

NVivo 9.1 reference guide

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These notes are designed as a reference manual for continuing work after a training workshop. More extensive self-help resources, along with extensive methodological explanation and advice, can be found in *Qualitative Data analysis with NVivo* (Bazeley, 2007, London: Sage). Data preparation notes and other resources are available from my web site.

▸ Instructions (actions) are marked thus. Words in **bold** are from the screen dialogues.

Instructions are supplemented by: ✓ Tips, and ! Warnings.

Table of contents_Toc284703365

Creating, naming, and storing projects.....	1
Sources	3
A note on terminology.....	3
Importing sources (internals) into NVivo	3
Creating and using folders for internals	4
Creating a new internal document or memo in NVivo	4
Viewing sources	5
Deleting sources	6
Creating and using sets for sources	6
Memos, annotations and links	7
Annotating text.....	7
Reflective memos	7
Creating a See Also Link to a selected extract.....	8
Memos, annotations and links – summary table	8
Nodes.....	9
Making nodes	9
Arranging nodes	10
Listing nodes	12
Coding.....	13
Reviewing coding.....	14
Exporting or printing node contents	15
Auto coding text sources	15
Recording relationships.....	17
Classifications and attributes.....	18
Creating Classification Types and Classification Nodes	18
Creating attributes and attribute values	19
Creating and entering attribute data by importing a table	20
Using attribute data	23
Working with datasets	24

Using NVivo with EndNote	26
Find.....	28
Find.....	28
Advanced Find	28
Queries	29
Group Query to find ‘items coding’	29
Coding queries.....	29
Scoping a query	31
Matrix coding queries.....	31
Word frequency query.....	35
Text search	35
Visualising data	37
Charts	37
Visual displays	38
Models.....	39
Creating a model	39
Teamwork tools.....	42
Defining User Profiles.....	42
Importing a project	42
Comparing coding	42
Reporting.....	44
Reporting text – from List View options	44
Reporting using predefined reports	44

Creating, naming, and storing projects

Creating a new project

- ▶ Creating a project in NVivo is as simple as clicking on **New Project** at the base of the Welcome screen, and typing a **Title** for the project into the New Project dialogue. Add a Description if you wish, to help identify this particular project.
- ▶ If you need to set a password and/or access rights to the project, this is done once the project has been created, by accessing **File > Info > Project Properties**. Unless you have a compelling reason to do so (or a faultless memory), it is generally safer to *not* set a password for the project.

When you have created a project, it will be added to the **My Recent Projects** list on the Welcome screen, and you will be able to reopen it with a single click on its name. If it is not showing on the Welcome screen, click on **Open Project** and navigate to where it is stored.

Identifying the user

NVivo will assume that the user is the same as the person identified in Windows. If you need to allow for multiple users accessing the same computer, then you can have NVivo ask for the user to be identified each time it is opened:

- ▶ From **File > Options > General tab** check/uncheck the box next to **Prompt for user on launch**.

To change a user's name or remove a user:

- ▶ Go to **File > Info > Project Properties > Users**.
- ✓ Options sets preferences for the application (i.e., NVivo) as a whole (for application to the next new and later projects, Project Properties sets preferences for just the current project).

Saving the project

- ▶ You will be asked every 15 minutes whether you wish to save changes to your project. Click **Yes** (or press Enter) to ensure your work is not lost.
 - ▶ This time lapse can be shortened or lengthened via **File > Options > Notifications tab**, but be aware that the pop-up reminder does interrupt what you are doing, so more frequent is not necessarily better, and less frequent carries obvious attendant risks regarding loss of work should the power go off or the program close for some reason.
 - ▶ Projects are saved by default to your My Documents folder. If you wish to change the location, go to **File > Options > File Locations**.
 - ✓ If your project is on a network drive, the intermediate saves, until you close the project, will be into a Windows > Temp folder on your local drive.
- ! Do *not* work from a USB/flash drive, especially on a desktop computer – if the power goes off suddenly, an open project may be corrupted. Always copy to the hard disk and work from there.**

Renaming a project

- ▶ A project can be renamed by going to **File > Info > Project Properties**. To avoid confusion, you should also change the file name (in Windows) to match the project name (you will then need to use Open Project next time you want to access it). The *project name* is a registry entry recognised by the software and which shows in the Welcome window and at the top of the NVivo workspace; the *file name* is what you will see in Windows dialogues, as well as in the Welcome screen.

! Do *not* change a project's file name in Windows while the project is open.

Backing up

Backing up a project is most easily done in two ways:

- ▶ Using Windows, **after the project is closed**. Copy the project file, paste it into a specially designated folder or onto an external drive, and date it.
- ▶ Within NVivo: Go to **File > Manage > Copy Project** and provide a new name. NVivo will close the current project, create the new copy, and then reopen the current project (i.e., the one you already had open, not the new copy).
- ✓ Use international date format for your dates (YYMMDD) because they sort correctly, with the newest one always at the bottom of the list.
- ✓ Always keep the last known *good* copy of a project, i.e., the second last backup, in case the last one was corrupted. Therefore, do not rely on automatic (system) backups, as they (usually) overwrite the previous file.

! Do not copy a project in Windows while the project is open in NVivo.

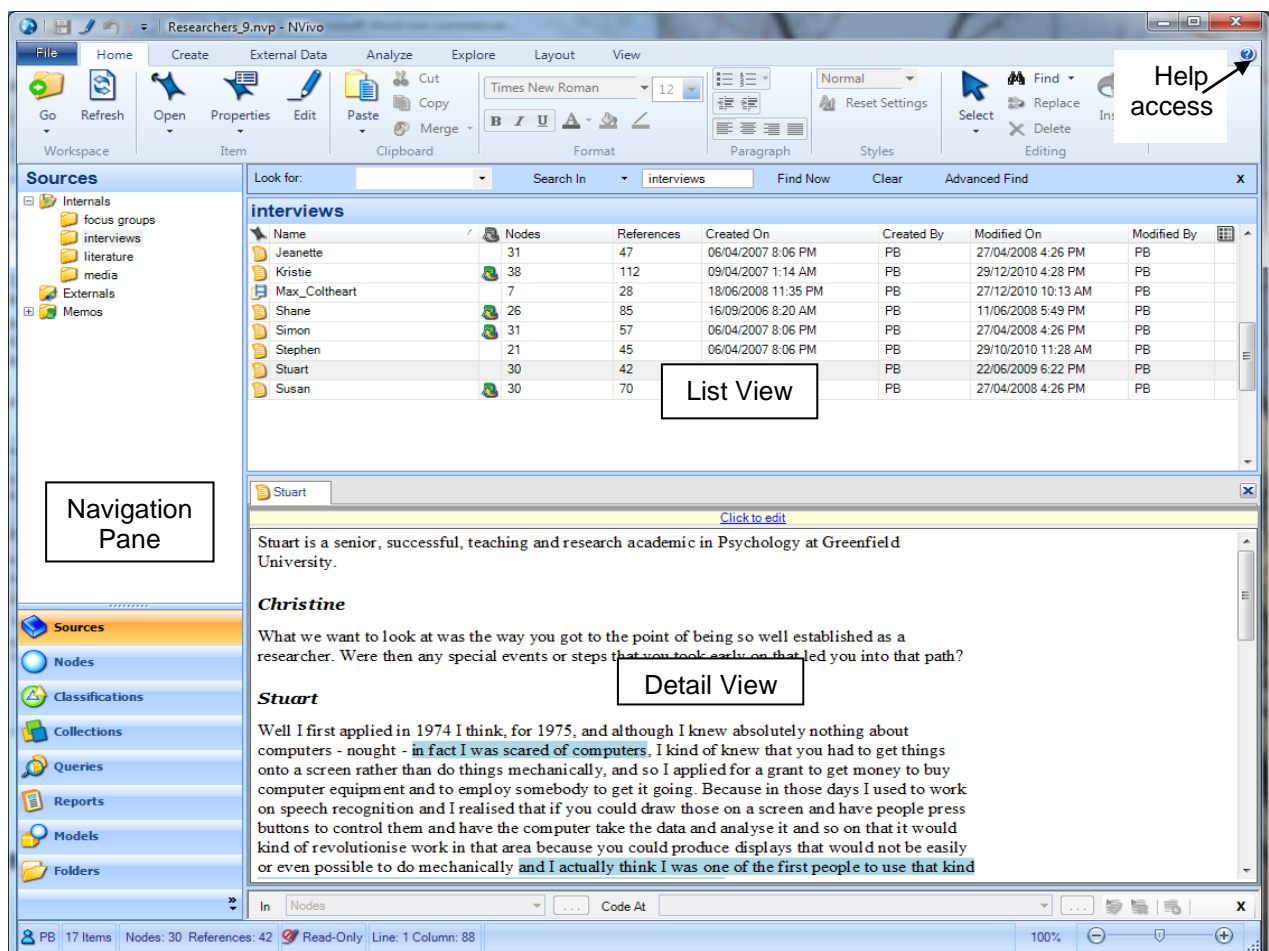
Deleting a project

Just in case you want to start over!

- ▶ Projects are deleted through the regular Windows file system (Windows Explorer / My Documents / My Computer).

Accessing Help

- ▶ Click on the question mark icon at the top right of the NVivo screen. Click on an item under **Contents** on the left pane of the screen, type a term into **Search**, or check a term in the **Glossary**.



NVivo screen, showing Navigation Pane, List View, Detail View, and Help access point

Sources

A note on terminology

Sources refers to data items that are imported or created in NVivo. These can be documents, audio files, videos, images, datasets.

Sources can be given a **Source Classification**. Each classification type embraces attributes (default of user defined). For sources, these usually relate specifically to the type of source, rather than to the characteristics of who or what provided the source.

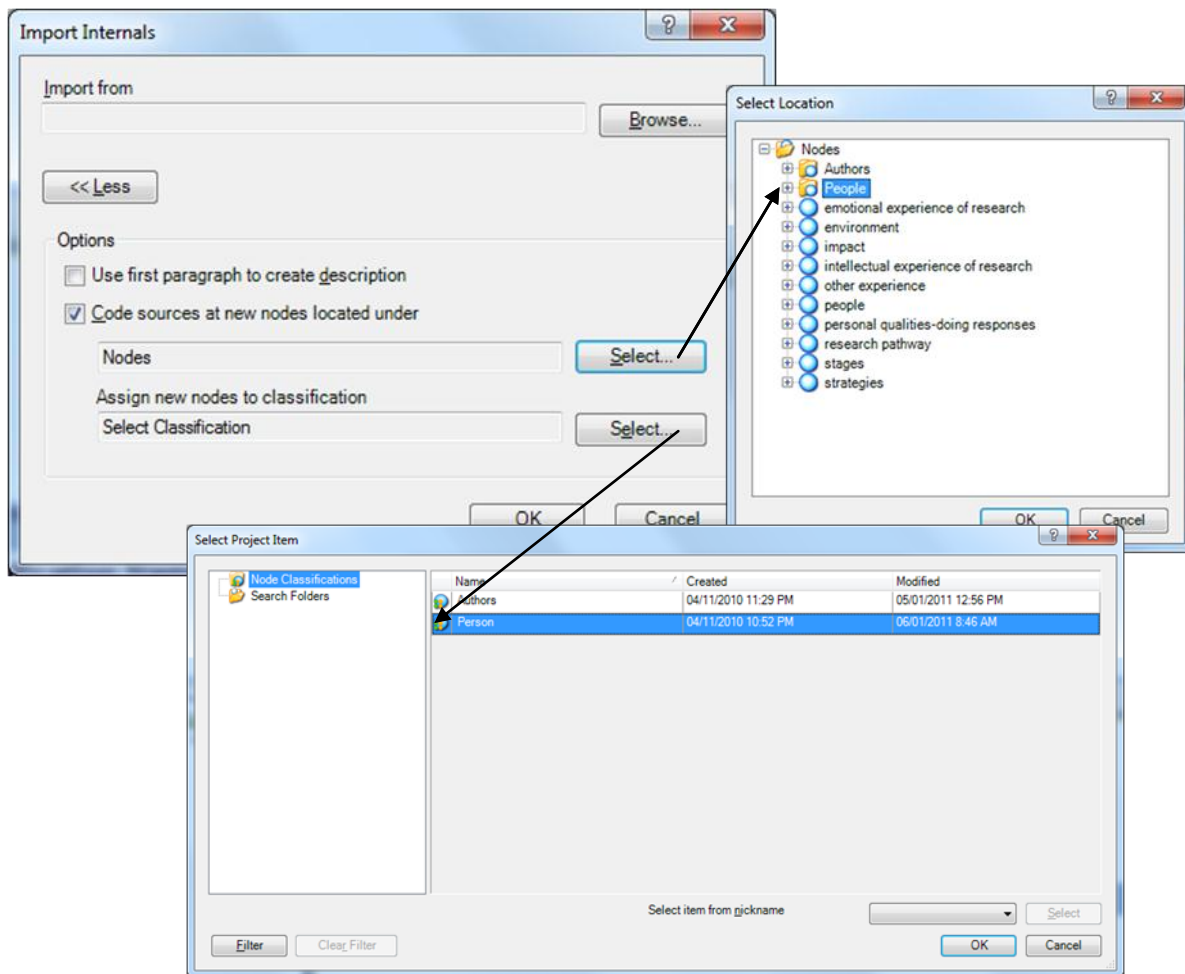
Classification nodes ‘hold’ all the data about the units of analysis (e.g., cases, participants) you will be using in your NVivo project. These can be of more than one type. Typically these include People, but they might also represent Organisations, Sites, Families, and so on. Because they are nodes, single, multiple, or parts of sources can be coded to them, either on import, *or later* (cf. below and especially under the heading for Working with Classifications). In NVivo 9, sources can be assigned (coded) to more than one type of classification node, and consequently an interview with an employee might be coded to a classification node for that person in a tree for individuals (People), and to another classification node for their Workgroup, and also to a node for their Organisation. Each of these would be associated with a different **Node Classification** with its own specific set of **attributes** (variable data) to apply. This allows for analysis at multiple levels, e.g., where your project has embedded cases (e.g., school/class/pupil), or for multiple types of cases.

