Overview – Unit 2

This unit presents an overview of suggested data management practices when working in NVivo 9 including:

- filenames and file formats
- setting default import (and export) folders from NVivo 9
- importing different types of data (text, spreadsheets, pictures, videos, audios and other NVivo 9 project files either as a whole or parts thereof)
- editing and anonymising before and after import
- logging events and keeping notes
- structuring your nodes and classifications
- data storage, backing up your data and access control
1   Editing and Anonymising

As previously mentioned, it is recommended that you do as much of the editing and formatting in word editing software before import, as the NVivo 9 editing tools are basic and do not include useful tools such as spell checking, format copying (format brush) or find and replace using regular expressions.

Nevertheless, if necessary, it is possible to do light editing and formatting in NVivo 9, using the Formatting tools on the Home ribbon.

2-1. a) Open 2000int001 located in the Internals\Text\Face-to-face_interview_transcripts\2.Formatted folder, which has not been formatted with headings for speakers and summary. Format all speaker tags with Heading2 style and the summary at the start of the interview with a Heading3 style.
   
b) Run a text search query on the term “Osyth” across all your sources.

To Edit a document either:

A. double click on its name then click on the Click to Edit link:

B. select the document, then press CTRL+E or on the Home ribbon, select Edit.

Once the document is open for editing, use the options from the Home ribbon to format your text.

You can define paragraph styles once in the File>Options>Paragraph styles tab. There, select the style you would like to modify, select the appropriate fonts and click on Apply to apply your changes (Figure 1.2).

![NVivo 9 Formatting tools](image1)

**Figure 1.1 NVivo 9 Formatting tools**

You can define paragraph styles once in the File>Options>Paragraph styles tab. There, select the style you would like to modify, select the appropriate fonts and click on Apply to apply your changes (Figure 1.2).

![Customising the paragraph styles of your internal documents and memos](image2)

**Figure 1.2 Customising the paragraph styles of your internal documents and memos**
You can set the font style for imported datasets (excel spreadsheets) from the **Application Options** menu too. Click on the **Dataset** tab, then select the appropriate fonts and click on **Apply** to apply the changes (Figure 1.3).

![Application Options](image)

**Figure 1.3 Changing the font style of importing datasets**

**Light anonymisation** is possible in NVivo 9 by either:

A. manually replacing words or phrases while in Edit mode,

B. using a very basic search and replace function on each document, i.e. it is not possible to replace across documents using the same criteria. Edit the document you would like to anonymise and click on **Home>Find** if you wish to find and **Home>Replace** if you wish to also replace it with the anonymised term or pseudonym.

![Replace Content](image)

**Figure 1.4 Single document Find and Replace Function in NVivo 9**

C. search across all your sources for a term by running a **text search query**. This will output a summary of all sources, nodes or memos and annotations that match this term. Click on **Explore>New Query>Text Search**. Type the term that you would like to find (note that you can only search for alphanumeric characters (no symbols like [,],@ or punctuation marks). Click on **Run** to run the Query.
Using the text query you can also search for broader terms by adjusting the Finding matches sliding bar, from an exact match to your search term to a similar broader term.

![Figure 1.5 Running a Text Search Query](image)

Note that you cannot directly replace from a text search query. You can however go to the linked documents and edit them individually.

Once the run is complete, NVivo 9 will output a tab with the results (Figure 1.6), in a summary view. Other result views available include the Reference view (Figure 1.7), the Text view (Figure 1.8) and the Word Tree view (Figure 1.9), all of which group your results in different ways.

![Figure 1.6 Summary view of results](image)  ![Figure 1.7 Reference view of the results](image)
2 Logging events and keeping notes

Using a project or a research journal is a good way to keep track of major issues during all stages of the research process that you or other researchers can use to reflect upon during the later stages or even after the project cycle, when considering areas for further research.

In principle, you can create a document within NVivo 9 to store your project/research journal either in the Internals or the Memos folder. It is recommended, however, that you save it as a memo, as this will help you adhere to the practice of keeping your internals for your data sources while adding any documentation or own thoughts in the memos.

2.1 How to create a project journal using memos

In the memos folder of your sources, create a new folder (right-click on Memos folder, then select New Folder or type CTRL+SHIFT+N) with the name Fieldwork Journal or Research Journal or [name] Journal replacing [name] with the type of activity you would like to record.

Create a new memo within that folder with the name _About this journal (select the directory, then click on Create>Memo). In this file, put information about this journal such as who is editing it, how often and any other remarks. Figure 2.1 shows an example. The use of underscore (_) in the beginning of the filename will ensure that the About (Figure 2.1) and the template files (Figure 2.2) will always be listed first.

