

Help – Build Data Marts

How to create and modify data marts

1. What is a Data Mart?	1
2. What kind of data works best with nVISION On Demand?	1
3. Why do I need to create a Data Mart?	1
4. How do I create a Data Mart?	2
5. What data file types can I upload into nVISION On Demand?	5
6. How do my CSV and Excel data files need to be formatted?	5
7. Does my data need to have dates?	6
8. Can I use information in a report header?	6
9. What is a hierarchy (drill down path, parent child relationship)?	6
10. What is a description?	6
11. How do I change the name of an item?	6
12. How do I change the display format of an item?	6
13. How do I get rid of data fields that I don't want in my Data Mart?	7
14. How do I show items in the Preview Data Mart tab?	7
15. How do I hide items in the Preview Data Mart tab?	7
16. How do I make calculated Items?	7
17. How do I make combine or split Items?	7

1. What is a Data Mart?

In nVISION On Demand, a data mart is the location within nVISION On Demand that you upload your data into and then ask questions of. It's helpful to focus a data mart on a specific business function, such as sales analysis. When you create a question, you need to specify which data mart to use.

2. What kind of data works best with nVISION On Demand?

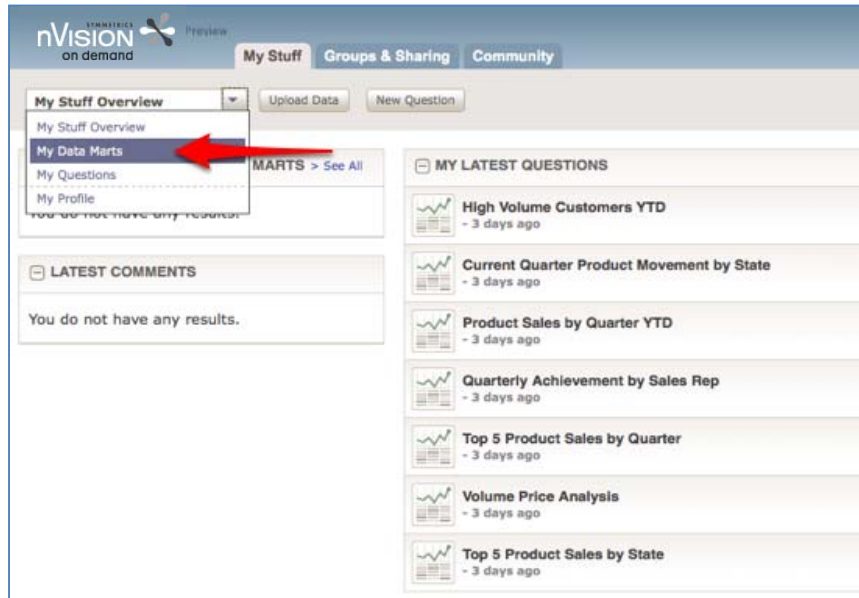
nVISION On Demand works best with cumulative business data that adds up over time. For example, sales data that adds up daily works well, because at the end of the month you will have an accurate total for the entire month. For instance, 10 sales per day will equal 300 sales at the end of 30 days. Data such as inventory on hand or total head count statistics are more difficult for nVISION On Demand because daily totals can expand or contract and will not necessarily add to an accurate total at the end of the month.

3. Why do I need to create a Data Mart?

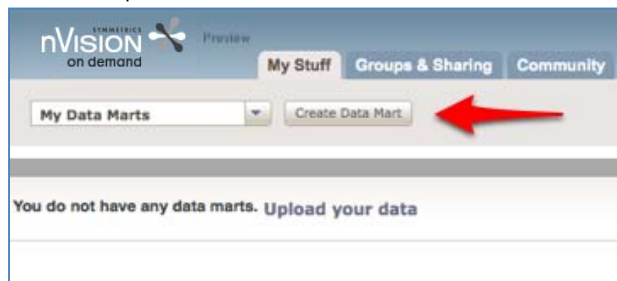
Data is held in buckets called Data Marts. If no buckets exist, there is no data, and thus no questions can be asked.

4. How do I create a Data Mart?

nVISION On Demand has a “Create Data Mart” wizard that steps you through the process of creating a Data Mart. You can launch the wizard from My Stuff Overview > My Data Marts, and then click the Create Data Mart button. To get started you will need a report or data set to upload to nVISION On Demand. The wizard will then guide you through the process of teaching nVISION On Demand how to manage your data and how you want to analyze it. Once you have created your Data Mart, you can upload newer versions of your report or data set, and nVISION On Demand will automatically add the new data to your Data Mart.



To create a new Data Mart, select **New Data Mart** from the drop-down menu, and click on the **Create Data Mart** button. Among other places, you can also find the **Create Data Mart** button on the **My Questions** page. Clicking on the **New Data Mart** button will launch the Upload menu.