- ✓ Classification nodes can be created and sources can be coded to classification nodes at any time after import, as well as on import. Classifications can be assigned and changed at any time during the project.

Importing sources (internals) into NVivo

Documents saved as Word files (document format, rich text format, or if you’re really desperate, plain text format) are easily imported into NVivo. You can also import audio, video and image files in various formats (see Help, or the options on the import screen, for a list of OK formats), and you can import *.pdf files (currently, these are converted to Word document format on import).

- In the Navigation Pane for Sources, select the folder into which the source is to be imported.
- In the List View, right-click > **Import Internals**.
 - An **Import Internals** dialogue will open, requesting the location of the files to be imported.
 - Click on **Browse** to navigate to locate the files you wish to import. Multiple sources (of the same type and location) can be imported in one pass: simply use Shift-Click or Ctrl-Click to select more than one when choosing sources for import.
- You can choose to provide some additional information about what is to be done with those files as they are imported:
 - Click on **More>>**
 - For text documents, you might indicate if the first paragraph of each source should be used to **Create descriptions** for those sources.
 - If each source represents a single case (unit of analysis – represented in NVivo by a classification node) of a particular type, then choose to **Code sources at new nodes located under > Select [Classification Node/Folder]** to indicate where they are to be located.
 - Tell NVivo which **Classification** applies to the new classification nodes.



- ✓ If you are new to NVivo, and working in a new project, don't worry about Classification nodes and Classifications at this stage. (These are covered in detail below). You can sort that out later.
- ✓ If heading/paragraph styles are important because you are planning to auto code a document, check them in Word, using Outline View, before you import the document. It is much easier to make corrections there than after you have auto coded in NVivo.
- ✓ Check Help > embedding media, re options for storing video and audio files; also File (menu) > Options to set limits on the size of embedded files.
- ✓ Some *.pdf documents (ones that cannot be copied into Word) will not import correctly.

Creating and using folders for internals

- In the Navigation Pane for Sources, right-click on **Internals** to create and name a **New Folder**. Drag documents from the List View to the appropriate folder.
- ✓ Internals can be imported or created directly into a selected folder, once it has been created.
- ✓ The most appropriate way to use folders is to sort different types of data.

Creating a new internal document or memo in NVivo


- In the Navigation Pane for Sources, select the folder in which the document or memo is to be created.
- Select the **Create**, then click on the icon for the appropriate source (if you select Memo, the location for it will automatically default to the Memos folder).

OR

- › Right-click in the List View (in the white space). Select **New Document** or **New Memo** (as appropriate).
- › A **Properties** dialogue will open. Type in a **Name** and **Description** for the document or memo.
- ✓ If you have set up source classifications, you can choose to assign a *source* classification and relevant attribute values (this is *not* the same as a node classification). The new document will then open in Detail View, ready for you to edit.

Viewing sources

Viewing document text

- › Double-click on a document in List View for the text to be shown in the Detail View, below the list of documents. More than one document can be open at a time, but the text of only one will be visible at any one time.
- › Select which open document is currently in view by clicking on its tab at the top of the Detail View.
- › Close a document by clicking the  (top right in Detail View).
- ✓ If you do need to see the text of more than one at one time, undock the Detail View by clicking on the check mark for **View > Docked**.

Playing audio/video files

- › Double click the file to open it in Detail View.
- › Click on **Play/Pause** in the Media ribbon that becomes available when you are viewing a media file. You can also choose to pause, fast forward, rewind, etc. from the Playback section of the Media ribbon.



Transcribing within NVivo.

- › Check **Help > Search >** (and type) **Transcribe while playing**, and **Help > transcribing** for options on combining transcripts with audio/video files. Transcribing within NVivo allows you to create time-stamped segments of text to match the wave file.

Viewing images

- › Double click the file to open it in Detail View. Options for working with pictures are mostly in either the **Picture** ribbon that becomes available when you select an image, or the **View** ribbon, or on the right-click menus.

Adding text to the Picture Log:

- › Open the picture source. To add text to the Log (at the right of the picture) you will need to change to Edit mode: click on **Click to Edit**, located at the top of the Detail View.
- › Select a region of the picture, right-click > **Insert Row**. NVivo will record the reference for the region, and you can record its content.

Images can be shown as thumbnails in List View (if you want to restrict which pictures are included, make a set of them and the view thumbnails in the set, *cf.* Help > picture gallery):

- › Click in the **List View** (to make it active).
- › From the **View** ribbon, select the **List View** group, and then an option for **detail** (the default view) or **thumbnail** (small, medium or large).

Viewing source properties

- › Right-click on a particular source to view its **Properties**,
OR select the source, and then **Home > Properties**,
OR select and key **Ctrl+Shift+P**.
- ✓ You can change the name of a source or add a description for the source in this dialogue.

Deleting sources

- › Select the source(s) in List View.
- › Right-click > **Delete**.
- ✓ Deleting a source will delete all coding for that source, but not the nodes that were created to hold that coding.

Creating and using sets for sources

These give you another way of ‘cutting’ your data; they are used primarily for scoping (restricting) queries, or for comparisons using queries, later in your analyses.

- › In a List View for sources, select one or more items (or a folder of items), then right-click > **Create as > Create as Set** *or* go to **Create** ribbon > **Create as Set**. Name the new set.
- › If the set already exists and you wish to add to it, select one or more items (or a folder of items) from a List View of sources, then **Create > Add to Set**, or right-click and **Add to Set**.
- › To view the set, choose to show **Collections** in the Navigation Pane. Expand + **Sets** in the Navigation Pane. Members of a selected set will show in List View as aliases for the items.
- ✓ Modifying a set: deleting an item from a set will not delete the item, just the shortcut to it. If you open an item from a set and modify it, however, you are modifying the actual item.
- ✓ Items can be members in more than one set.
- ✓ Sets can also be created using Find options (see below).

Memos, annotations and links

Annotating text

- › Select the passage to be annotated (usually short).
- › Check next to **Analyze > New Annotation**. A space for typing into will open at the base of the Detail View, and the text that was selected will now have a blue highlight behind it to mark the presence of an annotation.
- › Type your annotation.
- › You can choose to have annotations in view, or not, by checking **Annotations** in the **View** ribbon. Click anywhere in the blue highlighted text, and double-click the matching comment.
- ✓ Annotations travel with the text wherever it goes. They are best used to explain something that might be unclear or need expansion in the text.

Reflective memos

Creating a project journal

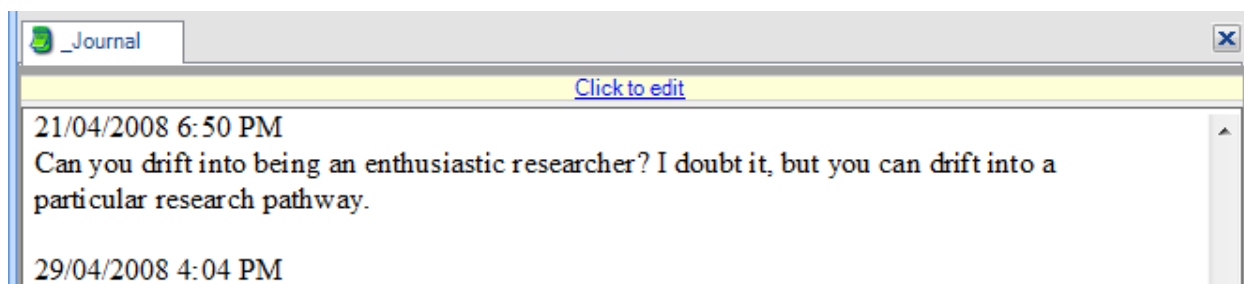
- › Choose **Create > Memo**.
- › Name the new memo.
- ✓ Put an underscore at the beginning of the name for project journal/s, so they always appear at the top of the list of memos for easy access. An alternative would be to create folders under Memos, including one for project-wide memos/journals.
- ✓ If you want your project journal to be located within a specific folder, then: In the Sources area in the Navigation pane, click on the relevant folder (it must be located under Memos), then choose to **Create > Memo**.

Creating a linked memo for a source (or node)

- › Select the source or node in List View. Right-click > **Memo Link > Link to New Memo**.
OR:
From the text of the source, right-click and choose **Links > Memo Link > Link to New Memo**.
- › Name the new memo (usually using the same name as the source or node).

Adding to the project journal or a memo

- › Add text, coding, see also links, etc. to the memo when you create it, and at any time later.
- ✓ To add text to an existing memo, you will need to click on **Click to Edit**, located at the top of the Detail View, or on the pencil icon in the quick access toolbar or Home ribbon.



Creating a See Also Link to a selected extract

- ▶ Highlight and copy the extract to be linked (e.g., video segment, text passage).
- ▶ Go to where you want the link to be accessed from, select an ‘anchor’ (e.g., a brief text passage in a memo or another document), right-click and **Paste as See Also Link**. The anchoring text will be highlighted in pink to indicate the presence of a linked extract.
- ▶ Show and access See Also Links from below the text in any source or node by checking next to **View (ribbon) > See Also Links** and then double-clicking the desired link.

Memos, annotations and links – summary table

	Source linked memos	Node linked memos	Annotations	See also links for whole items	Hyperlinks
Primary use	Notes re key points in a source; observations; reflective thoughts relevant to the source as a whole	Reflective thoughts about the concept or case represented by the node; ideas for further analysis	Notes which illuminate or reflect on a specific part of the text or image (seen in a source or node)	Links from a specific point in the source to relevant project items, including other sources, nodes, sets, models, memos	Links from points within text sources or memos to non-project on-line items or websites
Display to indicate presence	Icon next to source in List View	Icon next to node in List View	Blue highlight on text	Pink highlight on text	Underlined blue text
Coding of linked item	Can be coded	Can be coded	Can't be coded (code the anchor)	N/A (code the anchor)	Can't be coded (code the anchor)
Searching for a word or phrase	Content can be searched	Content can be searched	Content can be searched on request	N/A	Can't be searched
How many can you have?	One linked memo per source	One linked memo per node	As many as are needed	As many as are needed	As many as are needed
Help topic	About memo links	About memo links	About annotations	About see also links	Hyperlinks
To create:	From source item in either List or Detail View: Right-click > Memo Link > Link to New Memo ; or Ctrl+Shift+K		Right-click > Links from selected text in source or node; or select New Annotation or New See Also Link in Analyze		Right-click > Links from selected text in <i>editable</i> source
To view:	Right-click > Memo Link > Open Linked Memo ; or Ctrl+Shift+M		View > <input checked="" type="checkbox"/> Annotations	View > <input checked="" type="checkbox"/> See also links	Ctrl+click on highlighted text

Nodes

Making nodes

Nodes are containers for references (passages) from sources. There are multiple ways of making nodes, either as you are working through the text or when you are just thinking about the categories you might need.

Making nodes without coding

- In the Navigation Pane, select **Nodes**.
- Go to **Create ribbon > Node**.
- OR,**
- In the white space below the List View of nodes: Right-click > **New Node**
- Provide a name for the new node (and a description if you want).
- ✓ If you have an existing node selected when you choose to create a New Node, the new node will be placed as a subnode (child) of the selected node.

! You then need to code selected text to the new node.

Creating a node and coding at the same time

To create and code at new nodes, select the Nodes tab in the Navigation Pane for your project; then, with a document or memo open in the Detail View, choose from one of the following methods:

For creating and coding at nodes at the top level (i.e., directly into **Nodes**, not in a folder or tree under Nodes):

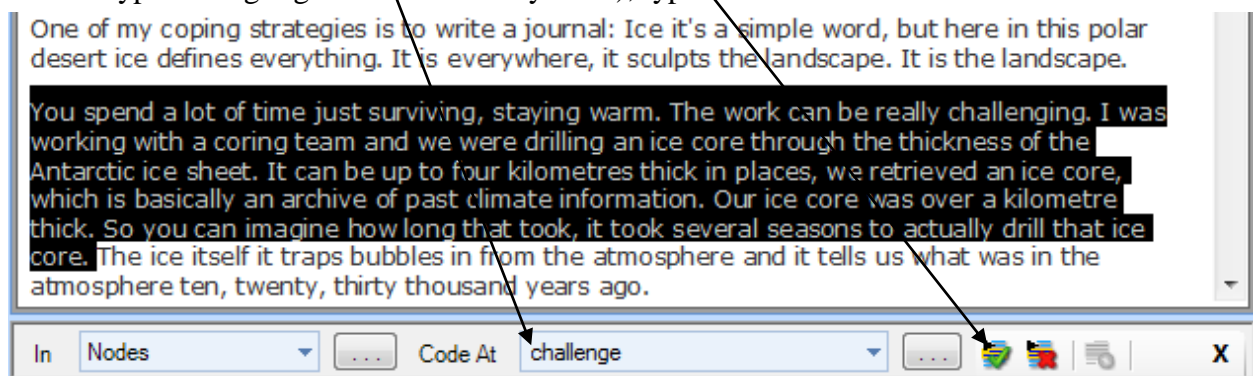
- Select text, right-click to **Code Selection > At New Node** to open a new node dialogue. Type a name and press **Enter**. This will code the selected text as well as creating the node.

OR


Select text and press **Ctrl+F3** on your keyboard, to open a new node dialogue. Type a name and press Enter. This will code selected text as well as creating the node.

