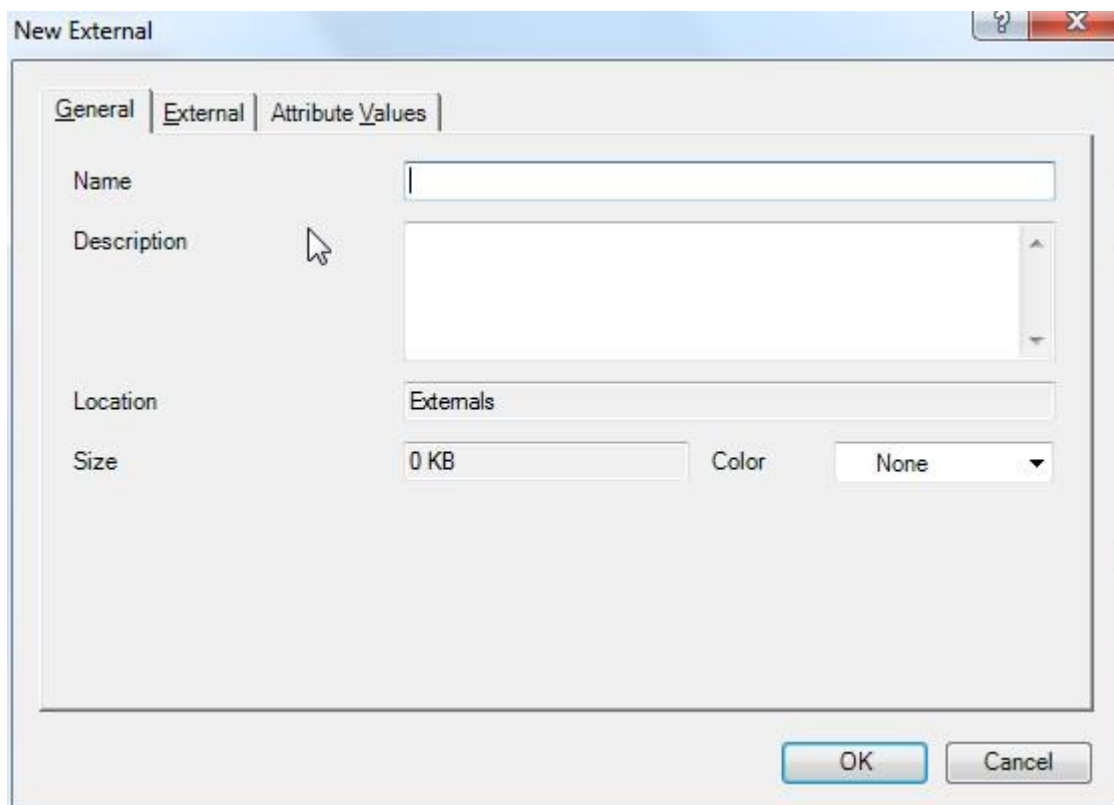


Figure 11: New External Dialogue Box

Fill in the *Name* and *Description* and click on the **External** tab to select the location of the file to be linked to.

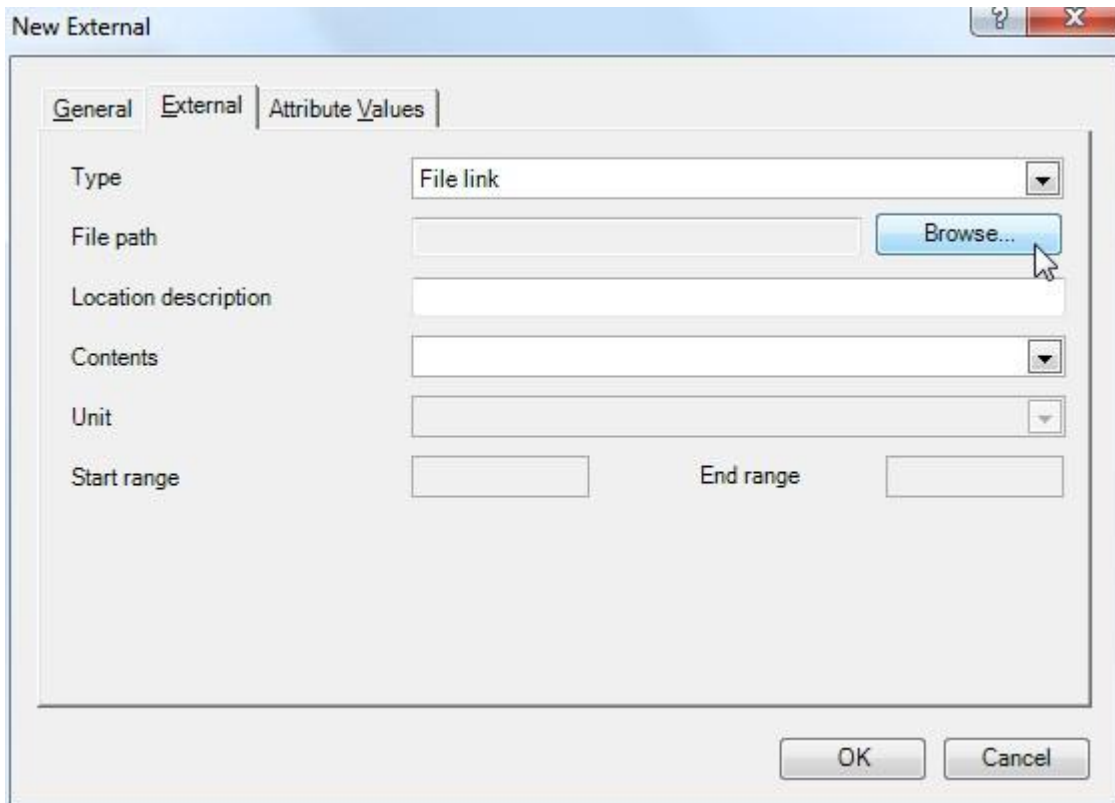


Figure 12: External Dialog External Tab

Click the **Browse** button and select the external file to link to.

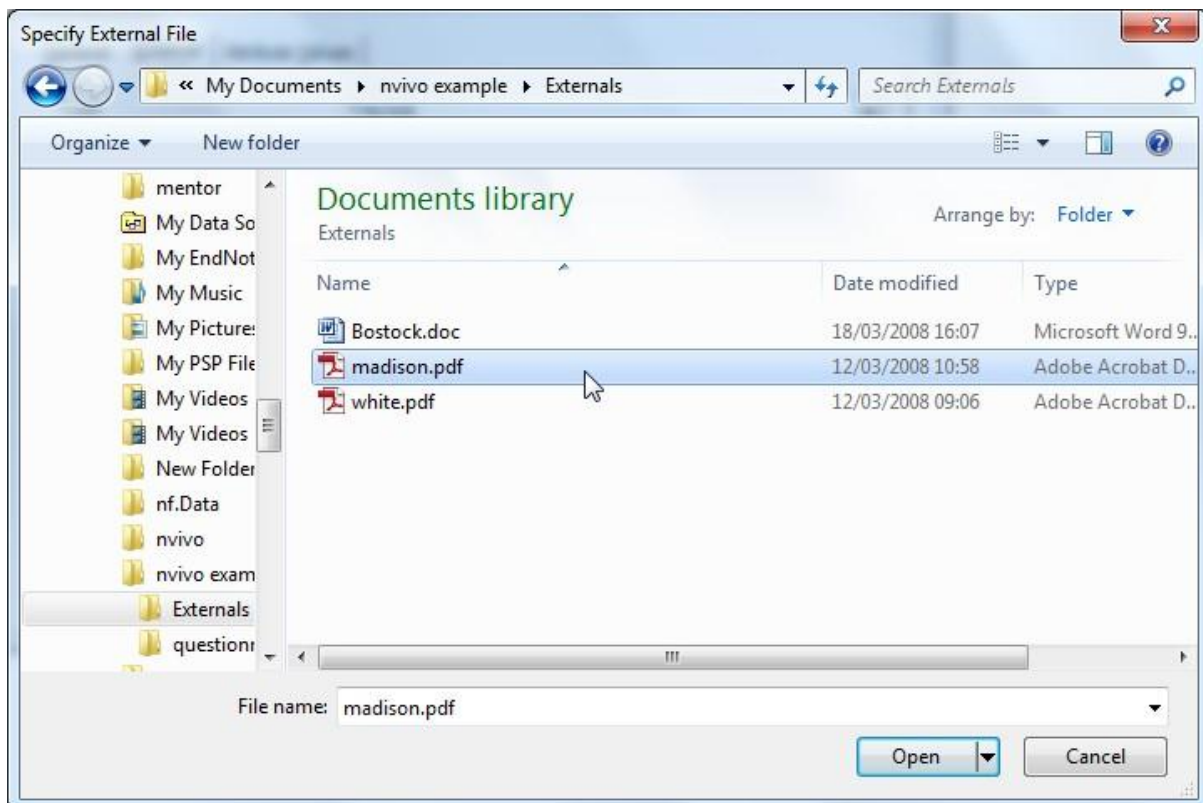


Figure 13: Open External

Click on **Open**, then **OK**. The external will be created and a new blank document generated which you can use for your notes on the external.

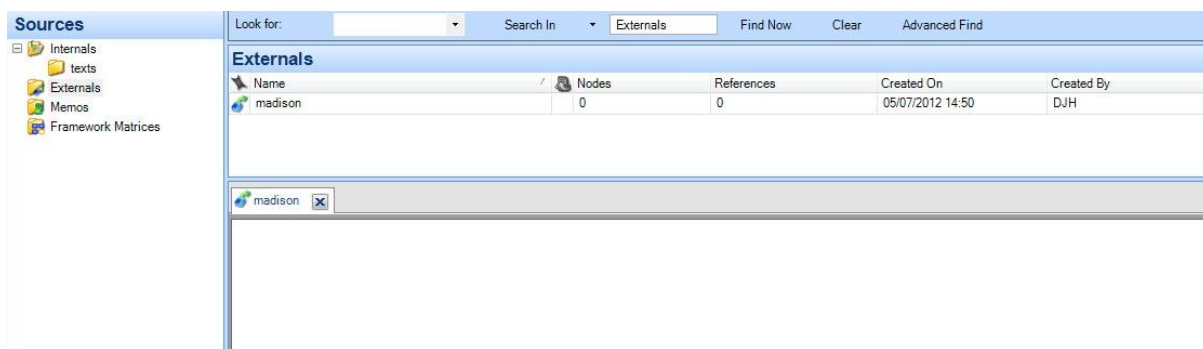


Figure 14: Created External

To open the external file, right click on the external and select **Open External File....**

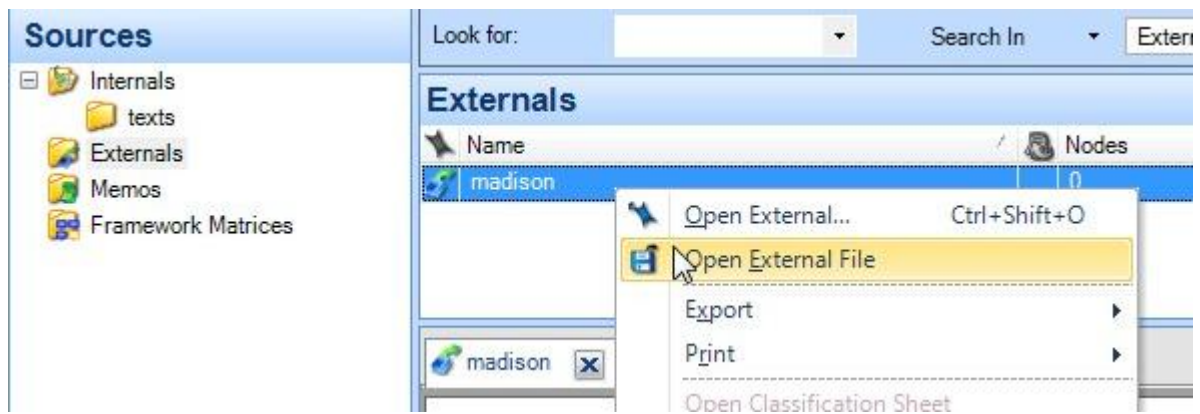


Figure 15: Opening an External File

The external will be opened.

4 Coding & Nodes

4.1 What is Coding?

Qualitative data is complex, and it is necessary to analyse it to find some sort of order and coherence within your data set, and to see how your data relates to your research questions. A node within a coding scheme is a representation of an idea, theme or category in your data. Segments of data from across your dataset are coded to these nodes. This enables you to retrieve all the data related to a node in one go at a later date. Coding is a way of classifying or tagging data so it can be reviewed by category as well as source.

There are various different approaches to coding data. You are referred to the literature or to the books mentioned earlier (page 1) to get an overview.

Analysing qualitative data is an iterative process and you will find yourself adding, deleting and moving nodes around the project as your understanding of the data changes.

4.2 Nodes

A node is made for each concept, theme, idea or category you find in your data. NVivo stores references to the coded data in the nodes. The source thus remains intact, even though the reference to the data is decontextualised.

Free Nodes

Initially, most of your coding will be to free nodes. Free nodes are not connected to anything else, as the name implies, and they serve as dropping off points for your data. They represent ideas, concepts, themes and so on in your dataset. As your ideas and analysis progresses, you may start to realise that some of your nodes have a relationship to each other. You can then rearrange them as tree nodes.

Tree Nodes

Initially, you will spend most of your time creating and coding to free nodes. However, you will probably start to notice that some nodes are connected or express similar sorts of ideas. It is here that the idea of arranging your nodes in a tree structure comes in useful.

Tree structures help to organise and classify your concepts, allowing you to code with more rapidity and more richly. They help in giving you conceptual clarity and in identifying interesting patterns in your data. Within NVivo you can easily create, merge, delete and shift nodes, thus giving you useful flexibility in finding the patterns and concepts in your data.

4.3 Coding to Nodes

There are various ways to create a node. The examples below relate to free nodes, but tree nodes can be created in a similar way.

With a document open, find a sentence, word or phrase which seems to suggest an idea or theme in your data. Highlight the sentence.

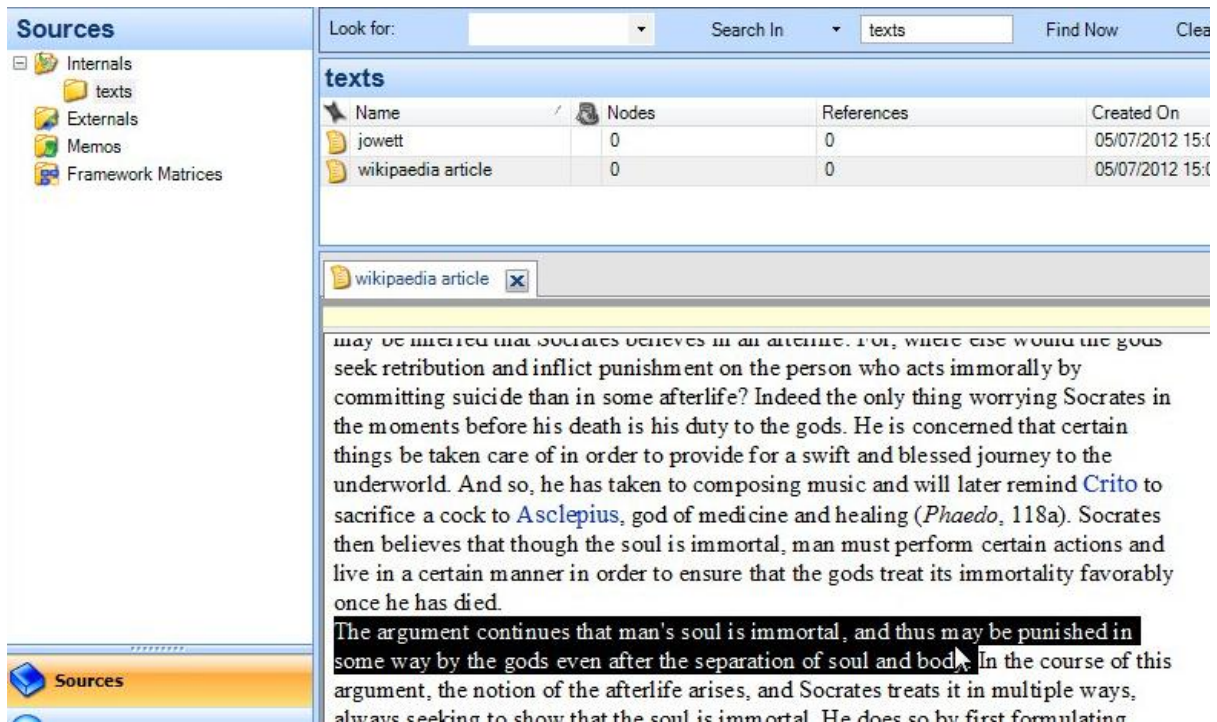


Figure 16: Free Node - Highlight

Right click on the selection and choose **Code Selection At New Node**.

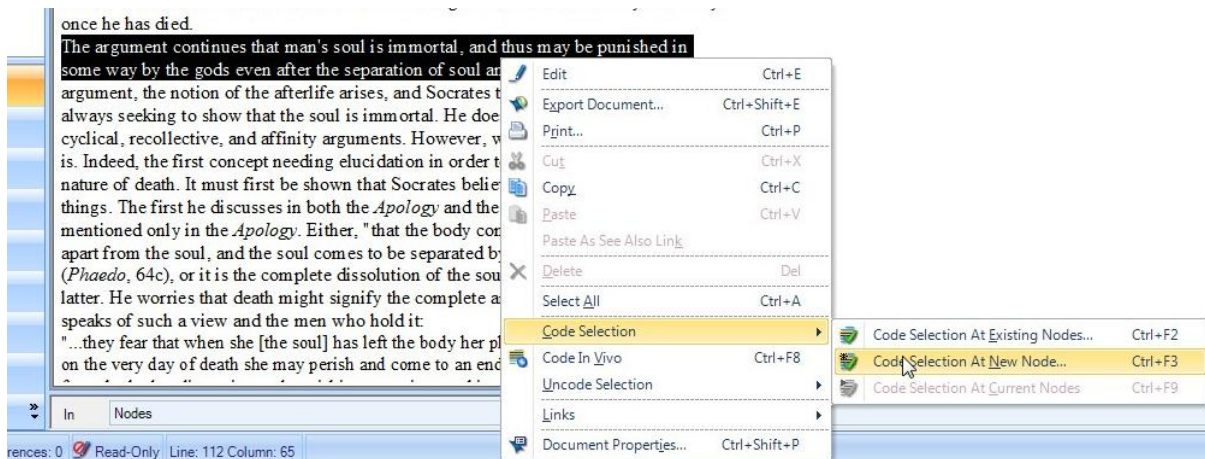


Figure 17: Code Selection

The displays the New Node dialog box. Choose a name for your node and click **OK**.

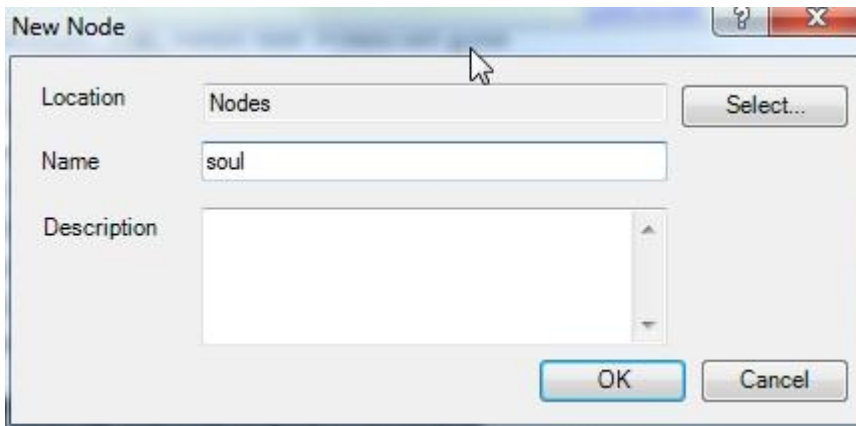


Figure 18: New Node Dialog Box

Your new node is displayed in the list of nodes above the detailed view in the **Nodes** area.

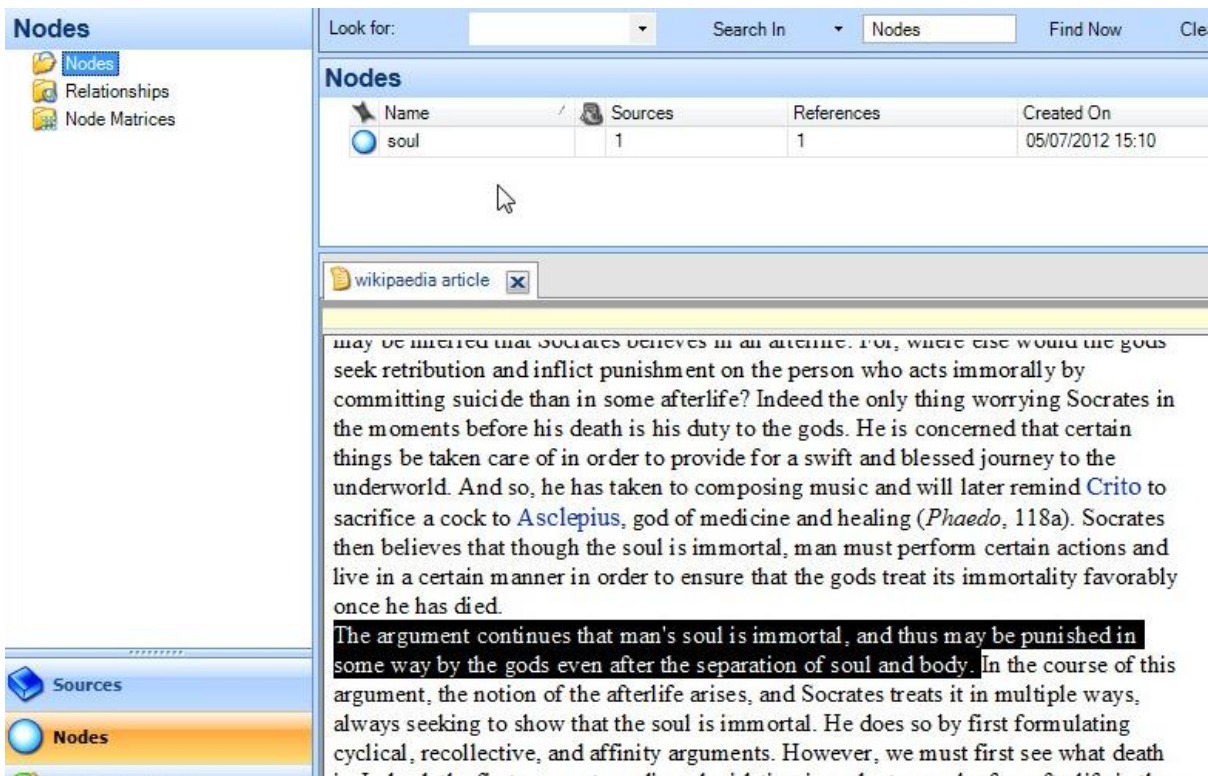


Figure 19: Node Display

You can code a sentence to multiple nodes if required.

You can also drag and drop highlighted text to the appropriate node. Highlight the required text.

The screenshot shows the NVivo software interface. On the left, there is a sidebar with 'Nodes' selected. The main window displays a search result for 'soul' with 1 source and 1 reference. Below this, a text editor window titled 'wikipedia article' is open, showing a paragraph of text. A mouse cursor is positioned over a highlighted section of the text: 'Two points are evident from this discussion. First, that the body and soul are held to be separate entities, and that they may be separated, most thoroughly through death.'

Name	Sources	References	Created On
soul	1	1	05/07/2012 15:10

wikipedia article

However, man should not kill himself. Socrates cites the traditional argument that man ought not to kill himself because he possesses no actual ownership of himself, as he is actually the property of the gods. He says, "I too believe that the gods are our guardians, and that we men are a chattel of theirs" (*Phaedo*, 62b). To this, Cebes assents. For, the body is the property of the gods, and man would be punished were he to destroy something that he does not truly own. Then, it may be concluded that man should not kill himself because he will be punished by the gods. The philosopher, then, will greet death, but not hasten to its arrival. For, while he has spent his life preparing for and awaiting its arrival, it is not virtuous to bring about its occurrence. **Two points are evident from this discussion. First, that the body and soul are held to be separate entities, and that they may be separated, most thoroughly through death.** Secondly, in arguing that one ought not to do harm to the possession of the gods, it may be inferred that Socrates believes in an afterlife. For, where else would the gods seek retribution and inflict punishment on the person who acts immorally by committing suicide than in some afterlife? Indeed the only thing worrying Socrates in the moments before his death is his duty to the gods. He is concerned that certain

Figure 20: Drag & Drop: Text Highlighting

Pick the text up with the cursor and move it to the node you wish to code at.

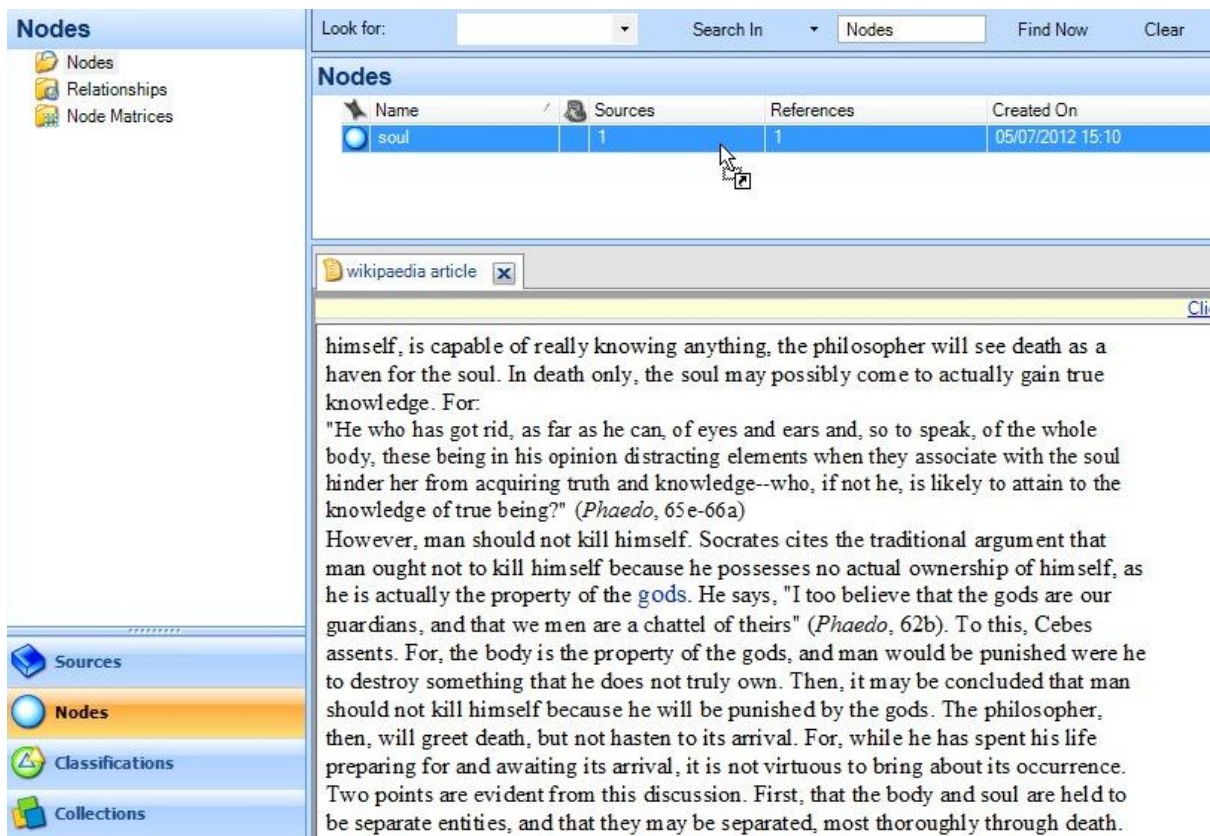


Figure 21: Drag & Drop: Adding the Text to a Node

Drop the text into the node. You will see the number of references increment.