Create a new memo for your first entry with the name YYYY.MM.DD-USERINITIALS-Fieldwork Journal e.g. 2011.02.14-KC-Fieldwork Journal – you are now ready to record your fieldwork observations! If you expect your journal to have a fixed structure, it might be a good idea to also create a template entry that you can copy and paste for ease of reference. An example entry of a fieldwork is shown in Figure 2.2.
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Figure 2.1 Sample “About this Journal” file

_FILEWORK JOURNAL_

**FIELDWORK JOURNAL**

<table>
<thead>
<tr>
<th>Name</th>
<th>References</th>
<th>Created On</th>
<th>Created By</th>
<th>Modified On</th>
<th>Modified By</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>YYYY.MM.DD</em> INITIALS Fieldwork Journal</td>
<td>0</td>
<td>2/14/2011 16:54</td>
<td>KC</td>
<td>2/24/2011 11:12</td>
<td>KC</td>
</tr>
</tbody>
</table>

This folder is a place for notes, research remarks, observations, thoughts or ideas during the data collection stage of the project (fieldwork notes). Use headings 5-9 to structure your data if needed (as the rest will most likely be in use already in the actual data).

These notes will constitute a chronological history of progress of your research during the project. Prior to closing out for any given day, please briefly summarize your daily progress here. Always start with a timestamp (Home>Insert>Date/Time or CTRL+SHIFT+T).

To see when this journal was last modified and by who, check the list view (above).

You can code and annotate or create links to other memos and sources as you would in your usual documents.

As this document will be seen quite long, it is best if keep the notes for each day observed separately.

**_YYYY.MM.DD-INITIALS Fieldwork Journal (template)_**

**INITIALS Fieldwork Journal for DD/MM/YYYY**

**Date Time - Location**

2/14/2011 16:53 (change this with CTRL+SHIFT+T) - Colchester, UK

**Participant(s) observed**

Mr John Smith

**Other participants present**

Ms Mary Smith

Other members of the Smith family

**Themes for observation**

**Theme 1**

Here are some observations about theme 1

**Theme 2**

Here are some observations about theme 2

**Theme 3**

Here are some observations about theme 3

**General observations**

Here are some general observations.

**Questions/clarifications for future observation**

Here are some questions and/or clarifications for future observation

**Figure 2.2 Sample Fieldwork journal entry**
Here we decided to have separate memo entries per user per day, but you might opt for a different way of structuring your journal – bear in mind that whichever method you choose you need to be consistent across all entries.

You can time-stamp your entries within a memo/document by inserting a date/time-stamp before each entry. To insert a timestamp:

- type CTRL+SHIFT+T
- from the Home ribbon>Insert>Insert Data/Time stamp

If you need to structure your entry, you can use headings – you might wish to avoid using the heading styles you have been using for autocoding to avoid confusion.

You can create more memos for other notes, such as:

- Documentation that you can import (consent form samples, interview notes, interview summaries)
- research and project notes
- communication templates (emails)
- interview schedules (if not in your externals)

3 Structuring your nodes and classification

Nodes and classifications are central to recording information, gathering elements relevant to your research and structuring them, helping you look for emerging patterns and ideas.

3.1 Nodes

A node is a collection of references from your sources (internal, external or memos) about a specific theme, topic, place or person. You can code all textual documents, audio and audio transcripts, video and video transcripts, pictures and their logs as well as datasets and memos. You cannot code external sources themselves, but you can code any notes made on them.

More details on how to code your sources in NVivo 9 should be provided in the main NVivo 9 course.

Figure 3.1 Coding using the Quick coding bar

Hint: To code some data, while in edit mode, select the relevant area, then right-click and select Code Selection>Code Selection at existing nodes (CTRL+F2) if you have already created the node or Code Selection>Code Selection at new node (CTRL+F3) if the node does not exist (Figure 3.2). You can also code using the Quick Coding Bar at the bottom of the reading pane (Figure 3.1)
Your nodes are available in the folder, along with relationships and matrices folders. NVivo 9 allows you to structure your nodes in folders in any way you see appropriate during the course of your data coding and analysis without affecting your coding. We would recommend you initially structure your nodes in three folders (Figure 3.3):

- a Free Nodes folder for nodes that you have used to code but have not related to others or analysed yet
- a Tree Nodes folder for nodes that you have related and structured and that you intend to analyse
- a Source Nodes folder, for your internal sources coded as sources

Note that NVivo 9 will by default link the coding to its coder, something useful if you are working on a project collaboratively using NVivo 9. See the relevant memo in \Memos\ExerciseAppendices in 2000-nvivo9-demo.nvp for more resources on team-working with NVivo 9.

