NVIVO

NVIVO10

GETTING STARTED

This guide will get you up and running with NVivo. It provides steps for installing the software and starting a new project, and gives an introduction to the NVivo workspace and features.

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How to use this guide

This guide will help you to get up and running with NVivo. It provides step-by-step procedures for fundamental tasks, and suggests ideas and techniques to help you move forward with your project.

Hints, tips and techniques are displayed in these panels.

If you want to share your own tips and techniques — join us on the QSR Forum

For more information about working with NVivo refer to:

- NVivo Help—click the **File** tab, then click **Help** and then click **NVivo Help**
- The QSR website (www.qsrinternational.com)—access video tutorials, the QSR forum, FAQs, training and support
- The NVivo User Group on LinkedIn and follow QSR International on Facebook

NVivo and qualitative research

Many qualitative researchers are interested in evaluating, interpreting and explaining social phenomena. They analyze unstructured or semi-structured data like interviews, surveys, field notes, web pages and journal articles—and they work in a range of sectors; from social science and education to healthcare and business.

What methodologies does NVivo support?

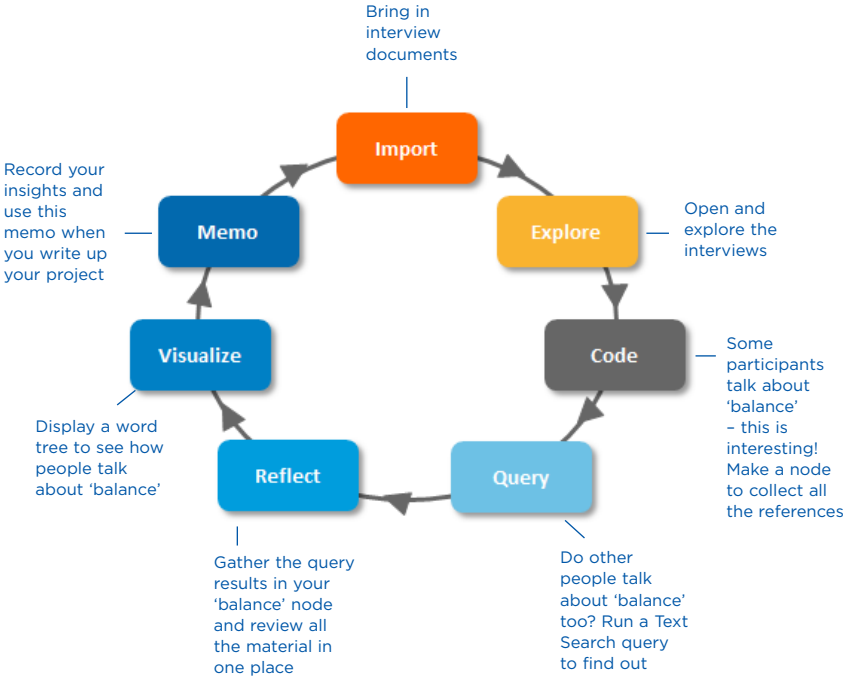
Researchers usually adopt a qualitative methodology to suit their research question. For example, a social scientist wanting to develop new concepts or hypotheses may take a 'grounded theory' approach. A health researcher looking for ways to improve policy or program design might use 'evaluation methods'. NVivo doesn't favour a particular methodology—it's designed to facilitate common qualitative techniques for organizing, analyzing and sharing data—no matter what method you use.

Qualitative vs Quantitative

Qualitative inquiry tends to focus on questions of 'how' and 'why' rather than the more quantitative perspective of 'how many' or 'how often'. While NVivo's main focus in on qualitative analysis, it does provide support for researchers who work with mixed methods. For example, you can analyze the open-ended questions in a survey and make comparisons based on demographic data—and you can exchange this data with applications like Microsoft Excel and IBM SPSS Statistics.

How do I approach my research project?

There is no agreed 'industry standard' or prescribed process for approaching a qualitative project but there are some recognized strategies and steps you can take—you'll find some suggestions as you work through this guide. It can help to understand that qualitative research is an iterative process—for example, this picture shows a path you might take when exploring a particular theme:



Remember that NVivo can help you to manage, explore and find patterns in your data but it cannot replace your analytical expertise.

NVivo key terms

As you work through this guide you'll be introduced to a number of key concepts but here are some basic terms to get you started:

- **Sources** are your research materials including documents, PDFs, datasets, audio, video, pictures, memos and framework matrices.
- **Coding** is the process of gathering material by topic, theme or case. For example, selecting a paragraph about water quality and coding it at the node 'water quality'.
- **Nodes** are containers for your coding—they let you gather related material in one place so that you can look for emerging patterns and ideas.
- **Source classifications** let you record information about your sources—for example, bibliographical data.
- **Node classifications** allow to you record information about people, places or other cases—for example, demographic data about people.

Explore the sample project

If you prefer 'hands on' learning, feel free to explore and work with the NVivo sample project—Environmental Change Down East. This is a 'real-world' project that illustrates the main features of the product. Looking at how the sample project is organized may give you ideas about approaching your own project. You can also use the sample data to experiment with queries, visualizations and other analysis tools.

You can access the sample project from the **My Recent Projects** list on the NVivo Welcome screen.

Install and activate NVivo

Before installing, make sure that your computer meets the hardware and software requirements:

Minimum requirements

NVivo supports the following minimum requirements:

- 1.2 GHz Pentium III-compatible processor (32-bit) or 1.4 GHz Pentium 4-compatible processor (64-bit)
- 1 GB RAM or more
- 1024 x 768 screen resolution
- Microsoft Windows XP SP2 or later
- Approximately 2 GB of available hard-disk space (additional hard-disk space may be required for NVivo projects)

Recommended requirements

The following system requirements are recommended for optimum performance:

- 2.0 GHz Pentium 4-compatible processor or faster
- 2 GB RAM or more
- 1280 x 1024 screen resolution or higher
- Microsoft Windows XP SP2 or later, or Microsoft Windows Vista SP1 or later, or Microsoft Windows 7
- Approximately 2 GB of available hard-disk space (additional hard-disk space may be required for NVivo projects)
- Internet Explorer 7 or later (required for NCapture—an optional browser extension that allows you to gather material from the web)
- Internet connection

Install NVivo

You must have administrator permissions for the computer on which you are installing the software.

If you are running a 64-bit version of Windows 7, you will have the option of installing a 32-bit or 64-bit version of NVivo 10. You should install the 32-bit version of NVivo if you want to work with .mov and .qt video files.

To install NVivo:

1. Locate and double-click the NVivo file that you downloaded—the installation process starts automatically.

   Note: If you have the NVivo 10 DVD, insert it into the DVD drive— if the DVD menu does not display automatically, double-click the file (NV10Menu.exe).

2. Follow the prompts to:
   - Install any prerequisite components. You may be asked to restart your machine—on restart the installation will continue automatically.
   - Accept the NVivo license agreement.
   - Confirm the location of NVivo program files and choose to include an NVivo icon on your desktop.
   - (Optional) Install NCapture—this is a browser extension that allows you to gather material from the web.
   - Accept the NCapture license agreement.
3. Click **Install** and the installation confirmation is displayed.
4. Click **Finish**.

Note: If you work with audio and video files, you may need to install additional codecs—for more information, refer to the FAQs area of the QSR website (www.qsrinternational.com).

