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Prerequisite knowledge
People undertaking the advanced workshops are expected to have the basics skills of using NVivo as outlined in the NVivo Basics Workbook. The advanced workshop will build on (but not repeat) the skills covered in the NVivo basics workshop. It is really important that you consolidate the basic skills before moving onto the advanced workshop.

Objectives
Upon completion of this NVivo advanced workshop students will know

- How to import multi-media based sources into NVivo
- How to transcribe multi-media based sources
- How to code multi-media based sources in NVivo
- How to import and work with survey data in NVivo
- Creating classifications and attributes
- Working with collections and search folders
- How to use the find and advanced find tool bar
- How to conduct advanced queries in NVivo
Chapter 1: Introduction
In the NVivo basics workshop you were introduced to the NVivo launch pad, project structure and layout, the ribbons and keyboard functions for common NVivo functions, as well copying and backing up your project and files. From there, we created and imported compatible text files, annotated them and created memo links.

Then came coding and nodes! We coded using right mouse clicks, ribbons, code InVivo, we dragged and dropped, and used the speed coding tool bar. We moved and merged nodes, turned on coding stripes, and then undertook some basic text searches and word frequencies. If you feel unfamiliar with these functions I suggest you revisit the Basics workbook for a refresher before attending the next workshop or working through this guide.

In the advanced workshop we move to some of the more advanced capacities of NVivo. However, as with all computer training workshops, the contents of this workbook are not exhaustive of the capacities of NVivo. To learn all of the functionalities of NVivo it takes over 2 to 3 days of training and many hours of practice to master the tasks. However, in this advanced workshop, I have chosen what I believe to be the most valuable processes which can be covered in the available time. You will see throughout this workbook that I have incorporated many URL links to resources provided online by QSR International, the owners of the NVivo software. These will be invaluable reference points to remind you of the functions taught throughout this workshop.

Where to get help?
There are a number of ways in which you can seek help for using NVivo. There is built in Help files which cover every aspect of using NVivo. NVivo will automatically install these Help files on your computer (offline Help) but defaults to try to access online Help (via the web if you have an Internet connection). If you are not connected to the Internet, NVivo opens the installed offline Help. Online help is to ensure you are getting the most up to date and accurate information at all times.

To open the Help, do any of the following:

- Press F1
- Click the File tab, then point to Help, and then click NVivo Help.
- Click the Help icon in the upper right of the NVivo ribbon or any dialog box—when you open the Help from a dialog box, the relevant topic is displayed.
- On the NVivo Welcome screen, click the Help button at the bottom of the window

Alternatively, you can access the NVivo Community through Facebook, Twitter, LinkedIn, QSR Forum as well as view many tutorials on the QSR You Tube channel. Don’t be concerned about using an NVivo 9 resource as the core capacities and processes are the same.

Ok, so lets go….
Chapter 2: Working with multi-media research materials

In the basics workshop we worked with the Internals and Memos folders using text based data. NVivo is a powerful program that can manage many different file types.

**Documents:** Microsoft word document (doc, docx); Rich text file (rtf); and plain text (txt)

**PDFs:** Portable Document Format (pdf)

**Spreadsheets:** Microsoft Excel spreadsheets (xls, xlsx); Access or SQL server file saved as xls; or Comma or Tab-delimited text file (txt)

**Digital images:** Windows bitmap (bmp); Graphic Interchange Format (gif); Joint Photographics Expert Group formats (jpg, jpeg); Tagged Image File Format (tif, tiff)

**Audio files:** MPEG-1 format (mp3); MPEG-4 format (m4a); windows media formats (wma, wav)

**Video files:** MPEG formats (mpg, mpeg, mpe, mp4); Windows Media formats (avi, wmv); QuickTime formats (mov, qt); 3G Mobile Phone format (3gp); AVCHD High Def Video formats (mts, m2ts)

In this advanced workshop we will work with multi-media based information in the form of digital images, audio, and video data. We will then look at data sets such as online survey information. We will start with images and then increase in complexity as we work towards other multimedia forms.