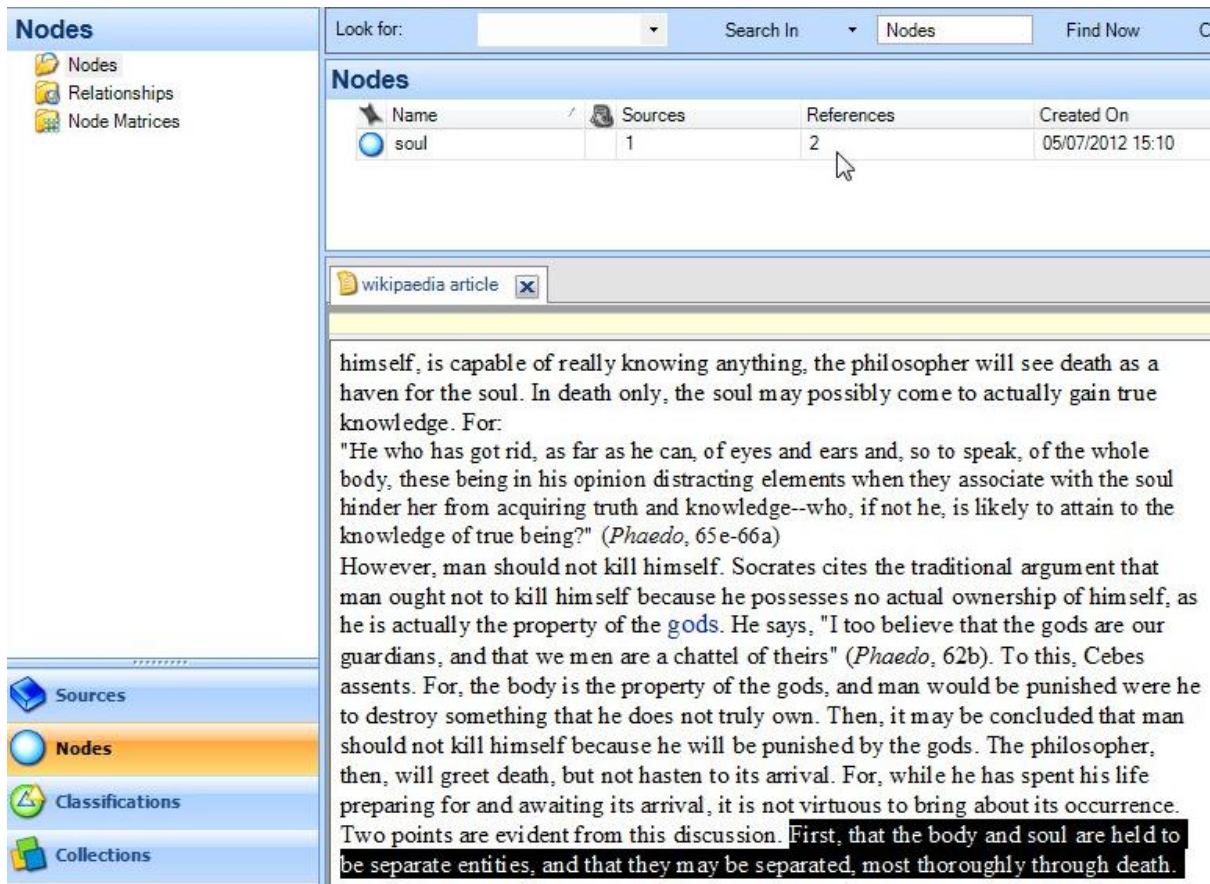


Figure 22: Drag & Drop Completed

A third way of coding documents is to code *in vivo*. This is a good way of capturing the words and phrases that people actually use, but it is limited by the vocabulary of the concepts in your data, rather than broader or more abstract ideas. *In vivo* coding is a good way of starting off your free node collection, but it often needs refining later.

To code *in vivo*, select the text to code and right click on it.

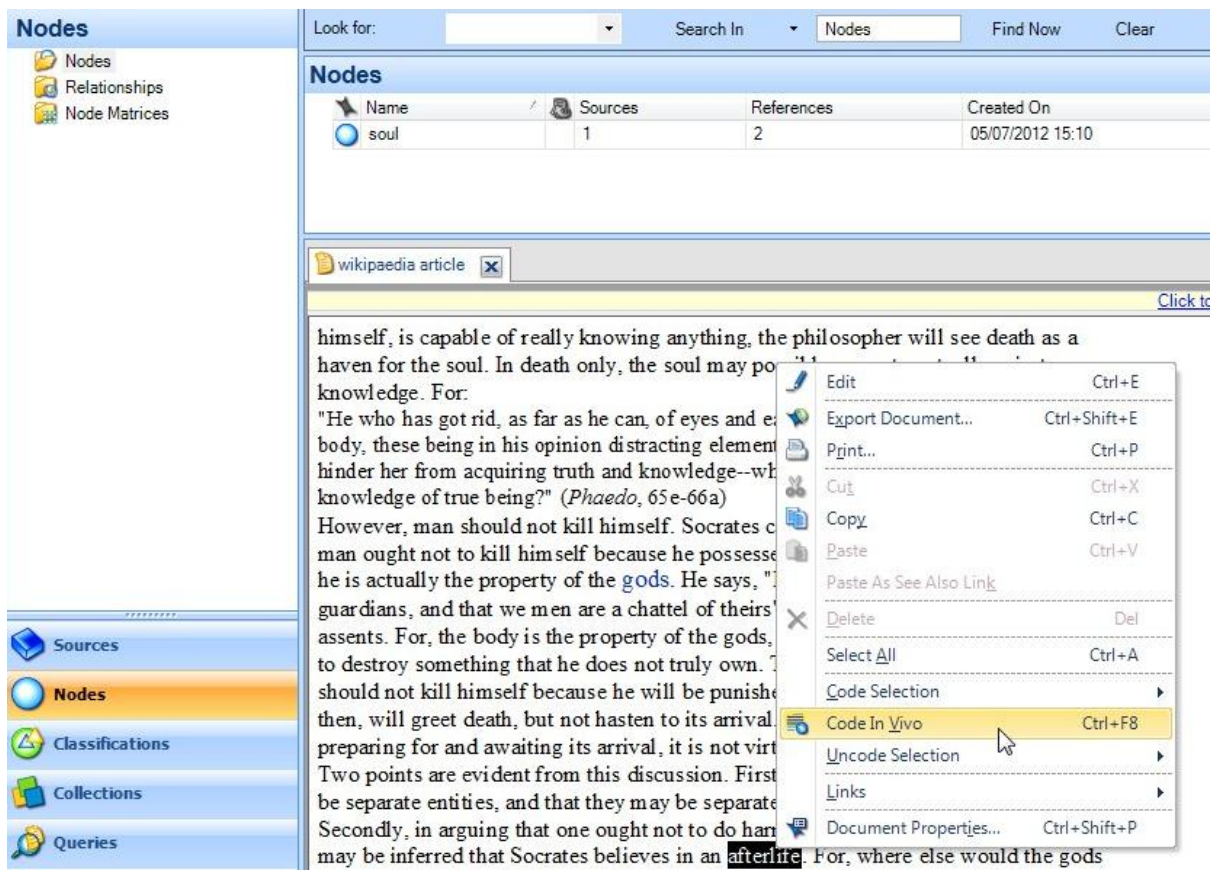


Figure 23: Coding in vivo

Select **Code In Vivo**. NVivo creates a new node with the name of the text you have selected.

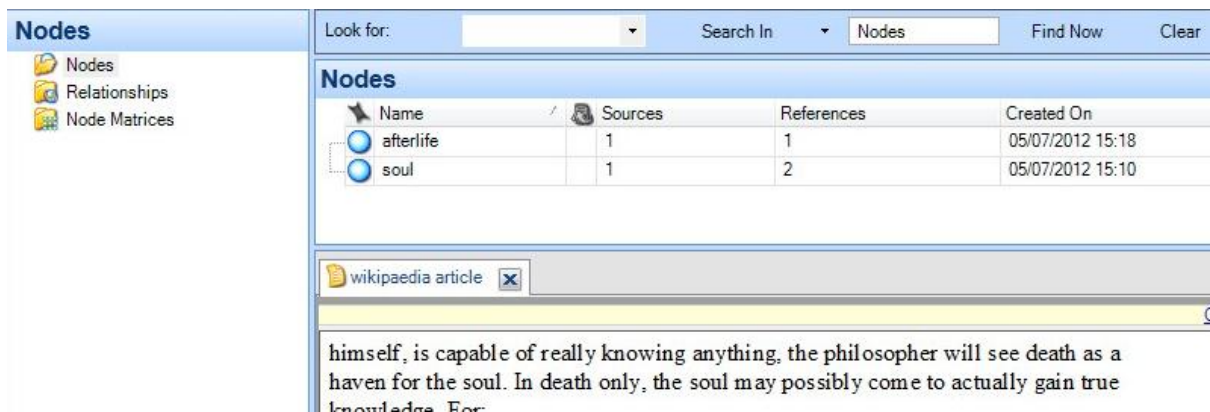


Figure 24: *In vivo* Coding Node Creation

Note that coding *in vivo* is usually best at capturing the language of the participants, and cannot sensibly be used for coding phrases.

You can also create nodes without coding to them initially.

Right click on the node list pane and select **New Node**.

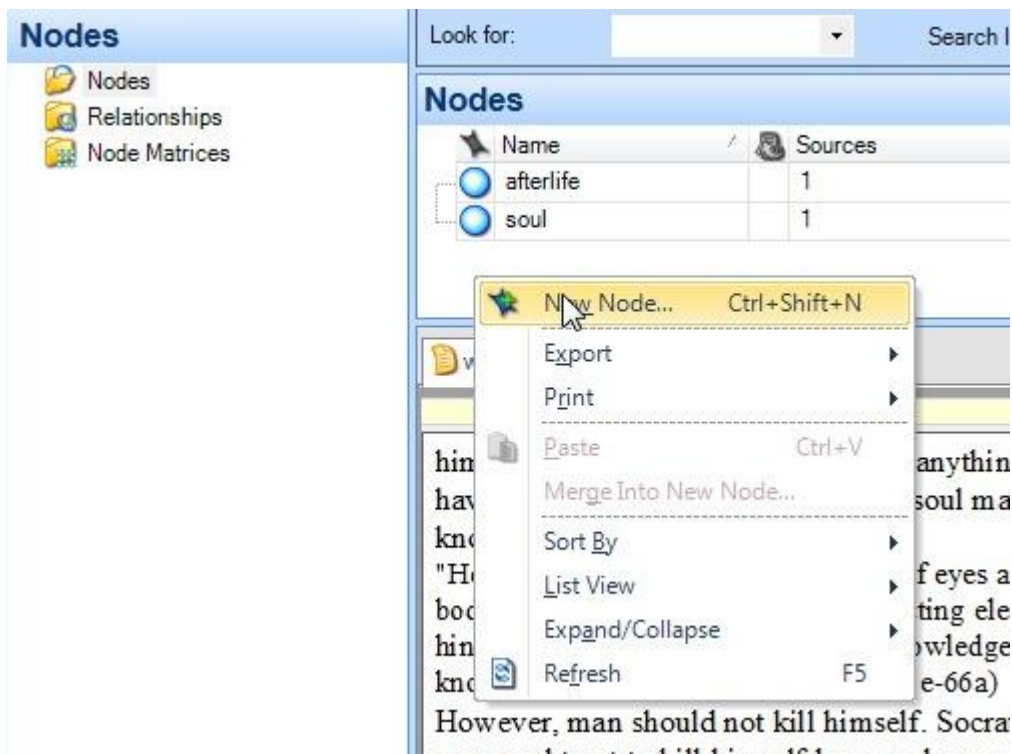


Figure 25: New Node

This displays the new free node dialog.

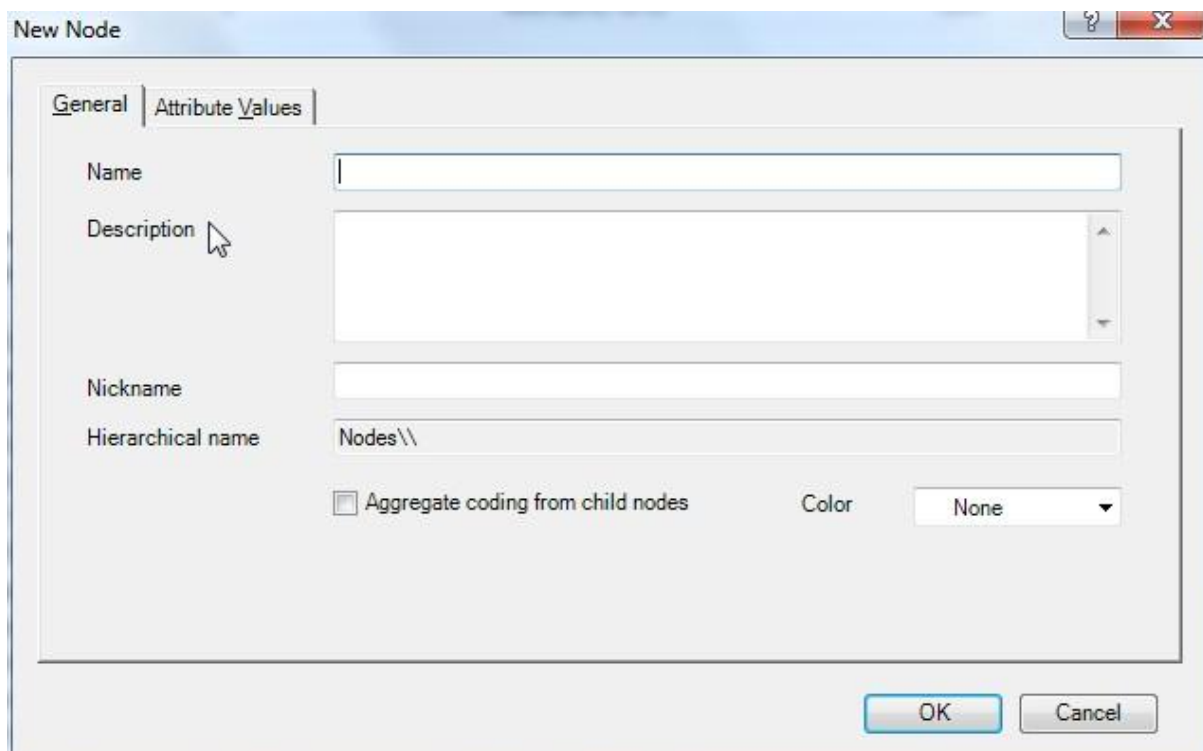


Figure 26: New Node Dialog

Name the node and click **OK**. The new node will be created in the node list.

4.4 Viewing Nodes

To view the contents of a node, double click on it in the node list. The content appears in the detail view.

The screenshot shows the NVivo software interface. At the top, there is a search bar with 'Look for:' and 'Search In' dropdowns, and buttons for 'Find Now', 'Clear', and 'A'. Below this is a table titled 'Nodes' with columns for Name, Sources, References, and Created On. The table lists three nodes: 'afterlife', 'soul', and 'underworld'. Below the table, there is a search bar for 'wikipaedia article' and a selected node 'soul'. The main area displays the content of the 'soul' node, including a path '<Internals\texts\wikipaedia article> - § 2 references coded [1.77% Coverage]', and two references with their respective coverage percentages and text excerpts.

Name	Sources	References	Created On
afterlife	1	1	05/07/2012 15:18
soul	1	2	05/07/2012 15:10
underworld	0	0	05/07/2012 15:20

wikipaedia article soul

<Internals\texts\wikipaedia article> - § 2 references coded [1.77% Coverage]

Reference 1 - 0.47% Coverage

First, that the body and soul are held to be separate entities, and that they may be separated, most thoroughly through death.

Reference 2 - 1.30% Coverage

Socrates then believes that though the soul is immortal, man must perform certain actions and live in a certain manner in order to ensure that the gods treat its immortality favorably once he has died.

The argument continues that man's soul is immortal, and thus may be punished in some way by the gods even after the separation of soul and body.

Figure 27: Viewing a Node

The contents of the node lists the sources, the number of references that source provides to the node, and the percentage of the source coded to the node.

Video, audio and image files can also be coded directly to nodes. However, it is probably more useful to code transcripts.

4.5 Coding Stripes

Coding stripes are a useful way of seeing how you are managing your coding, where the densest parts of your coding are and so on.

To turn coding stripes on, select **View** on the ribbon and click the **Coding Stripes** button. Select the type of coding stripes required.

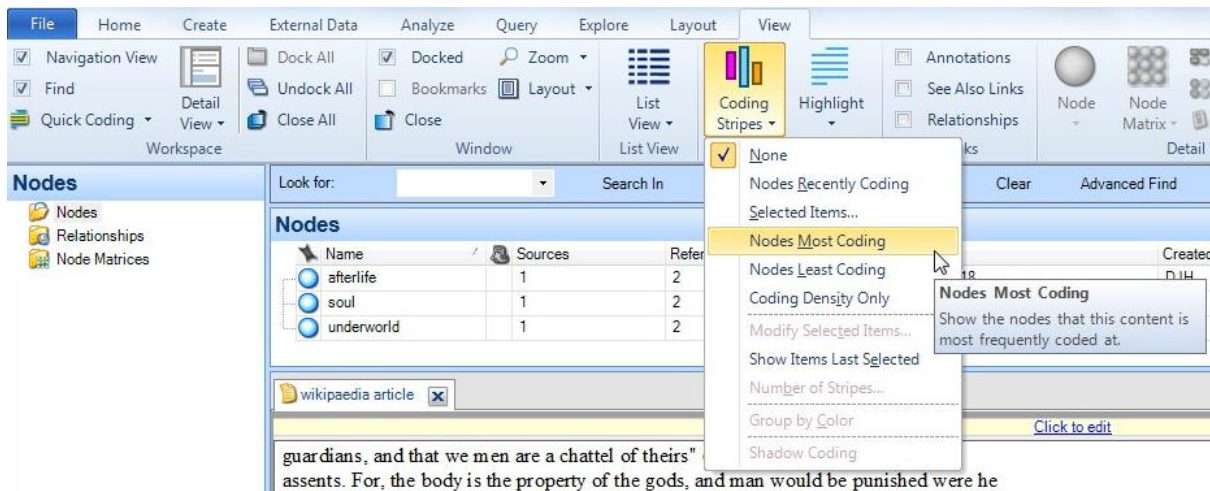


Figure 28: Selecting Coding Stripes

The coding stripes appear at the right hand side of the detail view.

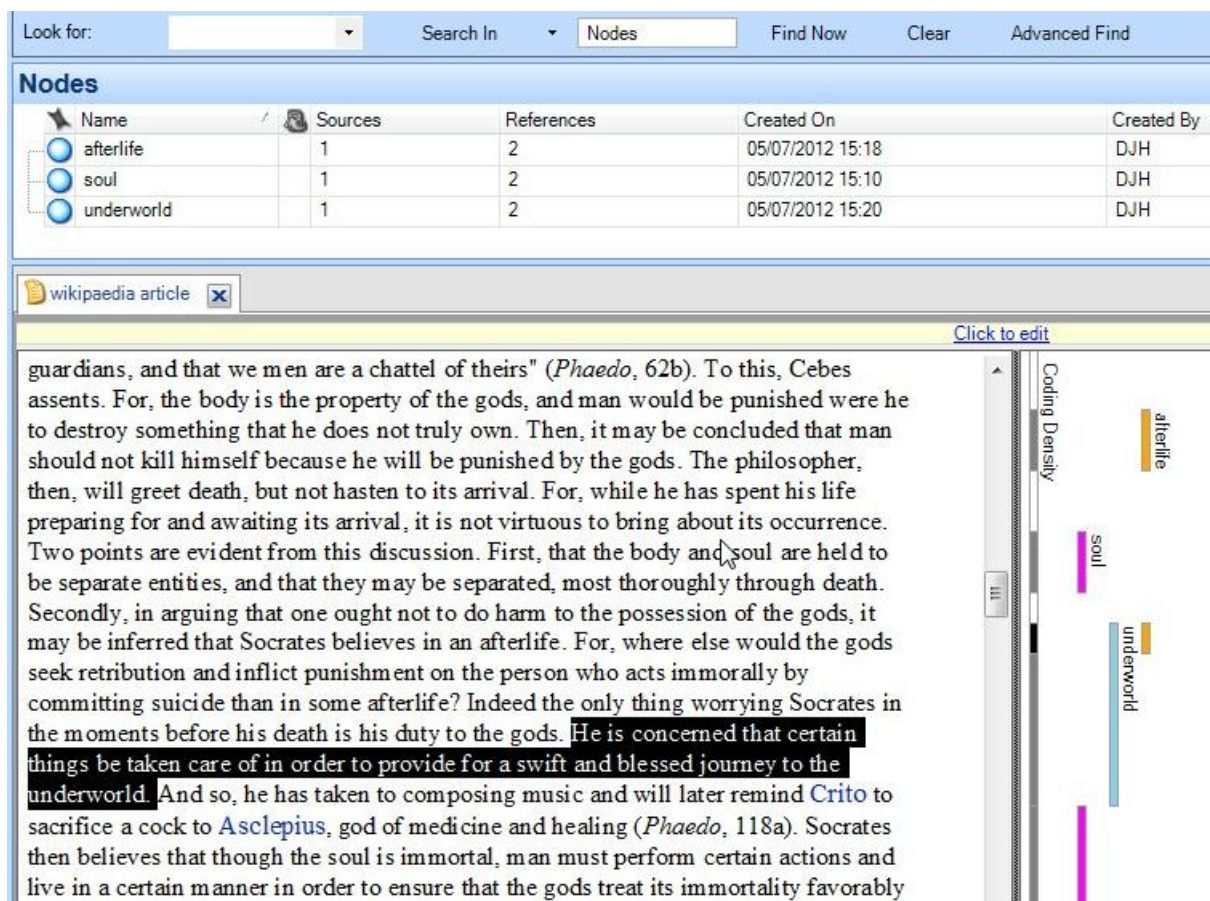


Figure 29: Coding Stripes

Each node has a different colour, and you can see which areas of the source are coded to the different nodes. The coding density gives you an overall view of the density of coded source at a given point.

Right clicking on a stripe gives you a range of useful options for working with the node.

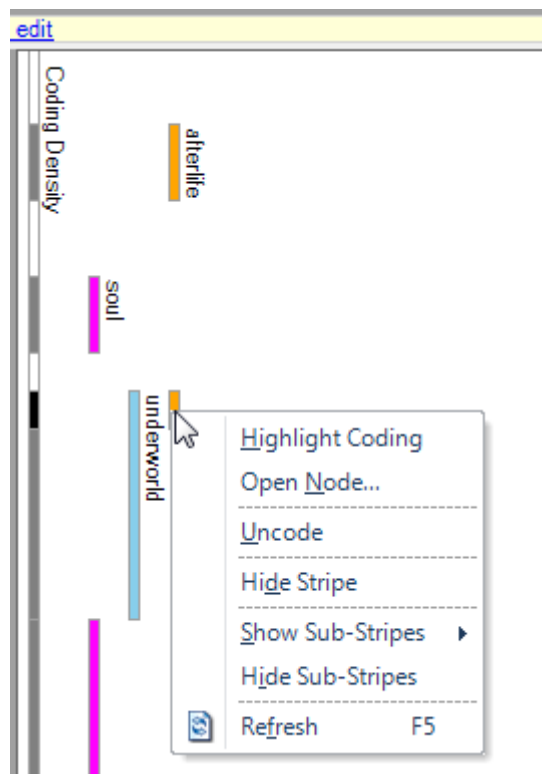


Figure 30: Coding Stripes Sub-menu

4.6 Auto Coding

It is possible to automate coding in some circumstances. Where the text is from documents that have been structured using Microsoft Word's heading styles, the Auto-code function can automatically code the documents to nodes based on the headings entered.

The three questionnaires a1.doc, a2.doc and a3.doc have been imported into the sources/questionnaire folder from T:/ITS/Nvivo/questionnaire. They are documents structured using Microsoft Word.