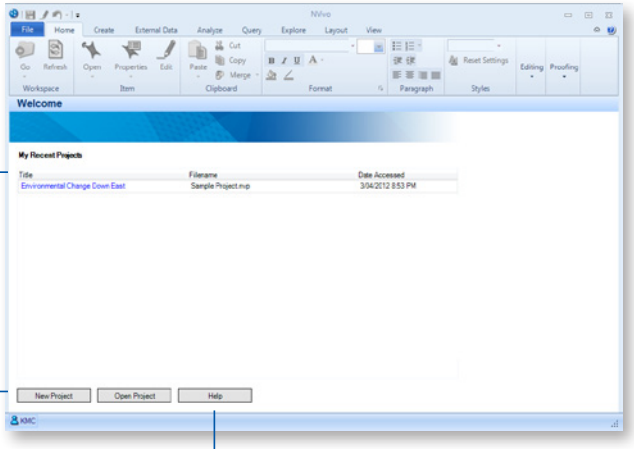
Start NVivo and activate your license

You need to activate your NVivo license—this is a simple and secure process that ensures valid licenses are used to operate the software.

To start NVivo and activate your license:

1. Double-click the QSR NVivo 10 icon on your desktop.
2. In the **Welcome to NVivo 10** dialog box, choose to trial the software or enter your license key and click **OK**. You can find the license key on your NVivo DVD case or—if you downloaded the product—in the email communication from QSR.

3. In the **License Activation** dialog box, enter your details and click **Activate**—if you are connected to the Internet, you can activate immediately.
4. In the **User Profile** dialog box, enter the initials you want to use to identify your work in NVivo projects. This is especially useful if you are working with other team members on standalone projects—refer to the NVivo Help for more information about team work in standalone projects.
5. (Optional) Clear the check box if you do not want to participate in the Customer Experience Improvement program—click the link to find out more about the program.
6. Click **OK**. The **NVivo Welcome screen** is displayed:



Create a new project

You can create a new standalone project (saved as a .nvp file) on your computer or a network drive.

If your organization has purchased NVivo Server, and you have appropriate server user permissions, you can create a new server project—refer to the NVivo Help for more information.

1. On the NVivo Welcome screen, click **New Project**. The **New Project** dialog box opens.
2. Enter a name for this project (and add a description if you want to).
3. Click the **Browse** button and in the **Save as type** list, make sure NVivo Projects (*.nvp) is selected—you can change the default file name and location if you want to.
4. Click **Save**, and then click **OK**.

Open a project

You can open a standalone project saved on your computer or a network drive, or (if you have access to an NVivo Server) you can open a server project.

1. Click the **File** tab, and then click **Open**.

   The **Open Project** dialog box opens.

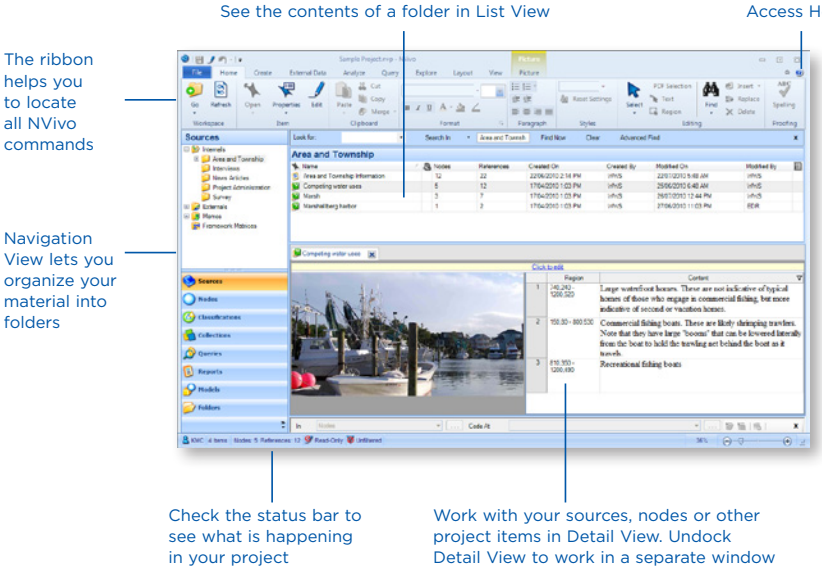
2. Select **NVivo Projects (*.nvp)** from the **File** or **Project type** list. If you are working with a server project, select **NVivo Server Projects** and then select the server from the **Connection name** box, then select the project you want to open.

3. Click **Open**.

Note: If you are working with server projects you may need to setup a server connection and check that you are permitted to access server projects—refer to the NVivo Help for more details.

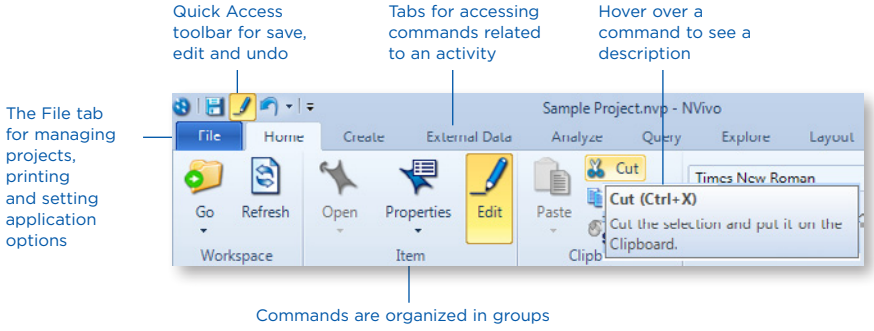
The NVivo Workspace

The NVivo workspace provides easy access to all your project material.



Working with the ribbon

The ribbon is designed to help you locate commands. Commands are organized into logical groups, collected together under tabs. Each tab relates to a type of activity, such as creating new project items or analyzing your source materials.

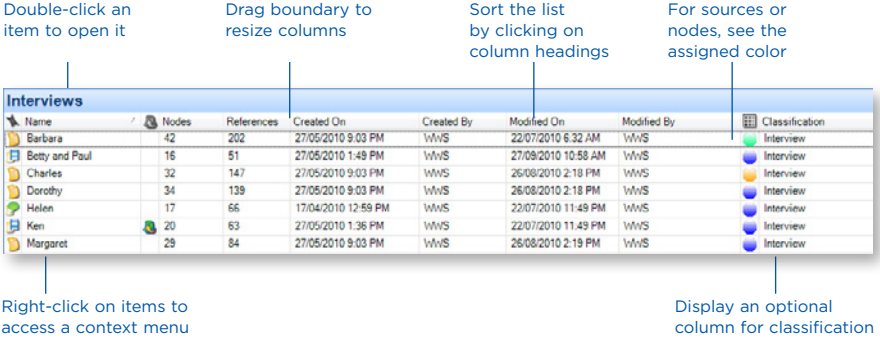


Navigation View

Navigation View helps you to organize and easily access all of the items in NVivo:

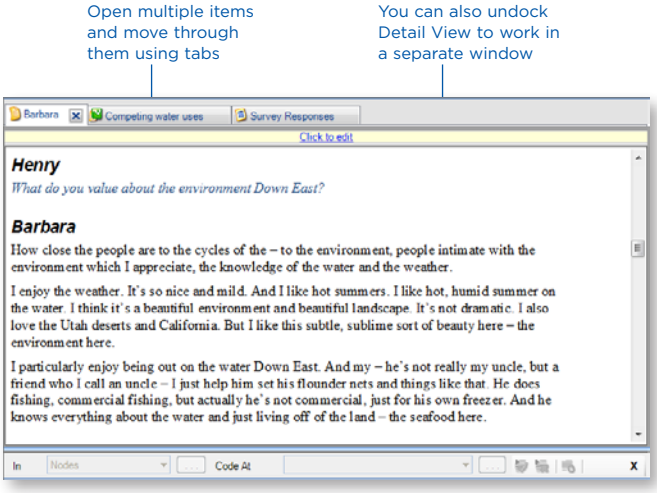
List View

When you select a folder in Navigation View, its contents are displayed in List View. In this view, you can add new items, open existing items and edit item properties. This List View displays the contents of a folder:



Detail View

When you open an item from List View it is displayed in Detail View. This is an example of an interview opened in Detail View:



Customize your workspace

You can arrange the workspace to suit the way you like to work. For example, you can minimize the ribbon or use the options on the **View** tab to:

- Hide Navigation View to make more room (ALT+F1).
- Display List View and Detail View side-by-side, this is particularly useful for drag and drop coding (see *Code at existing nodes* later in this guide).
- Undock Detail View into a separate window.