**Working with digital images**

**Import a digital image**
- First select **Sources** in the bottom of navigation view, then open **Internals Folder** in the top section of Navigation View so the Images can be shown in list view
- Right mouse click in the white space of the internals list view select **Import** then **Import Pictures** OR
- From the **Data ribbon** – select **Pictures**
- Locate the file you want to import. Note: only compatible document file types will be shown.
- Rename the file when the dialogue box opens if you would like and select OK.

**View a digital image**
- Double click the file in List View to open it in Detail View.
- NOTE when a picture file is open there is a new ribbon called Pictures that becomes active.
- Picture files have a content log which is a place you can add relevant text for describing, analysing, or searching.
- Here you can record notes or comments about the whole picture or about a specific region of the picture.
- Options for working with pictures are available from the Picture ribbon that opens when you have an image open in detail view, or the View ribbon, or on the right-click mouse menus.
- There is a zoom button at the bottom-right of the main NVivo window which allows you to zoom in or out of the image.

Adding text to a digital image content log
- With the picture file open in Detail View, adding text to the log means you are editing the file, so first select Click to edit or activate Edit mode via the home ribbon.
- Click your mouse into the content column of a row and enter your notes or comments about the picture.
- Once you close the file all of the log will automatically save and return to read only mode.
- A specific region of the image can be assigned to content log rows.
- Individual portions of a picture are recognised by its region coordinates.
Creating a log for a region of the picture is a two-step process:

**Step A**
- Insert the log contents that relate to that region

**Step B**
- Drag the mouse pointer to select a region of the picture.
- Right mouse click in the white space of the region cell adjacent to the text you want related and select **Assign region to rows** OR on the Picture ribbon, in the Selection group, click **Assign region to row**
- The coordinates are then displayed in the Region column.

If you now select just that row – the region of the image that relates to the coordinates and the content will be highlighted.

Task 2: Edit the image file to make content rows about aspects of the image and assign to regions of the image to the relevant rows
**Working with audio and video files**

All of the functions and steps for working audio and video files are exactly the same, apart from selecting the file type on import. So for ease, the descriptions provided here will focus on audio files. If using video – swap the term audio for video throughout.

### Import an audio file

- First select **Sources** in the bottom of navigation view, then open the **Internals Folder** in the top section of Navigation View so the Interviews sub-folder is shown in list view
- Right mouse click in the white space of the internals list view, select **Import** then **Import Audio** OR
- From the **Data ribbon** – select **Audio**
- Locate the file you want to import. Note: only compatible document file types will be shown.
- Rename the file when the dialogue box opens if you would like and select OK.

### Opening an audio file

- Double click the file in List View to open it in Detail View.
- **NOTE:** when an audio file is open there is a new ribbon called **Media Tools** that becomes active.
- Audio files have a content log which is a place you can add relevant text for transcribing, describing, analysing, or searching.
- Here you can record notes or comments about the audio or transcribe selections or all of the audio
- Options for working with audios are available from the **Media Tools** ribbon that opens when you have an audio file open in detail view, or on the right-click mouse menus.
- There is a zoom button at the bottom-right of the main NVivo window which allows you to zoom in or out of the audio timeline.

**HANDY HINT:** There are only a limited number of file types that can be imported as an audio file in NVivo. Remember to make sure your files are in a format that can be imported such as MP3, M4A, WAV, WMA
Using the Media Tools ribbon

This tab is only available when an audio or video source is displayed in Detail View.

The Media Tools ribbon contains the following groups:

- **Display**—customize the media source display. For example, show or hide the waveform, the transcript or the media player.
- **Playback**—to navigate the media using the playback commands. For example, Play/Pause, Stop, Skip Forward, Skip Backward.
- **Selection**—select media file content. For example, use 'Start Selection' and 'Finish Selection' commands to select media or select the media content associated with a transcript row.
- **Import**—import transcript rows or a media file into an audio or video source.

To listen to an audio file using PLAY mode

- With the file open in Detail View, make sure the play mode is set on **PLAY**
- You can adjust the sound and play speed in the **Playback** section of the ribbon
Adding text to an audio or video content field (notes or transcript) using PLAY mode

- With the audio file open in Detail View, adding text to the content field means you are editing the file, so first select **Click to edit** or activate Edit mode via the home ribbon.
- Click your mouse into the content column of a row and enter your notes or comments about the audio.
- Once you close the file all of the content field notes will automatically save and return to read only mode.
- A specific region of the audio can be assigned to content log rows.
- Individual portions of an audio are recognised by its timespan coordinates.
- Creating a transcript for a timespan of the audio can be done a number of ways.