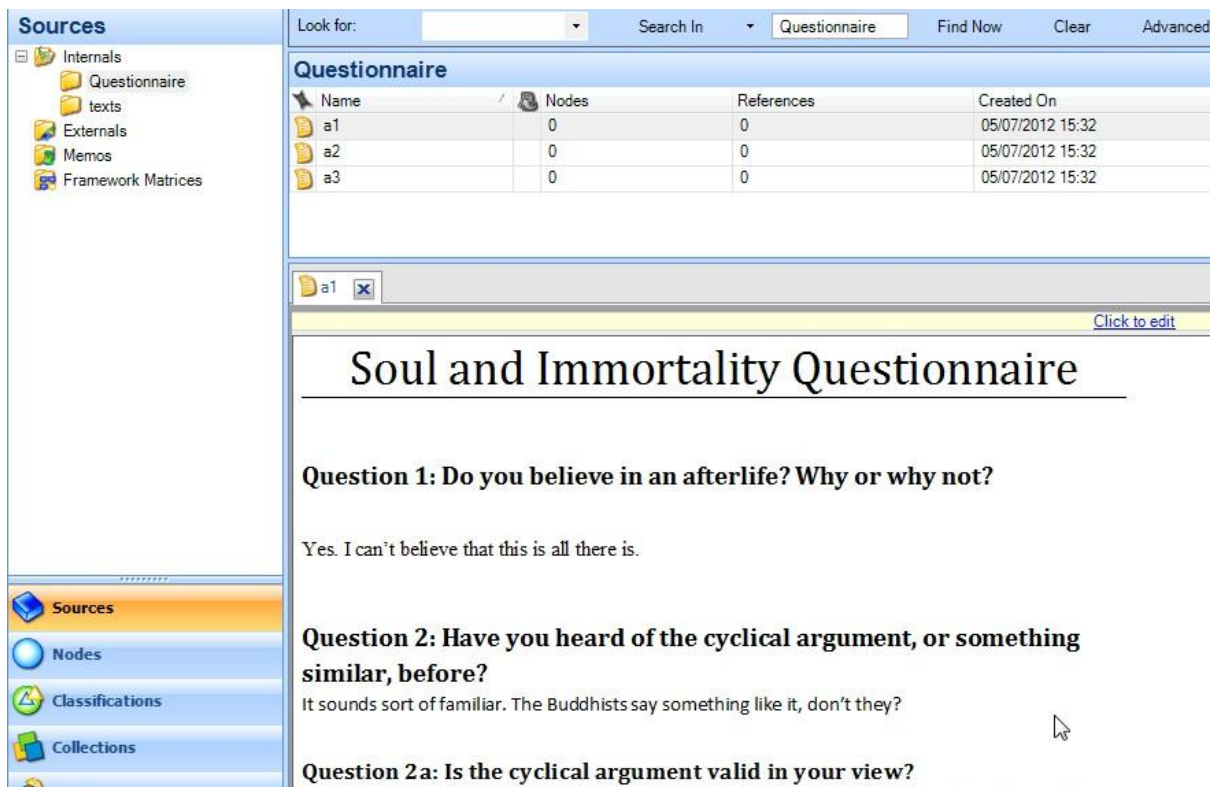


Figure 31: Structured Document

We can commence our analysis of the documents by autocoding them against the document headings.

First, select all the documents to be auto-coded and click on the **Autocode** button on the **Analyze** tab of the ribbon.

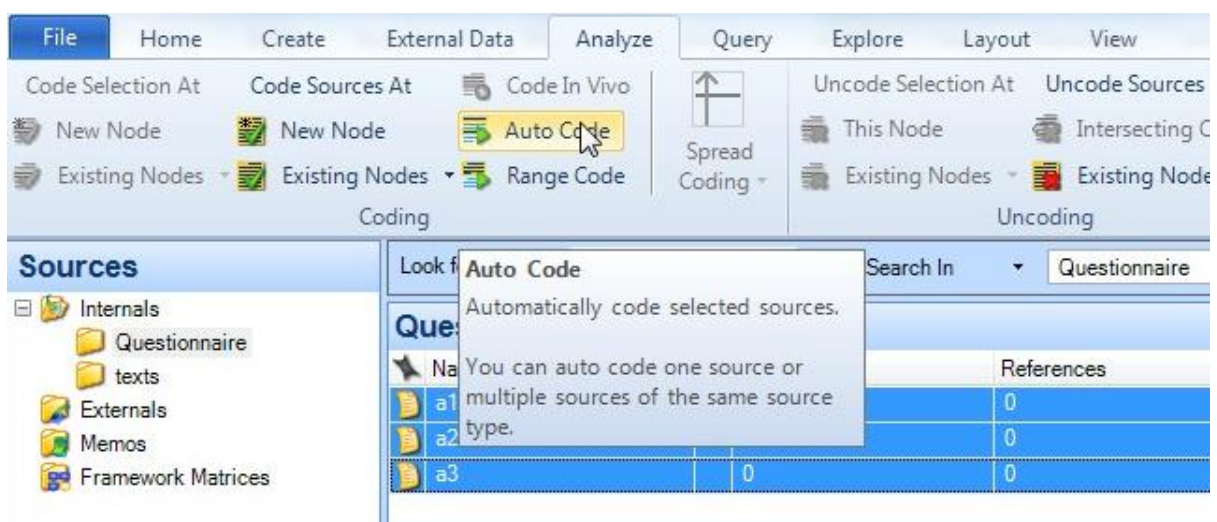


Figure 32: Autocode

In the Autocode dialog box, select the items to autocode and choose **New Node** from the **Code at Nodes | Under** drop down menu. In the dialog box, select the styles to code by (in this case the

Heading 1 and Heading 2 styles for the questions and sub-questions), and, if needed, create a new node for the results. In this case, the coding will be aggregated to a new node, so the results will be a tree node.

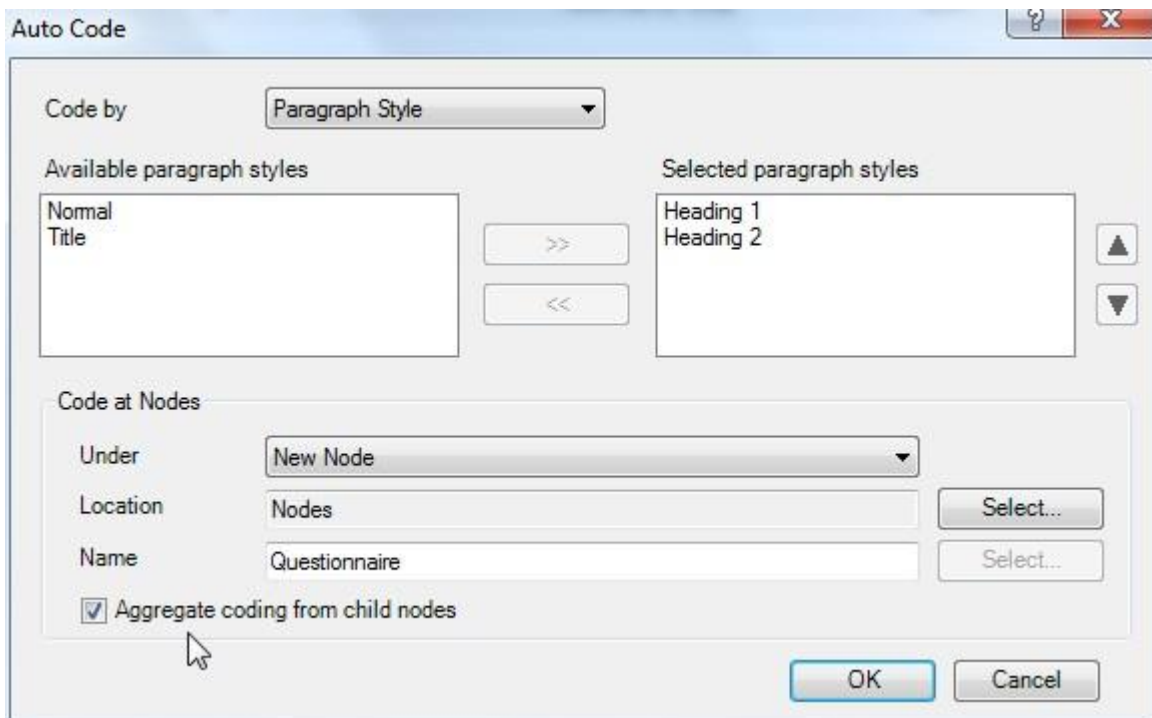


Figure 33: Autocode Dialog Box

Click on **OK**. When the autocoding has finished, click on the **Nodes** button. The autocoded node will be present in the list.

The screenshot displays the NVivo software interface. On the left, a sidebar shows a tree structure under 'Nodes', including 'Tree Nodes', 'Relationships', and 'Node Matrices'. Below this are buttons for 'Sources', 'Nodes' (highlighted), 'Classifications', and 'Collections'. The main area is titled 'Tree Nodes' and contains a table with columns for 'Name', 'Sources', and 'References'. The table lists a hierarchy of questionnaire questions. Below the table, a specific node is selected, showing its text and coverage statistics.

Name	Sources	References
Questionnaire	3	39
Question 1~ Do you believe in	3	3
Question 2~ Have you heard of	3	12
Question 2a~ Is the cyclica	3	3
Question 2b~ Is the cyclica	3	3
Question 2c~ Could anythi	3	3
Question 3~ Have you heard of	3	12
Question 3a~ Is the recolle	3	3
Question 3b~ Is the recolle	3	3
Question 3c~ Could anythi	3	3

Selected Node: Question 3a~ Is the recollectiv

<Internals\Questionnaire\1a1> - § 1 reference coded [8.50% Coverage]

Reference 1 - 8.50% Coverage

Question 3a: Is the recollective argument valid in your view?
 It seems to depend on the idea of some ideal Equal, which all real world equals ap
 that we meet this Equal before birth. I think the Equal is an unnecessary premise.

<Internals\Questionnaire\1a2> - § 1 reference coded [5.77% Coverage]

Reference 1 - 5.77% Coverage

Figure 34: Autocode Results Node

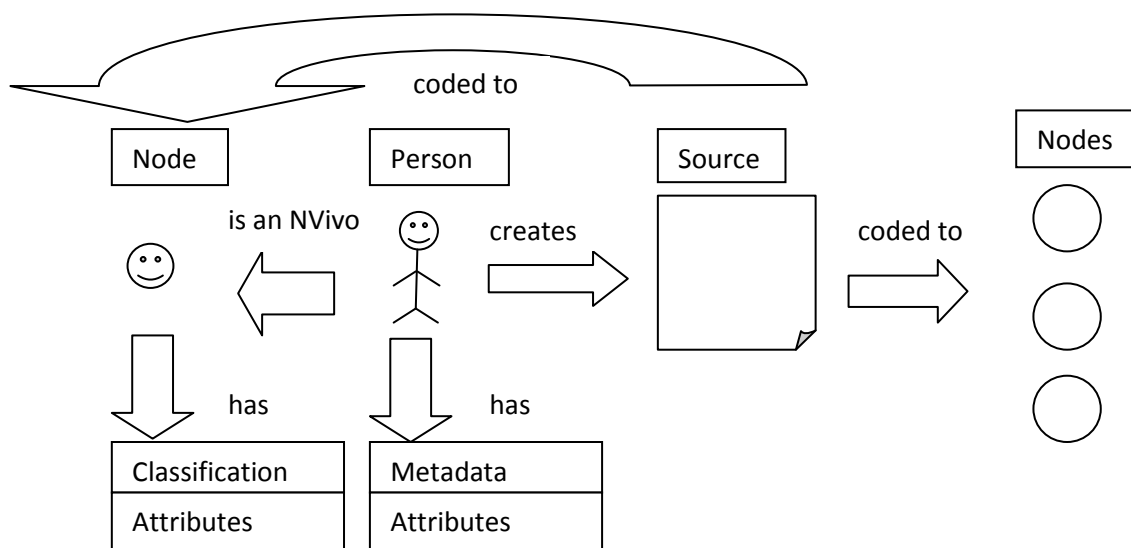
The answers to the questionnaire questions are contained in the Questionnaire node tree structure. Each sub-node is the collection of all the questionnaire answers to the particular question.

5 Classifications and Attributes

A person's position in society colours the way they think and act. Therefore, within a project, it is necessary to record relevant aspects of a person's location. For example, a person's age, sex, education and employment may make a difference to their responses to a questionnaire. Similarly, an organisation such as a company might need representations within the project, with the number of employees, turnover, location and other data recorded.

In NVivo, these entities, such as person or organisation, can be recorded as nodes. Each person in the project will have a different node, and, for example, sources created by them can be coded to that person's node. There is also a way of recording the metadata about the entity – the age, gender or location. These are called classifications and attributes.

Each type of entity can be given a classification. Nodes do not have to have a classification, but classifications are used to record the attributes of the nodes. Thus, the individuals in our project would have nodes with the 'person' classification, and the person classification would contain the attributes 'age', 'gender' and so on.



The diagram shows a person in the project. The person has created a source document (say, has filled in a questionnaire), and has some metadata associated with them, shown by the box below. The metadata consists of various attributes such as age, gender etc. The questionnaire can be coded to a set of free standing nodes, on the right of the diagram. The person is also coded as a node, on the left hand side of the diagram.

The node the person is coded to has a classification which records the attributes of that person which are relevant to the project. The source which the person created is also coded to the person's node.

The effect of this is to form a link between the person, their attributes and the source that they created.

5.1 Classifications

Classifications are holders for different sets of attributes. A project may need a classification for people, another one for places and another for organisations. It is worth planning initially which attributes belong to which classification, and exactly which attributes you will need to record.

Classifications are created in the **Classifications** area accessed by the button of the lower left of the NVivo screen. Choose **Node Classifications** as the folder and right click on the node classifications area.

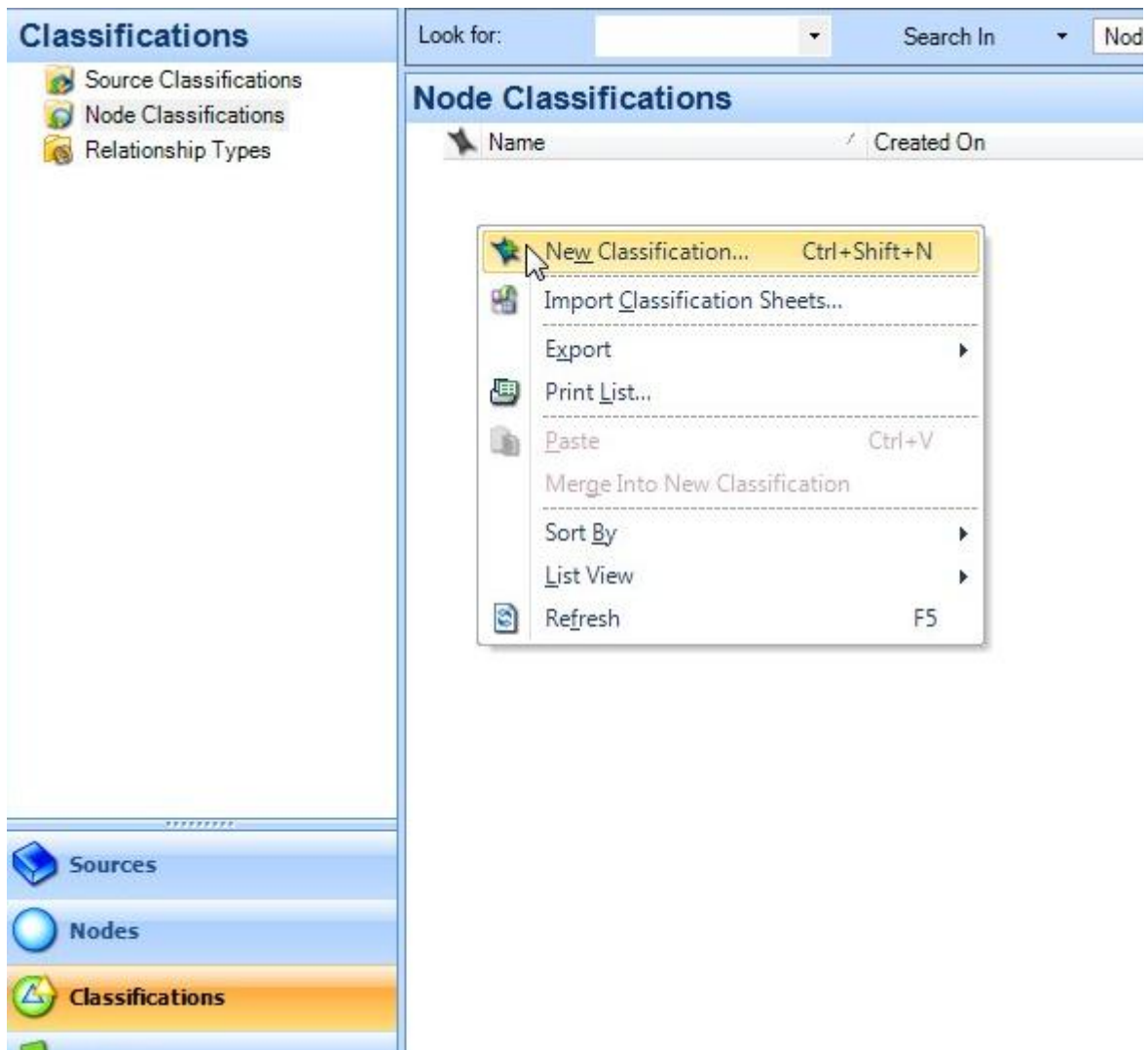


Figure 35: New Classification Creation

This brings up the New Classification dialog box.

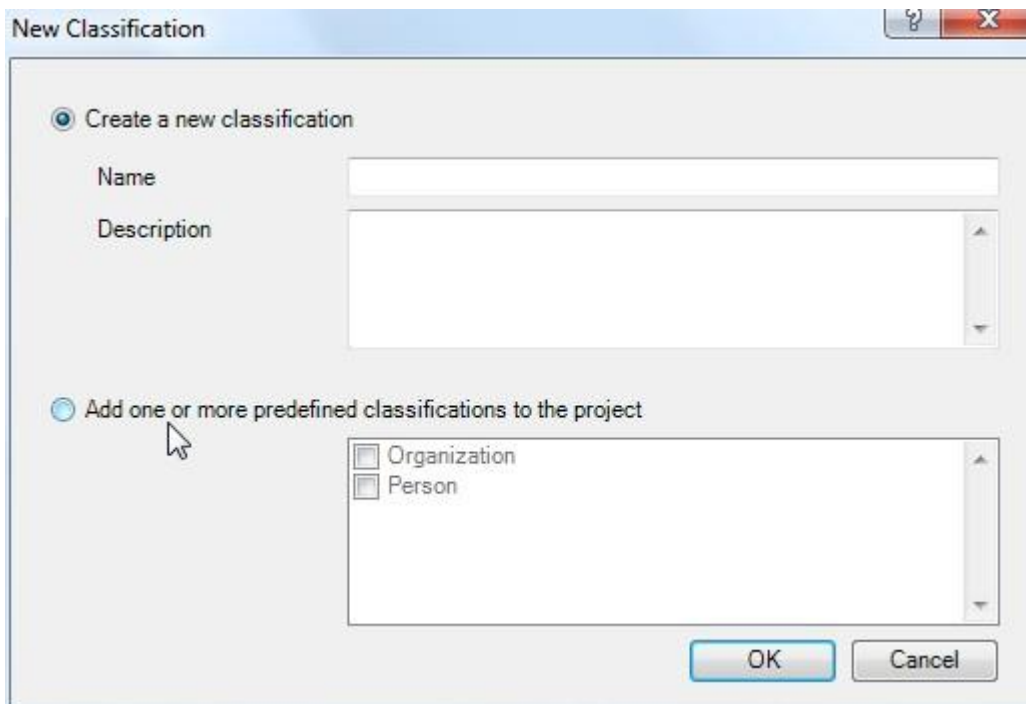


Figure 36: New Classification Dialogue

NVivo has two predefined classifications, Organisation and Person. These come with already defined attributes. To create one of them, click on the **Add one...** radio button, select the predefined classification to add, and click **OK**.

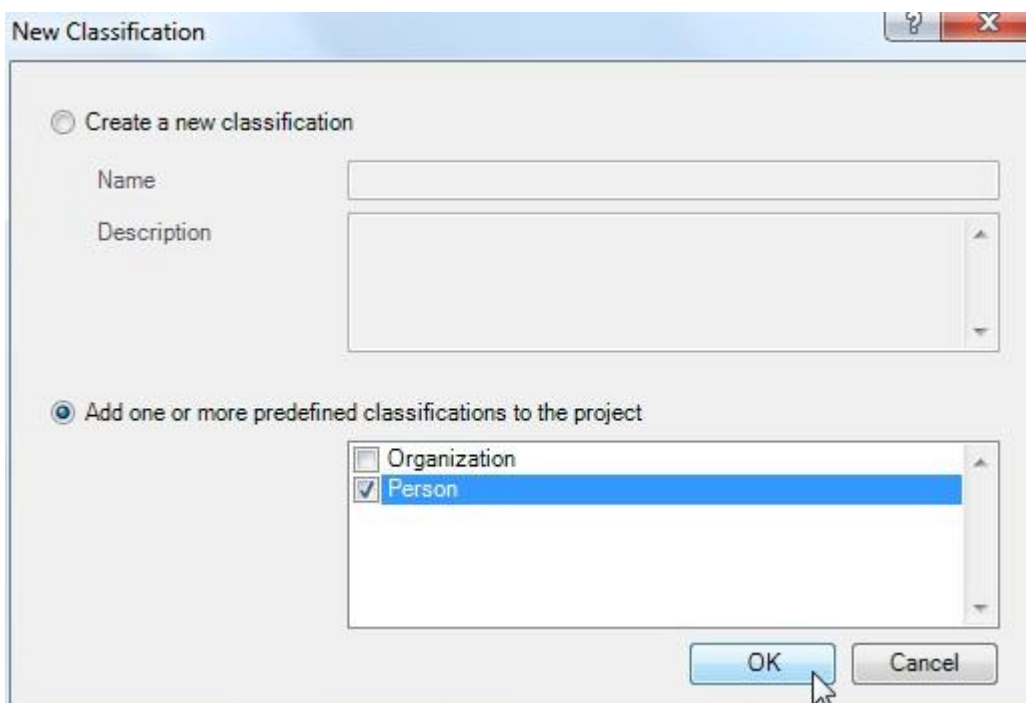


Figure 37: Adding a Predefined Classification

The classification is added to the project. Clicking on the + by the classification name shows the defined attributes.



Figure 38: Predefined 'Person' Classification and Attributes

5.2 Attributes

The predefined attributes (and any you define yourself) need to have their data ranged defined. To do this, right click on an attribute and choose **Attribute Properties....**

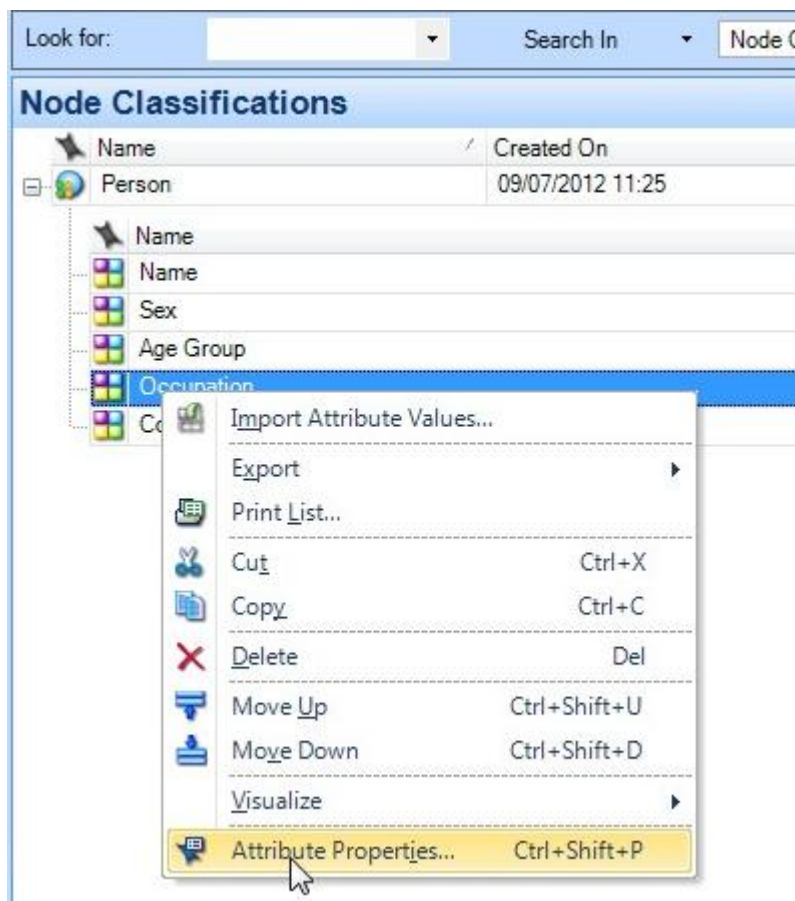


Figure 39: Attribute Properties

This displays the Attribute Properties dialog box.

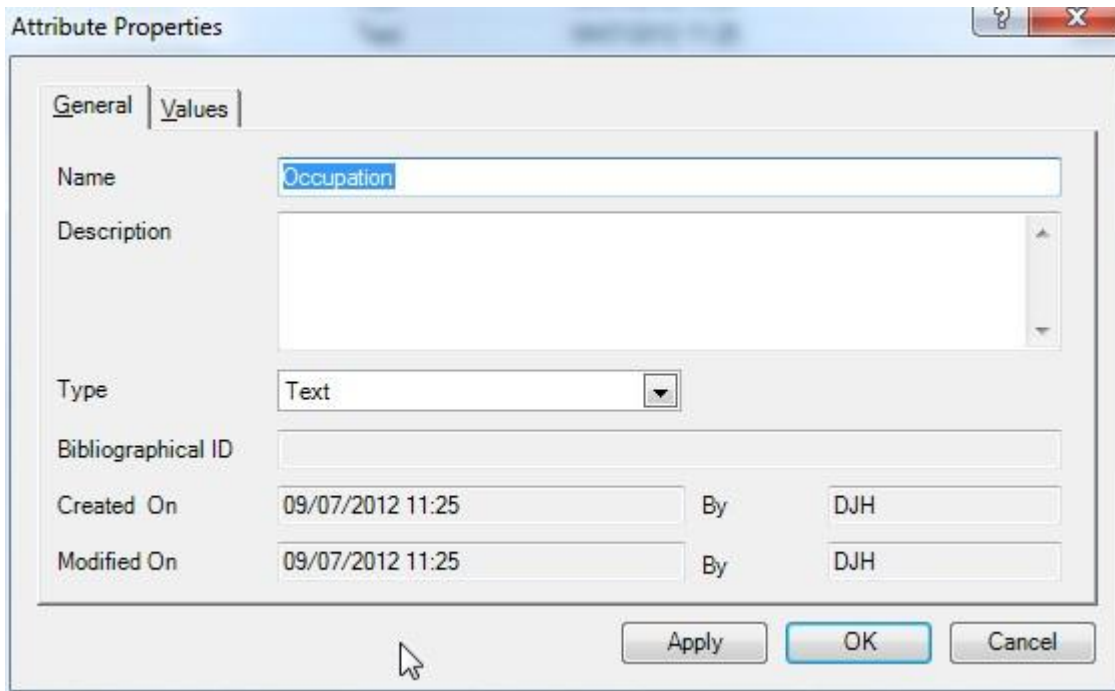


Figure 40: Attribute Properties Dialog Box

The name of the attribute can be changed on the **General** tab. The attribute value ranges are set from the **Values** tab.