Refer to the NVivo Help for detailed instructions.

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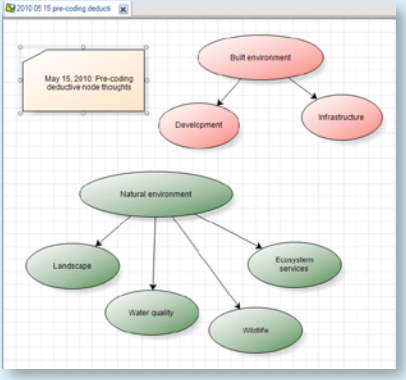
Early steps

Before you import your source material or get started with coding, you could take some time to:

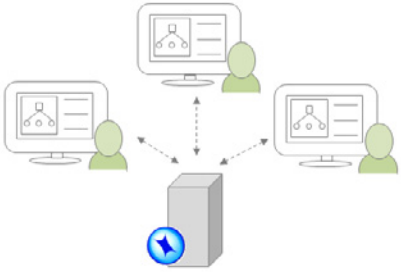
- **Prepare for auto coding**—if you have consistently structured sources like focus groups or interviews (that ask the same set of questions), you can apply paragraph styles to faciliate auto coding in NVivo. Refer to the NVivo Help for more information about how to do this.
- **Create a memo (journal)** and state your research questions and record your goals. Why are you doing the project? What is it about? What do you expect to find and why? What biases do you bring to the project? Update the journal regularly to stay focused and to show the evolution of your project.
- **Make a model** to show the relationships or patterns you expect to find in your data based on prior experience or preliminary reading—copy and paste it into your journal.



Sharing projects in a team

Many projects involve multiple researchers working together—NVivo provides two ways to approach collaboration:

- Share projects using NVivo Server—everyone in your team can work on the same project at the same time. They can code, annotate and link source content and have immediate access to the changes made by other team members.



Or work in copies of a standalone project and merge them into a master project at appropriate intervals—making use of user profiles to track changes. You can find out more about this in the NVivo Help.

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Preparing for teamwork

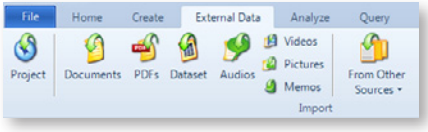
Whether you work with NVivo Server or collaborate in a standalone project you might want to consider the following:

- Appoint a team leader who will keep the team on track and make final coding decisions.
- Have regular team meetings to discuss interpretations, address issues and assign tasks—record the outcomes in a memo.
- Have each team member keep a memo to record their progress, including any hunches, suggestions or questions—you could also do this in a single 'teamwork journal'.
- Early on, have multiple team members code the same collection of sources, then compare coding (using coding stripes or a coding comparison query)—this can help ensure a consistent approach.
- To start with, make a node hierarchy for each team member. After team discussion, you can refine, merge and reorganize.
- Aim for a clear node structure and use descriptions (in node properties) to make the purpose of a node clear for all team members.

Bring your material into NVivo

Sources are the materials that you want to analyze in NVivo—they can include articles, interviews, survey results, audio/video recordings, pictures, web pages or social media content.

To import sources, use the options on the **External Data** tab:

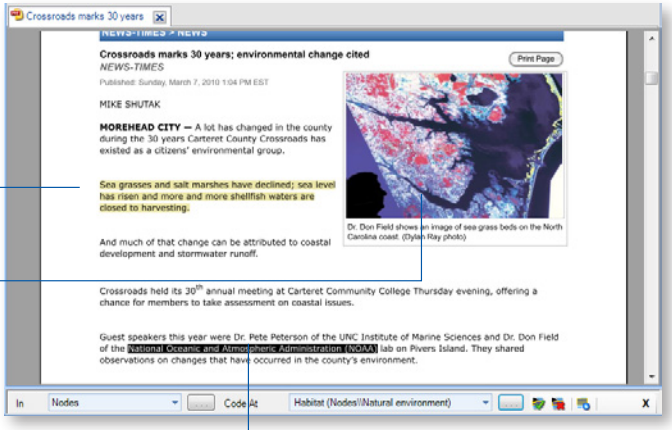


Interviews, articles and other documents

You can import interviews, journal articles, reports and any other Word documents or PDFs:

Select text, such as this paragraph, and code the text at a node

In PDFs you can also select regions of the page, like this image, and code the region at a node



Add annotations or 'see also' links to selected text (or to selected regions of the page)

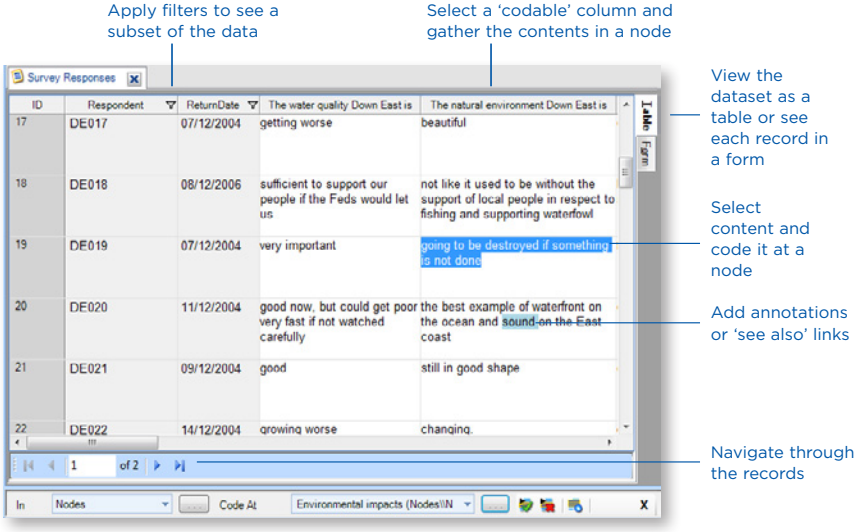
Survey results and other datasets

A dataset contains structured data arranged in records (rows) and fields (columns)—for example, a dataset could contain the responses to a survey. You can create a new dataset source in NVivo, by importing data from:

- An Excel spreadsheet (.xls or .xlsx)
- A text file containing comma or tab-separated values (.txt)

- An NCapture file containing social media data (for example, data from Facebook, Twitter or LinkedIn)
- A database table—for example, a Microsoft Access database table

You cannot edit the contents of a dataset once it is imported. Before importing spreadsheets, text files or database tables, you should prepare your data and consider how you want to use it in NVivo—refer to the NVivo Help for detailed instructions.



You can use auto coding to create nodes for the columns and rows in your dataset—refer to the NVivo Help for detailed instructions.