**Method A:**

- Insert the log contents that relate to a specific region of timespan
- Left click and drag the mouse pointer to select a region of the timeline.
- Right mouse click in the white space of the region cell adjacent to the text you want related and select **Assign Timespan to rows** OR on the Media Tools ribbon, in the Selection group, click **Assign Timespan to row**
- The timespan coordinates are then displayed in the Timespan column.

**Method B:**

- Insert the log contents that relate to a specific region of timespan
- Click **Start Selection** (on the media ribbon) or **F11** at the beginning of the recording and then **Finish Selection** (on the media ribbon) or **F12** to select a region of the timeline.
- Right mouse click in the white space of the region cell adjacent to the text you want related and select **Assign Timespan to rows** OR on the Media Tools ribbon, in the Selection group, click **Assign Timespan to row**
- The timespan coordinates are then displayed in the Timespan column.

Transcribing an audio file using TRANSCRIBE mode

- To use the transcribe mode most effectively you will be best to become familiar with the keyboard function keys F4 and F8. In transcribe mode, NVivo automates the allocation of the timespan to the rows.
- With the file open in Detail View, make sure the play mode is set on **TRANSCRIBE**
- You can adjust the sound and play speed in the **Playback** section of the ribbon.
- Transcribing, or adding text to the content field means you are editing the file, so first select **Click to edit** or activate Edit mode via the home ribbon.
- To play the media player – select the **Play/Pause** on the media ribbon or use **F4** on your keyboard. In transcribe mode each time you select Play a new transcript row will be commenced with the timespan the player is currently at. Selecting Play/Pause again will just pause the player and the curser will stay in the current row.

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**Task 4:** Insert some key words from the audio discussion and assign the timespans to the rows.
• Enter your notes or comments in the content log.
• To close the current row – select **Stop** on the media ribbon or use **F8** on your keyboard. In transcribe mode each time you select Stop the current transcript row will be closed with the timespan the player is currently at.
• Once you close the file all of the content field notes will automatically save and return to read only mode.

**Importing Transcript rows for an audio file**

• If you are fortunate to have your transcripts prepared by a secretariat service they can be imported and connected with the audio timespan if formatted in using Timestamp, Paragraph or Table row. More explanation of this is in the NVivo help.
• Importing transcript fields means you are editing the file, so first activate **Edit mode**.
• From the **Media Tools** ribbon select **Import Transcript Rows**
• Follow the dialogue box by locating the file for import, then the transcript row method and check the preview. If it is displayed correctly map the **Transcript Field** columns and select **OK**.

**Video files**

As mentioned at the beginning of the Audio section all of the functions and steps for working audio and video files are exactly the same, apart from selecting the file type on import. So have a go at doing the same tasks with a video file – swapping the term audio for video throughout.
Embedded and not embedded audio and video files

Each project file in NVivo has a 10 Gigabyte capacity. However, individually the system has a default setting of maximum file size of 20MB for audio and video files, with the option to increase this to 40MB for an individual file. This means that if an individual file exceeds this size limit, NVivo does not make a carbon copy of it to store within the project file .nvp, but rather creates a hyperlink to its existing storage location. This is not a concern if using the same computer consistently, however if moving between two computers or making a backup of all files and data – not embedded files need to be moved/copied independently of NVivo.

Customising your audio and video fields

An additional function that is very useful for multimedia content logs is customised columns. Custom columns allow you to add additional fields to the transcripts in your project. They contain additional information that you might want to capture, such as speaker name or setting. However, you cannot manually code, annotate or link the content in custom columns. But you can auto code transcripts based on content in a custom column. So if you wanted to separate all the interviewees words from the interviewers' words, custom column for speaker would allow NVivo to do this as an autocoding process.

To create a custom column, select File/Info/Project Properties; select the Audio/Video tab. Next choose whether you want Audio or Video and select New and type the name for the new field or custom column.
Chapter 3: Working with survey data

Survey style data such as that generated from questionnaires or online surveys, or social media such as Twitter or Facebook can be imported into NVivo for analysis. Due to the multiple ways to generate such data, NVivo refers to these as datasets. It is common for datasets to contain quantitative and qualitative components. Whilst the use of statistical analysis software remains the cornerstone for primary statistical analysis, NVivo is ideal for analysing the qualitative data and using the quantitative responses as variables for further analysis of the qualitative data.