OR

Select text, click in the **Code At** slot in the coding toolbar at the base of the source (or overwrite the highlighted name already there), type a name and click the Code icon.



OR

- Highlight text (a word or phrase), right-click to **Code In Vivo** .

! For In Vivo nodes, only the highlighted word is coded, so having created it, you will then need to code additional text around it (and probably change its name at a later stage to accommodate other variations).

Creating ‘child’ nodes:

- › Select text, then right-click > **Code Selection** > **at New Node** (or use **Ctrl+F3**). In the New Node dialogue, go to **Location** > **Select**, then (in the next dialogue) select the *parent* for the new node, type in a name and maybe a description, then **OK**. *This method codes the text as the node is created.*

OR

Select an existing node and right-click to create a **New Node**. The new node will be placed as a subnode (child) of the selected node. *You will then have to code selected text to the new node.*

Changing/deleting a node

- › If you want to change a node title, select the node in List View, right-click > **Node Properties** (or press **Ctrl+Shift+P**)—*or*, simply click on it a second time to change its name to edit mode.
- › Selected nodes can be deleted using either right-click > **Delete**, *or* the Delete key on your keyboard. When you delete a node, all coding for that node is removed.

Arranging nodes

These instructions relate primarily to nodes used for coding thematic type content of sources. Additional instructions specifically related to classification nodes will be found further below.

Creating a structure for nodes

Nodes can be arranged in hierarchical ‘trees’. They are best arranged as in a classification system (taxonomy), with any one node appearing in one tree only – a tree for all nodes of that kind (e.g., making separate trees for actions, events, people, emotions, values, issues, etc.).

- › If a suitable node doesn’t already exist, create a new top-level (parent) node.
- ✓ The top level node describes the general category of items to go in that tree, and is very likely to not have any coding in it.
- ✓ Parent nodes are not always at the top level, i.e., you might also want to define an intermediate level.
- ✓ If you are unsure about how to arrange your nodes, try importing them all into a model, and pushing them around the screen to create groups. Label the groups using shapes (labels will become parent nodes).

Moving nodes into trees

- › In List View select one node, or more than one using either **Shift+Click** or **Ctrl+Click**.
- › Hover over a selected node, then drag the selected node/s to a parent node.

OR

Right-click > **Cut** the selected nodes; select the appropriate parent node for the nodes you are moving; and right-click > **Paste**. (Generally use Cut rather than Copy if you are moving it so you don’t end up with two copies.)

- ✓ Dragging or **Paste** will place the node *under* the node you drag to or paste at (so you are giving it a new parent).

- ✓ If you are having trouble dragging a node from one tree to another (dragging just seems to select everything in between), make sure you first select the node, *then* click on it again to drag it.
- ✓ A node can be pasted once only after cutting, or multiple times after copying. If a node needs to go into more than one tree (e.g., because it involved more than one concept), use Copy rather than Cut, then return to delete the original. Rename the node appropriately in each new location (nodes with the same name should not need to be in more than one tree).

Moving nodes across trees

- Nodes can be dragged from one tree to another. Alternatively, **Cut or Copy** and **Paste**.
- To place a node at top level, drag to or paste to **Nodes** in the Navigation Pane.

Merging nodes

- If you have two nodes which are about the same thing, then **Copy** the first one (or **Cut** if you are sure you want to entirely remove the first node), select the second one, and **Merge Into Selected Node**. This will place all the text references from the first (source) node into the second (target) node. Note the range of options for merging nodes and trees of nodes.
- ✓ Amend the node's description to indicate what has been merged.
- ! **When you merge a node with a memo with another node, if you don't select to merge the memo then the memo is lost, i.e., if you merge it, it will be added to the target node's memo. If you choose to maintain the linked memo as a separate item you need first to delete the link with the node (Navigation Pane > Collections > Memo Links).**

Aggregating nodes

Coding at nodes can be automatically aggregated at (copied to) their immediate parent node.

- In the **Properties** dialogue for the *parent* node, check against **Aggregate**.
- ✓ Aggregation for a particular node can be turned on or off at any time.

Creating and using sets for nodes

- In List View for nodes, select one or more items (or a folder of items), hover over a selected item, then right-click > **Create as** > **Create as Set or** from the **Create** ribbon, select **Create as Set**. Name the new set.
- If the set already exists and you wish to add to it, select one or more items (or a folder of items) from a List View of nodes, then right-click and **Add to Set**.
- To view the set, choose to show **Collections** in the Navigation Pane. Expand + **Sets**. Members of a selected set will show in List View as aliases.
- ✓ Modifying a set: deleting an item from a set will not delete the item, just the shortcut to it. If you open an item from a set and modify it, however, you are modifying the actual item.
- ✓ Because sets hold aliases only, if you update nodes in a set, the set will be updated.
- ✓ Sets can be created also from items gathered using the Find Options – see below.

Listing nodes

The information displayed in the List View can be customised to suit your needs.

- › Click in the List View (to make it active).
- › Go to **View > List View > Customize...** Use the arrows in the dialogue to choose which fields are shown. Adjust the column markers to suit your needs (I usually maximise the column for descriptions).
- › To adjust the screen layout for child nodes, click anywhere in the List View, then go to View > List View > Child Node Headers. Moving column markers for one tree will move them for all nodes at that level.

To obtain a simple list of nodes:

- › In the Navigation Pane select **Reports > Node Structure Report** and select which nodes you want to include in the report (remember to request **Automatically select hierarchy**).
- OR**
- › From the display of nodes in List View, right-click > **Export > Export List**. Select the format you want for your list: it will open either in Excel or as a table in Word (*or* right-click to directly **Print List**).
 - ✓ To see the full list of tree nodes when you export, you will need to expand all trees in your list: Right-click > **Expand/Collapse > Expand All Nodes or Expand Selected Nodes**.
 - ✓ If you want to print/save just a list, you might first want to turn off most of the added detail, such as dates and creators (use View > List View > Customize).
 - ✓ Printing rather than exporting will preserve the appearance of the screen display, but you may have to ‘fiddle’ with the position of columns to avoid the width being spread across two pages.

To obtain a report listing your nodes with descriptions and a summary of the extent to which each has been used:

- › In the Navigation Pane select **Reports > Node Summary Report** and select which nodes you want to include in the report.
- › In the Detail View, right-click > **Export** or **Print** as required.



Coding

- › Rearrange the screen for drag-and-drop coding: **View > Detail View > Right**, then move the pane divider further left.
- › With nodes showing in the List View, and the text you are coding (either document or node) in the Detail View, drag selected text to a node.

OR

Highlight a passage (in Detail View), then select a node (or nodes) for coding using **Ctrl+F2** or right-click > **Code Selection > at Existing Nodes**.

OR

- › Highlight a passage, select a recently used node in the coding toolbar, and press Enter or click the tick.
- ✓ If **Click to edit** is *not* showing at the top of the Detail View, then go to **Home > Edit** or click on the pencil icon  in the quick access toolbar at the top of the screen. This will ensure the document cannot be edited (so text cannot be moved accidentally as you are dragging).
- ✓ Turn on the coding density bar (**View >  Coding Stripes > Coding Density Only**). Hover over the bar see what coding has been added for the adjacent passage.
- ✓ You cannot use drag-and-drop coding for contents of a single cell in a database, or for parts of a cell in an audio or video transcript.
- ✓ Nodes in List View can be reviewed while you are thinking about which to use for coding: double-click on the node you're thinking about, review its text, then close it to return to the source text. Alternatively, open its **Properties** (right-click or Ctrl+Shift+P) and check (or add to) its description.
- ✓ The right-click menu and coding toolbar options are available whether or not you have nodes showing in the List View. Menu options also allow for selecting multiple nodes at once.
- ✓ You can code at multiple nodes at once using Ctrl+F2 or the right-click options to make your selection and code.


Coding with nodes in trees

- › Code with child nodes in the same way as you have already been doing.
- ✓ Code the same passage of text to multiple nodes, each to pick up on one particular aspect of what is going on. (Queries will be used to find the associations between these nodes, e.g., between a person and an action, or an event or issue and an emotion or other response, or an action or strategy and its impact.)
- ✓ If you work with the nodes displayed, using drag-and-drop coding, remember to change the View to Detail View > Right, and to make sure the text is Read Only (click on the pencil in the quick access toolbar at the top of the screen); also, turn on the coding density bar (**View > Coding stripes > Coding density only**) so you can check your progress.
- › To expand a tree, click the + next to the top level node (double clicking will open the text for that tree node)

OR

Right-click to **Expand** (or Collapse) **All** (or a selected node).

Removing coding


- › Uncode (remove coding from) a selected passage either by immediately clicking **Edit > Undo** *or* by choosing to Uncode  at whatever node is showing in the Coding toolbar, *or* using right-click > **Uncode Selection > at Existing Nodes** (then selecting the nodes).
- ✓ Current node(s) are those currently showing in the Coding toolbar.
- ✓ If you want to remove coding while viewing in a node, select the text, right-click > **Uncode Selection > Uncode Selection at This Node**

Coding media files

Coding pictures:

- › Drag to select a region for coding.
- › Code by dragging to a node *or* right-click to choose to code to a new or existing nodes.
- ✓ The matching row in the Log needs to be separately coded. Coding a row of the log does not automatically include the corresponding image. Picture segments and whole rows can be dragged; part rows have to be coded using the right mouse menu.
- ✓ If it appears that coding stripes are not registering, check whether your display is set to Image or Log using the tabs at the base of the coding stripes area.

Coding video/audio:

- › Use the **Media** ribbon > **Start Selection**  *or* right-click to mark the start of a selection on the voice file. Use **Finish Selection** to complete the selection *or* simply drag over the required section of the voice file.
- › Code by dragging to a node *or* right-click to choose to code to a new or existing nodes.
- ✓ You can select and code only one section at a time.
- ✓ The transcript content needs to be separately coded. Coding stripes are shown separately for voice file and transcript content.
- ✓ Transcript rows can be coded using drag-and-drop, but you have to use right mouse menus for part rows. An alternative, if the contents of the source have been coded to a classification node, is to code the text from that node (using the Reference tab it view it).

Reviewing coding

- › Select a node in List View and double-click to open it. Text coded from all sources will be displayed in Detail View.
- › Check the *context* of a passage (e.g., the surrounding paragraph) by clicking in it, then right-click > **Coding Context > Broad**
OR
View the passage highlighted within the source document: right-click > **Open Referenced Source**.
- › To *spread* the coding of a passage to the context for that passage, choose right-click > **Spread Coding > Broad Context** (or to whatever level is wanted), *or*, select the required additional text while it is in view and code that.
- ✓ Narrow and broad context can be defined in File > Options.
- › View what other coding is on a passage using the Coding Density Bar or coding stripes. Right-click on the coding density bar to show a particular stripe; there are further options (including Uncode) from each stripe.
- › Alternatively, **View > Coding stripes > Selected Items** and select particular stripes to show across the display in Detail View, such as nodes in a particular tree or set. (Check)

Automatically select hierarchy to choose a whole tree by selecting the parent.) Nodes shown will be those that intersect with the text of the node on display.

- › Access the node properties (**Ctrl+Shift+P**) to record a description for the node.
- › Create a linked memo for the node (**Ctrl+Shift+K**) to record more reflective or analytic comments. View the linked memo at any time using **Ctrl+Shift+M**.
- ✓ Always reference the source for an idea recorded in the node memo *and/or* use a See also link to link the actual passage that was coded to what you have written in the memo.

Coding on

- › Recode or code on from a node as you would from a document.
- ✓ If you want to change the coding on text, recode first, *then* right click > Uncode Selection > At This Node. (Current node refers to the node currently showing in the Coding toolbar.)

Exporting or printing node contents

- › Highlight the particular node/s you want to export or print in List View.

To export:


- › Right-click > **Export > Export Node**, and then check the Export/Print Options. *To export or print text in document format*, choose to **Export > Reference View**. For files that may contain multimedia segments, choose to **Export > Entire Content** —this will save as .html and open as a Web page (*cf.* Help > exporting).

To print:

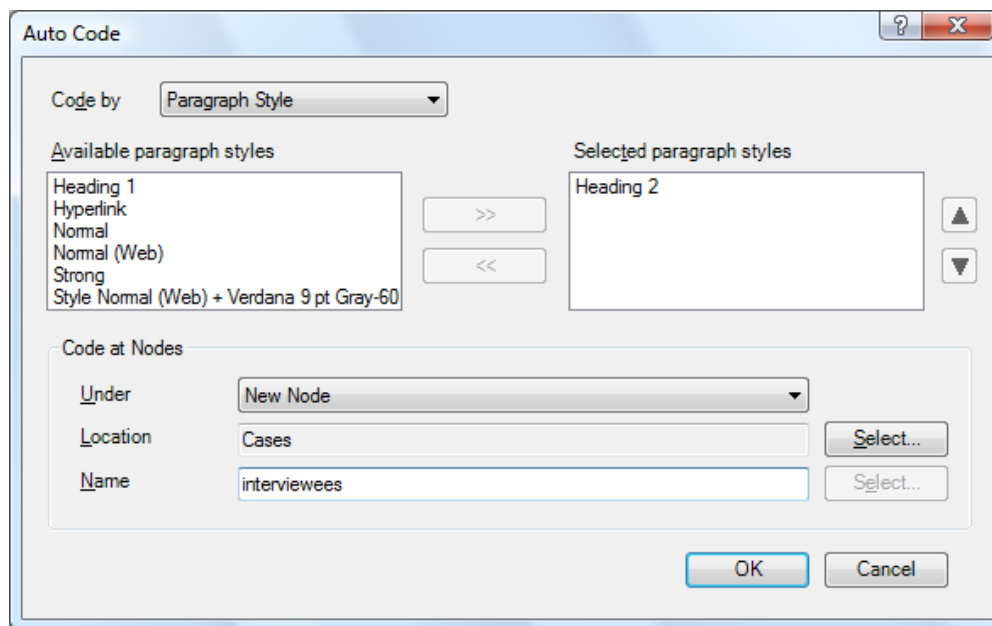
- › Right-click > **Print > Print Node**, and then select your Export Options. To print text, choose to **Print > Reference View**.
- ✓ To print a node (or document) with coding stripes, you need to have the text open in Detail View with stripes showing, then, in Detail View, right-click > **Print > Reference View**, and select the options you want.
- ✓ To print part only of a node (or document), export it first and edit in Word, *or* Copy from the Detail View and Paste into Word.
- ✓ You can change the default location for reports exported from NVivo through Tools > Options > Application Options > File Locations.
- ✓ Combine multiple node reports into a single document for printing in Word, using (in Word) **Insert > Object > Text from File**. Note that you can select more than one file to insert at the same time, using Ctrl+Click (be sure to include their names when exporting).