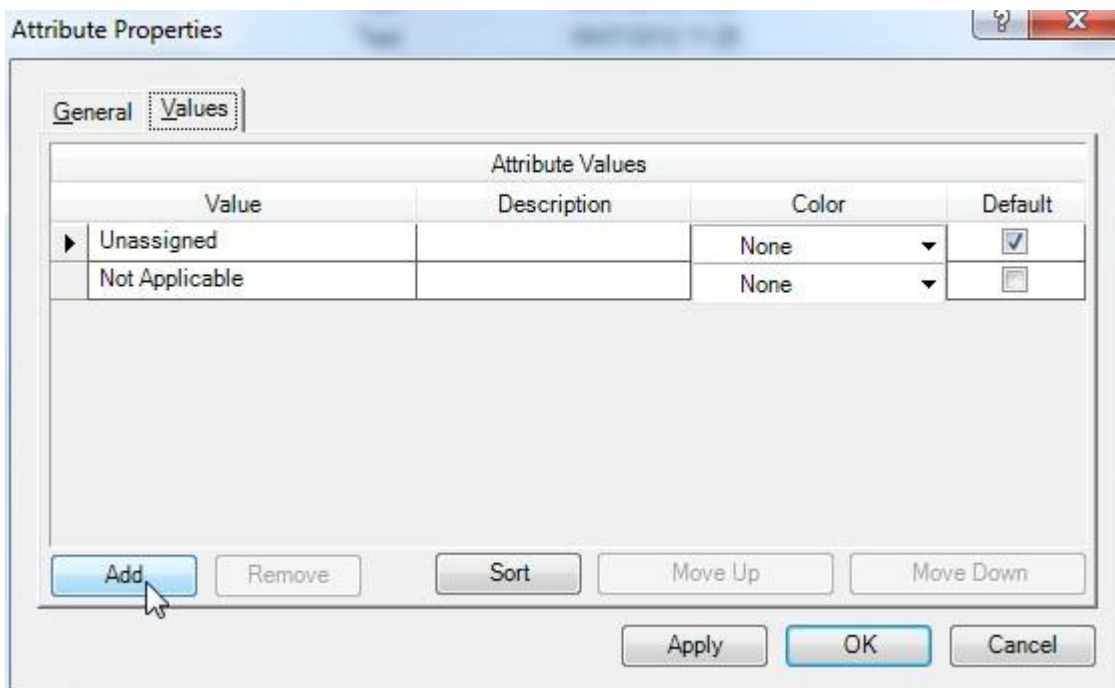


Figure 41: Attribute Values Tab

To add data ranges, click on **Add** and add the information.

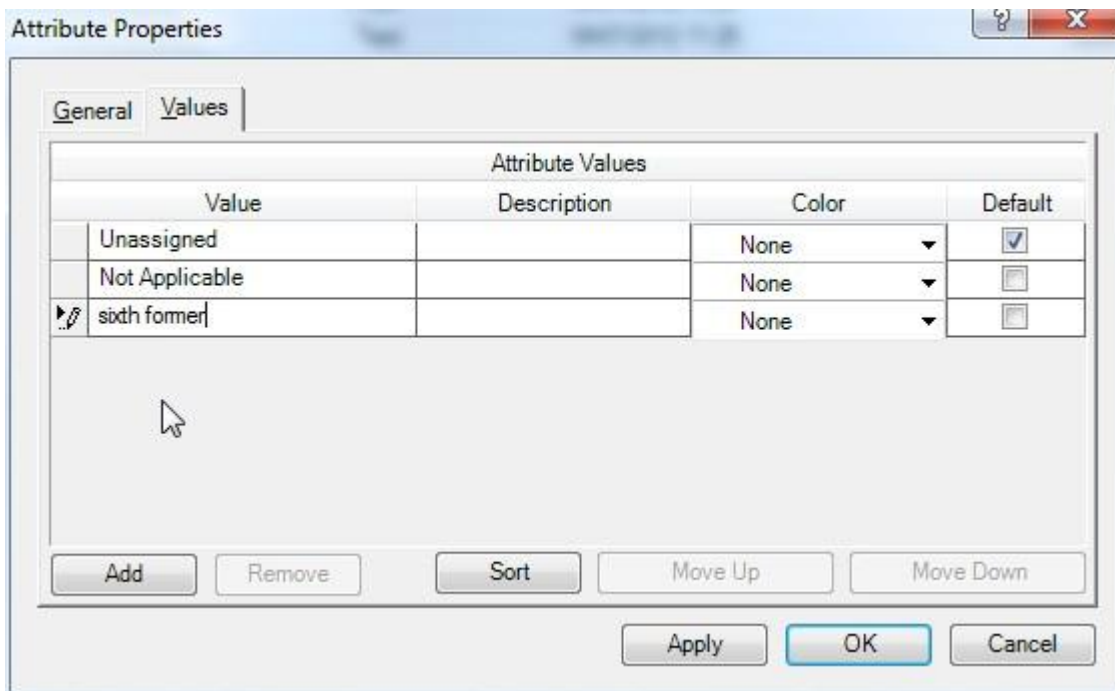


Figure 42: Adding Attributes

Further attributes can be added in the same way. Once you have completed the values, click on **Apply** and **OK**.

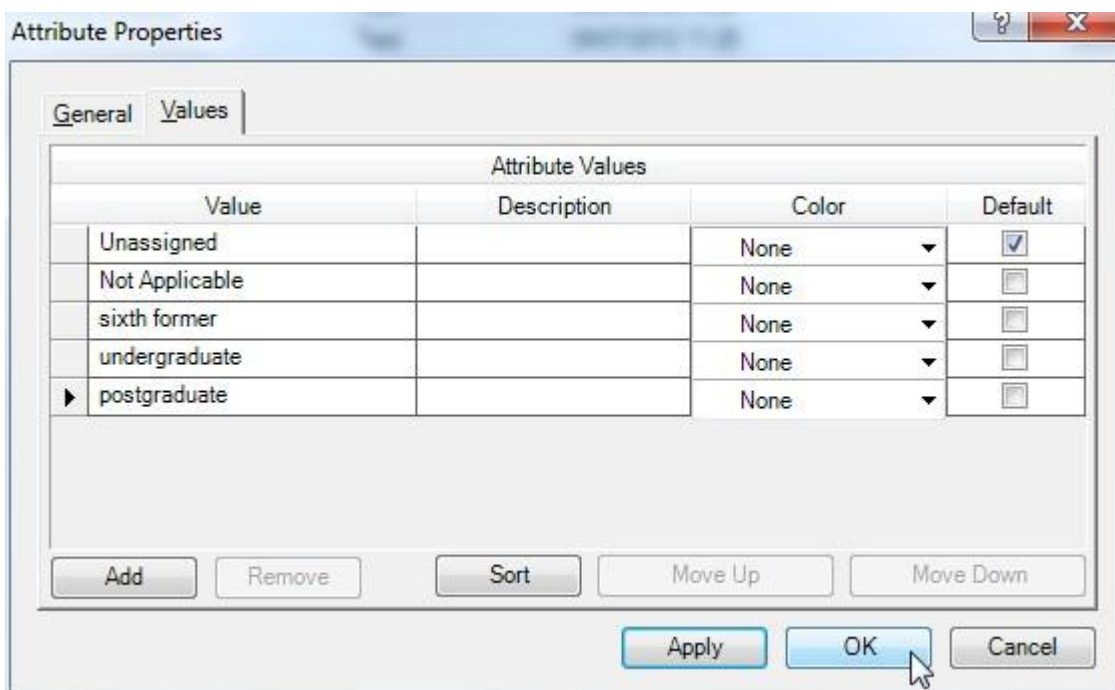


Figure 43: Completed Attribute

5.3 Nodes with Classification

Once the classifications and attributes have been created, appropriate documents can have nodes associated with them with the relevant classification.

To do this, go to the source document and right click on it. Choose **Create As... | Create As Case Node**.

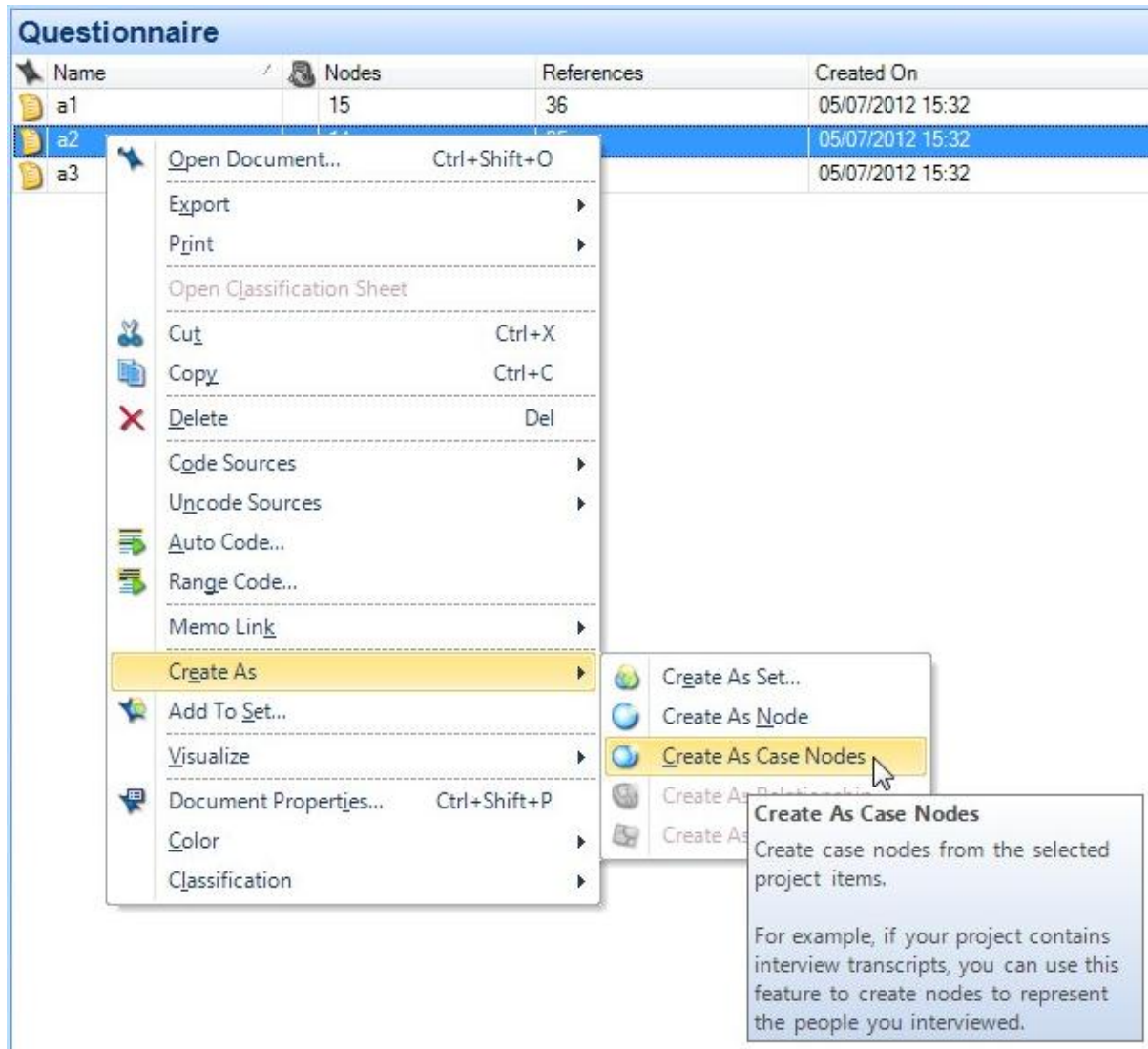


Figure 44: Creating a Source as a Node

The location dialog is shown.

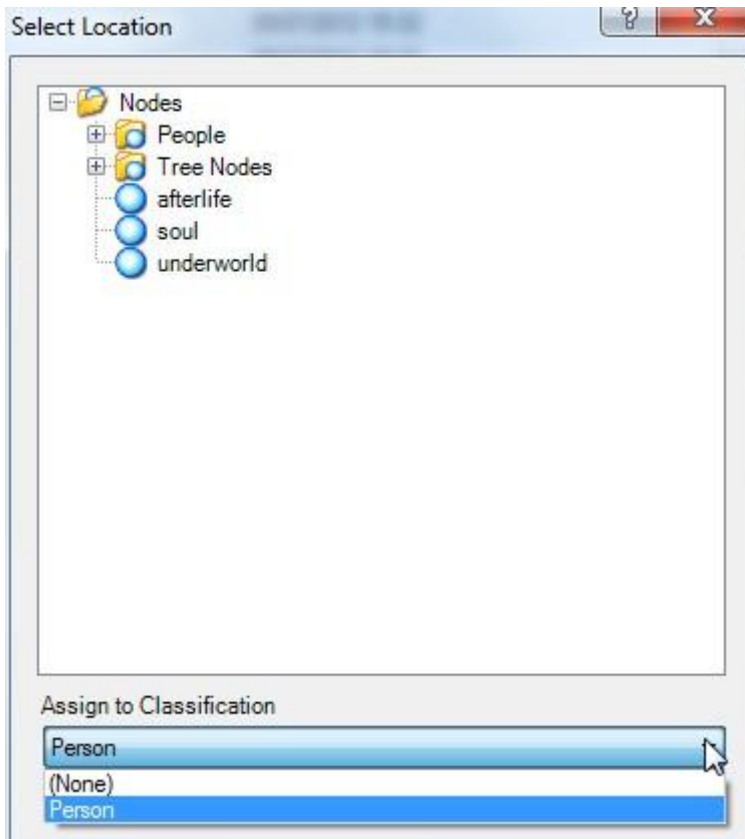


Figure 45: Select Location Dialog

Select the location (it is a good idea to separate out your nodes using folders in the node area) and click on **OK**. You can also assign the classification to the node at this point using the drop down menu.

Switch to the Nodes | People area (in this case). The items you have defined as case nodes will be listed there.



Figure 46: Case Nodes

Right clicking on a case node and choosing **Node Properties** will bring up the Node Properties dialog box.

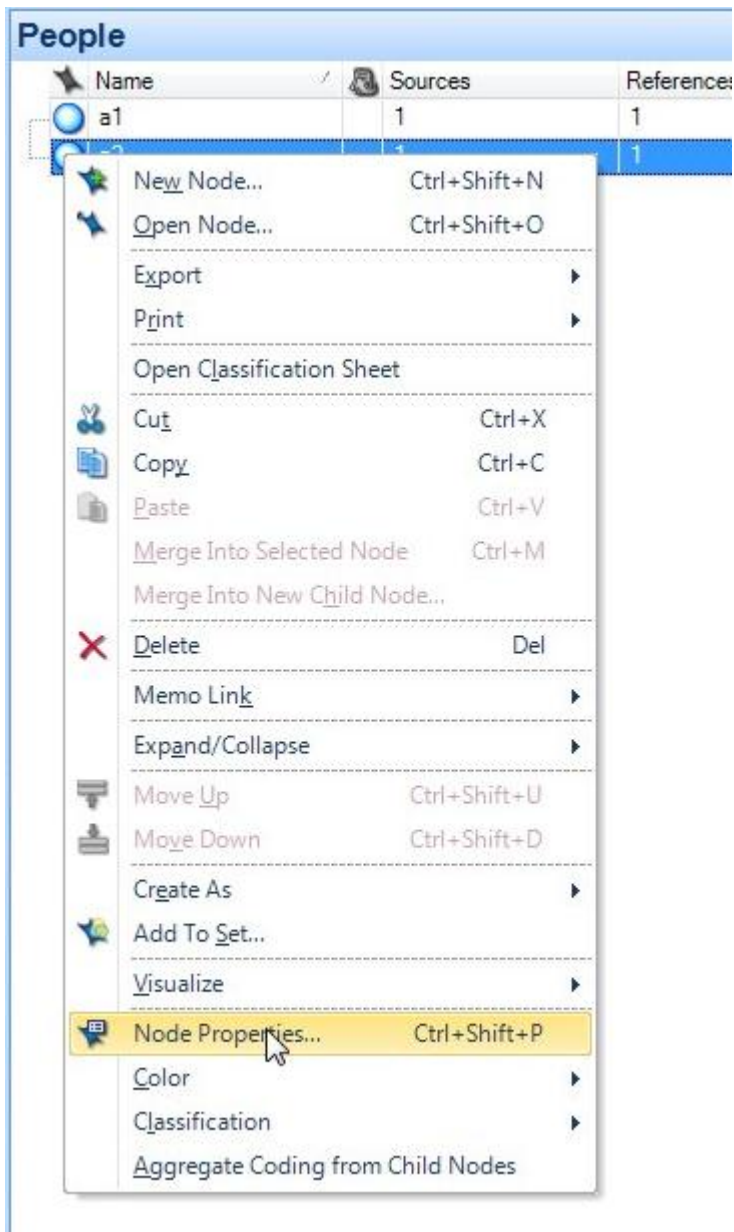


Figure 47: Node Properties

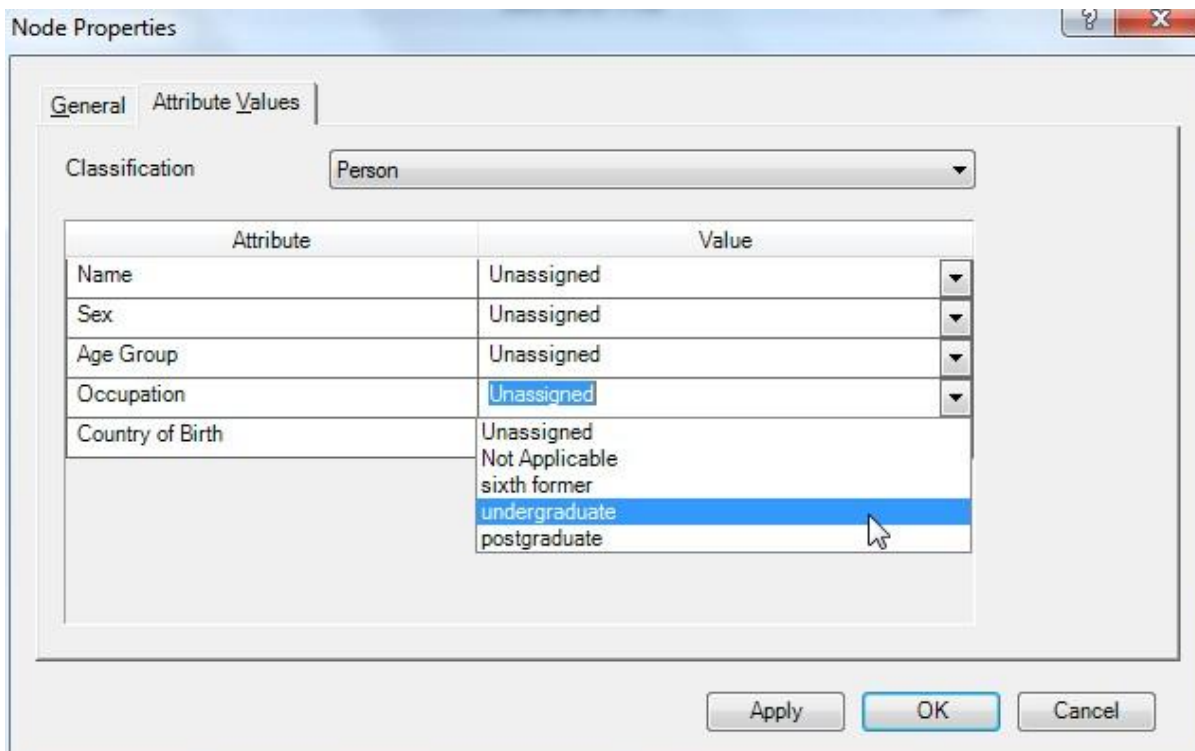


Figure 48: Attribute Values Tab

Choose the Attribute Values tab. The attributes appear in the box, and the values can be assigned from the drop down menus. Click on **Apply** and **OK** when you have assigned all the desired values.

5.4 Classification Sheet

A classification, the nodes using it and the attribute values can be visualised using the Classification sheet, available from the **Explore** tab. Choose the classification you are interested in visualising.

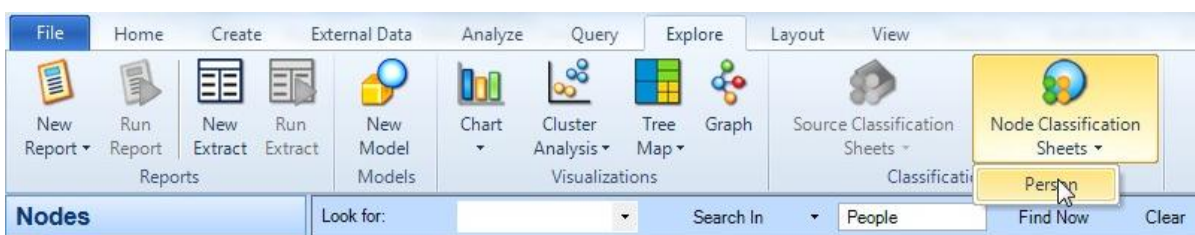


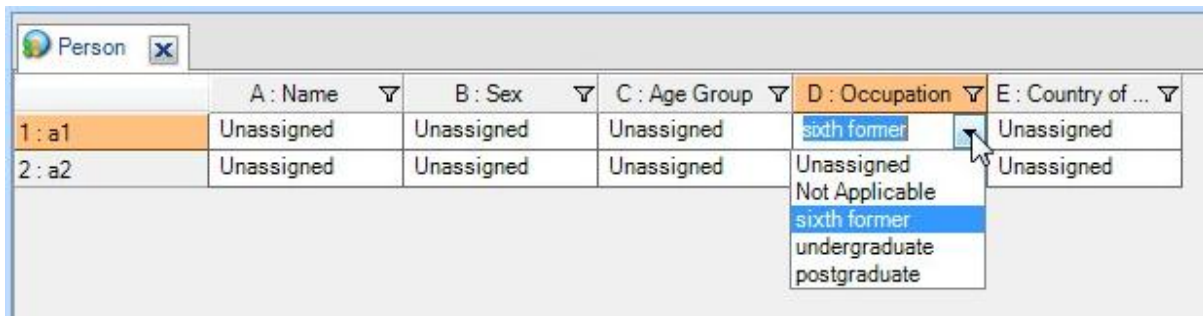
Figure 49: Classification Sheet Selection

The sheet appears in the detail view.

	A : Name	B : Sex	C : Age Group	D : Occupation	E : Country of ...
1 : a1	Unassigned	Unassigned	Unassigned	sixth former	Unassigned
2 : a2	Unassigned	Unassigned	Unassigned	undergraduate	Unassigned

Figure 50: A Classification Sheet

The values of the attributes can be changed by clicking on the relevant cell and choosing the value from the drop down box.



	A : Name ▾	B : Sex ▾	C : Age Group ▾	D : Occupation ▾	E : Country of ... ▾
1 : a1	Unassigned	Unassigned	Unassigned	soph former	Unassigned
2 : a2	Unassigned	Unassigned	Unassigned	Unassigned Not Applicable sixth former undergraduate postgraduate	Unassigned

Figure 51: Changing an Attribute Value.

6 Memos

Memos are a type of source, and can be treated like other sources. They can be linked to a source and used to record your thoughts about that source. They can also be free standing documents, and so can be used, for example, as a project journal.

To create a free standing memo for a project journal, navigate to **Sources** and choose the **Memos** folder. Right click in the memo list area and select **New Memo...**

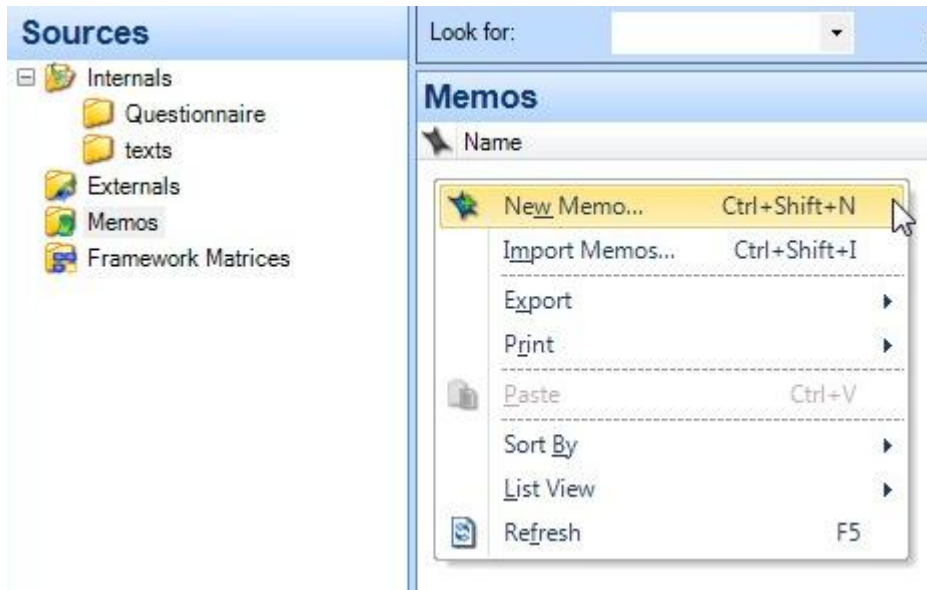


Figure 52: New Memo Creation

The New Memo dialog will be displayed. Name the memo. Calling it ‘_journal’ will ensure it remains at the top of the memos list no matter how many memos you create.

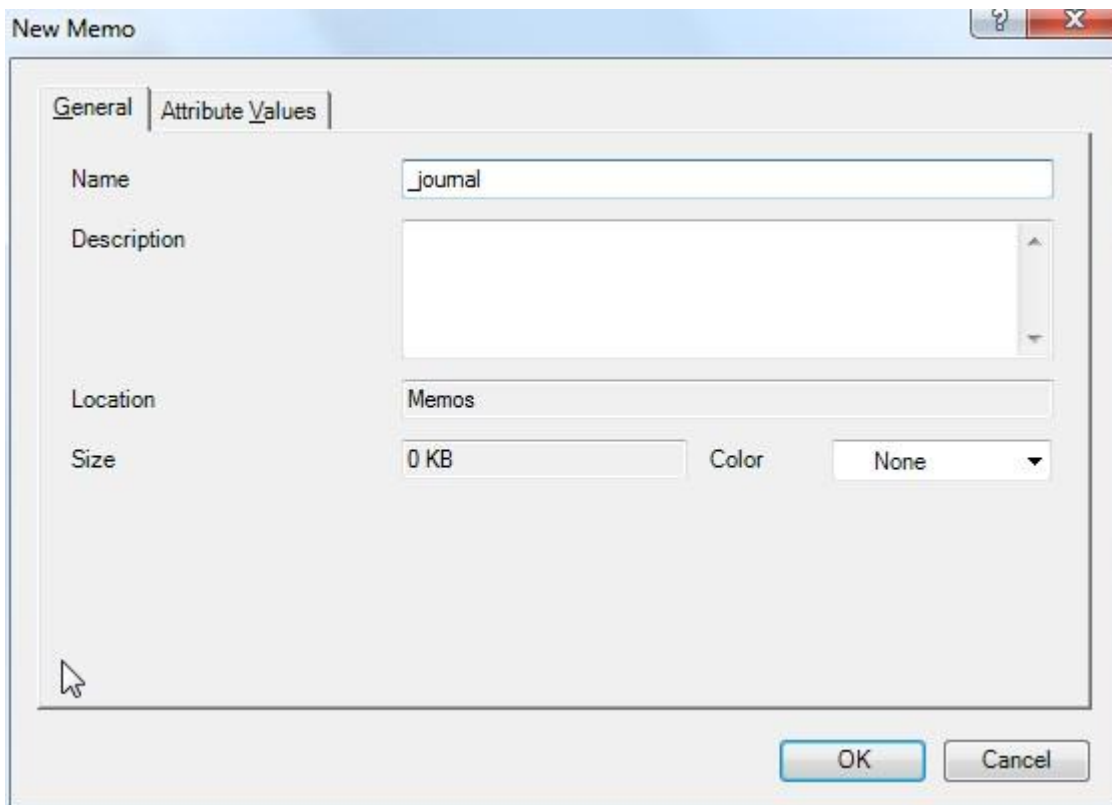


Figure 53: New Memo Dialog

Click on **OK** and the memo will be created.