If you are working with a dataset of survey results, you may also want to watch the video tutorial Work with survey results. (https://www.youtube.com/watch?v=f2dHnbEhsog&feature=youtu.be)

The easiest way to learn the basics of datasets is to get familiar with the columns and rows in your dataset, and familiarise yourself with what is a quantitative response (such as forced choice option questions such as gender and age) and qualitative response (such as open text question). These are vital distinctions for importing your dataset correctly.

The table below displays an example of a dataset containing survey responses. Each record (row) represents a single survey respondent. The fields (columns) contain demographic information about the respondent or their responses to the survey questions.

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Age</th>
<th>Sex</th>
<th>Feelings about university campus</th>
<th>Ideas for improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sue</td>
<td>21</td>
<td>Female</td>
<td>I love the IT hub – the staff are so helpful</td>
<td>Electric buses would help reduce pollution on campus</td>
</tr>
<tr>
<td>Paul</td>
<td>23</td>
<td>Male</td>
<td>Pedestrians need to feel safe. There should be better lighting and more security.</td>
<td>We should create more green spaces.</td>
</tr>
</tbody>
</table>

1. **Classifying fields**—contain information about your data—for example, the age and gender of survey respondents. Classifying fields have a grey background when using the import wizard.

2. **Codable fields**—contain the information you want to qualitatively analyze—for example, responses to open-ended survey questions. Codable fields have a white background when using the import wizard.

**Importing a dataset**

Before importing your dataset it is important that you have 'cleaned' your data, that you have changed any numerical references to the words if you wish (i.e. 0=no; 1=yes), and that every respondent has a unique identifier. Once imported into NVivo datasets cannot be edited, so make sure you have it right before you start. The best way to import your dataset is through the import wizard. To do this you will need to know which columns you want as Classifying fields and which you want as Codable fields. If this is done incorrectly on import you may as well delete it and start again! Remember classifying fields is for quantitative variables – to sort and filter with, codable fields are those you will need to analyse through coding and qualitative analysis.
**Viewing your dataset**

**Table and Form View tabs**—use these tabs to switch between Table View and Form View. When the dataset is open in Detail View, you can switch between Table View (view all records) and Form View (view one record at a time).

Each row in a dataset has a unique record ID automatically generated by NVivo, based on the order in which it is imported. This NVivo ID is the first column in Table View, and the first field in Form View. If you sort the dataset by the values in the ID column, the dataset is displayed in the order that the records were imported into NVivo. However you **cannot** use this ID as a search field. Therefore you **MUST** also include a unique identifier such as respondent number or code for each row. This will be the participant code to sort individuals’ responses by.

**Working with datasets**

Once imported into NVivo, datasets can be filtered, sorted and customised.

http://help-nv10.qsrinternational.com/desktop/concepts/about_dataset_sources.htm

Please remember the field of the data cannot be modified and the dataset cannot be edited. If you get it wrong on import you will need to delete and re-import it.

Datasets can be coded using the normal coding processes for codable fields, including character specific coding, and auto coding for entire cell content. You can identify codable fields by color—codable fields have a white background.

http://help-nv10.qsrinternational.com/desktop/concepts/approaches_to_analyzing_survey_results.htm
Chapter 4: Coding multi-media research materials

As previously discussed, coding is the process of examining the data and sorting it to be interpreted. In most approaches to qualitative analysis this is a human intellectual process of interpretation and deciphering data, although with computerised data some automated functions are possible.

In NVivo, there are four main coding choices:

- **Code source** will place the entire data source file into the node(s) selected. This is useful when wanting to put all data from one person or one organisation into one place for further analysis.

- **Code selection** will place the highlighted/selected text or image into the node(s) selected. This is the main method used for qualitative analysis.

- **Code In-Vivo** will place the entire highlighted/selected text into a node and apply the selected content as the Node name. Beware of using this for sentences and paragraphs as it will not be what you want for analysis as the node name will be too long and not meaningful.