Auto coding text sources

Help topic: Coding > Automatic coding techniques

- ✓ Sources for auto coding need to be specially prepared using Word (heading) Styles to indicate the passages to be coded. All passages to be coded at the same level should be given the same Style.
- › In List View for your **Internals** (or a sub-folder), select the source or sources you wish to auto code (if more than one, these should be of the same type). If you are auto coding surveys or questionnaires, then do the whole set at once. If you are auto coding focus group transcripts, it might be safer to do them one at a time, and essential if your method of identifying different people is repeated across groups.
- › Choose to **Analyze > Auto Code**, or right-click >  **Auto Code**. Choose the **Paragraph Style** identifying the text you wish to code and click it across to the right box,

- ▶ Choose where you want the resulting nodes to be located. You will need to create a parent node to ‘foster’ the new nodes if you don’t have one already.



- ✓ For survey questions, you may want to code for multiple levels of heading at the same time to produce a node structure which replicates the structure of the survey.
- ✓ For focus groups, you are most likely to want to code for particular levels of heading in separate passes, e.g., to separate topics (at, say, Heading 1 level), from participants (at Heading 2 level). All headings of the same type should have the same style.
- ✓ If auto coding produces a node which contains headings only (when there is another heading immediately under and you have used multiple headings), and you wish to see the text of all the next level of subsections, then right-click > **Properties > Aggregate**.
- ✓ If the nodes are out of order in the display click on **Layout > Sort by custom**. They will sort into the order in which they were created (but so will everything else, so an alternative solution is to name them consecutively, especially as the display reverts to name order each time you open the project).
- ✓ If you mess up, simply Undo, or delete the nodes you have created and start again!
- ! The downside of NVivo’s use of paragraph rather than heading styles is that you need a blank heading for say, H2, before any H1, if you are auto coding for H2 because the last H2 in a section will include any H1 that comes before the next H2.

Recording relationships

Set up the relationship type

- › From within the **Classifications** area in the Navigation Pane, select **Relationship Types**. In the List View, right-click > **New Relationship Type** *or* use **Create > Relationship**.
- › Provide a **Name** for the relationship type you are creating (e.g. encourages, works with, talks to, impacts on). Enter a **Description** if needed.
- › Select the **Direction** for this type of relationship, using the drop-down options. Click OK.

Recording a relationship

- › Move to the **Nodes** area, and select **Relationships** in the Navigation Pane.
- › Right-click in the List Area to create a **New Relationship**. Make the necessary selections for the source (**From**) and target (**To**) of the relationship, and the type (**Name**). The new relationship node will appear in List View.
- ✓ To make it easier to see the relationship nodes in List View, click to make List View active, then **View > List View > Customise**, and remove as many unnecessary fields as you can from the display.
- ✓ It may be advisable to use classification nodes rather than documents (where appropriate) to represent research participants as part of a relationship (benefits showing groups in models).
- ✓ You can edit the components of a relationship: right-click on the relationship > **Relationship Properties**.
- ✓ If you need to include a non-project item in a relationship (e.g. Ange collaborates with Professor X in the US, where Professor X is not represented in this project by either a document or classification node) then create an *external* source or a classification node to represent the associated item (Prof. X, in this example).

Viewing and coding to relationship nodes

- › Select the Relationships folder under Nodes to see the nodes in List View. A relationship node can be coded and viewed like any other node.
- › Relationships on a particular source or node can be viewed in the Detail View for that item: Check **View > Relationships** to have them listed at the base of the screen.
- › Code by dragging from text in the Detail View to a node listed in List View *or* under the Relationships tab in Detail View (which avoids having to change the List View folder).

Classifications and attributes

Attributes in NVivo are most commonly attached to classification nodes (cases), although they can also be attached to sources. *cf.* Notes on Terminology, above, for a definition of classification nodes.

Creating Classification Types and Classification Nodes

Preparation – creating classification types:

- › Decide what type of classifications you are dealing with, e.g., People, Sites, Organisations, etc.
- › Create either folders under Nodes for each type in the Navigation Pane, or top-level nodes in List View to ‘parent’ them (or parent nodes within folders).

If your Classification nodes comprise single sources:

- › Create and code to classification nodes as you import the sources (**More>>** in the Import New Source dialogue) as shown earlier;
OR, if you didn’t do so:
- › Select the sources to go into the classification nodes in the List View, right-click > **Create As > Create as Nodes** (make sure to select the plural if you have more than one source selected), then indicate where they are to go.
- ✓ If you are working with single document classification nodes at a single level (e.g. one interview for each participant, with participants being cases) you can manage by just using sources, without making classification nodes.

If your cases involve multiple whole documents:

- › Select all the sources to go into a single classification node in the List View, right-click, and choose **Create As > Create as Node** (singular!). Select the location, and then name the new node.
- ✓ If you have Classifications set up, you can assign that at the same time.

If several cases are combined within a source document (e.g., from a focus group):

- › Prepare the document by using consistently applied heading (paragraph) styles to identify each case/classification node (*cf.* data preparation notes on my web site).
- › Auto code the document (see *Auto coding sources*, above). You will need to select or create a ‘foster parent’ for these classification nodes as you can’t auto code directly to a folder.

Aggregating classification nodes

- › If your cases are embedded, e.g., individuals within a department within an organisation (or pupils in a class within a school), then one way of setting them up is to have parent nodes for each level, organised hierarchically, so that the classification nodes can be aggregated to ensure coding at the higher levels, thus:

Company A (aggregate – this will gather the dept nodes immediately below it)
 HR dept (aggregate – this will gather all the classification nodes within the dept)
 Fred
 Jim
 Mary etc.
 Sales dept (aggregate)
 Peter
 Stephanie
 Margaret etc

Company B (aggregate)
 HR dept (aggregate)
 Stuart
 Omar
 Jing etc
 Sales dept (aggregate)
 Pierre
 Taylor
 Calvin etc
Company C – etc.

- ✓ The alternative is to simply make separate groups (trees or folders) for each type of classification node, e.g., for companies, departments and individuals.

OR

To create classification nodes for individuals only (the smallest unit of analysis) and use attributes to record and work at company or department level.

- ! **Whichever way you do it, check that NVivo is counting cases in the way you were expecting when you run a query (e.g., a matrix coding query).**

Setting up and assigning Classifications

- › Go to **Classifications** in the Navigation Pane.
- › Select **Source Classifications** or **Node Classifications**, as required for now.
- › Right-click in **List View** > **New Classification**. Choose whether you want to **Create a new classification** or **Add one or more predefined classifications to the project**.
- › Repeat as often as required, e.g., For the first two options in the example above, regardless of whether you worked with embedded or parallel cases, you would create a New (Node) Classification for each of Companies, Departments, and People (or Individuals), especially given that different attributes will apply at the different levels.
- ✓ If you add a predefined classification, NVivo automatically assumes you will want to assign particular attributes for items that are given that classification. (You can delete from it those attributes and/or values that are not wanted and add others in the Classifications List View.)
- ✓ Classifications can be set up and attributes assigned ‘automatically’ by importing data from a spreadsheet (see below).

To assign classifications to sources or nodes:

- › Select the source(s) or node(s) in List View, right click > **Classification**.

Creating attributes and attribute values

- › Move to the **Classifications** view, right-click on the Classification for which you wish to define attributes > **New Attribute**. Provide a name for the attribute.
- › Indicate a **Type** for the values of the attribute. Most attributes will be **String**, as that is any combination of letters and numbers. Date values are in the form of DD/MM/YYYY (or your local format), so if you are wanting to record years only, then use Number.
- › Click on the **Values** tab. Click **Add**, and enter the first of the values you will be using for your attribute. Repeat this process for each value to be added. Use **Remove** if you make an error (or later, if you find you don’t need this value). For some attributes you may not know ahead what kinds of values you will encounter—simply leave these ones without pre-set values for the time being.
- › Repeat the process of making a new attribute and entering values for each attribute you want to record. If you find you want to add another later, that is not a problem—you can come

back to this screen at any time, or you can create new values as you are entering values for each classification node.

- ✓ While age might be recorded as a number, age expressed in ranges (e.g. 0-4, 5-9, etc.) becomes a string attribute. The same applies to Years of service or any similar variable.
- ✓ The most common error people make when they are creating attributes is that they use what should be a value label to name the attribute as a whole, e.g. they call the attribute Male, instead of Sex or Gender. Then they are limited to using yes/no values, and their use of the attribute for comparisons becomes very clumsy.
- ✓ Attributes can take only one value for a particular classification node. If a classification node fits two categories (e.g. Fred has two different jobs) then you will have to either: (a) record the most relevant or important value for that person and ignore the secondary one, (b) create a combined category—but only do this if there are likely to be others with the same combination, or (c) create an additional attribute (e.g. Job 2) to record the second value (and again, only do this if there are sufficient with a second job to warrant it).

Entering values on each attribute for sources or classification nodes

- ▶ Open a source or node classification sheet: **Explore > Source/Node Classification Sheet > [named sheet]**. The casebook will open in Detail View, with any sources/classification nodes to which you have assigned that classification listed as rows, and the attributes you have created as columns. Currently the values will all be listed as Unassigned (unless you changed the default value).
- ▶ Click in a cell, and select an appropriate value from the drop-down list for that cell, *or* double-click on the text in the cell and overwrite (NVivo will auto-fill for unique starting letters).
- ▶ If you wish to create a new value ‘on the run’, double-click in the cell and then overwrite the current entry with your new value. The new value will be added to the list and made available for further classification nodes.
- ▶ If you find you need to change or add an attribute, return to **Classifications** to do this.
- ✓ If you are entering the data as you work through coding a document, keep the classification sheet open in the background and, when you are ready to enter a value, simply click across to it (using the tabs in Detail View), then click back again to your document.
- ✓ A value can be copied and then pasted to multiple cells (use shift-click or ctrl-click to select them).
- ✓ Rows in the casebook cannot be deleted. You need to go to the corresponding source/classification node, right-click > Classification > No Classification (or delete the source/classification node if it is no longer needed).

Creating and entering attribute data by importing a table

Create the table

- ▶ In a new Excel (or other) spreadsheet:
 - (a) list your source or classification node names in the first column, exactly as they appear in NVivo;
 - (b) list your attribute names across in the first row of the table.
 - (c) put the Classification name into the first cell (especially if you want to import directly from the sheet in Excel format).
- ✓ Hierarchical names are used where the sources or classification nodes having the same classification type are in multiple locations. They include folder names as well as

hierarchical node names, thus Nodes\\Participants\\Group 1\\Mary (there is another alternative – see below, importing the table).

- ✓ If you are working with Name format only (rather than Hierarchical), make sure all your sources/classification nodes have unique names.
- ✓ If you are having difficulty getting the names typed correctly, then create at least one attribute (no values need be entered), then open the classification sheet in Detail View, right-click > Export Classification Sheet; open the file in Excel, and the table will open ready for you to type in additional attributes and values.
- ! If your names include commas, apostrophes etc, then they will be exported with quotation marks around them, and NVivo will not recognize them when you go to re-import. Open the file in Word or Notepad, and use Replace to remove the quotation marks (replace with nothing).
- ✓ If you have existing attributes (and values) for that classification, make sure they and the labels in the sheet match exactly.
- Enter the values for each classification node throughout the table. Empty cells are best left blank.
 - ✓ While SPSS and other statistical packages prefer you to use numeric codes for values (e.g. 1 for male), in NVivo it is better to enter non-numeric data as strings, using text labels (male), as these make more sense when you are reading output from the data.
 - ✓ Leave empty cells blank. These will become ‘unassigned’ in NVivo.
 - ✓ Excel has a habit of converting low number ranges (e.g. 1-3) into dates, so it is safer to write them as, say, 1 to 3. Even if you change the cells to a non-date format in Excel, this information will be lost when you convert and save the file as .txt, so that if you re-open the .txt file in Excel (e.g., to add more data) it will revert to dates.
- Save the table in **Excel format (*.xlsx)**, or as **Unicode Text (*.txt)**. Note that text files will not support formatting. Close the file.
- ✓ If you export directly from SPSS to text format, you will get numeric codes only. To bring data from SPSS, first save it as an **Excel 97 or later** spreadsheet, and check **write variable names to the spreadsheet** and use **value labels** where defined. Delete unnecessary variables by unchecking them in the SPSS Save As dialogue, or by deleting columns from the Excel table (think about which you will actually find useful in connection with your qualitative data and avoid ‘cluttering’ with the rest). If you had any empty values, these may become #NULL! in Excel: use Replace (find #NULL! and replace with nothing) to remove them.
- ! If the table ends in empty cells (i.e. at the bottom right of the table) it will fail to import (you will get a message saying the table cannot be correctly parsed). Rearrange the rows in order to ensure the last row is complete.