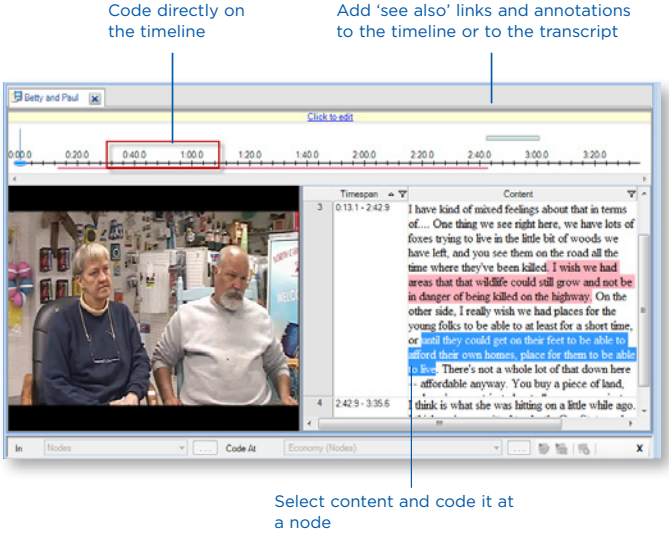
Audio, video and pictures

You can import audio, video and pictures in a wide range of formats—refer to the NVivo Help for a detailed list.

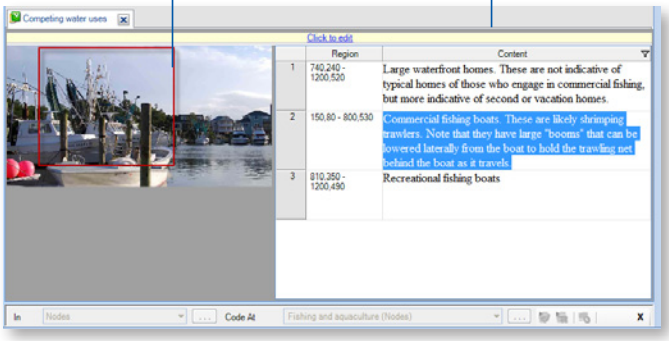
Before you import audio or video material:

- Consider any editing requirements. For example, if you have hours of video footage, you may want to edit it down to a manageable size—you cannot do this editing in NVivo. If you have many large videos, you can choose to store them outside the project so that software performance is not compromised.
- Think about whether you will require transcripts for your audio and video sources. They can be imported from Microsoft Word or you can transcribe the media directly in NVivo. When it's time to code the material, you can code directly in an audio or video, or you can code the transcript.

You can play and analyze an audio or video source in Detail View:

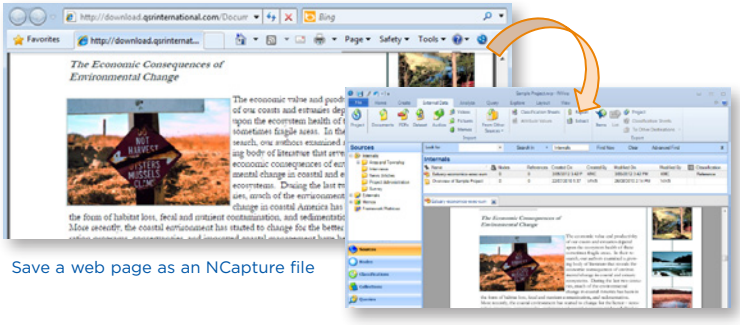


You can also work with picture sources in Detail View:



Web pages and social media content

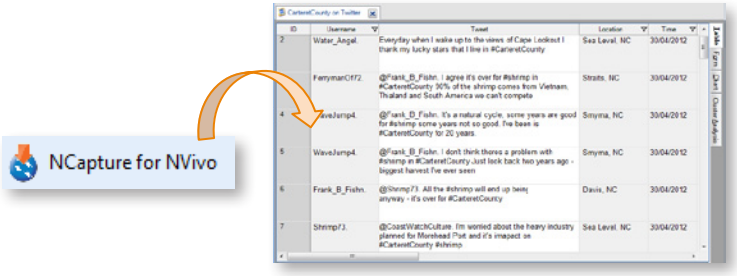
NVivo lets you capture web pages, PDFs and social media data—for example, from Facebook, LinkedIn or Twitter. Using the browser extension NCapture, you can easily capture (and code) web pages and bring them into your project as PDF sources.



Save a web page as an NCapture file

Import it as a PDF source

You can also capture social media data and import it as a PDF or dataset source—for example, you could save Twitter data as an NCapture file. Having the social media content in a dataset means you can sort, filter and auto code (for example, gather Tweets by location)



For detailed instructions about installing and using NCapture, refer to the NVivo Help.

Notes from Evernote

If you use Evernote, you can export your notes (to a .enex file) and bring them into NVivo—on the **External data** tab, in the **Import** group, click **From Other Sources**, and then click **From Evernote**. Refer to the NVivo Help for more information.

Bibliographical data

If you have conducted a literature review using a bibliographical application like EndNote, Zotero or RefWorks—you can export the data from the application as an EndNote XML file or RIS file and import it into NVivo. The records are added as sources in your project and the bibliographical details are stored as 'source classifications' and attribute values.

Source classifications

You can also record bibliographical information by 'classifying' your sources in NVivo—when you are ready to write up your findings, you can export this data to your reference management tool and use its features to insert citations and format the references. Refer to the NVivo Help for more information about classifying your sources and working with bibliographical data.

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Literature reviews in NVivo – keeping everything in one place

Using NVivo for your literature review can be a great way to learn the software and get started with a project. You can bring in your journal articles and:

- Organize them in a source folder called 'Literature'.
- Code each article to gather material by theme—you might also want to make nodes for 'statistics', 'good quotes' and 'definitions'.
- Annotate as you read, marking content for follow-up or futher exploration.
- Use memos to describe the key themes and critique the articles.
- Use source classifications to assign attributes like publication date and author (you can also import these from reference management software like Endnote). Then use queries to find everything an author wrote about a theme or everything that was written before a certain date.
- Use a Word Frequency query to see what common terms are being used.
- Use a Matrix Coding query to find gaps in the literature—what themes are already heavily discussed and which provide scope for further exploration?

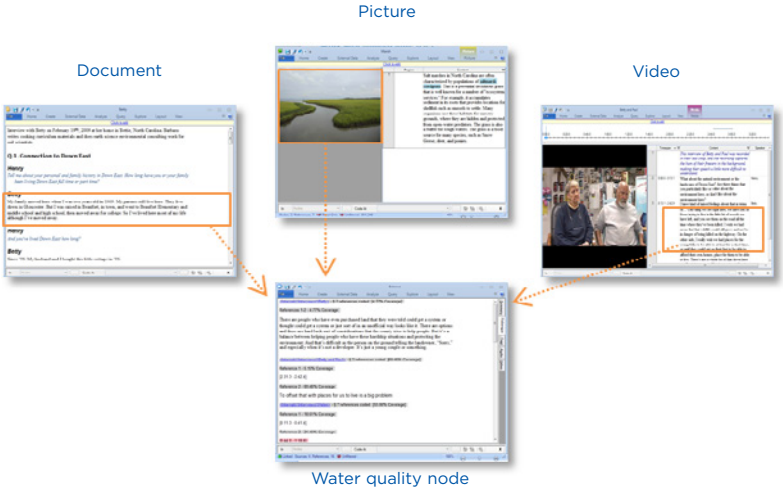
Create externals for the things you can't import

Externals are 'proxies' for the material you cannot import into NVivo such as books, or physical artifacts. You can create an external source (that looks like a document) and summarize the content of the item—for example, you might enter key points from a PowerPoint presentation or summarize the chapters in a book.