2-3. a) Ensure that your Internals\Face-to-face_interview_transcripts\3. Coded folder is populated with the formatted copies of your 4 transcripts.

b) Create the following nodes: deaths of siblings, housework, marital status

c) Ensure that your imported internals are coded at their respective source node. Make sure that different versions of the same transcript (master, formatted, coded) are coded on the same node.

Depending on your approach to data, you might opt to begin with a structured or unstructured set of nodes, or create nodes as you go along analysing the data. To manually create a node before processing your data, navigate to the Nodes folder (Figure 3.3). Create a Free Nodes, a Tree Nodes and a Source Nodes folder if you haven’t already done so. Click on the Free Nodes folder and on the ribbon click on Create>Node or right-click in the white area then select New Node or type CTRL+SHIFT+N (Figure 3.4)².

² Hint: The New Node window will appear, asking for information about the node you would like to create. Input your node name here e.g. siblings; add a brief description if necessary. Leave the Aggregate box unchecked on this occasion (but note its existence as we will come back to it in the following paragraphs). Note the Attribute Values tab, too, which allows you to classify a node (we will refer to this later). To create a node as you are reading through your data, while in edit mode, select the area you wish to code, then select Code Selection>Code selection
It is recommended that in addition to your theme coding, you code each internal source at a separate source node either upon import (see section 3.2) or after import by right-clicking on it then selecting Code Sources > Code Sources at a New node or pressing CTRL+F6 (Figure 3.5). The name of the source node should be the same as the first column of your classification sheet, to ensure that your classification sheet will be linked to your internal sources properly. This will enable you to link your internal sources to a classification sheet (imported or created in NVivo 9) as will be discussed in section 3.2.

You should now have a few nodes in your Free Nodes folders – notice how some are family related. A topic seems to be emerging from your coding so far, so let’s group these into a group of nodes with Family as their parent node.

Move the nodes relevant to the Family topic to the Tree Node folder. Select multiple folders by holding CTRL, then drag-and-drop them to the folder (Figure 3.7). Click on the Tree Nodes folder, then create a new node with the name Family. Make sure the Aggregate box is checked this time (Figure 3.8). Notice that all nodes are on the same level – we will need to place them all under the Family node we just created. To do that, select the nodes, then drag and drop them on the Family (parent) node. This will create a hierarchy or tree structure with Family as the parent node and the rest of the nodes as its children (Figure 3.6).

To create a new child node, right-click on the node, then select Create Node. This will create a child node with the current one as the parent.
If you have coded some text under these nodes, you will notice that the number of references and sources of the family parent node is the sum of its children nodes. If this is not the case, it's probably because you haven't enabled aggregate when creating the node, which gathers all content in the parent node. To do that, right-click on the node, then select **Aggregate** (Figure 3.9).

If you are working with structured documents, such as interviews, where participants are all asked the same set of questions, it might be useful to **autocode certain excerpts, by formatting them using consistent paragraph styles**. To autocode a document, begin by assigning a heading style to each word or phrase that you would like to code. These should be the same across different files (if not, a different node will be created). Be careful not to use headings already used elsewhere for other purposes. It is recommended that you format these excerpts before import to NVivo 9. It is also possible to do it within NVivo 9, albeit a bit more tedious (see section 1 for more information on formatting within NVivo 9).
2.6. a) Autocode your internal sources with Heading 3 style in your Internals\Text\Face-to-face_interview_transcripts\3.Coded folder under a new source node with the name Summary.

b) You can also import nodes or already coded documents from other NVivo projects, by importing specific sources or nodes from another NVivo 9 project file. Import the coded internal source files in the 2000-NVIVO9-demo_raw-data\2000-NVIVO9-demo.nvp file to your Internals\Text\Face-to-face_interview_transcripts\3.Coded folder in the appropriate locations.

To autocode a file, right-click on the file you want to code and select Autocode. In the Autocode window that appears, make sure the following are selected: Code by paragraph style, that the selected paragraph styles box includes the heading/style you have assigned to the phrases/words for coding, and that the code at nodes section is set as appropriate to the type of node you would like to create (Figure 3.10). Click on OK to apply. If you check at the bottom of your NVivo 9 window, next to the user name/initials, the number of nodes and references should now be updated.

![Autocode window](image)

Figure 3.10 Autocoding a document

3.2 Classifications

To record descriptive information about your nodes or sources, you can create different types of classifications.