Import the table into NVivo

- To open the Import Classifications Wizard, go to **External Data > Classification Sheets** or right-click in the Classifications List View, and work your way through the options.
 - Step 1 – if your file is not in Excel format, you may need to specify ‘encoding’ (Unicode is the default).
 - Step 2 – Default is to **Create new classification**. If the classification has already been created, change this to **Import to existing classification** and select which one.
- Also, you would most often choose to tick all three options (Unassigned is considered an existing attribute value, so needs to be Replaced on any existing classification sheets).

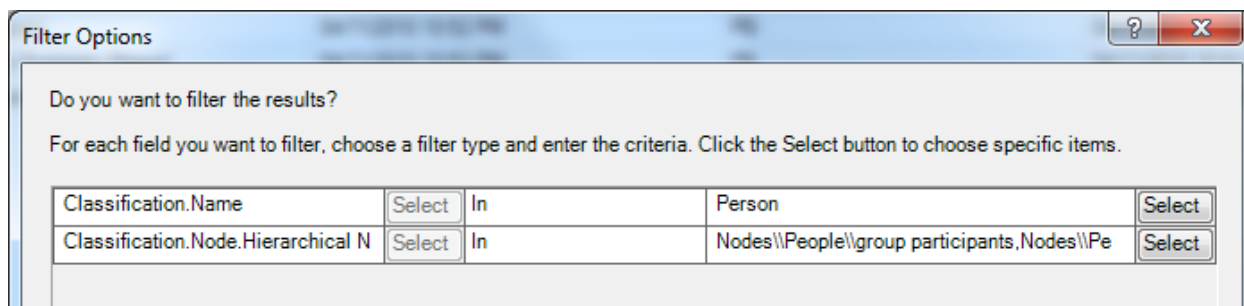
- Step 3 – Indicate whether you have used **Names** or **Hierarchical names** in the spreadsheet file. Specify the parent or folder to specify a location for names (not needed for hierarchical names).
- ! **Beware of Create new nodes/sources if they do not exist** (especially if you are importing multiple times for nodes or sources in different locations). NVivo will create a new node or source for *every* name listed in the file that does not already exist in the specified location. As a general rule, I uncheck this option.
- Step 4 – **Attribute Value Format** is relevant primarily for those using non-English languages (*cf.* File > Info > Project properties > Labels). Check **Date, Times and Numbers**, if needed.
- **Finish!** The Casebook will open (or update, if already open) in Detail View.
- ✓ If you have nodes or sources in several locations for which you are importing the same type of classification, you will need to use hierarchical names to import them all at once. Alternatively, because names are much easier to work with than hierarchical names, it may be easier to simply re-import the sheet as many times as necessary (being careful to specify the correct ‘parent’ each time) to catch all the different locations (make sure Create new nodes if they do not exist, on Step 3, is *not checked* if you use this method).
- ✓ NVivo will automatically recognize the best format for imported attributes, e.g. if all the values in a particular column are numeric, then NVivo will designate that attribute to be a number.
- ✓ If your data fails to import: (a) recheck through all the options; and (b) note, from the classification sheet, whether any of the new attributes were set up on your previous attempt, and if so, where the import appears to have stopped. This can provide a guide to where a problem may be in your original table.
- ✓ If a source or node name is not recognised in the table, the table will import, but will leave values unassigned for that row. (Watch out for stray spaces in names.)
- ✓ Node/Source information in the table can be in a different order from the names in NVivo.
- ✓ NVivo creates attribute values in the order in which it finds them in the table. *To sort the order of attribute values* (which impacts on presentation of query results) for a string attribute: navigate to Classifications > Attributes, double-click an attribute to open its Properties, and use the Sort button on the Values tab. (Numbers etc will sort automatically.)

Using attribute data

Making a report of classification data

It is important to know how many sources/classification nodes you have with any given value for evaluating results in Queries, especially for evaluating comparative tables generated with a matrix query.

- ▶ Create a summary of attributes, values, and numbers of classification nodes with each value. Navigate to **Reports > Node/Source Classification Summary Report**. If you simply run it, it will report on all types of Node (or Source) classifications (just click OK if the filter dialogue comes up), or you can Select to filter which one/s you want to run.



Classification.Name	Select	In	Person	Select
Classification.Node.Hierarchical N	Select	In	Nodes\\People\\group participants, Nodes\\Pe	Select

In the first row of this dialogue, you can select which classification type/s you want.

In the second row, you can select which classification nodes you want to include.

or

- ▶ Export the classification sheet as an Excel file. Select the classification sheet from the Classifications List View or from the Detail View, then right-click > **Export Classification Sheet**. Make the selections you want in the dialogue (especially re Names)
- ▶ Open the saved file in Excel – it will be in standard case-by-variable format, suitable for export to other programs, or to use in pivot tables, charts etc.

Using classifications in a matrix query – compare node content across groups

Use this to compare responses/experiences of sub-groups across a number of coding categories

- ▶ See Matrix coding queries, below (p...).
- ▶ Classification data can also be used to locate cases for scoping a query (see Advanced Find, p.)

Working with datasets

Importing a dataset (e.g., from an Excel spreadsheet)

- ▶ Right-click in the List View to choose to **Import Internals > Import Dataset**.
- ▶ Work your way through the Dataset Wizard, until you reach Step 4.
- ▶ At Step 4, you will need to check that NVivo has correctly read the type of data for each field in your dataset. Because NVivo scans only the first 25 rows to determine the type of data in a column, the type will sometimes need to be corrected. e.g., I had to change ‘AssRecognition’ (below) to a decimal with 2 decimal places, and ‘activity’ had been read as a classifying rather than a codable field, so each of these were amended.

! You cannot add further data to a dataset after import.

- ✓ The first column of the dataset (which usually contains your ID information for each row) should be treated as a classifying field. NVivo adds its own identifier (sequential numbers) for each row of the dataset, but you will still be able to auto code on the basis of your IDs.

Import Dataset Wizard - Step 4 of 5

You can specify information about each of the fields you are importing. Select the fields in the data preview area below. You can then modify field information in the 'Field Options' area.

Field Selection

Select all Deselect all

Field Options

Field Name: activity

Import Field

Analysis Type

Codable Field Data Type: Text

Classifying Field Data Type: Decimal Places: 0

Data Preview

ity	AssRecognition (Integer)	AssBenefit (Decimal)	ability (Codable Text)	activity (Codable Text)	approachable (Codable Text)	bene (Codable Text)
			Organisation skill	Apparent concert		I found qu
0		11.11	level of education	All, are undertakin	Don't consider ma	No one els
30		2	Good conceptual	Someone who ha	Keen to hear abo	Hard to as
				not just sitting in fr		relevant/us
12		17	Others want to vis	An active researc	The approachable	This is diff
10		5	original thinker, p	presently funded -	Have more time -	Ability to c
12		15	They are up-to-da	An active researc	An approachable	This is diff
0		0	Because they hav	Presumably, one	Their enthusiasm	In the hum
10		15	Commitment to th	Those people wh	They are willing a	It is releva
30		2	Has the ability to	I'm not sure I und	Ready to share n	I would co
5		5	Creative mind, go	Involved but not s	An open enquirin	Benefit to f
			Success in produ	Unfortunately one	Willingness to list	In some ca

Press Next to continue

Cancel Back Next

Viewing and coding dataset entries

Database entries can be viewed in either table or form views.

- ▶ Double-click the database in List View to open it in Detail View.
- ▶ Use the tabs at the right side of the Detail View display the information in Table or Form views.
- ▶ Data in codable fields can be coded. (Data in classification fields will become attributes.)
- ✓ You cannot code dataset entries using drag-and-drop when working in table or form views (i.e., use the right mouse menu to code), but if you have auto coded the entries to classification nodes or nodes for the questions being asked (see below), you can work through all the responses for any node, when in Reference view, using drag-and-drop coding.

Auto coding dataset rows or columns to nodes

- ▶ Right-click on the dataset in List View; choose to **Auto Code**. This will open the auto code dataset wizard.
- ▶ Work your way through the wizard. e.g., to code rows into classification nodes:

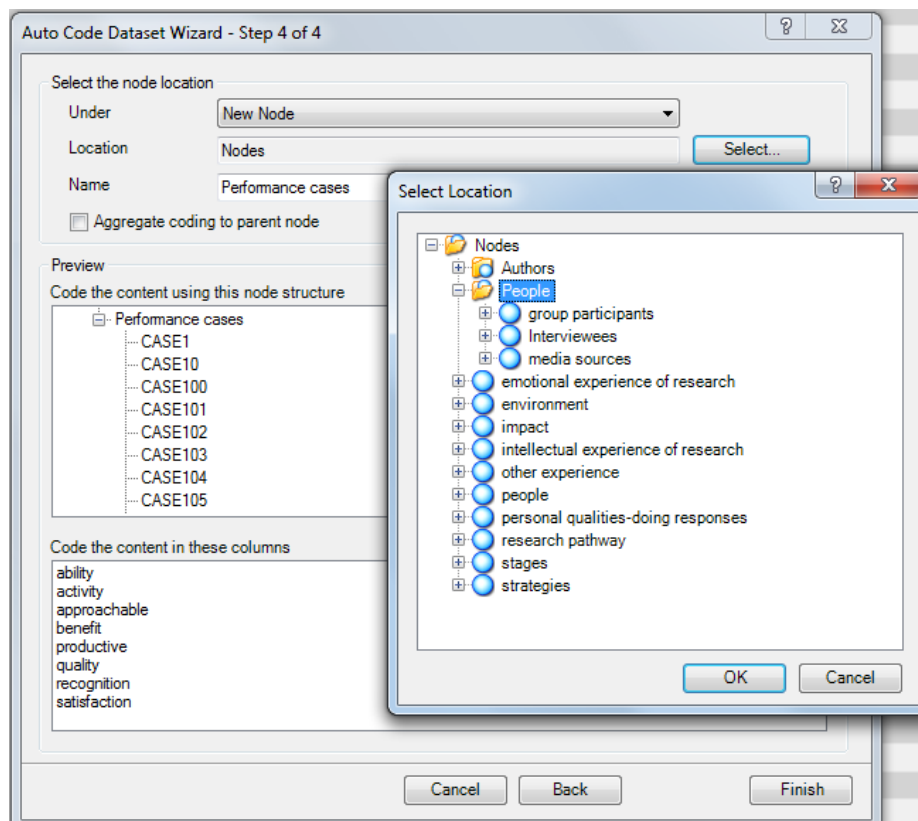
Step 1: Select to code either columns or rows.

Step 2: If you want to code rows into classification nodes, the node you wish to put the classification nodes under has to be created via the wizard (at present, you cannot choose to create a new parent node). If the nodes already exist and have data in them, create the new tree in the same area, then cut it and merge it with the existing one (choosing to merge the child nodes) to bring the two lots of data together.

Step 3: The wizard will just show you the columns that have codable text in them. Usually you would select all of them.

Step 4: This screen gives you the opportunity of amending the parent node name, and of choosing exactly where to locate the new classification nodes (select the folder or parent).

- ✓ Setting nodes up in a hierarchy through this wizard is generally not advised. (cf. **Help > Datasets > Approaches to analysing datasets.**)



Classifying nodes and creating attributes from a dataset

Help topic: Using the Classify Nodes from Dataset Wizard

- ▶ The wizard to assign attributes from the dataset will do so only for an existing classification. If a new one is wanted, it needs to be created before using this wizard.
 - ▶ To create a new classification: **Classifications view > Node Classifications >** right-click in List View > **New Classification** (or **Create > Node Classification**).
You do not need to pre-create the attributes for that classification.
- ▶ Select the dataset in the List View for Sources. Go to **Analyze > Classify Nodes from Dataset**.
- ▶ Work your way through the wizard.
- ✓ (Step 2) If you have already created the nodes using the auto coding wizard, *remove* the tick from **Create nodes if they do not exist in this location**. If you have not already created the nodes, you can do so via this wizard, and assign attribute values to them, but they will not have data coded to them, and the auto code wizard (currently) requires that a new set of nodes be made (so you would then have to merge the two trees – see notes above).
- ✓ (Step 2) Unless you have already assigned a classification to the classification nodes, then you will need to specify which it should be, and check **Update the classification of existing nodes**.
- ✓ (Step 4) If you have attributes with integer or decimal values, you may choose to **Group** the values of those attributes as they are set up. This will make them more useful for matrix queries.

Using NVivo with EndNote

Help topic: Exchange data between NVivo and reference management tools

- ✓ NVivo can also import from Zotero and RefWorks.
- ✓ If files are created in NVivo first, they can then be exported to a bibliographic program.

Very briefly:

Save an EndNote dataset

- ▶ Select references to import in your EndNote database (use Ctrl-click to select multiple references). If you want to import the full articles as well, make sure they are attached to the EndNote records.
- ▶ Go to **File > Export** and choose to **Export Selected References**. Check the **Output Style** and also the **Save as Type** (choose XML). Provide name and location for the file.

Import the EndNote files (including attachments) into NVivo

- ▶ On the External Data ribbon, select **Bibliographical Data**. The Import dialogue will open (see next page).
- ✓ Change the default for **Name sources by...** to Author and Year.
- ✓ Keep the **Assign sources to...**A single classification (otherwise you will create an unworkable set of classification sheets!).
- ✓ Note where NVivo is going to locate the files.
- ✓ If you don't have either notes or original articles that can be coded, there's not a lot of point in importing data for those articles.