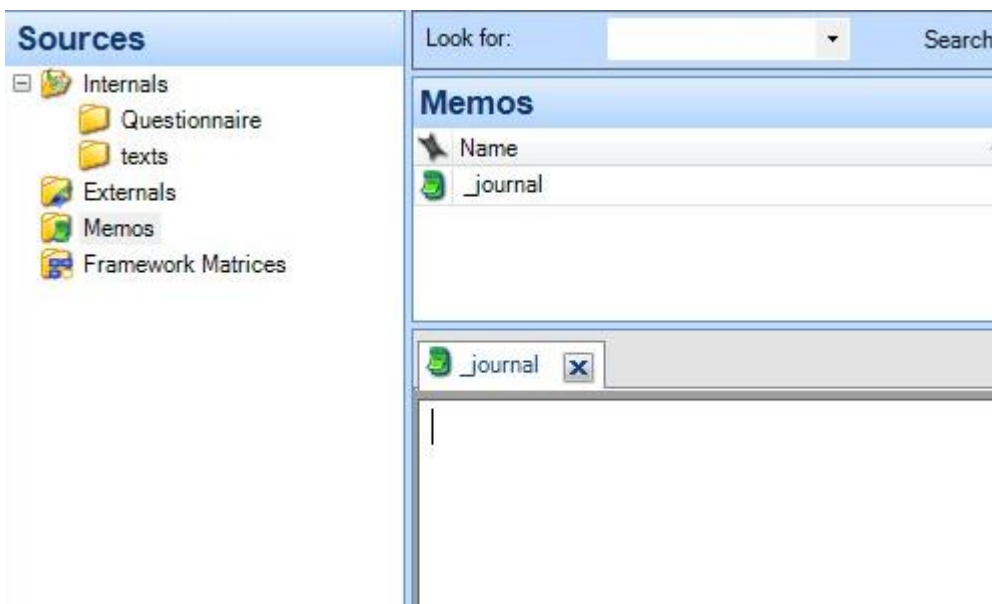


Figure 54: New Memo

You can also create memos linked to other project items, such as cases, nodes and sources.

For example, to create a memo linked to a document, navigate to the document, right click on it and select **Memo Link | Link to New Memo...**

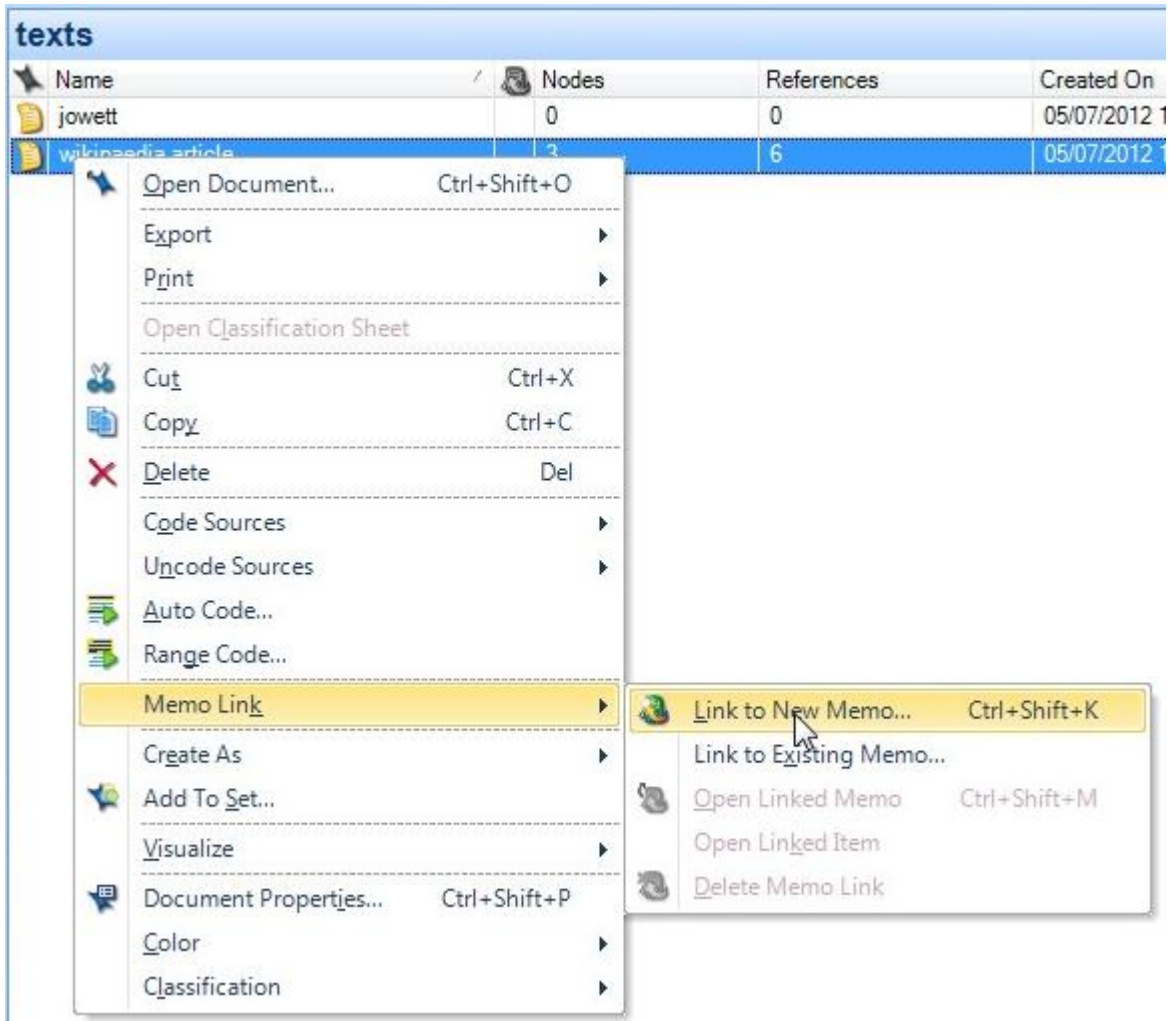


Figure 55: Linked Memo Creation

The New Memo dialog box will appear. Name the memo and click **OK**. The memo will be linked to the document, and the memo icon will appear on the document listing.

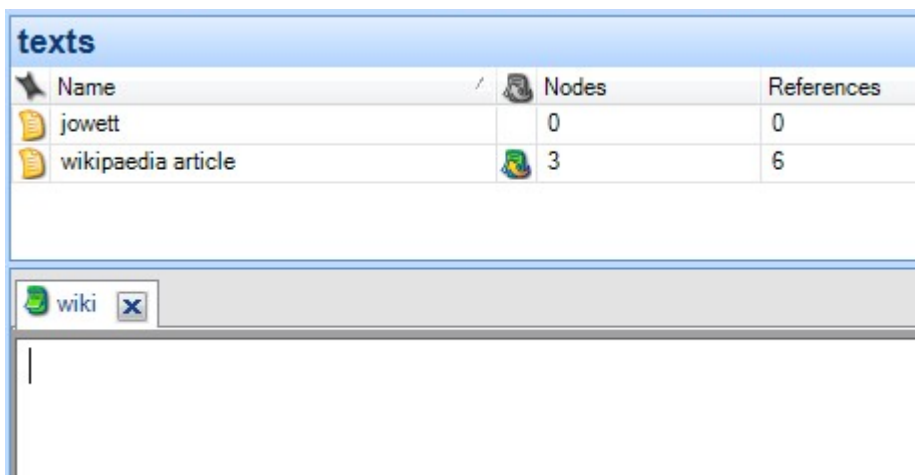


Figure 56: The Memo Icon

The memo is also listed in the **Sources | Memos** folder, where it appears with a similar icon indicating a link to the document.

7 Sets

A set is a flexible group of items. You can use sets to group together project items which seem to have a connection. You can place any sort of item into a set, thus perhaps finding links between objects which are not in the same coding tree. Sets can also be used as an organisational tool, enabling you to experiment with different groupings of the data.

When you add an item to a set, a link to the item is included in the set. Thus you are not changing, duplicating or moving the items in question. This means that you can experiment with different groupings of your items without upsetting the structure of the project.

To create a new set, click on the **Collections** button in the navigation pane and choose the sets folder. Then right click in the list pane, selecting **New Set....**

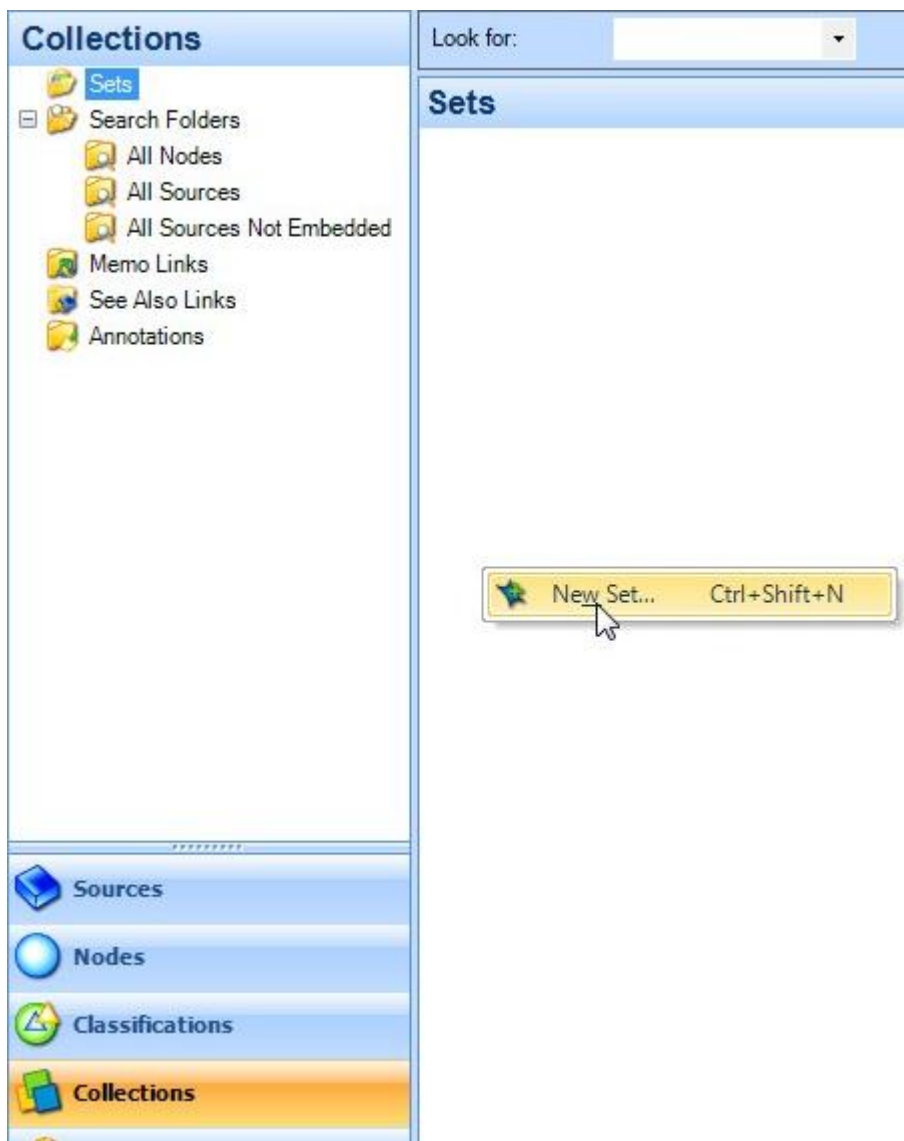


Figure 57: Creating a New set

The new Set dialog box is displayed.

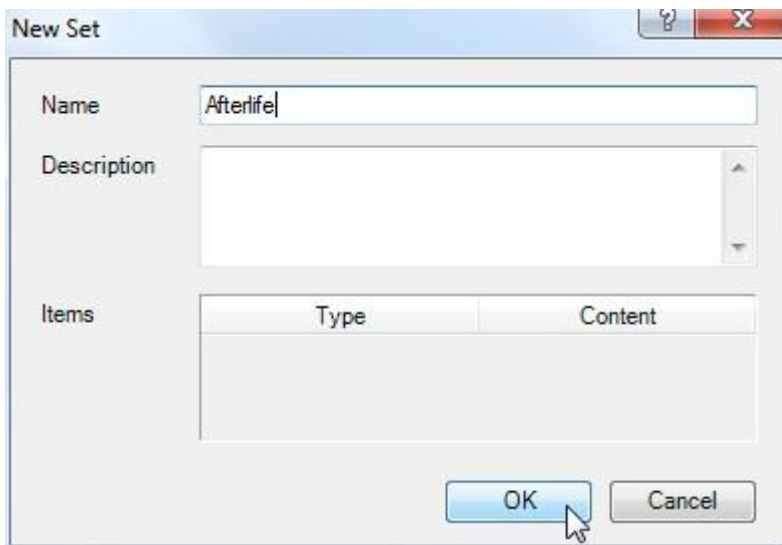


Figure 58: New Set Dialog Box

Click on **OK** and the set will be created.

To add an item to a set, right click on it and select **Add to Set**.

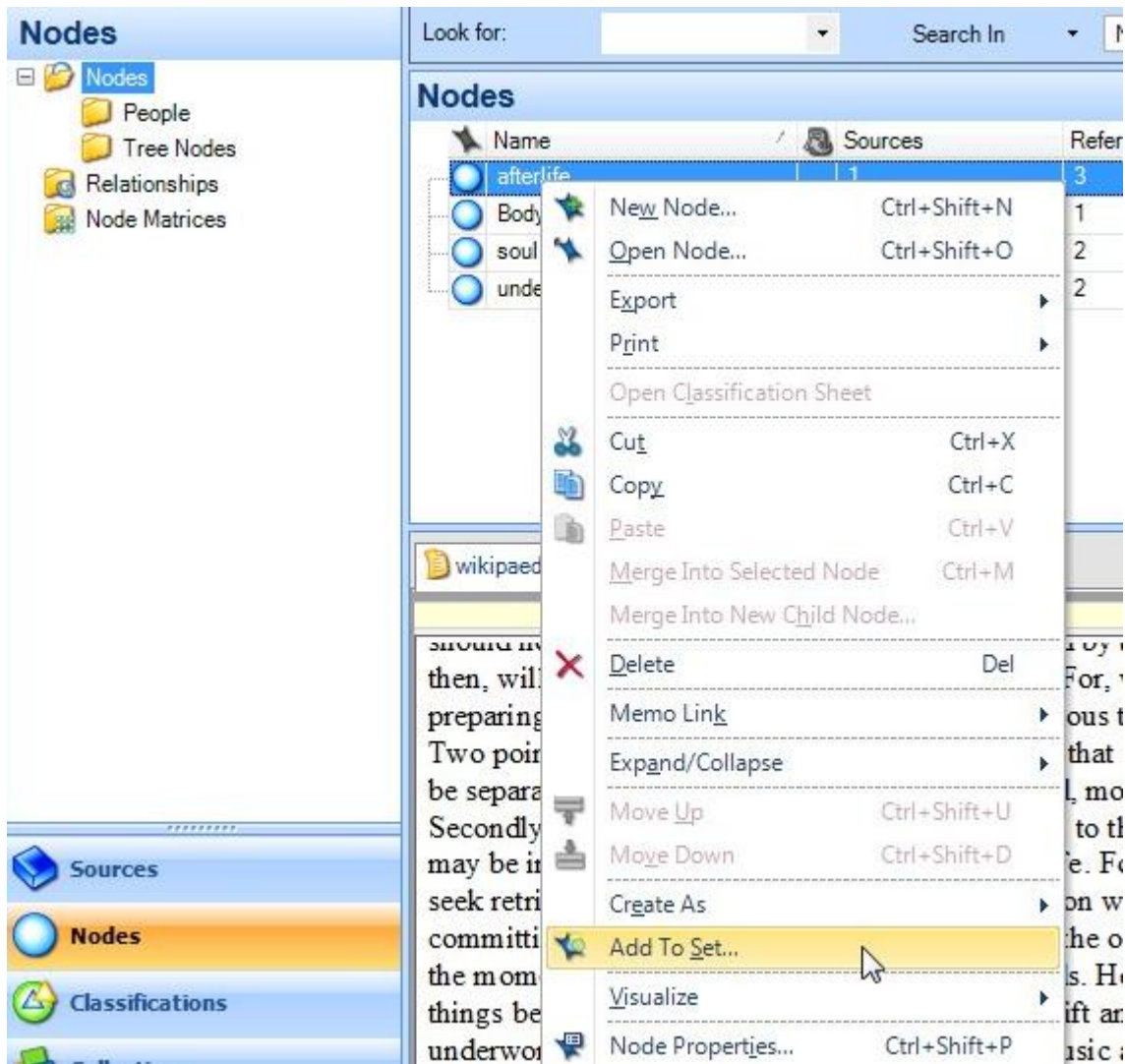


Figure 59: Adding an Item to a Set

This displays the Select Set dialog box. Highlight the set you want to add the item to and click **OK**.

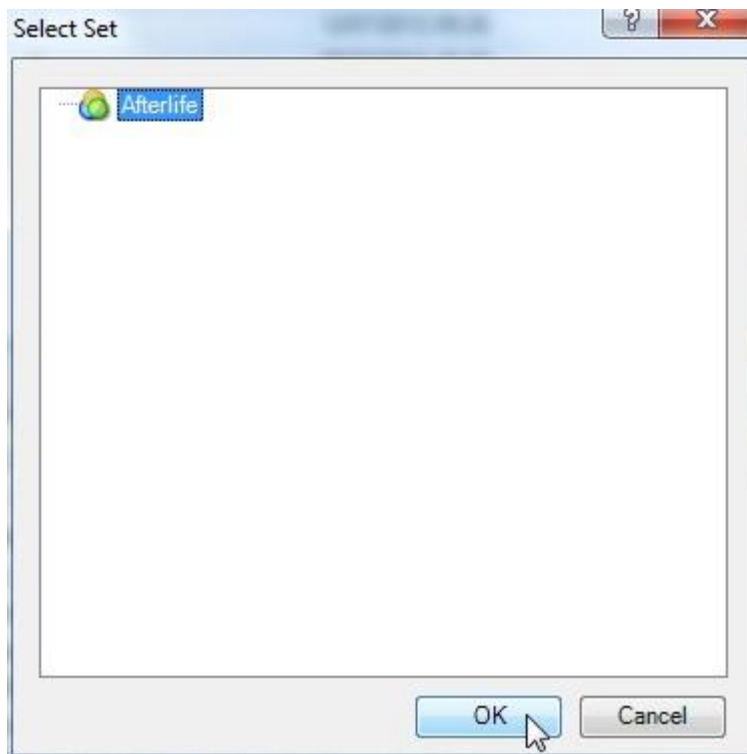


Figure 60: Select Set Dialog Box

Switching back to the Sets folder using the navigation pane and clicking on the relevant set shows the item has been added.

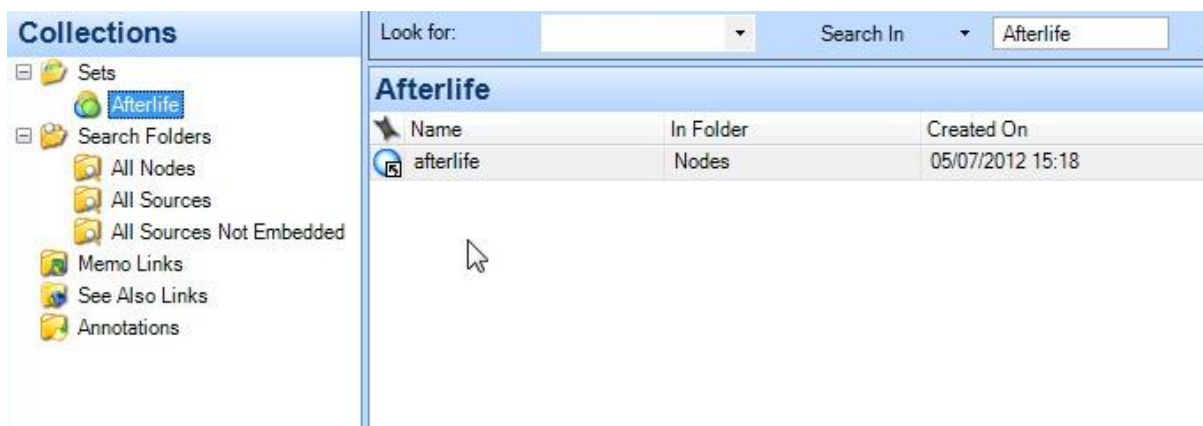


Figure 61: Set Contents

Other items can then be added to complete the set

8 Reports

One of the important things to do during a project is to take a step back and review your progress and whether it matches your research question. There are a number of tools which help you do this in NVivo. These include the Report tools, the modeller, the charting tool and using queries (although queries are also powerful research tools in their own right). These tools are described in the next few sections.

There are a variety of Reporting tools in NVivo. These will provide you with a summary of certain types of project item.

To create, for example, a summary of the nodes in the project, click on the **Reports** button and select the **Node Summary Report**.

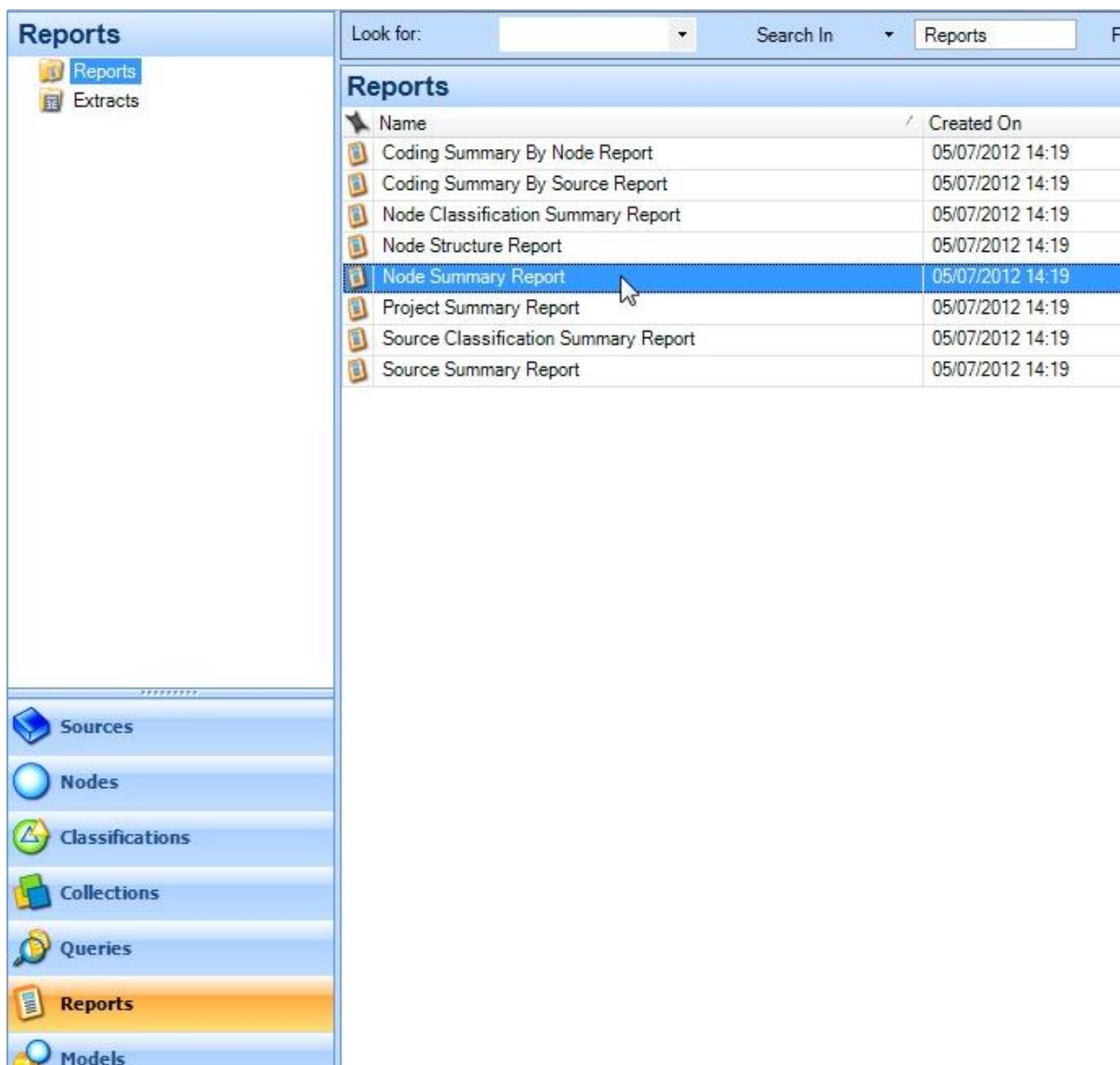


Figure 62: Creating a Node Summary

Right click on the report and choose **Run Report**.