A source classification records information about the type of source in your project. NVivo 9 offers some predefined classifications about interview types (interview and focus groups) and also about 45 classification types of bibliographical sources, such as book, journal article, web, blog etc.

A node classification records demographic or descriptive information about nodes that are either persons, organisations, communities or other cases in your project. For example, you may classify a node as a person and define attributes for her age and occupation.

Similarly to nodes, you have the option of manually creating your classifications or automatically importing them from another NVivo 9 project, classification sheet or bibliography list. You can also create additional node or source classifications other than the predefined list or modify their attributes.
NVivo 9 also allows you to **automatically create classifications** by importing them into your project for both source and node classifications in the following ways:

A. from an **external classification sheet** (.xls)
B. from **another NVivo project file**
C. (for **source classifications** other than interview and focus group only) from a **bibliography list** in .ris, endnote .xml, .txt formats

2.7. Create a source classification for *Book*. Define an additional attribute for *status* with values *read*, *to read*, *to find*.3

2.8. **Hint**: To **manually create a classification** (source or node), on the ribbon, click on **Create>Classifications>Source Classification** to create a source classifications or **Create>Classifications>Node Classification** to create a node classification (Figure 3.11). Alternatively, navigate to the **Classifications** folder, select either the source or the node classifications folder and **right-click in the white area**. Select **New Classification** or **type CTRL+SHIFT+N**.

On the **New Classification window**, you have the option of either creating your own classification providing a name and appropriate description, or adding one or more predefined classifications to the project. You can add more than one classifications at once, by checking the respective boxes. Predefined classifications come with a predefined list of attributes. You might also need to add new attributes to the predefined classifications to account for information not already included.

To create a new attribute, right-click on the classification you would like to add it to, and select **New Attribute**. In the **General** tab, provide a name and a description and the type of values that can be allowed (text, date, number). In the **Values** tab, select the attribute values that can be assigned. More can be added later directly from the classification sheet, but you might want to try to define the default value for each attribute to save you some time.
To automatically import a classification from an external classification sheet, on the ribbon select External Data>Import>Classification sheets (Figure 3.13). Alternatively, select the classification folder (e.g. node classifications), right-click in the white area, then click on Import Classification Sheets... .

![Import Classification sheets Wizard](image)

Figure 3.13 Importing a classification sheet (ribbon)

This will start the Import classification sheets Wizard. Select the file to import, by locating it on your local drive, then click on next (Figure 3.14). The next step asks you to specify how to classify the imported sheet. Select either source or node classification from the drop-down box, then make sure the following boxes are checked as appropriate in your case (Figure 3.15):

- create new attributes, if they do not exist
- update the classification of existing sources or nodes
- replace the attribute values of existing sources or nodes that appear in the file

Step 3 of the wizard asks you to specify how sources are represented in this file (Figure 3.16). This is related to the first column of your sheet and asks whether you have included the names of the sources (prompting you to select their location – external for source classifications or nodes for node classifications), the hierarchical names (of the form `\Exterals\Name` or `\Nodes\Name`), or their nicknames (for node classifications only).

In the last step specifies how dates, times and numbers should be imported, as in Figure 3.17.
To import a classification from another NVivo 9 project file, you will need to import the particular classifications from it using the Import Project wizard – see section 1.2.2 for more information. From the list of objects to import, select Source or Node classifications, attributes and attribute values as appropriate.

Although NVivo 9 includes a default source classification for interviews and focus groups, we recommend that you use the node classification instead to classify information about the interview, interviewer and interviewee. The reason is that source classifications by default will be linked to your external sources, whereas with node classifications you can link the classification sheet to your source nodes.

If you have a database or list of external sources in a bibliography list format like endnote .xml, .txt or .ris, you can use it to automatically import source classifications for your externals. When you do this, NVivo 9 can automatically create the bibliographical entries as externals, add the source classifications, and classify externals at the appropriate classification type.

To import a bibliography list, on the ribbon, click on External data>Import>Bibliographical data, then select your bibliography list file.
4 Data storage and access control

4.1 Data storage and backups

All internal sources, memos and objects that will be created in NVivo 9 during analysis (including, but not limited to: nodes, classifications, annotations, links, relationships and sets) are stored in a single NVivo 9 project file with an .nvp extension. This file should be stored securely on a PC or on a (university) server. There is virtually no limit to the objects or sources you can create in NVivo 9; bear in mind, however, that how quickly NVivo 9 will handle the queries and other tasks will depend on how close your system’s specifications are to NVivo 9’s system requirements (see the relevant memos in the \Memos\Exercise Appendices folder in 2000-nvivo9-demo.nvp).