Import Bibliographical Data [?] [X]

Importing from
 C:\Users\Public\Documents\NVivo 9 Samples\Researchers sample data\Test EndNote Libra

File encoding [v]

Name sources by Author and Year [v]

Assign sources to A single classification (Reference) [v]

Already linked
 0 of 7 records in your reference library are already linked to existing NVivo sources

Replace classification and attribute values of existing sources

Replace memo contents with abstract, keywords and notes

Assign attribute values to memos

To be linked
 0 of 7 records in your reference library will be linked to existing NVivo sources

Replace classification and attribute values of existing sources

Replace memo contents with abstract, keywords and notes

Assign attribute values to memos

Import new
 7 of 7 records in your reference library will not be linked to existing NVivo sources

Import unmatched records as new sources

Create internals in Internals [Select...]

Create externals in Externals [Select...]

Import source content from file attachments, URLs or figures where available

Create memos from abstract, keywords and notes

Assign attribute values to memos

[Advanced...] [Import] [Cancel]

Find

Find

The Find toolbar is located immediately above any List View. The kinds of things you can look for are parts or all of names of sources, nodes, sets, models—any item that is in your project. If you're not sure which tree a node is in, for example, you can Search in > Nodes, and a shortcut to any matching items will appear in List View.

Advanced Find

- › In the **Find** bar at the top of List View, go to **Advanced Find**.

e.g., Filtering classification nodes (cases) with Find, based on an attribute

If you are filtering on one attribute only:

- › Go to the **Intermediate** tab. Choose to **Look for: Nodes**.
- › Check against **Classified items where** (last option), and then use the drop down lists on each of the three slots to identify which **attribute values** you wish to filter on, and in what way. Click on **Find Now** and classification nodes that match the criterion will be shown in List View as aliases.

To filter on more than one attribute at the same time:

- › Go to the **Advanced** tab. Choose to **Look for: Nodes**. In the slot under **Interaction**, choose the attribute to use for setting the first criterion; in the slot under **Option** choose how you want to use it; and in the slot under **Value** choose the value/s you are including in this first criterion. When you've got it right, click **Add to List**. Repeat this process for each criterion you wish to apply *simultaneously*.

To save the results of your Find as a folder of items e.g., for later use to scope a query or insert in a model, or to put as individual items in a query:

- › Check **Add to project as a search folder** at the top of the Advanced Find dialogue. Provide a name for the Folder (it will be located under Search Folders, in Collections), then return to Search Criteria.

To save the results of your Find as a Set, e.g., to use in a matrix query (as a single item), or for scoping a query or to put in a model:

- › Select all the items found (or a Search Folder containing them if you made one), and go to **Create > Create as Set**.

Grouped Find

- see Queries

Queries

For any query:

- *To save your query setup*, check next to **Add to Project**, at the top-left of the query dialogue, and provide a name for the query. This will allow you to re-run your query at a later date with the same or slightly altered specifications.
- *To save the results of a query (except Group Query)*, go to Query Options in the query dialogue and provide a name. Note that results saved in the Results folder cannot be modified, other than to view context or coding stripes. (They can be copied and pasted into Nodes, where they can be modified.)
- ✓ You can choose to right-click > Save Query Results after seeing them in Preview if you wish.

Group Query to find ‘items coding’

Help topic > Run a Group query

e.g., to identify nodes coding another node

- In the Navigation Pane, go to **Queries**. In List View, right-click > **New Query > Group...**
- (For the above example) Ask for **Items Coding**, and select one or more nodes or classification nodes as the **Scope** item/s and **Nodes** (or a subset of Nodes) as the **Range** items.

To save the results of your Find as a folder of items e.g., for later use to scope a query or insert in a model, or to put as individual items in a query:

- ✓ Select all the found items. Right-click > **Add to project as a search folder**. Provide a name for the Folder (it will be located under Search Folders, in Collections).

To save the results of your Find as a Set, e.g., to use in a matrix query (as a single item), or for scoping a query or to put in a model:

- ✓ Select all the items found (or a Search Folder containing them if you made one), and go to **Create > Create as Set**.
- ✓ A variety of display options are available – use the tab at the right of the Detail View **or** right-click > Visualise > [select type of visualisation].
- ✓ If you choose cluster analysis, then *preselect* the relevant Find results before asking for the Visualisation, and then *ignore* the first Select button (selecting sources, nodes or whatever).

Coding queries

Help topics: About queries; Create, edit and manage queries; or Search “advanced coding queries”; “manage query results”

This query is for when you want to find text that is coded by both of two (or more) nodes (AND), **or** text coded at multiple nodes (**OR**), **or** at one node AND NOT another, **or** text coded by a node when it is NEAR another:

- Select Queries in the Navigation Pane, then right-click in the List View to create a **New Query > Coding** query.
OR
- Go to the **Explore** ribbon > **New Query > Coding...**
- ✓ A **Simple** coding query is used only when you want to find the coding at one node for a specific folder or set of items (e.g., to find what you have written in Memos about a topic).
- From **Coding Criteria**, select **Advanced** tab. Don’t be put off by the sound of ‘advanced’— it just means you’re going to be using more than one node!

For an AND (intersection) query, i.e. to locate text coded at *all* selected nodes:

- ▶ Click on **Coded at > All Selected Nodes > Select**. Expand and check the nodes you want > **OK > Add to List**. The node/s will be entered into the query dialogue.
- ▶ Now check the **Query Options** tab. You will find the query is set to show a **Preview Only**, which is probably all you need for the present.
- ▶ Click on **Run** at the base of the dialogue. This will both save the query (if you elected to do that) and run it. (Clicking OK will simply save it, or close the dialogue without doing anything.) The results of your query will open in Detail View.
- ✓ If you decide, on viewing the results, that you do want to store them, you can right-click and choose to Store Query Results. Results are stored as nodes in a designated folder in the Queries area. Result nodes cannot be modified while they remain in the results area: if you want to modify them (without re-running a modified query) copy and paste the results node into the Nodes area.
- ✓ Use a Matrix Coding Query if you want to look at multiple relationships between nodes at the same time, e.g., to review a range of responses to a set of events.

To find a union (**OR**), i.e., text coded at any of the selected nodes:

- ▶ As above, but change the option in the middle of the dialogue to **Coded at > Any Selected Node**.
- ✓ If the nodes you are selecting are all at the same level in the Nodes List View, then you can simply select them there (use Ctrl-click *on their icons*), hover over one, and right-click > Create as > Create as Node.

To find the difference in text coded at nodes (**A less B**):

- ▶ Select the A Node(s): Nodes **Coded at – All or Any Selected Node > Select > Add to List**.
- ▶ Use the drop-down to change Coded at to **NOT Coded at**.
- ▶ Find text **NOT Coded at – All or Any Selected Node > Select > Add to List**.

To find coding that is located NEAR coding for another node:

- ▶ **Select** only one node, **Add to list**.
- ▶ Under **Define more criteria**, select **NEAR Content** (or PRECEDING Content if you want to specify order – A before B).
- ▶ In **Coding Search Operator**, next to **Proximity**, define how you want it to relate to the second node - *how near?* Also, check what **Finds** you want to retrieve.
 - Overlapping – full extent of passages as long as they intersect somewhere.
 - In Custom Context – you specify (# words, paragraph etc.)
 - In Same Scope Item – usually anywhere within whole Sources, but can be changed to anywhere within whole Nodes or Sets by specifying a scope (see below).
 - In Same Coding Reference – restrict to finds where both nodes occur within the same coded passage, for Nodes specified by scoping.
- ▶ Now Select a second node.
- ✓ NEAR options are *not* good options for focus group data (unless you are very clever with scoping)!
- ✓ NEAR options will also find intersections.

Scoping a query

Scoping a query allows you to restrict the range of items considered in a query.

Use Advanced Find or Group Query to identify items to use as sets or search folders.

—with items in folders

- › In any query dialogue, at the base of the dialogue is an option to run the query **In – All Sources, Selected Items, or Items in Selected Folders**. Choose **Items in Selected Folders**.
- › The **Select** button will become active – click on this to be able to choose which folders you want included for this query (including Search Folders). Selecting a higher level folder will include sub-folders (e.g., Internals would include all internal sources, but not externals or memos.)

—with sets or nodes

- › NVivo queries view sets as a single item, and so the process of choosing a set involves choosing to run the query **In > Selected Item/s**, rather than in items in a selected folder.

—within case analysis

Any query can be set up to run within a single classification node (or a group of selected classification nodes).

- › At the base of the query dialogue, choose **In > Selected Items**. Click on the word **Nodes** (or a subfolder within Nodes), and then in the right pane, check against the classification node(s) you plan to use.

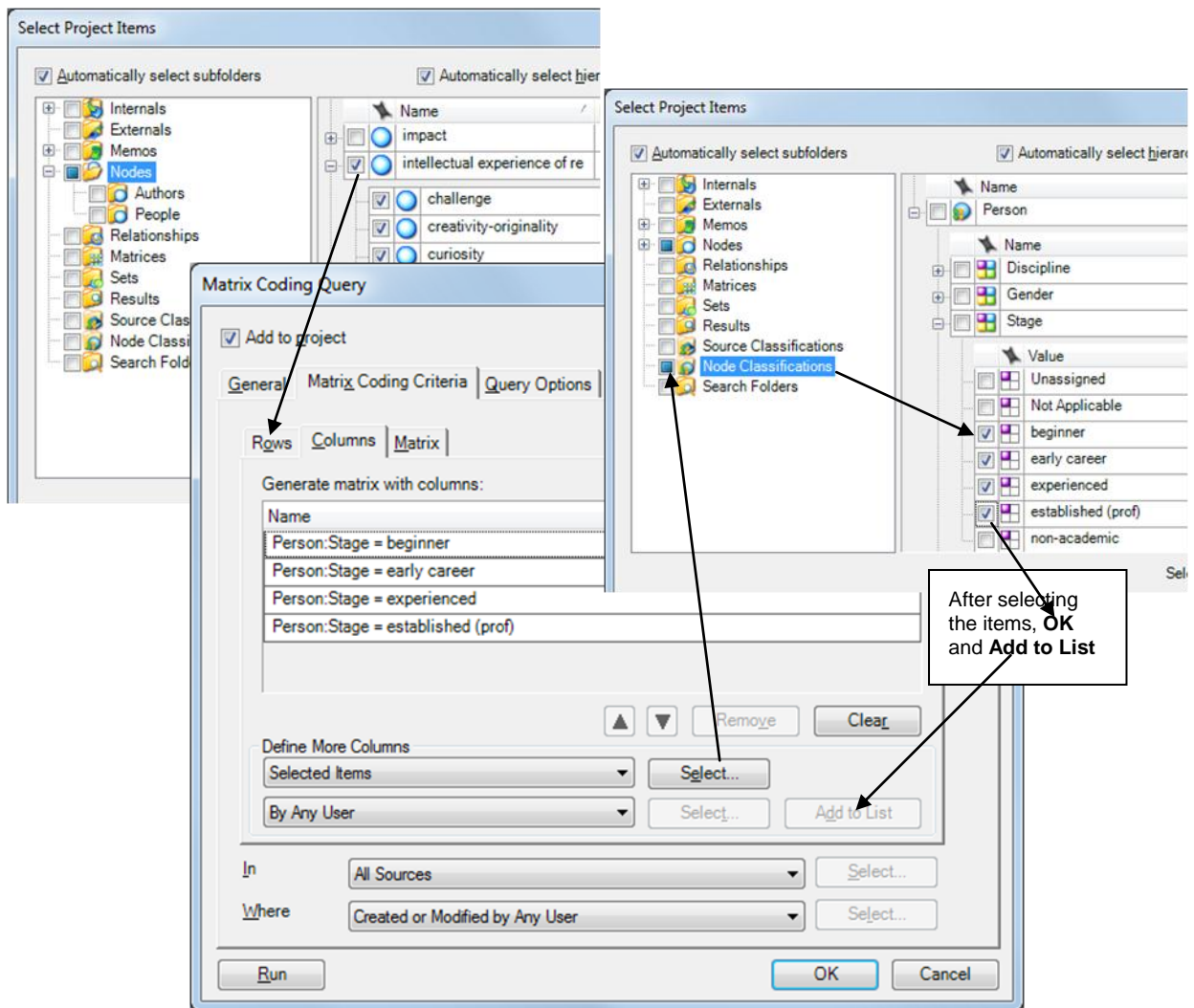
Matrix coding queries

Running a matrix coding query is like running multiple coding queries in one go, but with more flexibility. Used to see patterns across data.

e.g.1: Using classifications in a matrix coding query

Use this to compare responses/experiences of sub-groups across a number of coding categories (nodes)

- › Open **Queries** in the Navigation Pane, and right-click in the List View, to make a **New Query > Matrix Coding**.
- › Open the **Matrix Coding Criteria** tab. For **Rows**, under **Define More Rows > Selected Items > Select**. In the left pane, click on the label (*not* the check boxes) to choose **Nodes**, then choose the nodes you want to include in your query by placing a check mark against them in the right pane. (You can select an entire subtree by first checking **Automatically select hierarchy** at the top of the dialogue.) After clicking **OK** in the selection dialogue, you will then need to click on **Add to List** in the matrix dialogue.
 - ✓ Rearrange their order using the up and down arrows if you wish, and remove any you didn't intend to select.
- › For **Columns**, under **Define More Columns > Selected Items > Select > Node (or Source) classifications**, check against the attribute *values* you want to include in your query, then **OK** and **Add to List**.
 - ✓ Don't add values of more than one attribute into a single query – better to understand one at a time.