- **Auto Code** will sort the data based on the structure of the source file; using paragraph styles in text sources, or by rows and columns in table structured sources.

All of these processes, as described in the basics workbook also function the same with multimedia sources.

**Coding multimedia sources**

Multimedia sources can be coded in a number of different ways. When coding multimedia sources from one approach (ie the timeline or the text) the system automatically shadow codes the corresponding portion. In audio and video sources you can code:

- A section of the media via the timeline
- An entire source file
- Text in the Content field (column) of a transcript (if one exists)
- Auto code by columns in the transcript field
In image files you can code:

- A region of the picture/image
- Text in the Content column of the picture log (if one exists)
- The entire picture source
In datasets you can select and code:

- The entire source; but remember only content in codable fields is coded.
- Text in codable fields by a single word, a phrase, or the whole cell.

- Auto code by columns or rows; where only content in codable fields will be coded.

Coding multimedia files is undertaken using the same processes as demonstrated in the basic course; using selection of text, region or timespan and right mouse click options, using drag and drop, or using the quick coding tool bar.

Task 9: Go back to all four new sources files and code them using your preferred manual coding approach. Turn on/off coding stripes and see how they display.
Chapter 5: Classifications and Attributes

Ok, now we have covered the new source data types we have got to the hard bit! Often we have details about our participants, source data or places relevant to our research. For example you may want to use the demographic information about your participants such as age, gender and educational level. These may be important variables to consider when you undertake your analysis. If this is so, you need to have some way within NVivo to be able to easily compare and contrast by these attributes. Within NVivo this type of information is stored as classifications. You use classifications to store descriptive information about your sources or about the people, places or other cases in your project. I suggest you start with this video tutorial: https://www.youtube.com/watch?v=hn1u-r4Q5jo&feature=youtu.be.

A classification sheet allows you to see all the items assigned to a particular classification and see the attribute values set for each item.

There are three subfolders in the section called classification. The primary ones you will use are the source and node classifications. However whilst they function in a similar way, they are used for different purposes:

- **Use source classifications** to store bibliographical information about your sources—you can import this information from reference management tools like EndNote. A source classification has to apply to the whole source file (whether it be a PDF, interview transcript or data set and hence is not useful for focus groups, group interview data or where participants provide more than one source of data).
- **Use case classifications** to provide demographic details about the people, places or other 'cases' in your project. For example, classify a node as a Person and define attributes for age and education level. By classifying case nodes, you first create a ‘case’ node for each participant and apply the classification information to their personal case.

Creating classification sheets
The key concepts to understand when using classifications in NVivo are the **Classification type**, **Attributes** and **Values**. The first step to work through is to determine if you want to create a source or node classification. For the purposes of explanation, I will show you how to create a node classification sheet for your participants. Given that some of my participants

[Image of a classification sheet with columns and rows marked with numbers and letters.]
have undertaken more than one interview – I need to create the classification type as a node classification and not a source classification. This is because whilst I have 2 interview transcripts with Mary, if I classified the sources, NVivo would think I had two separate women called Mary. So from the create ribbon select Node classification.

Given we I want to create a system to store information about individual participants – I will label my new node classification sheet “Participant”. The next step is to consider the attributes and values for my participants. The attribute is the concept I want to capture such as age or gender, whilst the value is the specific information. So for the attribute gender, the value may be male or female. You can manually create each attribute and then apply the values for each attribute by right clicking on the classification sheet and selecting new attribute.

However, it is likely you have a table or spreadsheet with this information on it already. If so, the quickest way to create the attributes and values is to import an excel sheet. For this to work, the excel table needs to be in the same format as the classification sheet shown above. That is cell A1 needs to have the same name as the classification sheet in NVivo. Column heading row is the attribute labels, Row headings are the individual participant node names, whilst the remaining cells are the information you want to capture about each individual for the attributes.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age</th>
<th>Gender</th>
<th>Education Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peter</td>
<td>40</td>
<td>Male</td>
<td>High School Certificate</td>
</tr>
<tr>
<td>Mary</td>
<td>32</td>
<td>Female</td>
<td>Bachelor Degree</td>
</tr>
</tbody>
</table>
Import classification sheet
- From the External Data ribbon – select Classification Sheets
- The Import Classification Sheet Wizard will launch.
- Follow the steps commencing with selecting the file you wish to import
- Step 2 of the wizard is where you need to specify if you are importing as a node or source classification.
- Step 3 is where you need to identify the ‘case’ nodes if you have created them first – otherwise the wizard will automatically create these on import for you. BUT remember, you need to code the data for each individual to their own participant case node.