Note that any external sources will not be stored in the NVivo 9 project file, so you will need to consider any data storage issues.

Set the NVivo 9 save reminder to appear every 10 minutes (instead of the default 15 minutes).

NVivo 9 is by default set up to prompt you to save the project file every 15 minutes. You can customise how often you would like this prompt to appear by clicking on File>Options and select the Notifications tab. It is recommended that this is set to 15 minutes or less.

You should make regular backups of the NVivo 9 project file, in case of data loss or in the case your project file gets corrupted. It is highly recommended that you make a copy of your NVivo 9 project file at the end of each working day.

Make a copy of your current NVivo9 project file in your 2000-NVIVO9-demo directory with the name 2000-NVIVO9-demo_YYYMMDD.nvp where YYYMMDD is today’s date.

To do this, click on File>Manage>Copy Project… NVivo 9 will then ask you where you would like to save the copy – by default this will be the Default project location path you set in section 1.1.5.7. The file naming conventions discussed in section 4.7 of unit 1 are important here too, so that you do not lose track of the different copies – it is suggested that you give your copies a meaningful name of the format YYYYMMDD_filename.nvp such as 20110325_2000-nvivo-demo.nvp.

You should also make sure that all master versions of all data files (e.g. transcripts or spreadsheets) as well as your NVivo 9 project files, are stored on multiple locations (such as a PC, a university server which is usually backed up automatically or external password-protected hard drives).
It is recommended that you organise all external files of an NVivo 9 project (as well as any internals stored outside NVivo and outputs) in a folder together with the NVivo 9 project file, which will make storage and backup easier. Figure 4.2 shows the structure we followed for the demo project.

![Figure 4.2 Example folder structure of sources, outputs and NVivo 9 project file](image)

Regardless of your operating system, you should be able to set automatic daily backups for your NVivo 9 project file and data folders – that will ensure that your data is backed up at the end of the working day. More information on how to set automatic backup tasks should be available in your operating system’s help pages. Some instructions on how to do this are included in the relevant memos in the \Memos\Exercise Appendices folder in 2000-nvivo9-demo.nvp.

### 4.2 Access controls

Regardless of whether you are running a single-user or server-based NVivo 9 project files, you can password-protect your NVivo 9 project file and set read/write (full permissions) or read-only access to the material included in your NVivo 9 project file.

#### a) Try password protecting for read/write and read only access your project file.

Make a note of the passwords you use in a safe place. If you experience any problems, or forget your passwords, you can always revert back to your backup copy of Activity 2-19. Try logging in with different permissions to see what each access allows to you do in terms of editing, creating and exporting project sources.

#### b) Remove the password protection from your NVivo 9 project file.

To set a read/write or a read-only password, click on File>Info>Project Properties then click on the Passwords tab. Set your passwords and click on Apply.

![Figure 4.3 Password protecting your NVivo 9 project file](image)
If you exit your file and open it again, NVivo 9 will prompt you with a window to enter your password (Figure 4.4). Any password hints will be displayed to everyone so make sure people cannot guess the password using the hints. Note that you cannot password protect individual folders or objects within an NVivo 9 project, which will mean effectively that all users with read/write access will have full permissions to all the project and that read-only users will be able to read (but not edit) all sources, memos and notes in your file. Access controls might not be a crucial issue for smaller projects, but are quite important in larger collaborative projects and for any sensitive data. In these cases it is recommended that data that need to handled securely (e.g. personal data, real names) are not included in the NVivo 9 project file.

![Password Required](image)

**Figure 4.4 Accessing a password protected file**

**Summary**

In this unit we have presented an overview of suggested data management practices when working in NVivo 9, including:

- filenames and file formats
- setting default import (and export) folders from NVivo 9
- importing different types of data (text, spreadsheets, pictures, videos, audios and other NVivo 9 project files either as a whole or parts thereof)
- editing and anonymising before and after import
- logging events and keeping notes
- structuring your nodes and classifications
- data storage, backing up your data and access control

**NEXT ➔ UNIT 3 : Managing your data at the end of your project**

The next unit will deal with issues you need to consider at the post-analysis stage of your research, when you are ready to export your data and documentation from NVivo 9 for archiving or to make them available to other researchers for reuse (or even for you to reuse at a later date). We will present some recommendations on the following issues:

- exporting data and documentation for archiving including advice on preservation-friendly formats and exporting contextual information about your data created within the NVivo 9 project file.
- managing your bibliographical data and resources created or imported in NVivo 9 and advice on exporting them for use with reference management software.

Available from MANTRA-NVIVO-exercise-Unit3.doc
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