- ▶ The **Matrix** tab is set (by default) to **Search for content of rows AND of columns**, which is what you want in a query involving attributes (and most others). This means that for any particular cell, text that matches both the node for that row AND the attribute value for that column will be found.
- ▶ To optionally save the query for later re-use, check **Add to Project** and provide a name for the query. (Saving is useful, as you can then re-run the query with values of a different attribute)
- ▶ If you want to save the results of your query as a node, you need to turn to **Query Options** and provide a name for the results node.
- ▶ To both save and run your query, click on **Run** at the base of the dialogue. Clicking **OK** will just save the query, ready for you to run when you wish (double-click on the saved query, or right-click and choose **Run Query**) or to re-run with some specifications changed (right-click and choose **Query Properties** to open the query).
- ! Clicking OK without having first saved the query will simply close the dialogue.
- ▶ The matrix table will open in Detail View. Double-click any cell to see its text. Use your right-mouse menu to change Matrix Cell Content options, to show shading, or for various other display options. (These are also variously available on the View and Layout ribbons.)
- ✓ To see a count of classification nodes (e.g., cases) rather than coding references (the default): Select to see Nodes and from the sub-menu, choose the relevant classification for the cases

you wish to examine or count. (Do the equivalent for Sources if you want to count for a particular sub-classification of sources.)

- ✓ Look at the interactive effect of two attributes by putting attribute values in both rows and columns, and scoping the query to a particular node (**In > Selected Items > Select [Node]**).

e.g.2: Pattern searching across nodes

Use this, for example, to look at responses in different contexts, or to different issues, or to consider impact of various strategies. Typically nodes for each of these different kinds of inputs would be located together in a tree (i.e., trees for responses, contexts, issues, impacts, strategies).

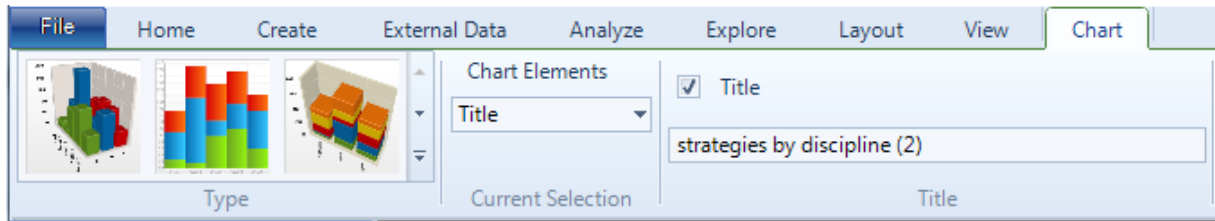
- ▶ Open **Queries > New Query > Matrix Coding**.
- ▶ Open the **Matrix Coding Criteria** tab. For **Rows**, under **Define More Rows > Selected Items > Select**. In the left pane, click on the label (*not* the check boxes) to choose **Nodes**, then choose the nodes you want to include in your query by placing a check mark against them in the right pane. (You can select an entire subtree by first checking **Automatically select hierarchy** at the top of the dialogue.) After clicking **OK** in the selection dialogue, you will then need to click on **Add to List** in the matrix dialogue.
 - ✓ Rearrange their order using the up and down arrows if you wish, and remove any you didn't intend to select.
- ▶ Repeat the above step to specify nodes for the Columns in your query.
- ▶ Complete the setup and review the results as for example 1.
- ✓ While it is possible to use the OR, NOT, and NEAR search options in matrix queries, it isn't generally recommended unless you have a very specific purpose in doing so, and you have a very clear understanding of what you are asking for. (Try it on individual pairs of nodes first, using a Coding Query.)

e.g.3: Cross-case analysis

- ▶ Comparing classification nodes is similar to comparing attribute values. This time, however, set up your **Matrix Coding Query**, with the required classification nodes in the **Rows**, and coding content nodes defining the **Columns**. Again, you will search for content of rows **AND** of columns. This will find the text for each specified item separately for each included classification node, and display it in table format, allowing you to compare across classification nodes.
- ▶ If you want to refine your analysis by comparing what has been said or what happens at different time phases in the life of an organization, or through repeated interviews with the same participants, then you will need first to create a Node or Set for documents for each time period or wave of interviewing (usually a Set). Then, you will be able to use the time-based nodes or sets to identify the columns in a matrix (with classification nodes still in the rows), and by scoping the query to a particular node (**In > Selected Items > Select [Node]**) you will have a comparison of how each case progressed over time for that particular issue/topic.
- ▶ Refine your query by scoping to a particular folder or set of documents, for example, to compare cases on a range of factors at the beginning (Time 1) of the study or intervention, or, to examine the patterning of responses at different times. In this instance, you would set up your query with classification nodes (or other nodes) in the rows, nodes in the columns, and scope to the folder or set of Time 1 documents. If you have added the query to project (i.e., saved the query setup), then it is a simple matter to re-run it for Time 2, etc.
- ✓ If each of your classification nodes codes just a single whole document, the query will run faster if you use internal sources instead of classification nodes to define the rows.

View your matrix as a chart

- ▶ Click on the Chart tab at the right of the Detail View. The currently displayed matrix will open as a chart.
- ▶ Click on the drop-down in the Type section of the Chart ribbon to change the type of chart. Grouped column is often the most helpful display.



- ✓ You may need to **Transpose** your data (right-click menu) to improve the readability of the chart (especially for those involving comparisons across attributes).

Reporting your matrix

In table format:

- ▶ Directly print the matrix table by going to **File > Print**.
OR
- ▶ Export the matrix table as an Excel file: right-click > **Export Result** (or go to **External Data** ribbon > **Export > Export Matrix**).
OR
- ▶ Click in the top-left cell of the table to select the whole table, **Copy**, and **Paste** into a Word document.
- ✓ I generally use the copy-and-paste-into-Word method, because it is simple to then add a summary of the text into each cell (and to format the table in a preferred style if needed).
- ✓ Excel allows you to split the screen, which is useful for retaining the identifying row and/or column when you have a particularly large table.

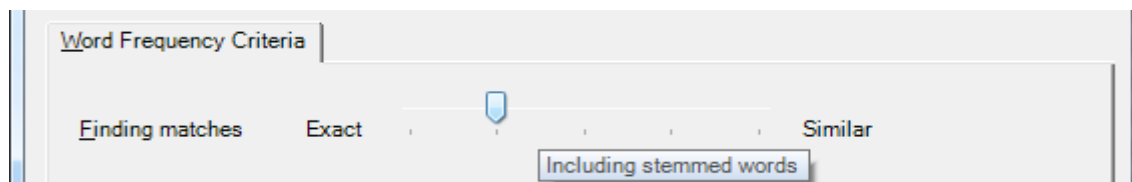
To print out the text in the table:

- ▶ First you will need to Copy or Cut the matrix results node and Paste it as a Tree Node. Then, select all the (third level) child nodes (use Ctrl+Click), and choose to Print or Export. Make sure you select the option to include the **hierarchical name** for each node in the output.
 - ✓ If you export text, then open a Word document, choose Insert > File, and select all the files that were output (at once). Use Replace to replace Name: with Name in a heading style so you can use document map or outline view to order your reading.
- ▶ Alternatively, copy and paste text from the cells into a Word document as you review each cell.
- ✓ My rule is to *not* print reams of results from any analysis program, but to work through them on screen first, and then be selective. In NVivo, I often find I want to explore context or to modify the text or the coding while I'm reading it, and I can't do that from a printed copy. Also, from long experience, I have learned it is best to deal with (i.e., write up) results as soon as they are generated—and printing them off, apart from using up the world's resources, is a really good way of putting off actually doing anything with them! You will not feel like ploughing through a long output document some time after it was generated!
- ✓ A really good alternative option is to read through the text at a cell, and reduce it to a short summary, typed into the cells of a table holding the numeric results.

Word frequency query

Help topic: Queries > Find and analyse text using queries > Run a Word Frequency query.

- ▶ Go to **Queries** (or **Explore**) > **New Query** > **Word Frequency**
- ▶ Set the options you want for where to search in the Word Frequency Query dialogue.
- ▶ For **Finding matches**, use Exact match, or Including stemmed words.



This combines different forms of the same word into the same 'find', thus:

Word	Length	Count	Weighted Percentage (%)	Similar Words
trained	7	4	0.40	trained, training
applied	7	3	0.30	applied, apply, applying
approach	8	3	0.30	approach
because	7	3	0.30	because
both	4	3	0.30	both
competent	9	3	0.30	competence, competent
demonstrated	12	3	0.30	demonstrate, demonstrated
detail	6	3	0.30	detail

Anything more 'similar' than this will produce too many dissimilar combinations.

- ▶ To save *all the finds* for a word as a node: select the word in the results list, right-click > **Create as Node**, then **Select Location** (i.e., a parent node for it), and provide a name.

OR

- ▶ Double-click a word of interest and view it in context. Code relevant content as wished.
- ▶ Stop words (see list in File > Info > Project Properties > General > Stop Words button) are not found as results when you run a or Word Frequency Query or Text Search. These include such English words as 'a' and 'the'. To compare use, say, of 'the baby' compared to 'my baby', remove them from the list. Words can be added by typing or by clicking on **Analyze** > **Add to Stop Words List** in a Word Frequency Query.

Text search

Help topic: Queries > Find and analyse text using queries > Run a Text Search query

- ▶ Navigate to Queries, and with Queries showing in List View, choose to create a **New Query** > **Text Search**, or, **Explore** > **New Query** > **Text search**.
- ▶ Decide whether or not to **Add to project** so you can either re-run or modify the search.
- ▶ Type the word or phrase to search for, on the **Text Search Criteria** tab. If you want an exact phrase, enclose it in double quotation marks. If you are using just the root of a word rather than a whole word (so you find variations on it), add an asterisk (*) to the end of what you type, otherwise it is likely not to find anything at all. To specify alternative words or phrases, type **OR** between them.
- ▶ Select how **exact** you want the **matches** to be (anything other than **Exact** or **Stemmed** can bring up a very wide array of possibilities).
- ▶ Choose to search in **Text** or in **Text and Annotations**, and then whether to search **All Sources**, or to limit your search to **Selected Items** (e.g., responses to a single question), or **Items in Selected Folders** (e.g., to exclude Memos).
- ▶ Under the **Query Options** tab, choose to **Preview Only** or to **Create Results as New Node**, and **Name** the node.

- ! **Never send the results of a text search into an existing node unless you know exactly what the search is going to find, and you are sure you want all of it in that node.**
- Indicate whether and how far to **Spread** the finds from the search. NVivo will show 5 words either side as context, in any case, and you can choose to see extended context.
- Select **Run** from the base of the dialogue. This will both save the query (if that is what you selected) and run it. The results will open in Detail View, showing **Preview** (a list of sources containing the finds – finds will be highlighted within each source). To see just the specific finds (e.g., found text), select the **References** tab at the right of the Detail View..
- To see the found text in paragraph context, **Edit > Select All (Ctrl+A)**, then right-click > **Coding Context > Broad**, or for a particular find, **Open Referenced Source**.
- To save any of the found text (and context), select and code it in the normal way to a new or existing node in the Nodes area. Once you have coded a passage, the relevant node will remain selected (recently used) in the Coding toolbar for further coding.
- ✓ Text search will not find part words, symbols or punctuation—for these you will need to use Edit > Find within particular sources or nodes (including a results node).
- ✓ Always treat the node with the results of a text search as a temporary holding area only; once you have coded relevant text on to a more permanent location, delete the temporary node.

Refining text searches

In Help, search for "Special characters and operators" to find a detailed explanation of various wildcards and other ways of making your text searching more (or less) specific with:

- wildcards to replace one or more than one character in words;
- Boolean terms (AND, **OR**, NOT) to specify particular combinations of words within each document (or other scope); or
- using fuzzy (vague) or proximity (NEAR) operators (the proximity operator requires that the two words are enclosed in double quotation marks).

Use Compound Query to combine text search with other queries

Do this either to make your search more specific, or to ask questions involving the use of language.

The **Compound Query** tool provides for the combination of either two separate text searches or a text search with a coding query (or two coding queries), using an AND, **OR**, AND NOT or NEAR operator to link the two separately specified queries.

- Use the two Text Search Query subqueries in **Compound Query** to find words or phrases which occur **NEAR** each other (Options: **Custom context > Surrounding Paragraph**)—thus using the more natural context of the paragraph rather than the context provided by a rigid word count.
- Use **Compound Query** to check the thoroughness of your coding by searching for a keyword or phrase, less what you have already coded. Specify the text search first (**Text Search Query**), then **AND NOT** the node/s (**Coding Query** – Simple, or Advanced > Any Selected Node) you have been using for coding. The benefit of doing this is that you can remove all known (coded) finds from the results before ‘cleaning up’ what the text search might locate.

Use the results from a text search in another type of search by using the node containing the results as an item in the search, rather than the text pattern itself.

- Compare usage of words in different contexts or by different groups by using one or more text search results nodes in the **Rows** of a **Matrix Query**, with contextual nodes or attribute values in the **Columns**.

Visualising data

NVivo offers a range of visualisation possibilities – from simple pie charts based on (demographic) attributes and bar charts showing the top 20 nodes in a document, to more complex 3D charts based on matrix results or other combinations of nodes and attributes, to multidimensional clustering or visualisations. *All visualisation techniques, particularly the latter, should be treated with caution as it is very easy to gain a wrong impression from a simply generated visualisation that is built on a range of complex knowledge and assumptions.*

Charts

I have not listed all charting possibilities, as a number of them appear to me to be of no use, or completely uninterpretable. Here are some you might find helpful.

- ✓ All charts can be rotated if that helps you to see the result more clearly. Click on the chart and move your mouse.

Chart frequencies directly from List View

- › To chart the top 20 nodes occurring in a *source* (based on proportion of the document coded at each node): Select document in List View, right-click > **Visualise > Chart Document Coding**.
- › To chart the top 20 documents coded by a particular *node* (based on proportion of each document coded at the node): Select the node in List View, right-click > **Visualise > Chart Node Coding**.