Create node classifications from datasets
A dataset contains structured data arranged in records (rows) and fields (columns). On import into NVivo the data fields (columns) are identified as codable fields or classifying fields. You can use this information within the data set to auto generate your node classification values within NVivo.

To classify nodes using attribute values in a dataset:
- Open the dataset or select it in List View.
- From the Create tab, in the Classifications group, select Classify Nodes from Dataset.
- The Classify Nodes from Dataset Wizard opens.
- Follow the steps in the wizard to create or update nodes and their attribute values.

Task 11: Import the participant classification sheet and ensure you have the data coded at the participant nodes

Task 12: If you managed to import your dataset successfully, now create your node classifications from the dataset.
Chapter 6: Collections and search folders

Collections are groupings of items in your project. The most used collections are sets and search folders. The others are folders of links you create and is where NVivo stores the data.

**Sets**

Sets are a flexible way of grouping your sources and nodes—for example, you might create a set for all of your data that relate to one family or organisation; or items you have yet to reviewed; or items you wish to share and discuss with your supervisor. Items in a set are references or 'shortcuts' to the original items—you do not physically move items into a set. This means you can delete an item from a set without removing it from your project.

A set can include any number of project items including sources or nodes, and any individual project item such as a source or node can belong in multiple sets. You can use sets to create temporary groups, and then delete the set when you no longer require it. Sets are a static entity – they are not updated automatically but you can modify them manually.

Create a new set and add members

- In the bottom of Navigation View, select Collections to display the Sets folder. From the top of navigation view now select Sets to display in list view.
- You will note that you cannot have subfolders of sets – they are all listed in one level folder.
- From the Create ribbon, in the Collections group, select Set.
- The New Set dialog box opens; enter a name for the new set. Select OK and the new set is added to the Sets folder.
- In the sets folder within Navigation View, highlight the new set so it is displayed in the list view, and then right-click in List View field and select Add Set Members.
- The Select Project Items dialog box opens.
- Select the project items, such as sources or nodes you want to add to the set and click OK.

**Search Folders**

Search Folders display project items that meet previously defined search criteria—for example, a Search Folder might display all nodes you created in the last week. Unlike sets, search folders are dynamic and will auto populate based on the defined criteria. The project items displayed in a search folder, remain stored in other NVivo folders. Again, like sets items in a search folder are references or 'shortcuts' to the original items—you do not physically move items into these folders. You can create your own Search Folders by using

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**Task 13: Create a set of project items all containing the word environment**
**Advanced Find**, and selecting the **Add to Project** as **Search Folder** check box to save the criteria as a Search Folder.

Saving an Advanced Find criteria as a Search Folder means you can execute the Find any time you want to, simply by opening the Search Folder. For example, you can create a Search Folder to find any nodes that you have created which have the node classification of Participant. Whenever you open the Search Folder, you will see a list of nodes that meet the search criteria at that point in time. If you change your project (for example, add or remove nodes), then the items shown in the Search Folder will change.

You can use Search Folders to select the items you want to show in charts, cluster analysis diagrams and tree maps. You can also use Search Folders in the scope of queries—this allows you to create queries with dynamic scope. As items in your project are added, deleted or modified, the items in the Search Folder change, and if you run the query again, it may return different results.

**Create a new search folder**

- On the **Create tab**, in the Collections group, select **Search Folder**.
- The New Search Folder dialog box opens; enter the name and description of the search folder.
- On the **Search Criteria tab**, create your search criteria—refer to **Advanced Find** in the following chapter for detailed information on using this dialog box.

**Task 14: Create a search folder for all nodes with attribute gender equals male**
Chapter 7: Find, Advanced Find and Query search functions

Once you have your data in NVivo, you need ways in which to navigate around and locate the information within in it. NVivo has two different approaches to finding information within the database. The Find tool will locate project items by the label or classifications you have given them, whilst the query tool allows you to find information within project items.