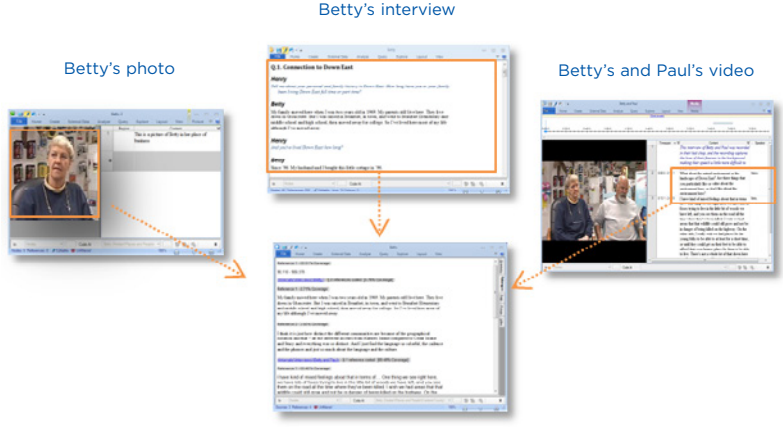
You can then code or annotate this content. If the external represents a file on your computer, you can create a link to the file and easily open it from within NVivo.

Coding and making nodes

You can 'code' your sources to gather material about particular themes and topics— for example, you could create the node *water quality* and as you explore your sources (documents, PDFs, datasets, audio, video or pictures) you could code all references to *water quality* at the node:



You can also code to gather material about a person, place or other case:



Approaches to coding

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The way you approach coding depends on your methodology and research design but here are some ideas to get started:

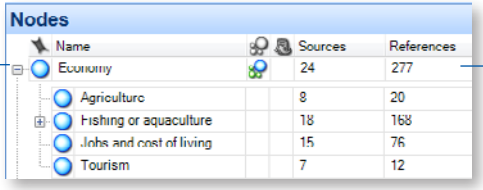
- Start with 'broad-brush' coding to organize the material into broad topic areas (you can use Text Search queries to help with this)—then explore the node for each topic and do more detailed coding. For example, gather all the content about *water quality* and then explore the node looking for interesting perceptions, contradictions or assumptions.
- Or, you could get straight into detailed coding (making nodes as you need them) and then, later on, combine and group your nodes into related categories.
- As you reflect on a piece of content, think about these different types of coding:
  - Topic coding—What is the topic being discussed? For example, *water quality, real estate development, tourism* and so on.
  - Analytical coding—What is this content really about? Why is it interesting? Consider the meaning in context and express new ideas about the data. For example, *ideals vs reality, tension between developers and residents.*
  - Descriptive or 'case' coding—Who is speaking? What place, organization or other entity is being observed?

Add nodes before you start coding

If you already know what themes you are looking for (based on your literature review, for example)—you can create and organize the nodes before you start coding:

1. In the **Navigation View**, click **Nodes**.
2. On the **Create** tab, in the **Nodes** group, click **Node**.
   The **New Node** dialog box opens.
3. Enter a name and description.
4. Click **OK** and the new node is added to List View.
5. You can add 'child' nodes (sub-nodes) under the new node and create a node hierarchy:

The parent node has 'aggregation' turned on. Any content coded at the child nodes is rolled-up into the parent node—you can display a column to see this



As you code at the node, you can see the number of sources and references increase

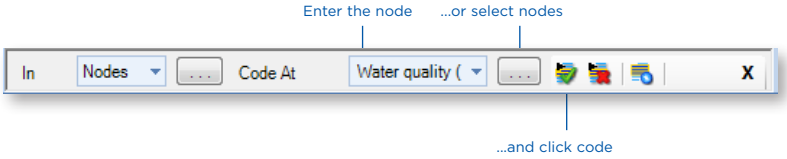
Code at existing nodes

As you explore your sources, you can code at the nodes you have created:

1. Display your nodes in List View and open a source in Detail View. You may want to display Detail View on the right—on the **View** tab, in the **Workspace** group, click **Detail View**, and then click **Right**.
2. Select the content that you want to code. The content you can select depends on the type of source you are working with. Refer to the NVivo Help for information about coding in different source types.
3. Drag the selected content to the node.

   You can also code by:

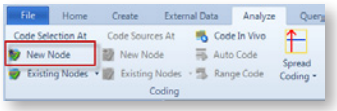
   - Clicking options on the ribbon—on the **Analyze** tab, in the **Coding** group, click **Existing Nodes**.
   - Using keyboard shortcuts—refer to the NVivo Help for more information about NVivo keyboard shortcuts.
   - Using the Quick Coding bar (at the bottom of Detail View) to code content at existing nodes:



Create nodes as you code

As you explore your sources you can create and 'code at' new nodes:

1. Open a source in Detail View.
2. Select the content that you want to code. The content you can select depends on the type of source you are working with. Refer to the NVivo Help for information about coding in different source types.
3. In the **Analyze** tab, in the **Coding** group, under **Code Selection At**, click **New Node**.



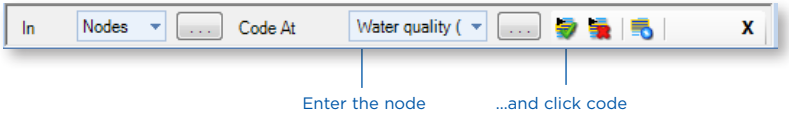
The **New Node** dialog box opens.

4. If you want to change the folder location for the node, click the **Select** button.

5. Enter a name and description.
6. Click **OK**.

   When you create a new node it is added to the selected location in the node hierarchy—you can reorganize and work with the node in List View.

   You can also use the Quick Coding bar (at the bottom of Detail View) to code selected content at new nodes:



Make a node from a selected word (In Vivo code)

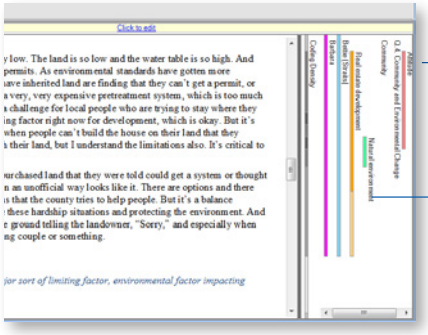
You can also use 'in vivo' coding to create and code at new nodes—the selected word or phrase is used to name the node and is (at the same time) coded at the node. This is useful if you want your nodes to reflect the language of the people you have interviewed.

1. Select the text content you want to code.
2. On the **Analyze** tab, in the **Coding** group, click **Code In Vivo** (or click Code In Vivo on the Quick Coding bar).

See what you have coded

To see what has been coded in a source, you can:

- Turn on coding highlight—on the **View** tab in the **Coding** group, click Highlight, and then select a **highlight** option.
- Turn on coding stripes—on the **View** tab in the **Coding** group, click **Coding Stripes**, and then select an option. Coding stripes are displayed on the right of the source:



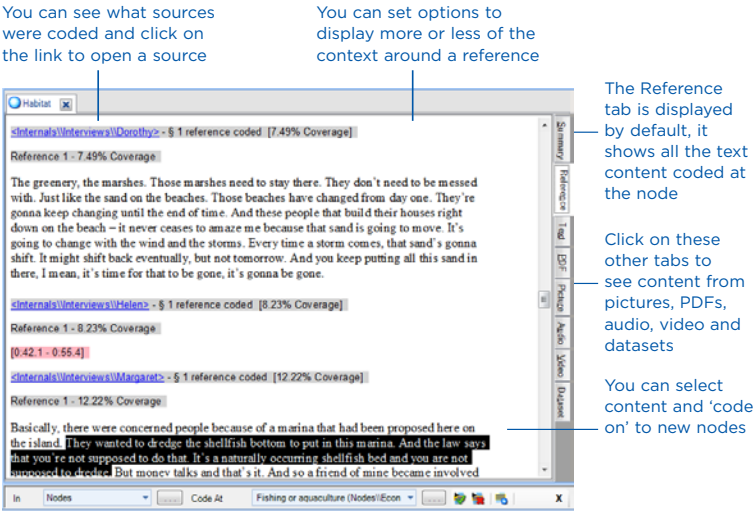
You can right-click on a stripe to open a node

Coding stripes can reflect the colors you have assigned to nodes—refer to the NVivo Help for more information about using color in your project

Open a node to explore the references

You can open a node to see related references gathered in one place:

1. In Navigation View, click **Nodes**.
2. In List View, double-click the node you want to explore. The node is opened in Detail View:



Auto code structured sources

If you have structured data like interviews, survey responses or social media data—you can take advantage of NVivo's auto coding features. For example, you could auto code:

- A collection of interview documents where participants are all asked the same set of questions. You can auto code these documents if you have used consistent paragraph styles.
- A survey dataset to gather all the answers to each question.
- A Facebook dataset to gather posts by conversation or username.
- A Twitter dataset to gather Tweets by hashtag.