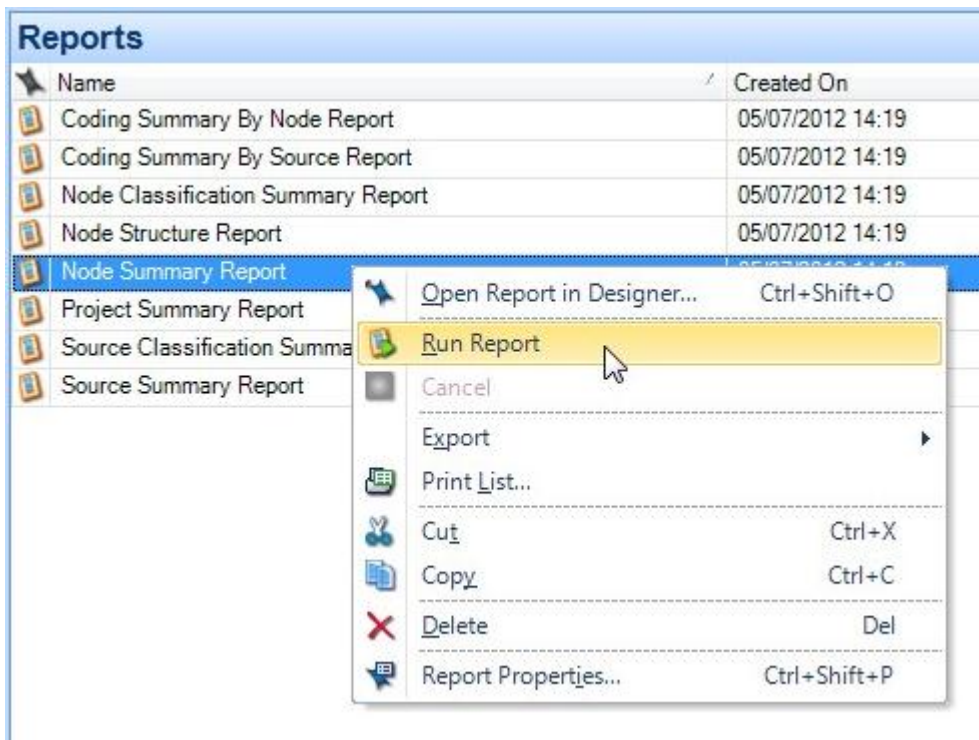


Figure 63: Run Report

The Customize Node Summary dialog box is shown. Make appropriate selections.

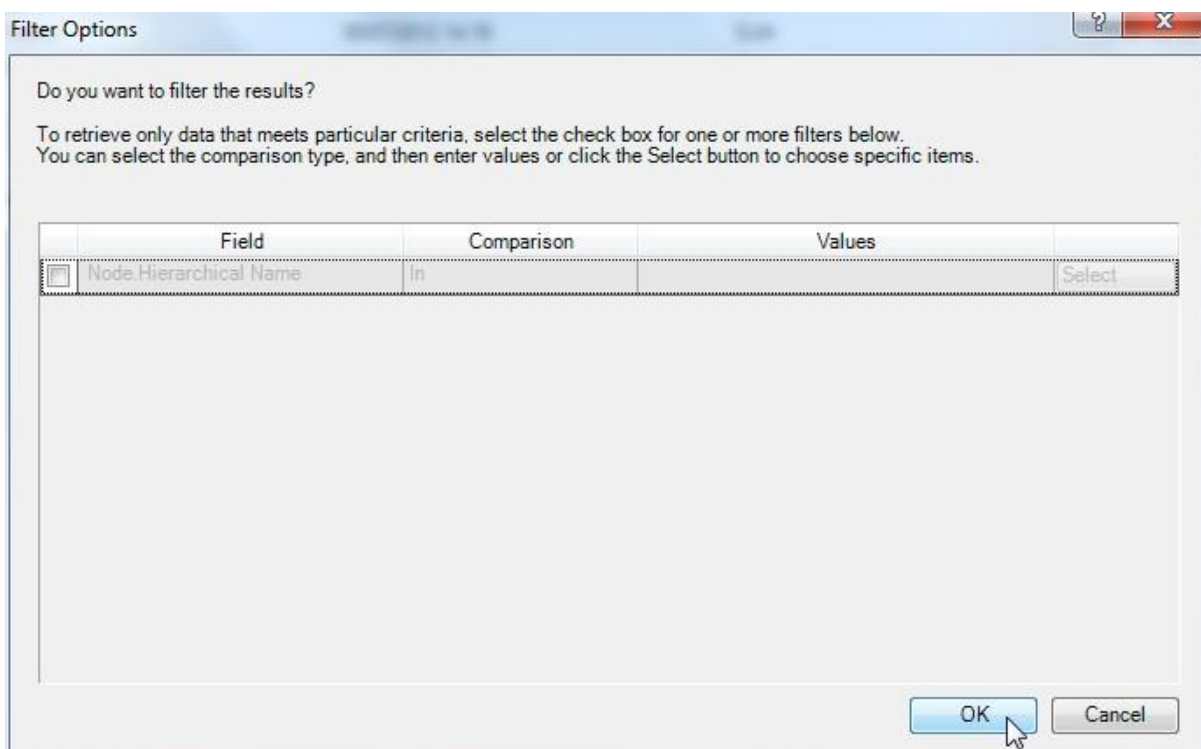


Figure 64: Report Filter Options

Click on **OK**. The node summary report is then shown in the detail view.

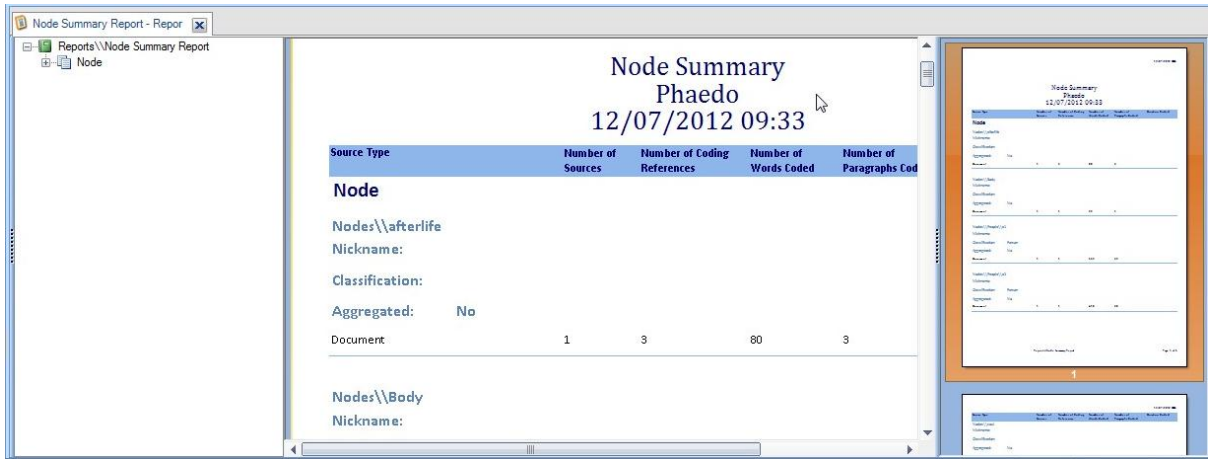


Figure 65: Node Summary Report

The report can be printed or exported by right clicking on it.

9 Queries

9.1 What is a Query?

Queries enable you to question your data to help you find patterns and unifying concepts. If coding is regarded as being the splitting up and decontextualising of your sources, then running queries is the recontextualisation and bringing together of your data into different patterns of understanding and deeper insight.

There are five different types of query you can run in NVivo. These are the text query, coding query, matrix coding query, compound query and coding comparison query. We will focus on the first three of these which are the most useful.

9.2 Coding Queries

To start a coding query, click on queries in the navigation pane and then right click on the list pane. Select **New Query | Coding...** from the pop-up menu.

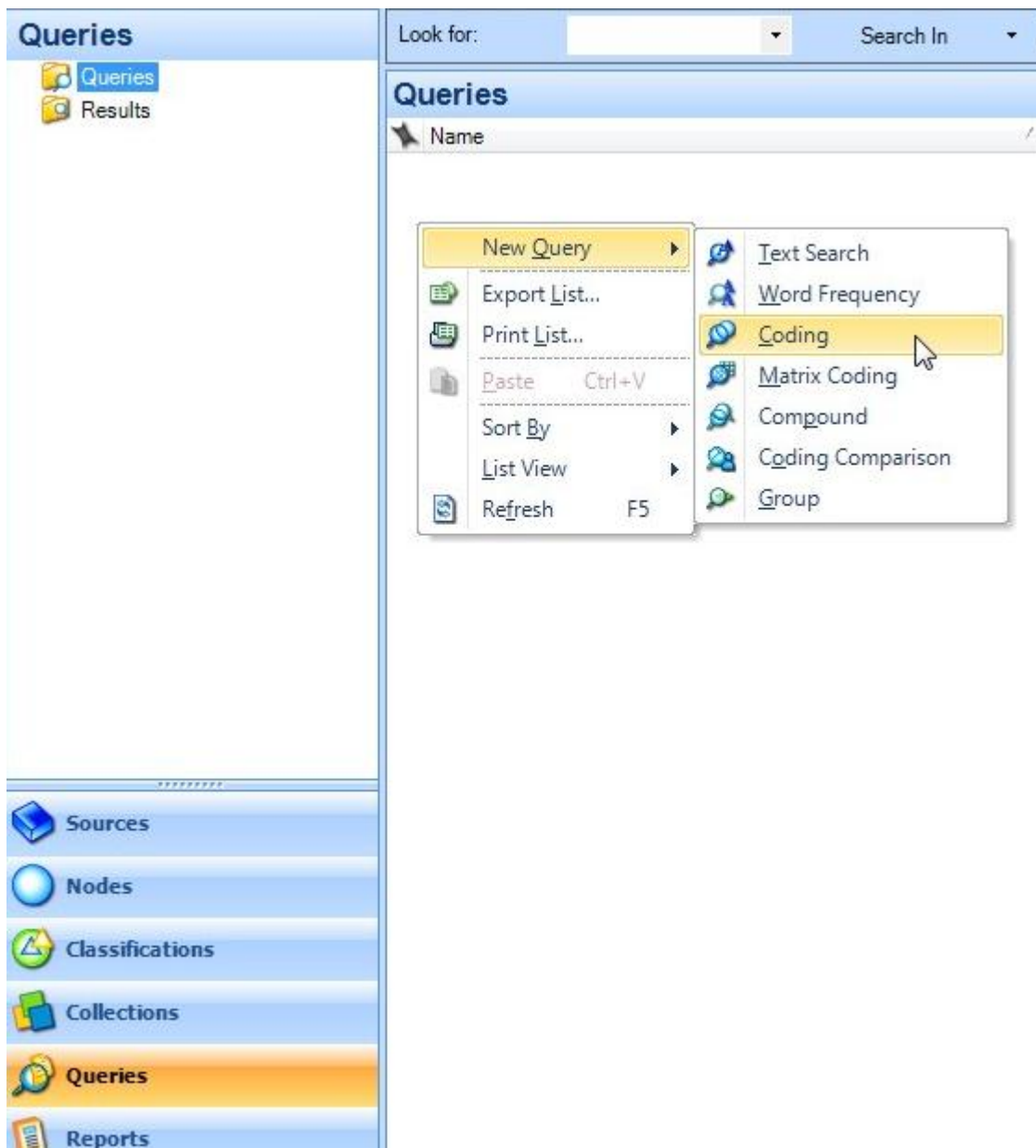


Figure 66: New Coding Query

This displays the Coding Query dialog box.

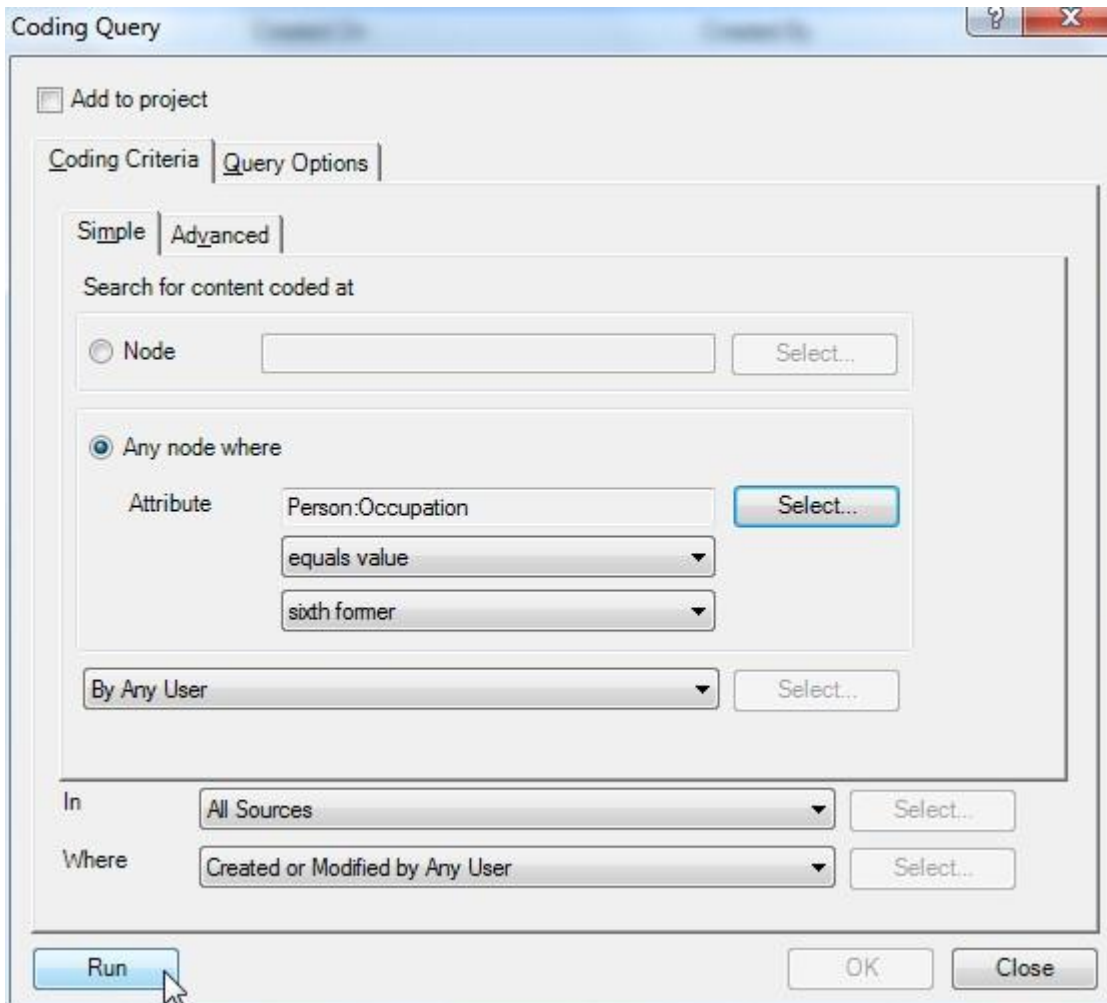


Figure 67: Coding Query Dialog Box

In this case, we have chosen to run a case based query (using the Select button to choose the classification and attribute to query) to find the entries where the attribute 'role' has the value 'sixth-former'. Click on **Run** to execute the query. The results are displayed in the detail view pane.

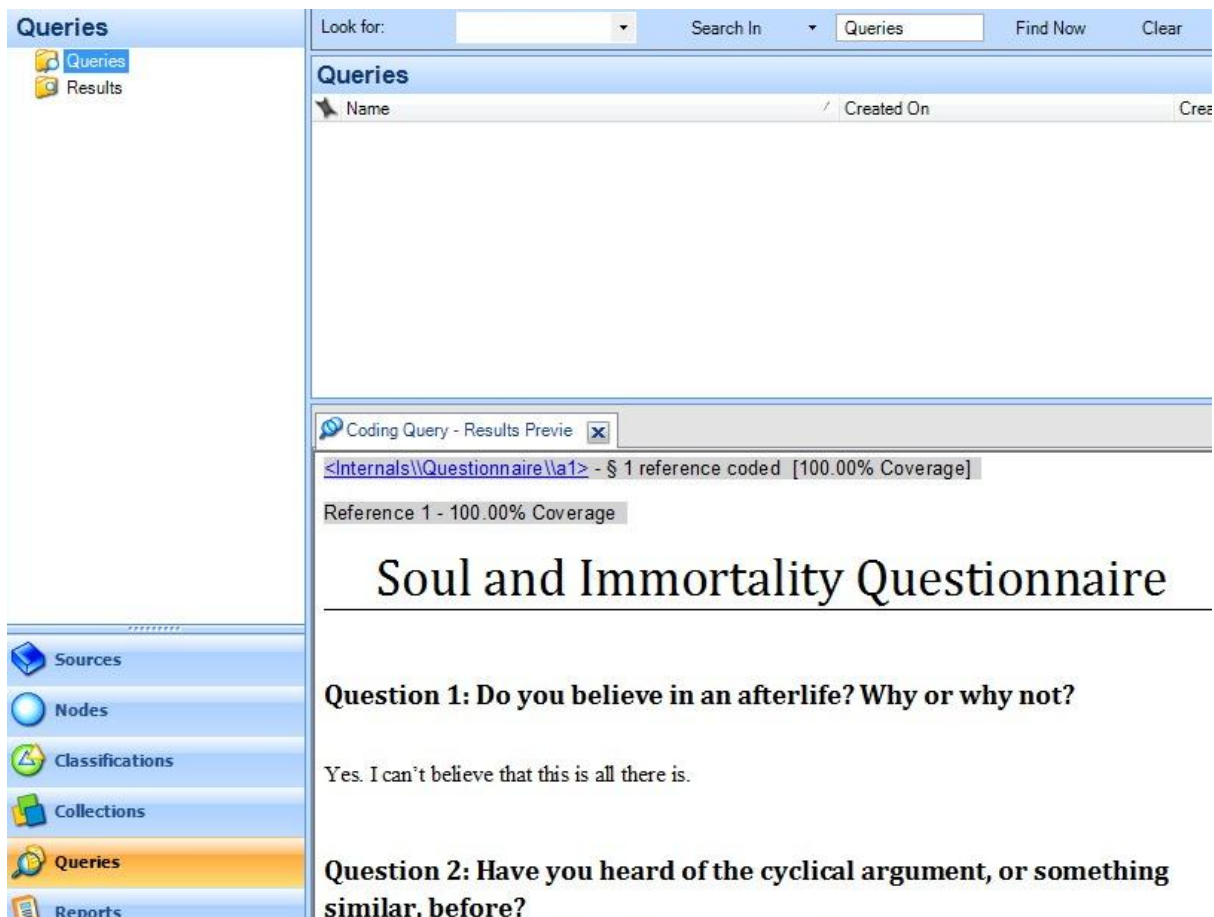


Figure 68: Query Result

Right clicking on the results in the detail view displays a menu of options for further action.

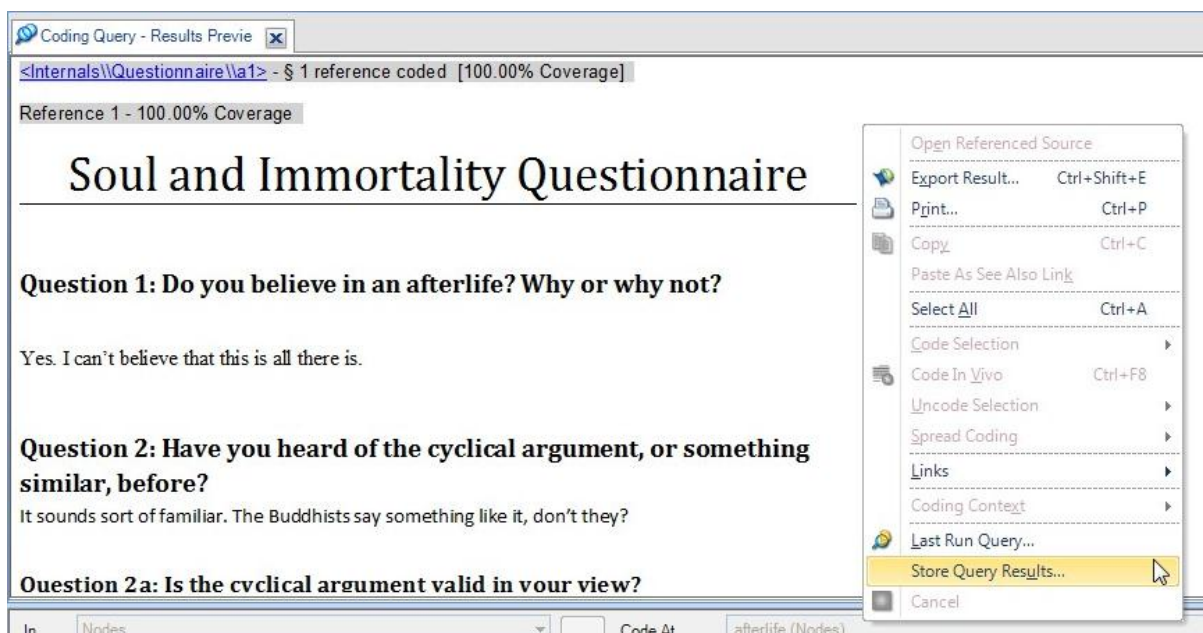


Figure 69: Query Options

The most useful options are **Last Run Query...** which redisplay the Query dialog box for repeat running or modification , or **Store Query Results....**

Selecting **Store Query Results...** brings the Store Query Results dialog box.

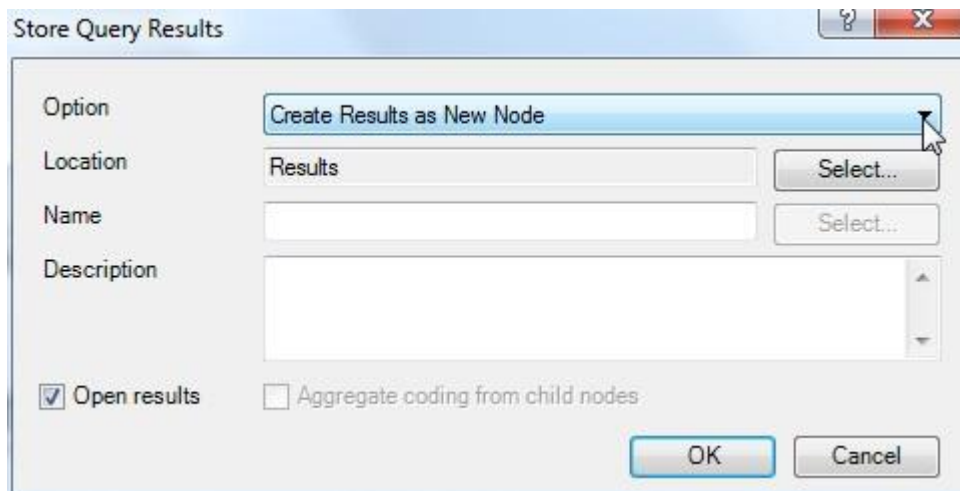


Figure 70: Store Query Results Dialog Box

The results can be stored to a set or to a node using the **Option** drop down menu.

To store a query for later re-running (after you have done more analysis), select **Last Run Query....** When the dialog box is shown, check the **Add to Project** box in the top left corner. The Coding Query dialog box changes to show the General tab. Enter the name and click **OK** to store the query or **Run** to re-run it.

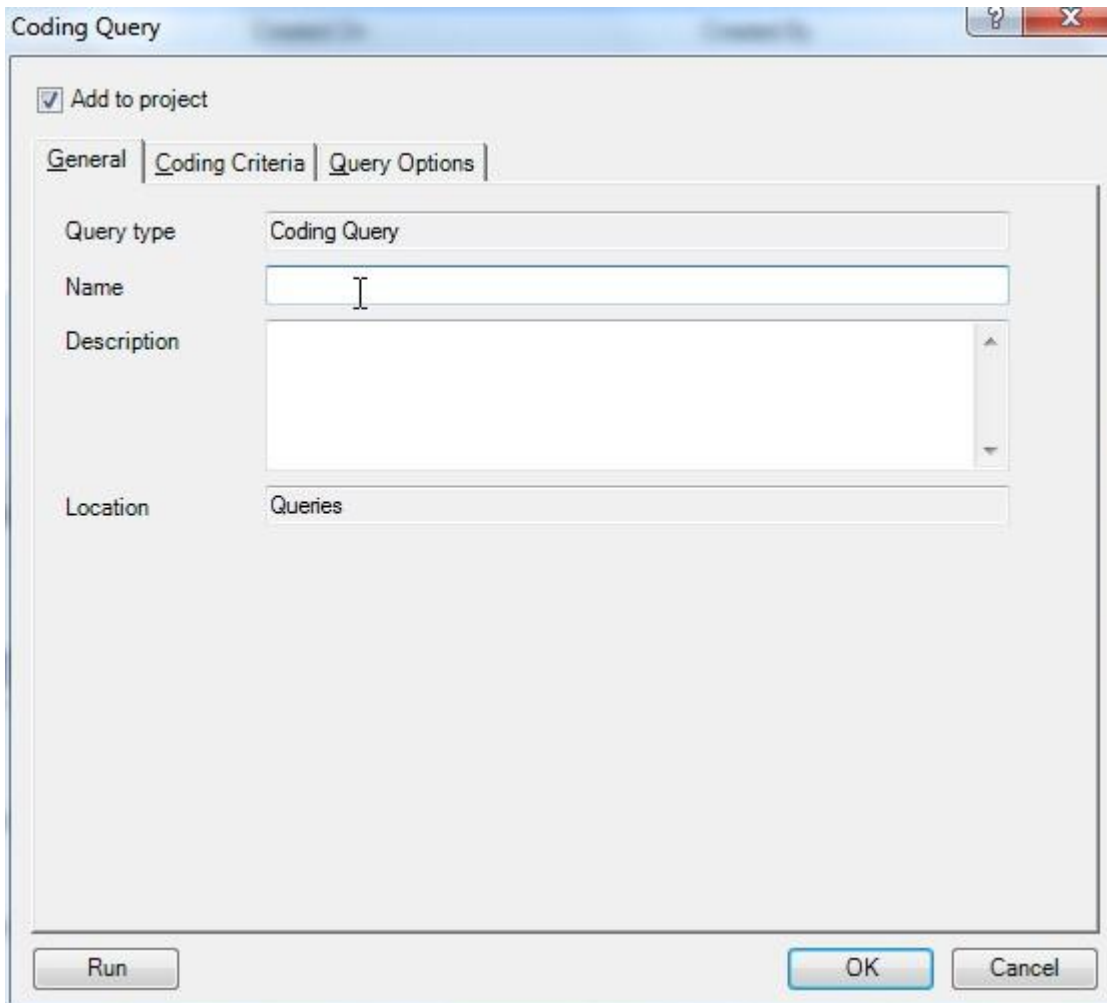


Figure 71: Coding Query Dialog General Tab

Queries are stored in the Queries folder.