Chart demographic (or other attribute) information

- › Go to **Explore > Chart > Nodes > Nodes by attribute value for an attribute** (or for two attributes).
- › Select the attribute/s you want to display.
- › Indicate which attribute values you want displayed (normally **All attribute values except 'Unassigned', 'Not Applicable'**).
- › Choose the type of chart you want from the top left of the Charts ribbon which will now be showing (use Column or Pie for a single attribute; try Grouped Column for two attributes.)
- ✓ The only nodes that can be counted are those classification nodes that have been given the relevant attribute/s.
- ✓ The equivalent for sources (where you have source attributes) could be obtained by Exploring Chart > Sources > Sources by attribute value for an attribute (or two).

Chart the distribution of coding across sample sub-groups (attribute values)

This kind of chart provides a chart view of a matrix coding query using attribute values.

- › Go to **Explore > Chart**
- › Select **Coding by node attribute value for multiple nodes (or a node)**.
- › Select the Node(s) you want to include (usually all those within one tree)
- › In the Chart Wizard, select the **node** or nodes you want to chart, and the **attribute** you want them sorted by.
- › For which attribute values do you want the coding in those sources counted? Select these for the X-axis.
- › Indicate which attribute values you want displayed (normally **All attribute values except 'Unassigned', 'Not Applicable'**).

- Select the information you want displayed for each attribute value (Y-axis), i.e., **Percentage coverage** (= proportion of total text from that node in sources with that attribute value), **Number of coding references** (= absolute number of passages in those sources with that attribute value), or **Number of nodes coded** (= number of *classification* nodes [i.e., cases] *with that attribute* that are coded at the selected node/s).
- Choose the type of chart display you want to use (bar, column, etc.) from the drop-down display in the Charts ribbon.
- ✓ Two dimensional (2D) charts (e.g., grouped column) are less ‘jazzy’ but can be much easier to interpret than 3D.
- ! **Charts based on comparisons involving attributes are not adjusted for differing numbers of classification nodes that have each attribute value and so can give a false impression of the distribution of responses across groups.**
- ! **Be careful about interpreting numbers of coding references in these displays: there will appear to be more coding for members of larger groups, or particularly, for more talkative groups.**
- ! **Percentage coverage is particularly misleading as it emphasises even more those who are particularly talkative about a subject. This does *not* show, as one might expect, the proportion of text with that attribute that is coded at that node.**

Visual displays

Tree Map

Help topic: Visualisations > Tree map > About tree maps

A tree map shows the relative volume of coded material at a set of sources or nodes in diagrammatic form, as well as providing a summary. It can also be used to show the number of items (e.g., sources or cases) that have a particular attribute value, or (usefully) a particular combination of attribute values.

- Go to **Explore > Tree Map > Tree Map** (*or* if you have already selected what you want to map: **Tree Map of [Items]**).
- Choose what you want to map (**Sources, Nodes, or Attributes**)
- For Nodes or Sources, indicate the **Scope** (if not already defined by your starting point).
- For Attribute value combinations, indicate first of all which **Classification** Sheet they are from, then select the attributes you want to map using the arrows under the list, and then set the scope (all or selected items with that classification).
- ✓ Tree maps can be generated for selected items from the right mouse menu.

Cluster

Help topic: Visualisations > Cluster analysis > About cluster analysis

Cluster provides information about the way in which various sources or nodes might ‘hang together’, based on common patterns of words or coding. The Help files provide a comprehensive explanation of the options.

- Go to **Explore > Cluster Analysis > Cluster Analysis > Sources or Nodes**.
- Select the sources or nodes you want to cluster.

OR

Cluster analysis based on word similarity can be run on selected items from the right mouse menu (right-click on the result > **Select Data** to change type of clustering).

- Choose how you want them clustered. NVivo will select an appropriate similarity metric.
- To change what is included in the chart, or how it is clustered, click on Cluster Analysis > **Select Data** (or right-click > **Select Data**).
- Explore different levels of clustering by selecting the number of clusters in the Cluster Analysis ribbon.
- Rotate 3D charts by moving your mouse over the display.
- ✓ If you use the automatically select hierarchy button to select classified nodes so you can cluster them by attribute value, make sure you deselect the parent node if it has not been given the same classification.

Graph

- Select the item you wish to graph. Right-click > **Graph** (or select from **Explore** > **Graph**). NVivo will show the item with its associated nodes (for a source) or sources (for a node).
- To modify or save the graph, right-click > **Create Model from Graph**.
- ✓ If you create a model of nodes coding a source (e.g. for a person) from a graph, you might select the source the nodes code, delete it from the model, and then rearrange and connect the remaining nodes to create a model of what you have learned about that person.

Copying and exporting visualisations

Charts are not directly saved within NVivo, but they can be copied and pasted into any Office (or similar) applications, or they can be exported as picture or .pdf files. If the copied chart is pasted as an Internal (in the List View) it will be saved as an Image source.

Models

Creating a model

(Help topics: Models > About models, etc.)

- Click on **Models** in the Navigation Pane, then right-click in List View to create and name a new model. An area for working will be created in Detail View.
- Build with new items: from the **Model** ribbon, click a shape to insert it in the model. Double-click to name it.
- If you already have nodes or other project items, **Model** > **Add Project Items**. Once you select items, you will be asked if you want to add associated items, and then if you want all or some of those (if you don't want any associated data, simply click **OK**). See e.g. below.
- Items can be resized, or the shape can be extended in one or other direction. Select those you want to change (drag to select; use Ctrl-A for all; or Ctrl-Click for some), and then adjust one. The adjustment will apply to all selected items.
- Move the shapes to where you want them, by dragging. Multiple selections can be moved at the same time so that their spatial relationships are preserved.
- Add connectors to show links between shapes or nodes. Select the first item for the linked pair. Use **Ctrl-click** to select the second item. While hovering over one of the items, choose **Model** > select a **Connector**, and choose the type of connector that best describes the relationship between the two items. If you create a one-way arrow that is pointing the wrong way, select it, select it and use **Model** > **Reverse Direction** to fix it.
- ✓ To create more working space, select **View** > **Docked** (to remove the check mark) and the Detail View will become a separate window which can be enlarged to fill the screen.


! If you keep undocking additional Detail View windows, whether you close them or not, you will eventually use the program's memory and cause a crash.

- ✓ Explore the options available on your right-click menu (Detail View, with a model open).
- ✓ When you're working in a model, if you don't need them, go to **Model** (in either the main view or the undocked window) and turn off **Model Groups**. This gives you more room for working in.
- ✓ Use the slide bar below the model, or **View > Zoom > Zoom Out** to see more model in the space available.
- ✓ To model from an interview, choose to add the source document you have been coding, and **Add Associated Items > Items coding > Nodes > Selected Associations > Select** (select from the left pane in the dialogue, then delete the document icon from the model so that you can rearrange and link the items). To model from a classification (or other) node, run a Group Query to list the nodes coding the classification node, create a set from them, and import that with associated data (members).

Modify the appearance of model items


- Makes sure **Click to edit** is not showing at the top of the model, i.e., that it is editable (**Home > Edit**).
- Adjust font type and size, fill and line colours for a selected item (or use Ctrl-Click to select a number of items to adjust at the same time) using the **Format** section on the **Home** ribbon.
- Enhance your model's power to explain and communicate by applying *styles* to the node shapes or connectors within it (these work on the same principles as paragraph styles). These can be set up for the current project through **File > Info > Project Properties > Model Styles**, or for the application as a whole (i.e., for all future projects) through **File > Options > Model Styles**.
- Defined styles can be applied to currently selected items from the drop-down slot (labelled Default by default) on **Model > Styles**.
- ✓ Change the default item style (via File > Info > Project Properties > Model Styles) to 8 point font size and maybe also to Arial Narrow font (or another small one).
- ✓ Styles that you create are available to apply to items or links in all models in a project (or in all projects in NVivo if they were set up through application options prior to creating the project).

To archive the model

- so you have a stored (non-editable) copy as well as a dynamic one to continue working on.
- In List View, select the model you want to preserve. Right-click > **Create As Static Model**. You will be asked to name the new model—this is the one which will be the archive (static) copy, indicated by a different icon . A static model will lose any live links with project items.


Model Groups

If an item has a classification of some kind, then attributes of those classifications will be shown in the right panel on Detail View.

- To show or hide a group of items in the model, click on the check box under .
- ✓ Make sure your model can be edited if you want to view particular groups (even though doing this will not change the model itself).
- ! If you select some items, then highlight *the name* of a particular group (based on an attribute value or one you have created), and then click Delete on your keyboard, those items will be *deleted* from your model (not just hidden).

Creating custom groups in a model

Custom groups are model specific. If you make a new model, even if it is in the same project, you need to re-create the groups. The **Help** files contain a very full description of the operation of model groups in a project—search for **model groups** if you need further assistance.

- At the right of the model window (Detail View), under **Custom Groups**, right-click > **New Group**. Name the group, and optionally provide a description.
- To populate the group, select an item or multiple items in your model, then click in the check box under . The same item can belong to multiple groups. Remove an item by selecting it then clicking to remove the check mark.
- To show or hide a group of items in the model, click on the check box under .
- ✓ If you have one or more items selected when you elect to create a custom group, all the selected items will automatically be placed in that group.

Teamwork tools

Help topic: Teamwork and project users > About teamwork (and related topics).

Combine and track the contribution of different team members to a project, and compare coding as a way of facilitating common approaches across a team.

Defining User Profiles

When NVivo is launched for the first time, the NVivo user dialogue requests a name and initials. These will become the default user for NVivo projects set up on that computer.

- If multiple users are accessing the same copy of NVivo, from **File > Options > General**, check the box next to **Prompt for user on launch**.
- To change or add a user while the program is running, in **File > Options > General**, provide the requested **User** details (can be either existing or new).
- ✓ Any items created or modified will be identified in List View by user initials.
- ✓ Users can be identified in coding stripes (View > Coding Stripes > Selected Items > Users).

Remove or merge user profiles

- Go to **Info > Project Properties > Users**. Select the **User** you wish to remove or merge, click on **Remove**, and indicate whom the replacement should be.

Importing a project

- Make a backup copy of your current project, as the imported one will be added to it.
- Go to **External Data > Project**.
- Select how much of the project you want to import, noting what changes it will make to your current project.
- ✓ Use **Import > Selected (excluding content)** to transfer a project structure to a new project for a second coder to work on.
- ✓ If you are using this to recover an accidentally deleted item (e.g., coding at a tree of nodes), make a copy of the backup project you are drawing on and reduce it to just the items you need to import (remembering that for coding you will need the sources as well as the nodes).
- ! **If sources have been edited in one or other copy of the project, you will *not* be able to merge them or the coding on them.**

Comparing coding

Two **measures of agreement** between coders are provided:

- *Percentage agreement* is calculated from the number of units (usually characters) for which two coders (or groups of coders) are in agreement (including both presence and absence of coding for the particular node), compared to the total number of available units.
- The *Kappa coefficient* is a statistical measure of the level of agreement between two coders which takes into account the amount of random (chance) agreement which could be expected to occur.
- Go to **Explore > New Query > Coding Comparison...** *or* navigate to **Queries > right-click in List View > New Query > Coding Comparison...**
- Select the **Users** (or User groups) to be compared, the **Nodes** they are to be compared on (e.g.), and the **Sources** to be compared. Options for **Display** (Display Kappa Coefficient and Display percentage agreement) are checked already.

! In NVivo, Kappa is calculated at a very fine level (e.g. characters), and is therefore likely to produce lower estimates of agreement than might otherwise be expected.

Results of the coding comparison are presented for each node used in each source, in table format in Detail View.

Result columns include:

- *Source size* – total number of units in the source being coded (characters for documents, duration to 1/10th of a second for media files, pixels for images).
- *Kappa* – 1 indicates perfect agreement (identical coding), 0 or less indicates no better than chance (or worse than chance).
- *Agreement (%)* – overall level of agreement between coders (a combination of the next two columns).
- *A and B (%)* – the percent of units coded by both coders.
- *Not A and Not B (%)* – the percent of units coded by neither coder.
- *Disagreement (%)* – overall level of disagreement between coders (a combination of the next two columns).
- *A and Not B (%)* – percent of units coded by A but not coded by B.
- *B and Not A (%)* – percent of units coded by B but not coded by A.

To view details, e.g. of a problem area:

- › Double-click any line of the results, to be shown the particular source with coding stripes detailing coding for that particular node, as assigned by each user.
- ✓ Use this display as the basis for team discussion about what ‘should’ be coded at this node.

Reporting

Help topic: Reports and extracts > About reports and extracts.

Reports and extracts in NVivo 9 are still somewhat in development – expect changes!

Reporting text – from List View options

- Right-click on the item you wish to print or export, and choose the appropriate option.
- ✓ For text output, select **Export > Reference View**. This will export to a Word or text file.
OR
For output that includes video, audio or image source or coded material, select **Export > Entire Content** . This will export as a web page (*.htm).
- ✓ Annotations and see also links export as end notes to the content (very useful!).
- ! Check the options for *exporting* in the dialogue carefully, especially that to do with what is to be exported.

Reporting using predefined reports

Help topic: Reports and extracts > About reports and extracts; Run predefined reports and extracts, and other related topics..

- ✓ Help provides a useful summary of general guidelines and of what each kind of report provides.
- To generate a report: Navigate to **Reports** > select [**Report type**] from List View, and work through the filter options (if needed).
- ✓ When a filter dialogue comes up, if you don't want to filter, simply click OK.
- ✓ When selecting nodes, take care with what you include (e.g., usually you do not want text from classification nodes).
- ✓ Extracts put all the information in a report into spreadsheet format.
- ✓ If you want to customise your report, at this stage, you need to build it yourself. Check the options and results on a predefined report first, to obtain a better picture of what kind of things you will be asked to decide.

! Don't forget to make a back up copy of your project after each day's work!!