Refer to the NVivo Help for more detailed information about auto coding.

Quick code with Text Search queries

You can use NVivo queries to automatically code your sources based on the words or phrases they contain. This can be a useful starting point for reviewing your data. For example, you could run a Text Search query on the word *fish* and automatically code all occurrences. You can search for exact words, phrases or similar concepts. For example, search for *fish* and find *trout, mullet,* and *crab*.

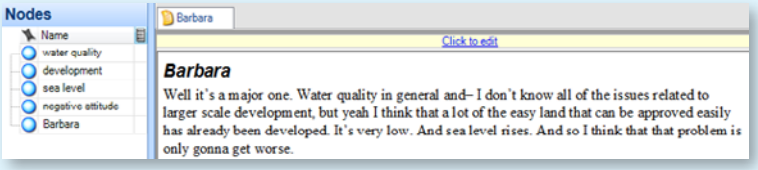
To create a Text Search query—on the **Query** tab, in the **Create** group, click **Text Search**. Refer to the NVivo Help for more information about the options you can choose.

Note: You can also run a Word Frequency query to see the words that occur most often—for example, if the word *housing* appears frequently you can save the context around each occurrence in a node for further investigation.

ideas

Coding tips

- Remember that you can (and should) code content at multiple nodes. For example, you could code Barbara's comment at all of the nodes shown on the left:



- If you code all your interviews like this, then you can use queries to gather your material in different combinations. For example, show me:
    - All the content coded at *water quality and development*
    - Negative attitudes about *water quality*
    - What women said about *water quality*
- If you find an interesting phrase or theme in one interview, you can use a Text Search query to see if it appears in the other interviews—and automatically code the content.
- After exploring and coding a source, take some time to reflect on what you have discovered. Run a report to see which nodes have been used most often—how do these nodes relate to each other? Make a model to explore the relationships and record your thoughts in a memo.
- You may not need to exhaustively code all your material. For example, if after working through twelve interviews you are not finding any new themes or ideas—you may have reached 'saturation'. You could use Text Search queries to do some broad-brush coding in subsequent interviews.

Memos, annotations and links

Memos are an integral part of the research process—and can be a great starting point when you come to writing-up your project. Memos are like documents and they can be linked to sources or nodes.

Annotations are like scribbled notes in the margin—they let you record comments, reminders or observations about specific content in a source or node.

Use 'see also' links to draw connections between items in your project. For example, you can use 'see also' links to point out contradictions, follow evidence or show a sequence of events.

Creating a linked memo

To create a memo that is linked to a source or node:

1. Select the source or node in List View or open it in Detail View.
2. On the **Analyze** tab, in the **Links** group, click **Memo Link**, and then click **Link to New Memo**. The **New Memo** dialog box opens.
3. Enter a name for the memo.
4. (Optional) Enter a description of the memo.
5. Click **OK**. The memo is opened in edit mode and you can enter the content.

Adding an annotation to selected content

To create an annotation:

1. Select the content you want to annotate.
2. On the **Analyze** tab, in the **Annotations** group, click **New Annotation**.
3. In the **Annotations** tab at the bottom of Detail View, enter the annotation.

Adding a see also link

To add a see also link from content to another source:

1. Select the content you want to link from.
2. On the **Analyze** tab, in the **Links** group, click **See Also Link**, and then click **New See Also Link**.

Memos - a crucial piece of the analytical puzzle

You can use memos to tell the story of your project—from your early ideas and assumptions to fully-fledged insights about a topic, person, or event. Use them to 'talk to yourself' as you make sense of your data.

Tracking your analytical process with memos can help you to increase the transparency and reliability of your findings. With your process recorded in memos, you can easily demonstrate the evolution of a theory or quickly call up data that supports client questions.

Memos are quite 'free form' in NVivo and our innovative users (from the LinkedIn NVivo Users Group) have come up with some great uses for them:

- **Project memo**—record your goals, assumptions and key decisions. Like a journal, update it regularly and include links to the significant theme nodes and sources. Bring your journal to life by displaying it in a model
- **Interview or participant memo**—summarize the key points of an interview. Make note of contradictions, surprises or early hunches. Include ideas about the nodes you might make and include photos or descriptive information about the interview setting.
- **Node memo**—explain why you think a theme is significant (especially useful in team projects). Add to the memo as your thinking evolves and include links to the related literature. By writing as you go, you won't face the pressure of staring at a blank document when it comes to writing up your project.
- **Query results memo**—what do these query results tell me? Make a memo to organize your ideas and to plan future steps. If you display your query results in a chart or other visualization, copy and paste it into the memo.
- **Analytical and procedural memos**—record your findings in analytical memos and use procedural memos to document the methodological steps you take.
- **NVivo memo**—record what works best in the software, including any tips or shortcuts you want to remember. Include links to NVivo related support materials that you've found on the web.

Work with demographic data

You can use 'node classifications' to capture the demographic details of the people, places or other cases in your project. For example, if you have interviewed people in a particular community, you may want to collect information about their age, gender and occupation—and compare their responses based on these attributes.

You can setup demographic data in NVivo or you can import it from a spreadsheet or text file.

Add node classifications to your project

Before you can classify nodes, you need to add at least one node classification to your project:

1. On the **Create** tab, in the **Classifications** group, click **Node Classification**.
2. In the **New Classification** dialog box, select the type of classification you want to add:
   - To add your own custom classification, select **Create a new classification** and enter a name and description.
   - To add one of NVivo's ready-made classifications, select **Add one or more predefined classifications to the project** and select the check boxes for the required classifications.
3. Click **OK**.

Note: Predefined classifications come with a set of attributes—for example, *Person* has attributes for *age, occupation* and so on. Custom classifications do not have default attributes but you can add your own—select the classification and on the **Create** tab, in the **Classifications** group, click **Attribute**.

Classify a node

When you have created the classifications you need, you can classify your nodes:

1. In List View, select the node you want to classify.
2. On the **Home** tab, in the **Item** group, click **Properties**.
3. In the **Node Properties** dialog, click the **Attribute Values** tab.
4. From the **Classification list**, select the classification for the node.
5. Click the arrow in the **Value** field to select a value for each attribute. To add a value, click in the **Value** field and enter a new value.
6. Click **OK**.