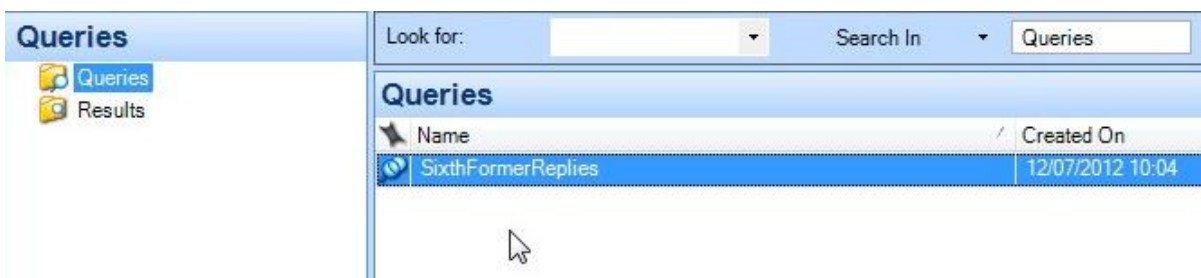


Figure 72: Stored Query Location

More complex coding queries can be constructed using the Advanced tab on the Coding Query dialog box.

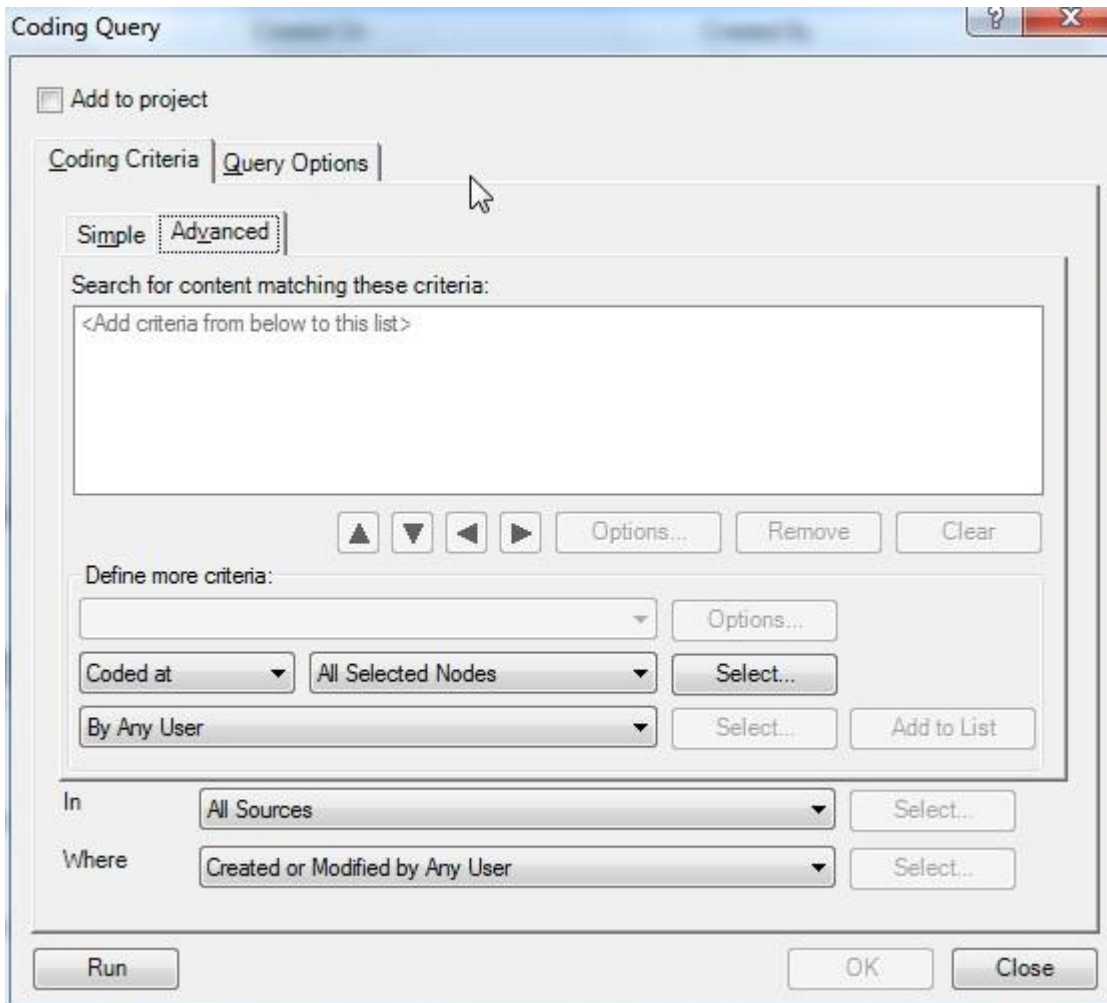


Figure 73: Coding Query Dialog Box Advanced Tab

To construct a similar query to the one above, choose **Any Node Where...** from the drop down menu.

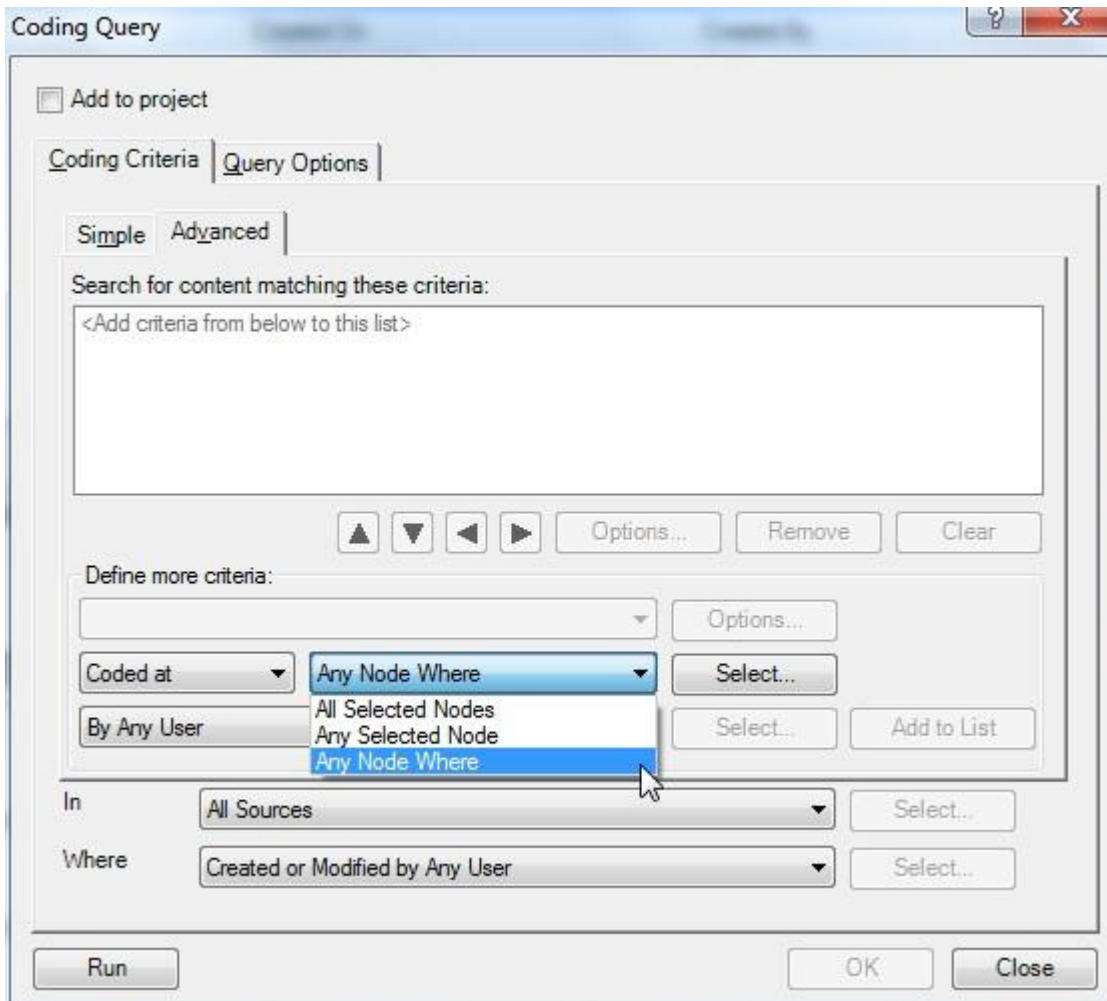


Figure 74: Criteria Selection

Click the **Select** button to define the criteria, and use the Coding Search Item Dialog **Select** button to select the attribute, and the drop down menus to set the value.

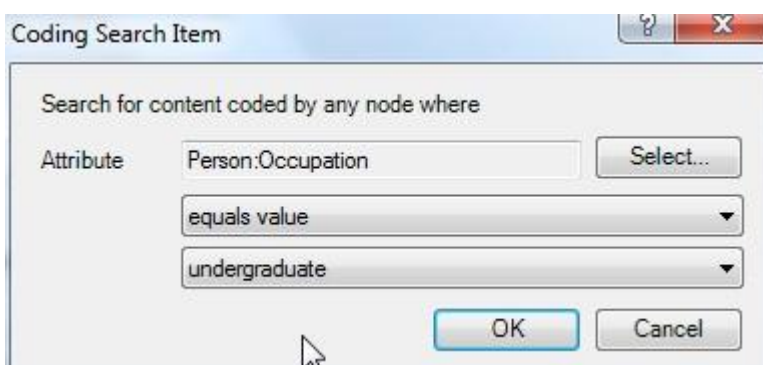


Figure 75: Attribute and Value Selection

Click **OK**, and then **Add to List** on the Coding Query Dialog. The criterion appears in the main window of the box.

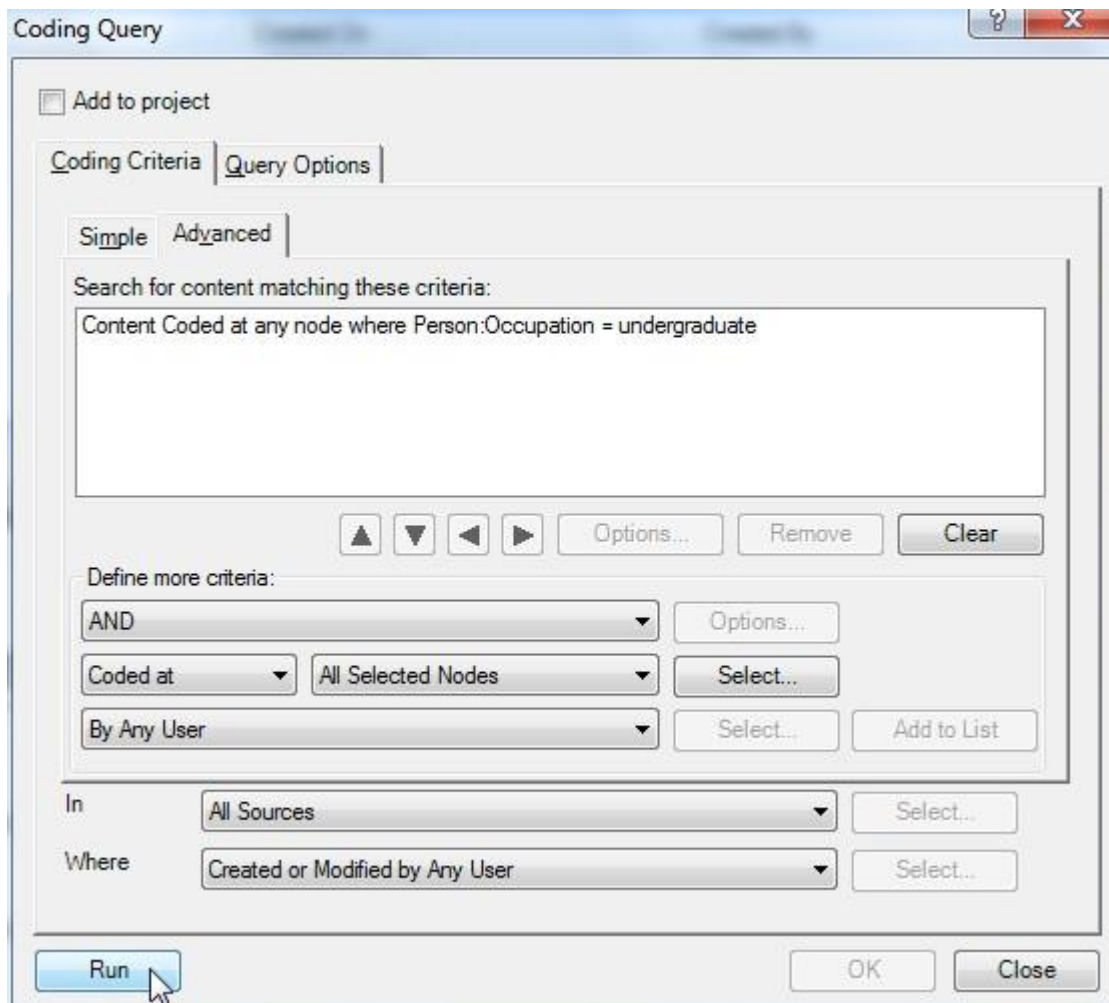


Figure 76: Advanced Coding Query

Run the query. The results are the same as before. However, by using the Boolean logic of the Coding Query Advanced tab, more complex queries can be constructed.

9.3 Text Query

Text queries enable you to search sources for specific words or phrases. Choosing **Text Search** from the pop up menu displays the Text Search Query dialog box.

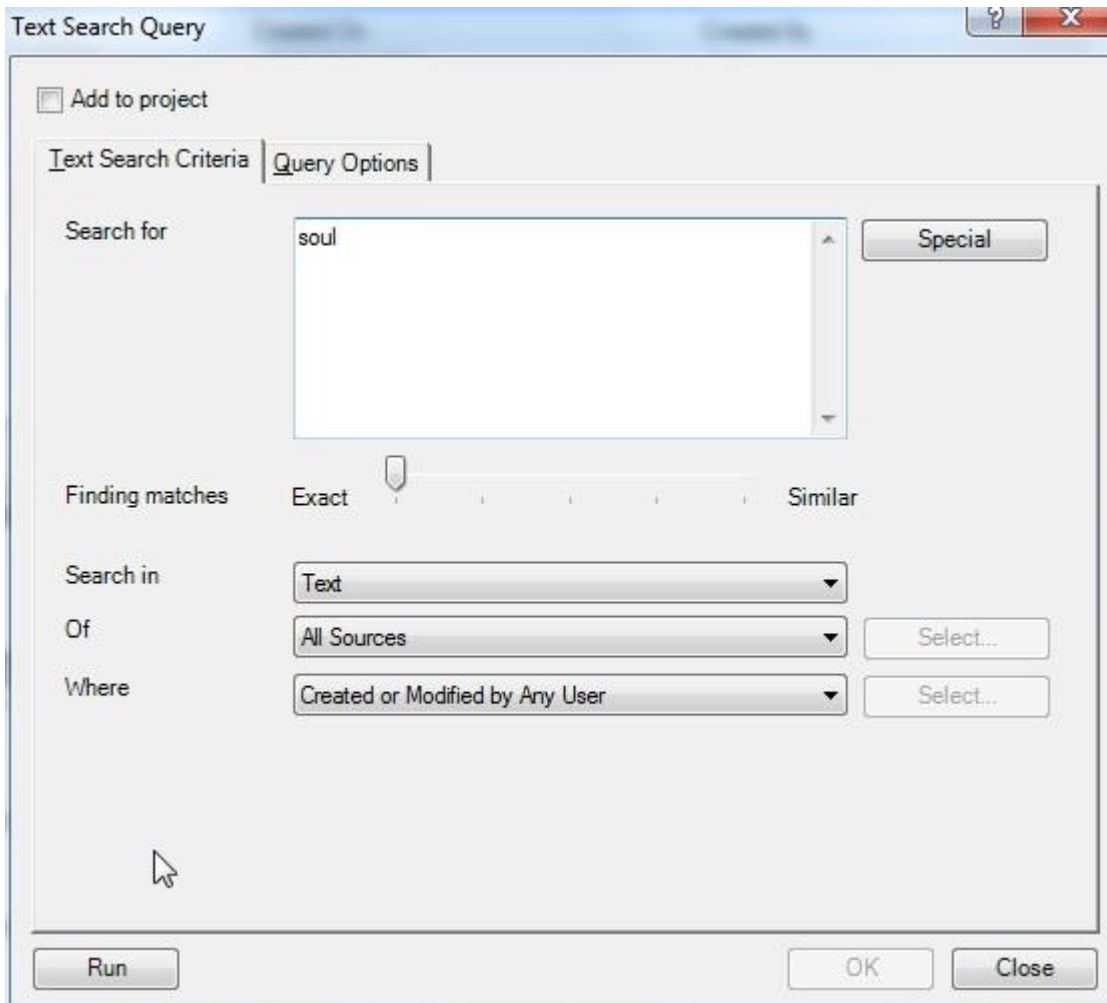


Figure 77: Text Search Query

Wild card characters and Boolean operators can be added to the text using the Special button. The results are displayed in the detail view pane.

The results are displayed in the detail view pane.

Name	In Folder	References	Coverage
wikipaedia article	Internals\texts	100	1.54%
jowett	Internals\texts	157	0.44%
a3	Internals\Questionnaire	2	0.35%
a2	Internals\Questionnaire	3	0.52%
a1	Internals\Questionnaire	8	1.10%

Figure 78: Text Search Query result

The results can be explored using the tabs at the right edge of the results pane. For example the Text panel shows the results in context.

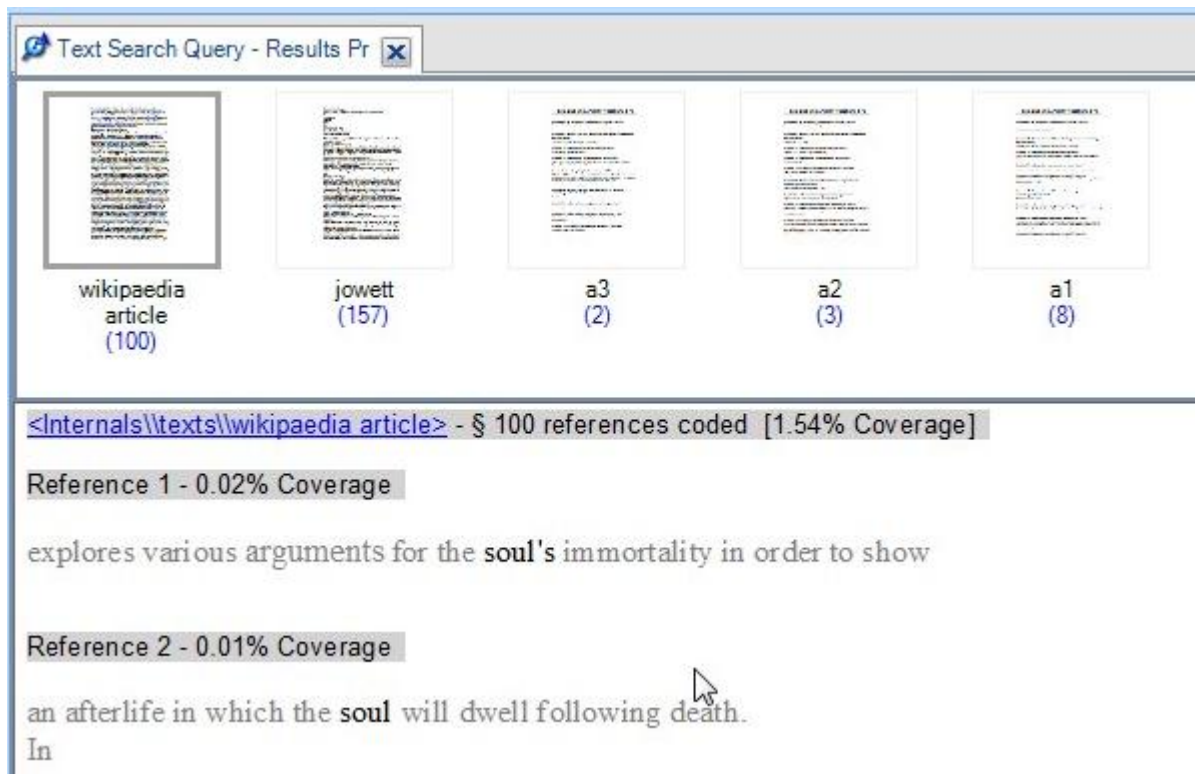


Figure 79: Text Query Result Text Panel

9.4 Matrix Coding Queries

Matrix coding queries enable you to compare what different demographic groups may have said about a topic. You can therefore find out what different groups may have said about an experience or event, and compare reactions between groups. The matrix coding query produces a cross tabulation. Usually, the results of a node (or nodes) give the rows of the matrix, and the attributes the columns.

To run a matrix coding query, select **Matrix Coding...** from the pop up menu. This displays the Matrix coding dialog box.

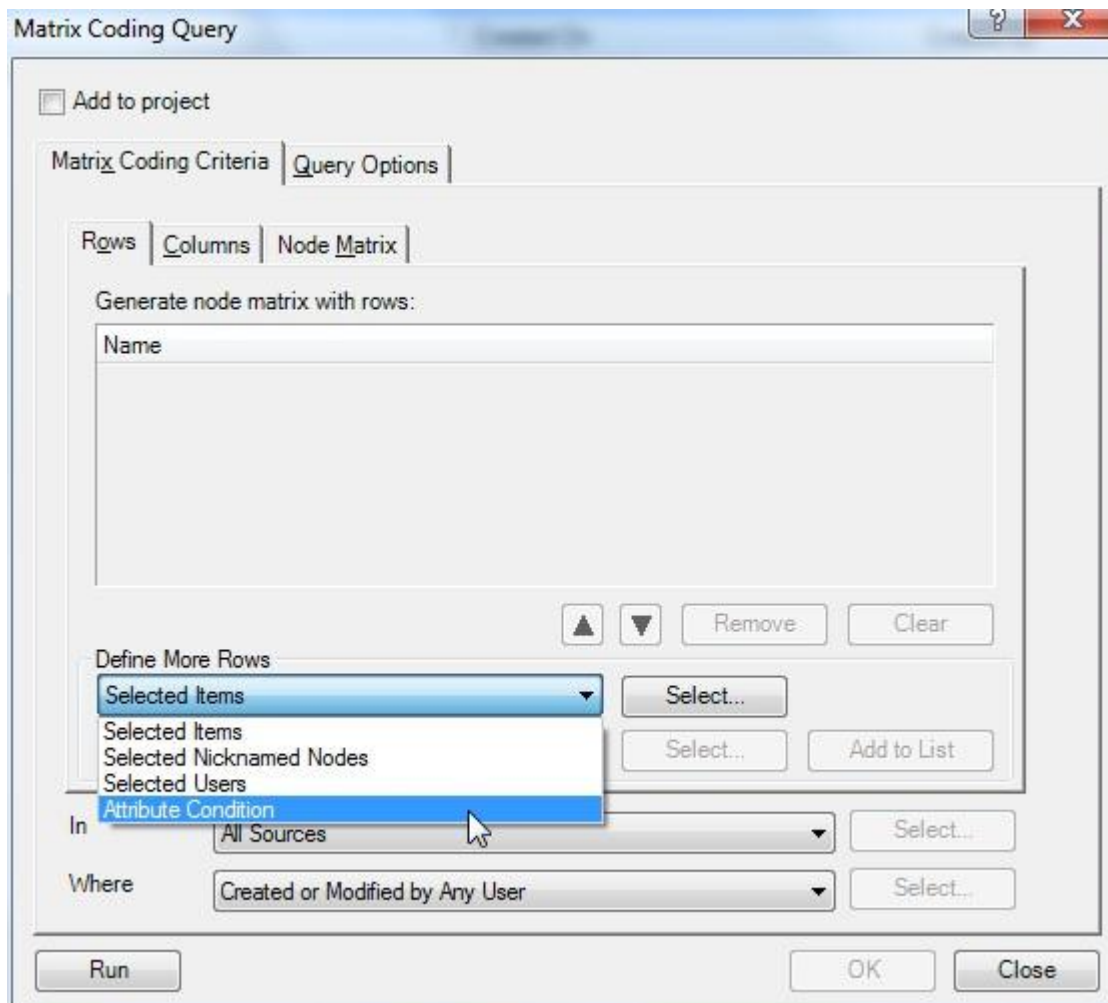


Figure 80: Matrix Coding Dialog Box

In this case we are going to use the query developed above for our example, modified to display the answers to only one question in the questionnaire. Firstly, select the rows, and choose Attribute Condition.

Click Select and the coding item search dialog box is displayed. Make the attribute and values choice and click **OK**. Click on **Add to List** in the Matrix Coding Query dialog box and the row definition is added to the list.

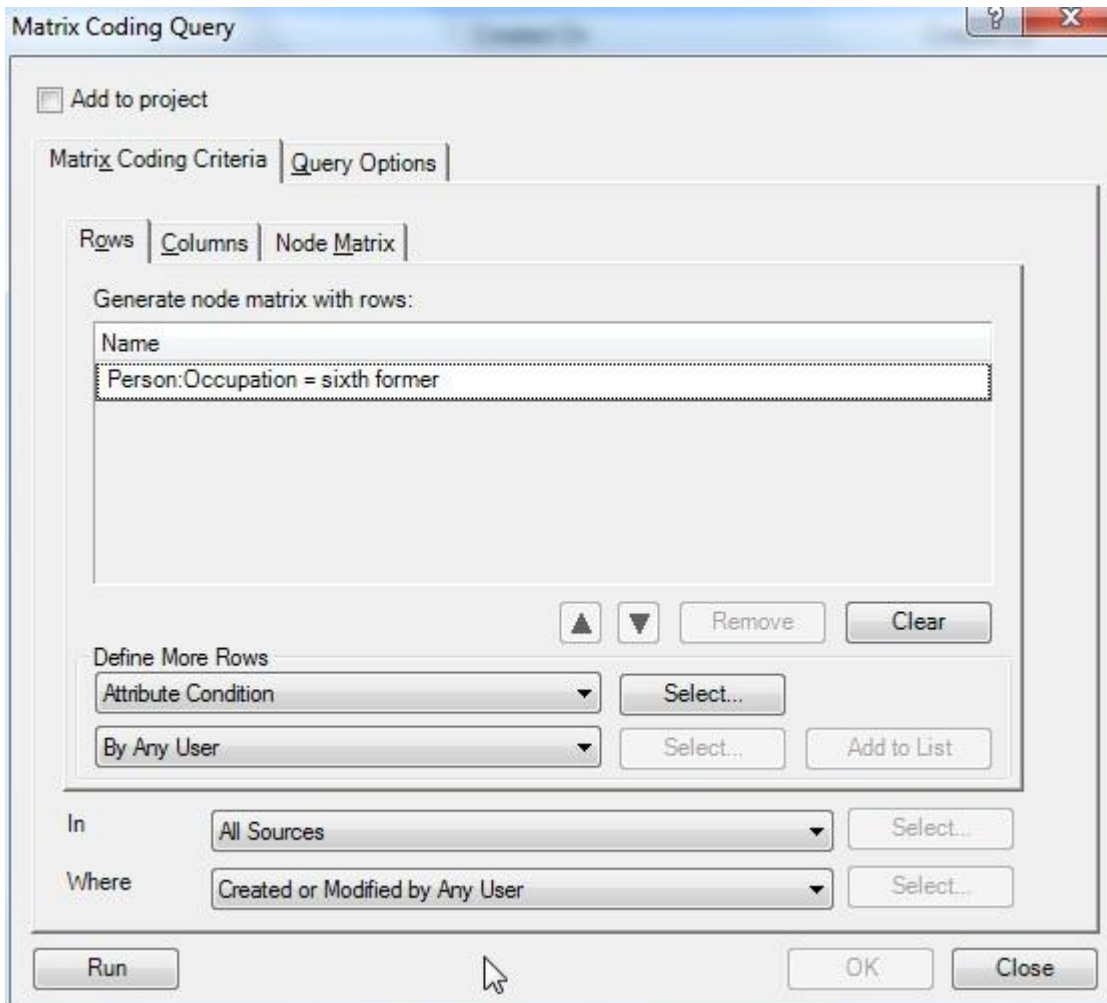


Figure 81: Matrix Query Row Definition

Click on the **Columns** tab to define the column part of the matrix.