In order to create a new Data Mart, select the **Start** button from within the “Create a new Data Mart” box. Choose **Browse** and select the primary file of this new Data Mart. The title and description of the new Data Mart will be defined later in the Wizard. Additional files may be uploaded later.

Welcome Indices Demo > Logout > Help

My Stuff Groups & Sharing Community

Want answers? You need data. There are 2 ways to get started with Indices:

Quickstart Templates

Choose from popular templates that understand the data from a variety of business applications.

- Pick a Quick-Start template from the list below
- The Wizard walks you through the rest

Watch Video

Create Your Own Datamart

Don't see a QuickStart for your application? You can teach Indices about your data, how it's related and how you want to see it.

- Upload your first data file*
- Tell Indices what it looks like and how you want to view it
- Add files from other sources or applications, combine them and organize relationships

Watch Video

*We read data from text (CSV), Excel (XLS) and Crystal Reports (RPT) files

Once the nVISION On Demand Wizard has successfully uploaded the new data set, it will display the **Preview Data** tab. It is important to verify the formatting of the data. Follow these four steps:

- Select the **starting row and column** for the uploaded file. Crystal Report files will already be properly formatted; however, if working with a CSV or XLS file make sure that the headers are properly defined.
- Confirm the **Data starts at row** value. This is the first row in which the Data Mart should collect data from.
- Data Sets often have additional information that you may not want in your Data Mart. By deselecting the header boxes, certain data columns can be removed from the question interface. *Note: This does not physically remove the data from the Data Mart, it simply "hides" it from view in case you need to add it back later.*
- If any additional information was contained in the file above the significant data, it can be applied as a new column. For example, instead of each row having a date, the entire page could have a common date (which was placed above the data). This single date can be applied to all rows within that data set.

Upload Data to a new data mart

1. Preview Data 2. Preview Data Mart 3. Data Mart Details

Data sets like Indices Bikes Sales Jan 2009.xls

Labels start at row and column Data starts at row

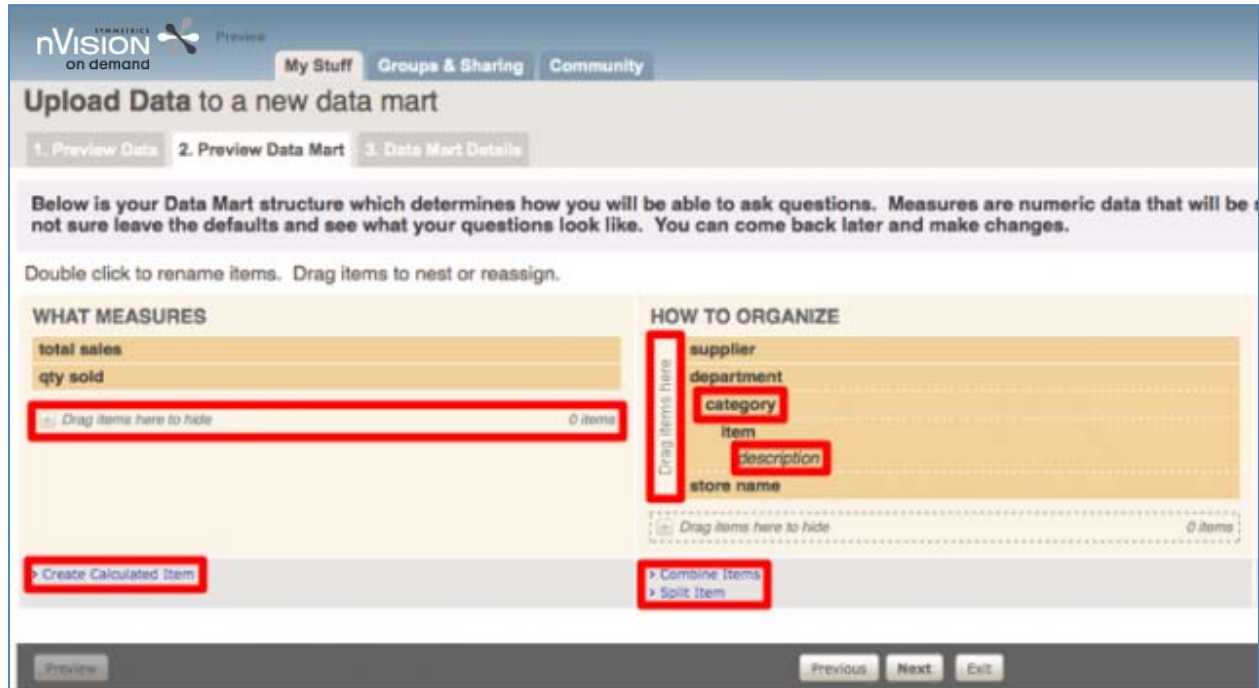
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Store Name	Department	Category	Supplier	Item	Description	Qty Sold	Sold Price	Total Sales	Transaction	Date Sold
2: Banff	Clothing	Shorts	Cool Threads Performance Apparel LP	1911020101	Cool Threads RS Bib - M	1	95.93	95.93	3549	1/1/09 10:53
3: Banff	Clothing	Shorts	Cool Threads Performance Apparel LP	1911020101	Cool Threads RS Bib - M	-1	-113.2	-113.2	3550	1/1/09 10:54
4: Whistler	Helmets	Kids / Youth	Symco Products Ltd	550292	Maxx C4 Lite Helmet	1	58.18	58.18	4329	1/2/09 10:58
5: Whistler	Parts	Tire and tubes	Symco Products Ltd	1148	Comet Tubes Boxed 26" Presta	2	3.8	7.6	4330	1/2/09 12:47
6: Banff	Accessories	Fenders	Symco Products Ltd	177797	Comet Fender Clipper Trek	1	10.58	10.58	3552	1/2/09 13:17
7: Banff	Parts	Brakes	Symco Products Ltd	1714	Cables Brake HTB	2	1.94	3.88	3553	1/2/09 14:47
8: Banff	Parts	Shifters	Symco Products Ltd	1676	Generic Cables Shifter SIS	2	2.52	5.04	3553	1/2/09 14:47
9: Banff	Parts	Brakes	Symco Products Ltd	2445	Generic Housing Brake Per/ft.	2	1.72	3.44	3553	1/2/09 14:47
10: Banff	Parts	Brakes	Symco Products Ltd	250760-01	Kool Stop Pads ThruVine VBrake	2	15.39	30.78	3553	1/2/09 14:47
11: Banff	Parts	Shifters	Symco Products Ltd	283804	Shy Man sis 4mm housing bulk	2	4.93	9.86	3553	1/2/09 14:47
12: Whistler	Parts	Tire and tubes	Symco Products Ltd	11652	Comet Tubes 700C Schroeder	1	4.56	4.56	4331	1/2/09 14:52
13: Whistler	Parts	Tire and tubes	Cycles Inc.	4481K	Maxxis Minion 2.35 50a Kevlar	1	48.64	48.64	4332	1/2/09 15:10
14: Whistler	Parts	Tire and tubes	N.R.G. Enterprises	787355	Maxxis Advantage 2.4 Kevlar	1	52.2	52.2	4332	1/2/09 15:10
15: Banff	Accessories	Lubes	Symco Products Ltd	348500-01	Phil Tenacious oil	1	5.03	5.03	3555	1/3/09 11:58
16: Banff	Clothing	Gloves	Symco Products Ltd	4032	Comet Stormfront Glove	1	58.92	58.92	3557	1/3/09 15:40