Work with classification sheets

Classification sheets provide an overview of the items in a particular classification. For example, if you have created nodes for interview respondents and classified them as *Person*, you can double-click on the classification to quickly see the spread of your respondents:

Apply filters to see a subset of your data

Click in a cell to update attribute values

Person

	A : Age Group	C : Community	E : Gender	F : Generation...	H : Opinion - P...	J : Respon...	K : Township
22 : DE008	50 - 59	Otway	Male	1	about right	DE008	Straits
23 : DE009	60 - 69	Marshallberg	Female	3 or more	too fast	DE009	Marshallberg
24 : DE010	60 - 69	Stacy	Female	3 or more	about right	DE010	Stacy
25 : DE011	50 - 59	Stacy	Female	3 or more	too slow	DE011	Stacy
26 : DE012	60 - 69	Williston	Female	2	undecided	DE012	Smyrna
27 : DE013	50 - 59	Straits	Male	3 or more	too fast	DE013	Straits
28 : DE014	60 - 69	Bettie	Male	1	too fast	DE014	Straits
29 : DE015	60 - 69	Sea Level	Male	3 or more	undecided	DE015	Sea Level
30 : DE016	70 - 79	Sea Level	Male	3 or more	too fast	DE016	Sea Level
31 : DE017	50 - 59	Cedar Island	Male	3 or more	too slow	DE017	Cedar Island
32 : DE018	30 - 39	Gloucester	Female	3 or more	too fast	DE018	Straits
33 : DE019	50 - 59	Sea Level	Male	3 or more	too fast	DE019	Sea Level
34 : DE020	60 - 69	Straits	Male	none	about right	DE020	Straits
35 : DE021	80 - 89	Cedar Island	Male	3 or more	too slow	DE021	Cedar Island
36 : DE022	70 - 79	Atlantic	Female	3 or more	too slow	DE022	Atlantic
37 : DE023	50 - 59	Atlantic	Female	3 or more	too slow	DE023	Atlantic
38 : DE024	70 - 79	Atlantic	Male	3 or more	too fast	DE024	Atlantic
39 : DE025	70 - 79	Davis	Male	3 or more	too slow	DE025	Davis
40 : DE026	60 - 69	Gloucester	Male	2	too fast	DE026	Straits
41 : DE027	50 - 59	Smyrna	Male	1	about right	DE027	Smyrna

If you have demographic attributes in a spreadsheet or text file you can import this data and automatically classify the case nodes in your project. For example, to setup node classifications for your interview respondents, you could follow these steps:

1. Add the node classification *Person* to your project—on the **Create** tab, in the **Classifications** group, click **Node Classification**.
2. Select all your interviews in List View.
3. Right-click and click **Create as Case Nodes** and assign the *Person* classification. NVivo makes a new node for each interview and codes the content.
4. In your spreadsheet, make sure the interviewee names match the names of the nodes you just created.
5. Import the spreadsheet—on the **External Data** tab in the **Import** group, click **Classification Sheets**. NVivo automatically applies the attributes from the spreadsheet to the *Person* nodes.

ideas

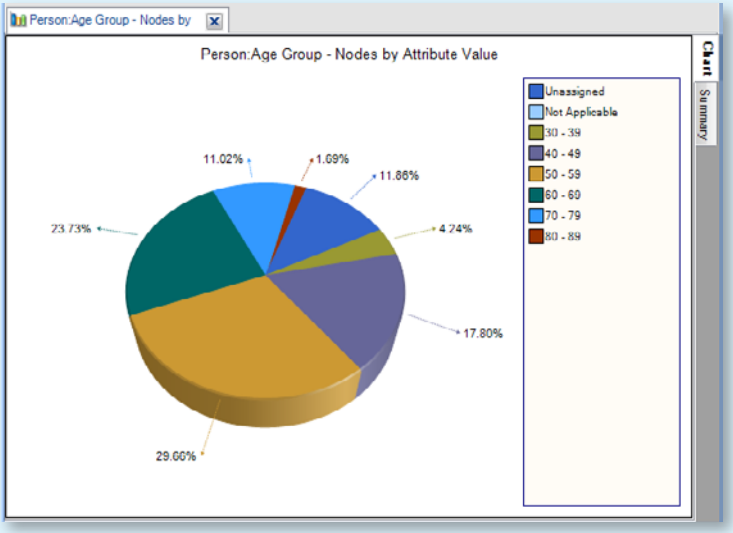
Exploring people, places and other cases

NVivo provides tools for exploring the cases in your project, for example, you could:

- Use a matrix coding query to compare your respondent's comments based on demographic attributes:

	A : Person:Commercial Fishing = Yes	B : Person:Commercial Fishing = No
1 : Positive	4	19
2 : Mixed	0	6
3 : Negative	31	127

- Create a chart to check the demographic spread of your respondents:

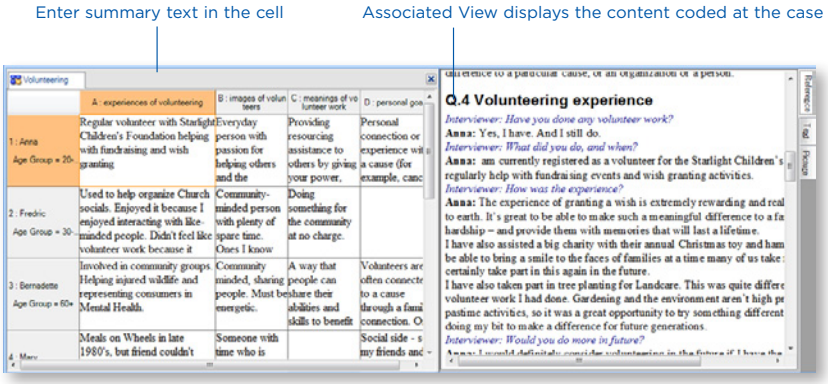


- After reviewing the content in a case node—make a model to visualize a participant's perceptions and to 'tell their story'.
- Make a memo to record your thoughts and insights about the case.

Summarize your data in framework matrices

You can use framework matrices to summarize your data in a grid format—this is especially useful if you are working with interview or focus group transcripts.

The grid has rows for case nodes (for example, people you interviewed) and columns for theme nodes—you can enter your summary in the cells where the case and theme intersect. For example, you could summarize Anna's experience of volunteering:



Working with condensed source materials in the framework matrix can make it easier to:

- See everything about a theme by looking down a column.
- See how different themes relate to each other for a particular individual by looking across a row.
- Compare the experiences of different individuals by comparing one row to another.

Once you have condensed your source materials in a framework matrix, you can easily share your data with others by printing the matrix or exporting the matrix to a spreadsheet.

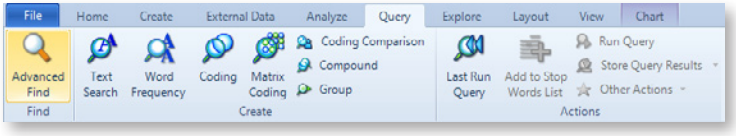
Before you can start working with framework matrices, you need to import your source materials, code source content to case nodes, and set up thematic node hierarchies. Refer to the NVivo Help for comprehensive information about working with framework matrices.

Bring it all together with queries

You can use NVivo queries to:

- Find and analyze the words or phrases in your sources and nodes. You can find specific words or those that occur most frequently.
- Ask questions and find patterns based on your coding, check for coding consistency among team members and review your progress.

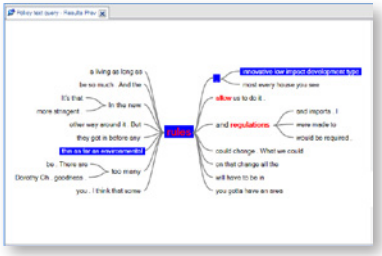
You can work with queries using the **Query** tab:



Use queries for text analysis

You can explore the text in your sources using the following queries:

- **Text Search Query**: search for a word or phrase in your source material and view all the matches in a preview node—automatically code the content (if you want to). Display a word tree to visualize words in context:



Display results in a word tree, click a branch to highlight the context

- **Word Frequency Query**: list the most frequently occurring words in your sources and visualize the results in a tag cloud, tree map or cluster analysis diagram.