Use the Find bar to find project items by name

The Find bar is displayed at the top of List View. If the Find bar is not available at the top of List View, it is turned on or off in the View ribbon.

You can use the Find bar to find project items based on their name or characters contained in their name. For example, you could find all the sources, nodes and sets that have environment somewhere in their name.

To find items by name:
- In the Find bar, enter the item name (or part of the name) in the Look for box.
- From the Search In list, select the folder that you want to search using the drop down arrow.
- Click Find Now.
- Items that match the criteria are displayed in List View. From here, you can open items, add items to a set, print items, copy items to a model and so on.

To find items using advanced find:
- Select Advanced Find on the right hand side of the Find bar.
- The advanced find dialogue box appears which allows you to locate project items that meet specified criteria.
- This dialog box has two tabs—Intermediate and Advanced—you can define your search criteria on either tab.
  - The Intermediate tab allows you to define common search criteria—this makes it easy for you to set the search criteria. For example, you could use this tab to find all nodes you created last week.
  - The Advanced tab allows you to set as many criteria as you want. This is useful when you have complex search criteria—for example, you could use this tab to find all external sources classified as Book that were published in the United Kingdom before the year 2000 and are coded at the node Ship Building Industry.
- See the following URL for further examples of Advanced finds http://help-nv10.qsrinternational.com/desktop/dialogs/advanced_find_and_search_folder_options.htm

Task 15: use the find bar to locate items with word ‘fish’ in their name/label
**Queries**

Queries provide a flexible way to gather and explore subsets of your data. In NVivo, you can create queries to find and analyze the words or phrases in your sources, annotations and nodes. You can find specific words or those that occur most frequently. You can undertake more advanced functions to ask questions and find patterns based on your coding and check for coding consistency among team members. In the basics workshop we covered the basic search techniques of **Text Search** and **Word Frequency**. In this advanced workshop we will cover a **Matrix coding query**.

**How do I set up a coding query?**

NVivo queries offer a flexible approach to exploring your data, you can create quick and simple queries to get a sense of what is happening in the data or you can build detailed queries for a more focused perspective. Queries are essentially NVivo’s name for criteria questions. The query questions you ask can be developed, reviewed, refined, and saved for running again another time. The query results can be previewed or saved for further analysis.

The best way to become familiar is to run some simple queries and preview the results. As you grow in confidence you can look at building more complex criteria and storing your results in nodes and sets. When you create any type of query the query properties dialogue box comes up. Each of these vary in complexity but most have the same structure.

1. The **Criteria** is used to define the criteria for the query—what are you looking for and where do you want to look?
2. The **Run or SAVE Query Option** is used to determine how the query results are displayed and stored. Do you want a temporary preview of results or do you want to save them in a node or a set? The default is to preview first, which is a great place to start.
3. The **Save results** comes active only when you have output, and allows you to name and save the query result.
4. The **Add to Project** gives you the option to save the query question. This means you can easily run the query again. By default, queries are stored in the Queries folder.

There is a query wizard which helps you to identify the type of query you want to ask and steps you through its creation. However, if you then select ‘Last Run Query” the dialogue box reverts to the original style and hence I will demonstrate here, using the original dialogue boxes.
Matrix coding query

Matrix coding query is the most complex but very powerful queries and allows us to find a combination of items (usually nodes and attributes) and display the results in a table. Each cell of the matrix table is a live direct link to all of the data that fits the criteria for the cell. Doing one matrix is the same as doing multiple single coding queries at the once.

To create a matrix coding query:

- Select **Queries** form the navigation pane. This will show any saved queries you have that can be run.
- To create a new query select **Matrix Coding** from the **Query Ribbon**.
- The matrix coding query dialogue box opens

- The first task is to identify the rows of the table – in our example it will be the natural environment node and its siblings. So with the Rows tab uppermost, click **Select** besides the **Define More Rows** option with **Selected Items** in the drop down menu.