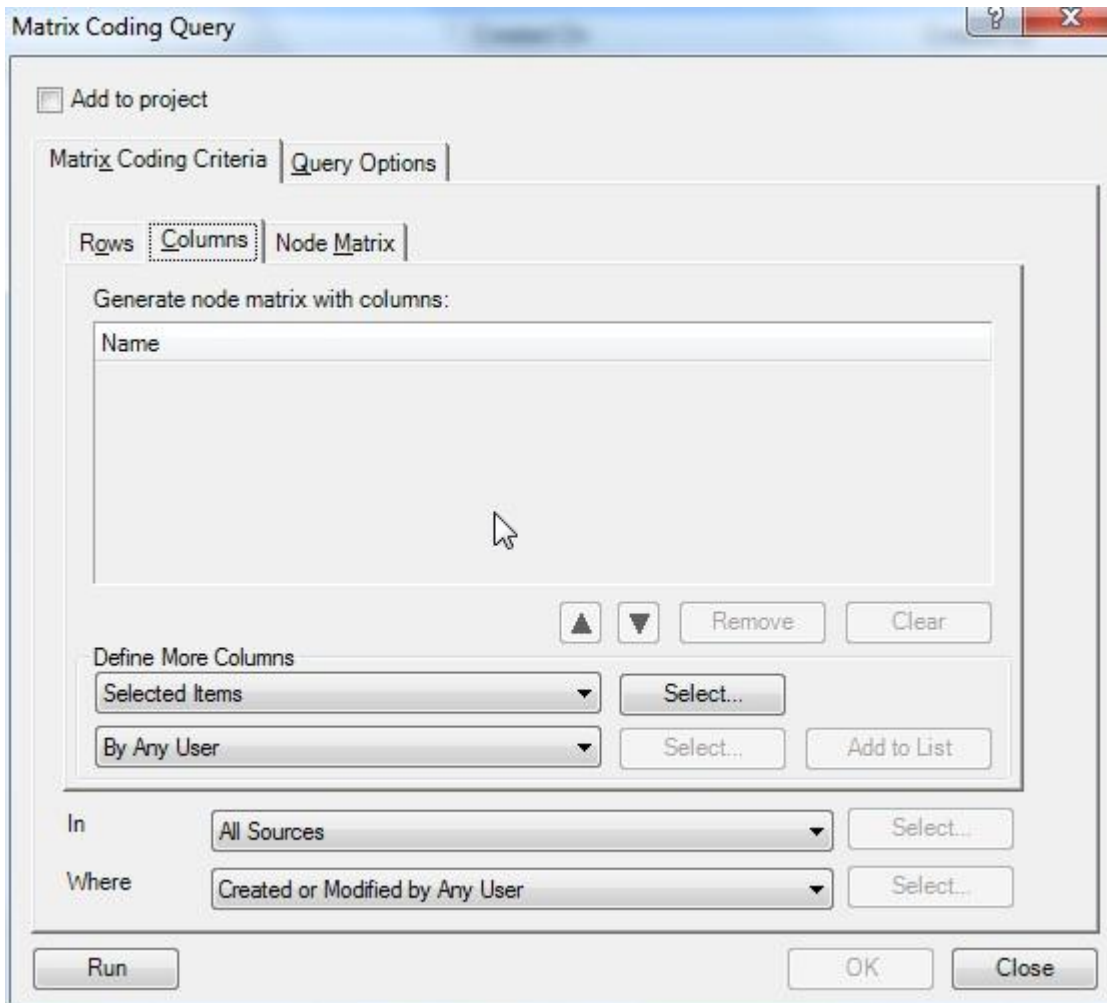


Figure 82: Matrix Coding Query Dialog Column Definition

Click on **Select** and the Select Project Items dialog will be displayed.

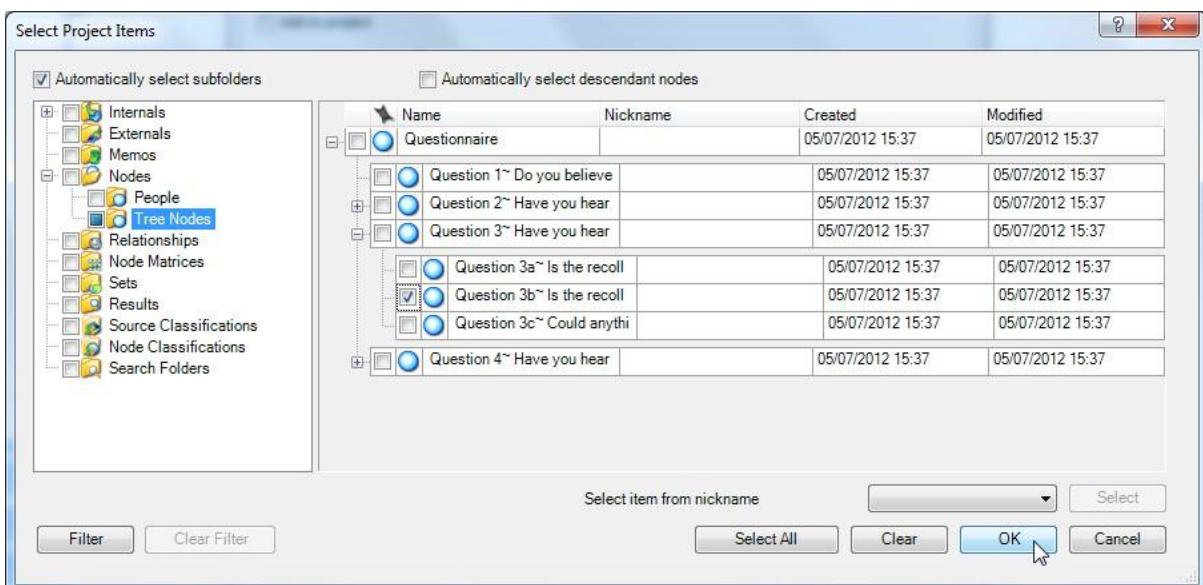


Figure 83: Select Project Items Dialog
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Click on the **Tree Nodes** item and then expand the **Questionnaire** node in the right hand window. Click on the check box for Question 3b, and then **OK**.

Click on **Add to List** in the Matrix Coding Query dialog box to add the column to the query.

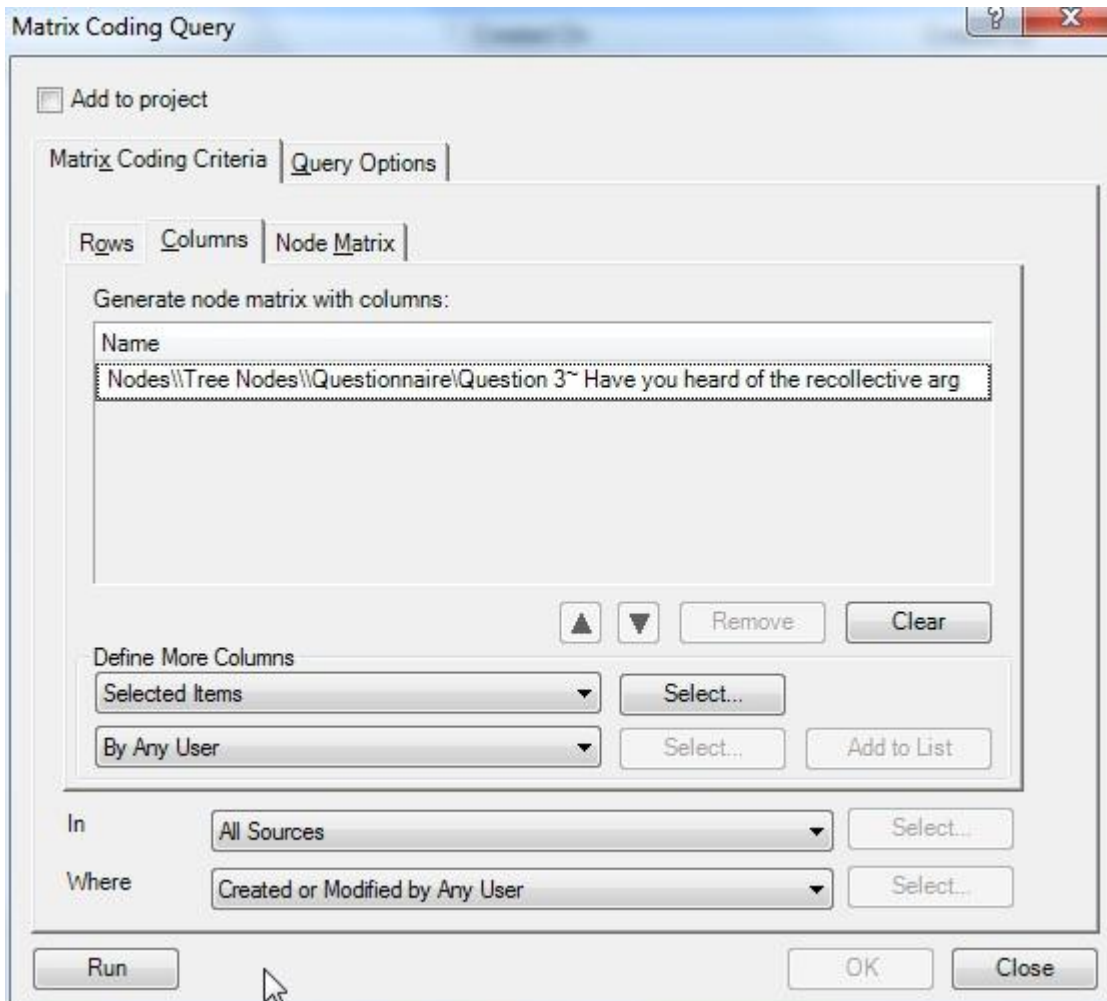


Figure 84: Matrix Coding Query Column Definition

Click on **Run** to run the query. The results are displayed in the detail view.

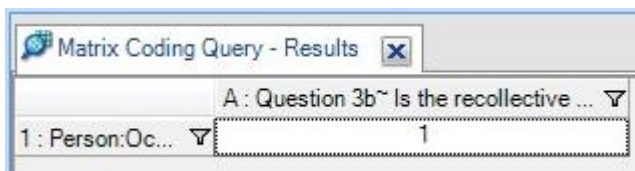


Figure 85: Matrix Coding Query Result

The number of items matching the query is shown in the cell. Double clicking on the cell will open those items in the detail view.

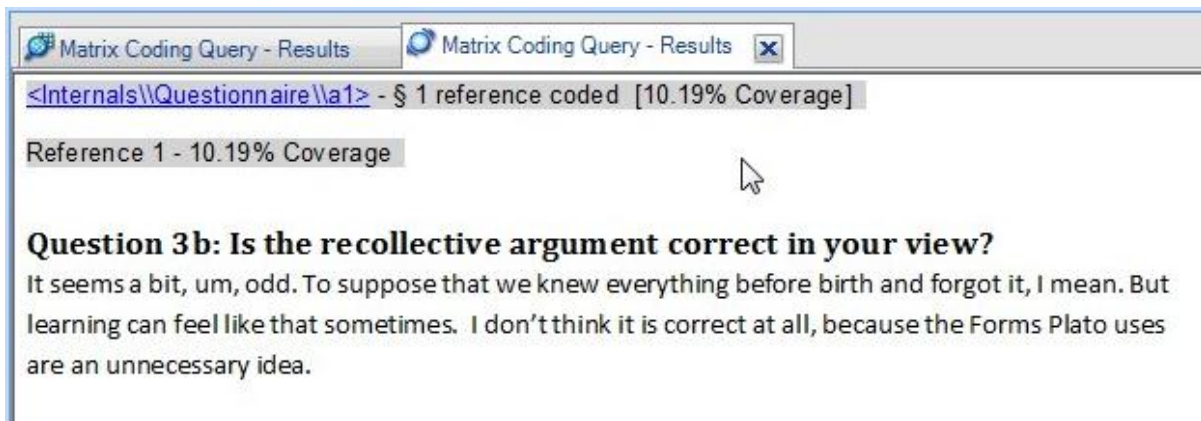


Figure 86: Matrix Coding Query Matching Document

10 Charts

Charts are another way of visualising some aspects of your data set and analysis. Charts are created by using the **Chart** button on the **Explore** tab.

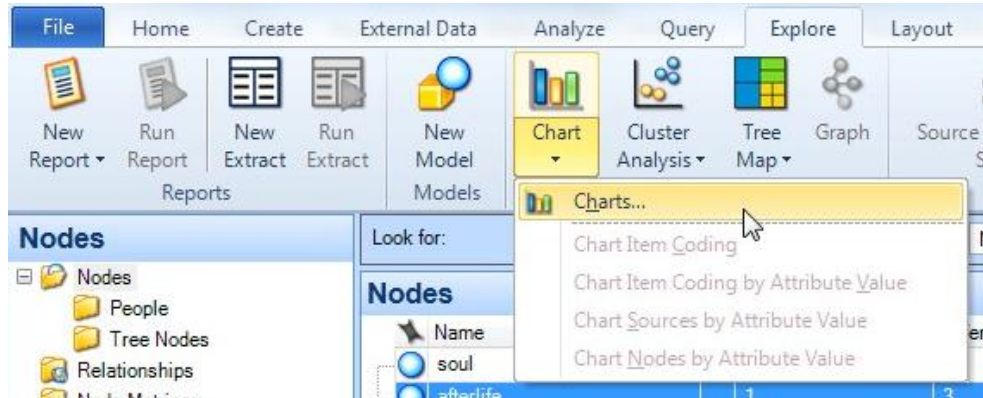


Figure 87: Charts Button

This shows the first step of the chart wizard.

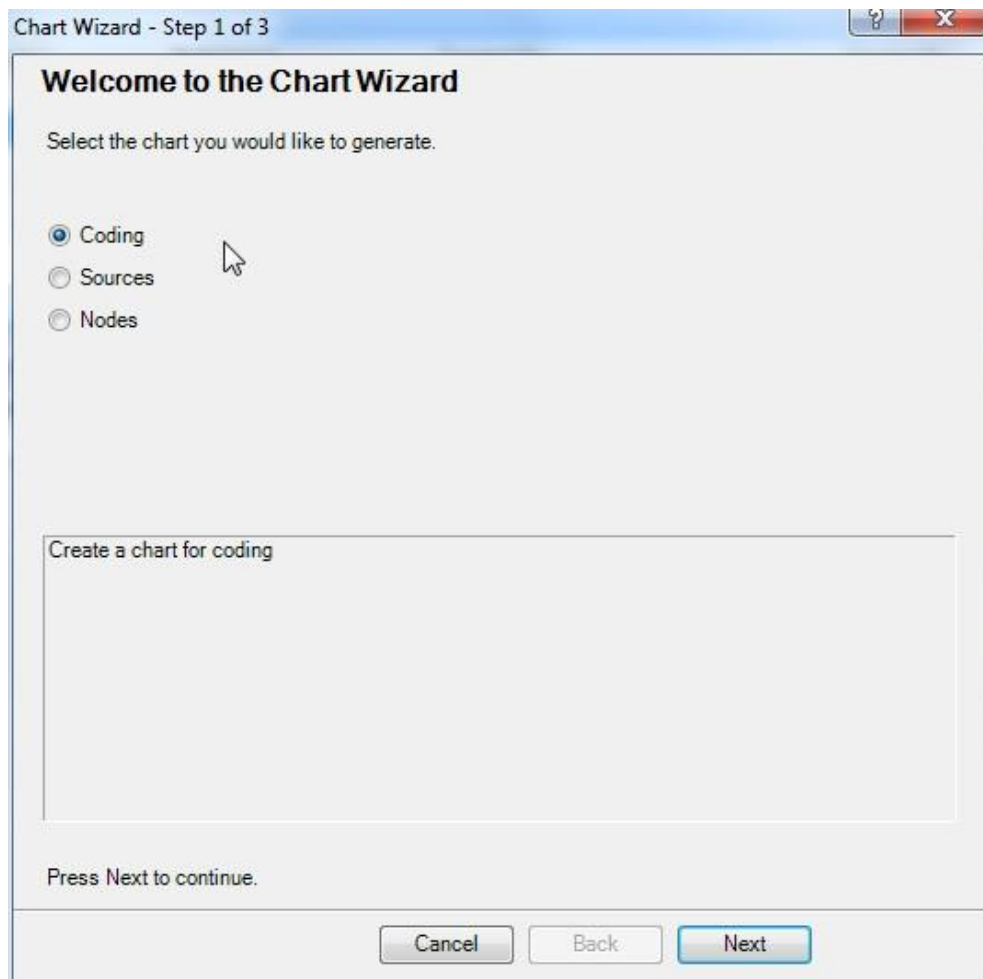


Figure 88: Chart Wizard step 1

Select the item you wish to chart. Click **Next**. In this case we will chart the coding for a source.

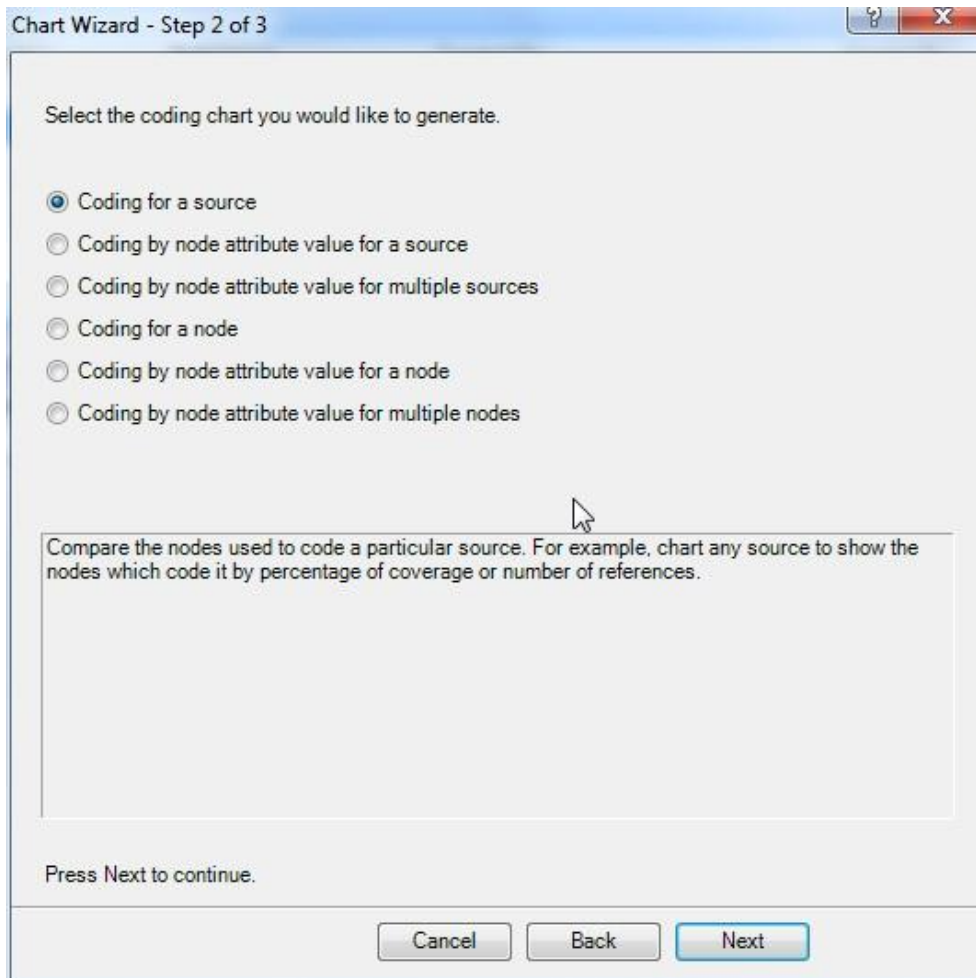


Figure 89: Chart Wizard Step 2

Click **Next**.

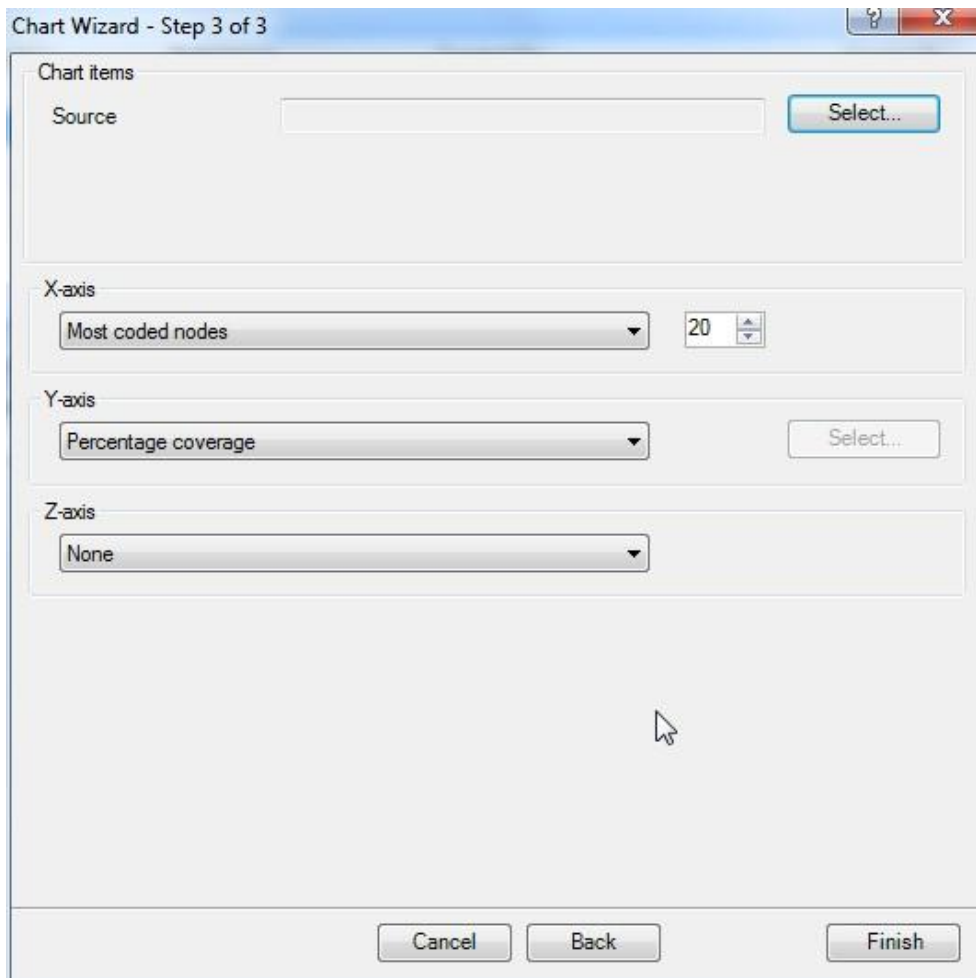


Figure 90: Chart Wizard step 3

Click on **Select...** to select the item of interest. The Select Project Item dialog is shown. Select the required node and click **OK**.

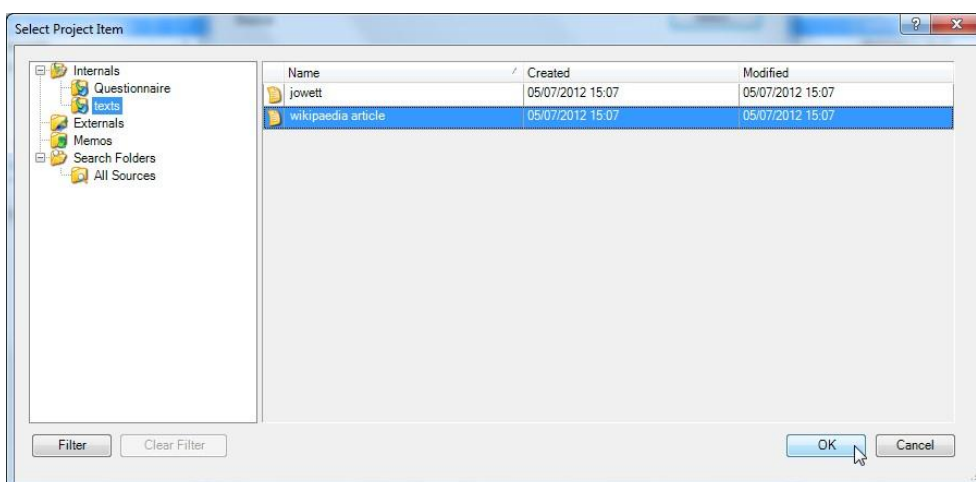


Figure 91: Select Project Item Dialog

Click on **Finish** and the chart is displayed in the detailed view area.

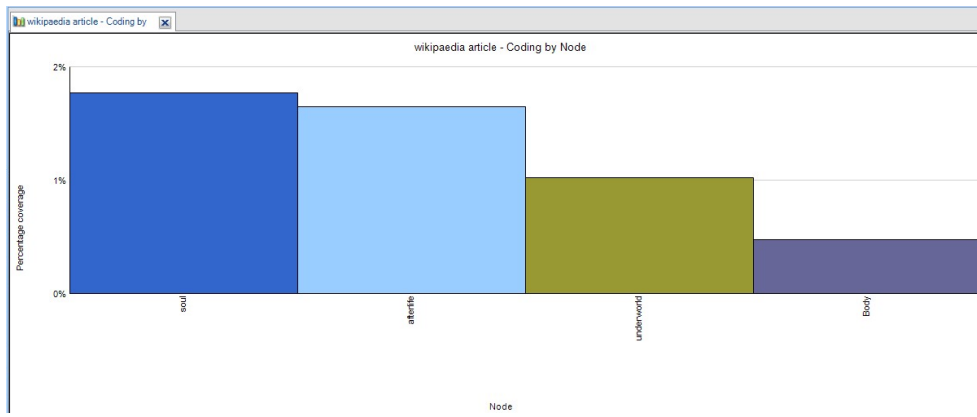


Figure 92: Chart Display