Display results in a tag cloud, double-click a word to gather all occurrences in a node

Use queries to explore your coding

You can review and explore your coding using:

- **Coding Query**: gathers all the coding at any combination of nodes—for example, gather and explore all content coded at *water quality* and *tourism*, or find where content coded at *water quality* is near content coded at tourism.
- **Matrix Coding Query**: creates a matrix of nodes based on search criteria. For example, show me attitudes about *water quality by community*.
- **Coding Comparison Query**: compares the coding of two researchers or two groups of researchers. This is useful for teams who are interested in coding consistency and the questions posed by researcher disagreement.
- **Compound Query**: combines text and coding queries—search for specified text in or near coded content.
- **Group Query**: finds items that are associated in a particular way with other items in your project. For example, list the nodes that code a selection of sources.

ideas

Making the most of queries

- Start running queries early on in the coding process—they can help you focus on the questions you want to ask (and prompt you to code accordingly). For example, if you want to ask *"How serious are the issues of water quality for local fishermen?"*—make sure you code at the node for *water quality* and code at case nodes with the *fisherman* attribute.
- Use coding queries to build-up and test ideas. For example, you have a hunch that people's perception of water quality is closely tied to the pace of development. Create a query to gather all material coded at *water quality* where it is *NEAR* content coded at 'development'.
- Use matrix coding queries to compare attitudes based on demographic attributes. For example, explore attitudes about *water quality* by community:

Water quality attitudes by com

	A : Positive	B : Mixed	C : Negative
1 : Atlantic	10	0	8
2 : Bethe (Straits)	11	3	5
3 : Cedar Island	4	0	2
4 : Davis	6	0	5
5 : Gloucester (Straits)	13	0	4

Double click a cell to see the coded content

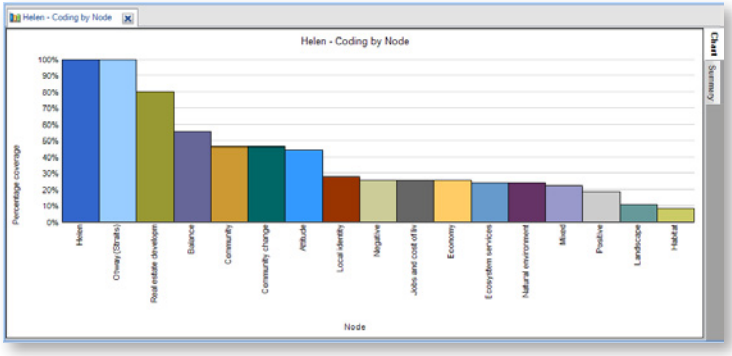
- Make a memo to record what you learn from a query—this can prompt you to ask further questions and facilitate deeper analysis. Link the memo to the query results.

Visualize your project

NVivo lets you explore your data using charts, models and other visualization techniques. They can help you to explore trends, test theories and make sense of what is happening in your source materials.

Display your data in charts

You can create a chart to present or explore the data in your project. For example, you could make a chart to see the nodes that code a source:

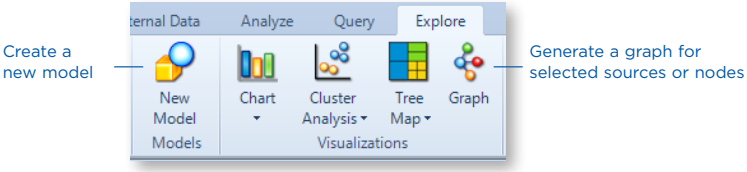


You can create a chart using the Chart Wizard or while working on other areas of your project—for example, you can create a chart based on a node, node matrix or source that you have opened in Detail View.

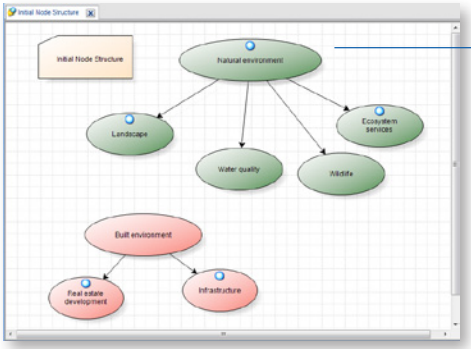
You can also choose from a variety of chart types—for example, 3D bar or column. To launch the Chart Wizard—on the **Explore** tab, in the **Visualizations** group, click the **Chart** image. Refer to the NVivo Help for comprehensive information on working with charts.

Create models and graphs to visualize connections

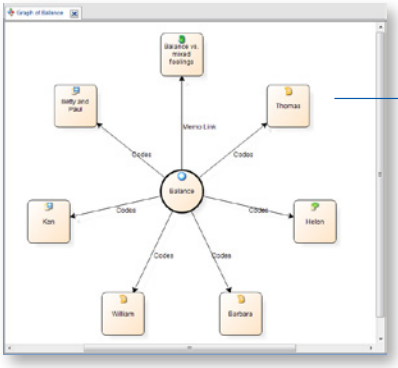
You can create models or generate graphs to visualize, explore and present the connections in your data. You can create models and graphs using options on the **Explore** tab:



You could create a model to plan your project and sketch your expectations or hypotheses:



You could also generate a graph to see how project items are connected. For example, you could see which items are connected to a selected source or node.



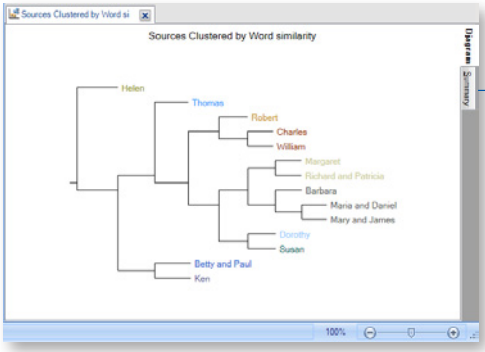
Work with tree maps and cluster analysis diagrams

You can use other visualization techniques to get a different perspective on what is happening in your data—for example:

Use a tree map to compare nodes by the number of references they contain:

See patterns of coding in your project, or compare sources or nodes based on their attribute values

Use cluster analysis to group sources or nodes that share similar words, attribute values, or coding:



Click the Summary tab to see the values that were used to generate the diagram

As you work with sources, nodes or query results you can choose to visualize the data. For example, you can display a cluster analysis diagram for a social media dataset or display a tag cloud for the results of a Word Frequency query.

Refer to the NVivo Help for more information about working with visualizations.

Create reports and extracts

As your project grows you can use reports to:

- Review and revise your progress
- Identify themes that are occurring more than others
- Present your findings

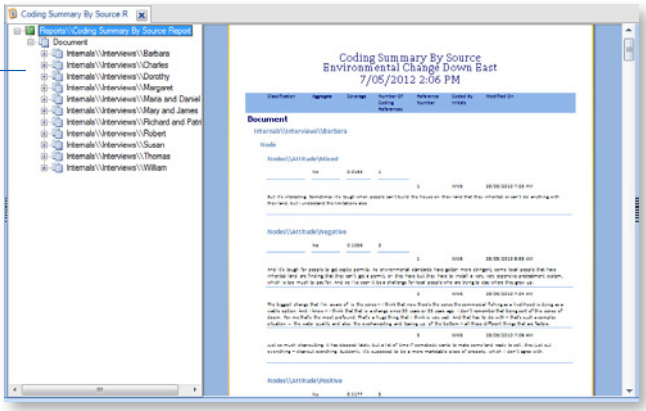
Extracts allow you to export a collection of your data to a text, Excel or XML file—you can use this data for complementary analysis in other applications.

To run one of NVivo's predefined reports:

1. In Navigation View, click **Reports**, and then click the **Reports** folder.
2. In List View, double-click the report you want to run.

   The report results are displayed in Detail View:

Use this view to navigate through the items in your report



To create your own report—on the **Explore** tab, in the **Reports** group, click the **New Report** image. Follow the steps in the Report Wizard to choose the fields, filters and layout of your report. You can also create your own report (or modify an existing one) using the Report Designer—refer to the NVivo Help for more information about working with reports.

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