Task 16: Create a matrix coding query for all nodes coded to the natural environment node (and child nodes) against age values or gender values
- The **Select Project Items** box opens and you need to navigate to show and select the nodes you want in your query.
- Use the + boxes by the headers to open up sub-folders

![Select Project Items](image1)

- Once chosen, select **OK** then on the matrix coding query be sure to select **Add to List**
- You must see the nodes in the white box of the Rows tab like this

![Matrix Coding Query](image2)

- The second task is to identify the columns of the table – in our example it will be the values for the age attribute. So with the Columns tab uppermost, click **Select** besides the **Define More Columns** option with **Selected Items** in the drop down menu.
• Once chosen, select **OK** then on the matrix coding query be sure to select **Add to List**

![Matrix Coding Query](image)

• You must see the values in the white box of the Columns tab like this

![Matrix Coding Query](image)

• The third task is to identify the **sources** which you want included in your search. In our example we have multiple sources of data including interviews, focus groups and survey data. The default setting is **All Sources** – but you can narrow the scope to only the interviews for example if you want. For now I will keep it at all sources.

• Select **Run**.
• The result you get will look like this
• Here I have right mouse clicked over the table and selected **Cell Shading** choosing the **Blue-White** option. This makes it easier to see the difference in results.
• **Cell Content** will default to the number of **coding references** found that meet the intersection criteria.
• The cell content can be changed again in the right mouse click options as shown.

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![Cell Shading Example](image)

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• So what this matrix is showing me is the number of references coded for each node separated by the age groups. I can now select the 30-39 age group response and compare it qualitatively to the 50-59 year olds point of view for example. Each cell is live and active with the coded data. Just double click a cell and see the magic!

**To review/modify a matrix coding query:**

• Select **Last Run Query** from the **Query ribbon** and the query dialogue box will display with the previous criteria.
• Here you can refine/modify/change your criteria and/or what NVivo does with both the question itself and the results.
• Use the **Add To Project** box to save the query question to run at a later time.
• Use the **Query Options** tab to save the results when you next run the query.

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**HANDY HINT:** I always run a query in preview only mode to ensure I have written it correctly to get the result I am seeking. Once I am happy with the question I save the question and/or the result. This avoids getting too many query questions in the query folder and too many results that I don’t need.

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**Task 17:** Modify your matrix coding query for all nodes coded to the natural environment (and child nodes) against gender values and save the query.
Chapter 8: Explore within NVivo

We will not have time to demonstrate all of the remaining NVivo functions – so I have created this help list for you to self-navigate the help files to learn more about visualising your data, exporting and reporting.

Visualisations: Charts, Graphs and Models
You can use charts and graphs to explore or present your NVivo project. You can use a model to map out your ideas or to explore and present the connections in your data. To find out more watch the video tutorial Visualize your project and review the help pages:

Charts
About Charts:
http://help-nv10.qsrinternational.com/desktop/concepts/about_charts.htm

Creating a chart
http://help-nv10.qsrinternational.com/desktop/procedures/create_a_chart.htm

Graphs
About graphs

Create a graph

Models
About models
http://help-nv10.qsrinternational.com/desktop/concepts/about_models.htm

Create a model
http://help-nv10.qsrinternational.com/desktop/procedures/create_a_model.htm

Add shapes and connectors
http://help-nv10.qsrinternational.com/desktop/procedures/add_shapes_and_connectors.htm

Exporting and printing
Everything that goes in can come out! All content existing in an NVivo project can be exported for use in other software programs or printed. Individual sources, node content or even lists of items can be exported or printed. Be aware that some of the content functionality will be lost outside of NVivo.

Exporting project items
http://help-nv10.qsrinternational.com/desktop/procedures/export_project_items.htm

Printing project items
http://help-nv10.qsrinternational.com/desktop/procedures/print_project_items.htm
**Reports**

As your project grows you can use reports and extracts to review and revise your progress. Reports can be created using the inbuilt templates or you can create your own report style using the report wizard.

About reports
http://help-nv10.qsrinternational.com/desktop/concepts/about_reports_and_extracts.htm

Run reports

Create reports using the wizard

**Revision tasks**

Locate where the project file has been saved.

Make a backup copy of your project to a USB.

Transcribe the audio interview with Helen

Write detail about the image file you have imported in transcript rows

What is the difference between text pointer and region pointer and how do you change this?

Import your dataset and autocode the codable fields by columns

Turn on coding stripes for multimedia files

Run a matrix query for coding by a classification such as age or gender

Develop a model to depict your emerging thematic ideas

Run a chart of the coding for a source file

Run a chart for the sources to a node