Previewing rows 2-16 of 100

With these items confirmed, advance to preview the Data Mart.

The “Preview Data Mart” tab is used to build the structure of data. For example, “item” is nested within “category”, which is nested within “department”. There are six key functions used to manipulate columns on this page:

- **Show Items** - By dragging items onto the vertical boxes, hidden items can be added to the list of categories.
- **Hide Items** - By dragging items onto these rectangular boxes, items can be removed from the question interface.
- **Nested Items** - Items can be nested under broader categories by dragging them to the bottom of their “parent” item. Once the blue line appears, release the item to nest it. Note: Items can only be nested if they have one “parent”. For example, at nVISION On Demand Bikes “categories” are nested within “departments” because no category can be part of more than one department. However, departments must not be nested within “Store Name” as all the branches of nVISION On Demand Bikes have the same categories (ie. Departments have multiple parents)
- **Item Descriptions** - By dragging an item, and placing it on top of another, it applies itself as a description. Items can have multiple descriptions, but descriptions can only apply to a single item.
- **Calculated Item** - Similar to revenue or units sold, calculated items may apply to any level of summation (item, category, store) over a period of time, and with limits. Calculated items are unlike the common calculated columns found in spreadsheet applications as they do not generate a list of values, but are a calculation based on a summation of data.
- **Combine and Split Items** - Some values need to be combined or split before they can be added to the Data Mart. For example, if a report exports a customer’s name as separate first and last names, nVISION On Demand can join these two into a single name. Alternatively, if a report exports a region and country as a single value, nVISION On Demand can split them into two columns allowing for the nesting of these values.



Once the Data Mart had been organized, details can be defined in the Data Mart Details tab. The Data Mart and the Data Set must be given names. Because a single Data Mart can simultaneously contain multiple reports, a more generalized name is suggested such as “nVISION On Demand Bikes Data Mart”. The Data Set must also be labeled. The first Data Set will be used as a template to import similar reports. Our report was called “nVISION On Demand Bike Sales Jan 2009”, and we have named the Data Set “Data Set like nVISION On Demand Bike Sales Jan 2009”. Click **Finish** to proceed.

Upload Data to a new data mart

1. Preview Data 2. Preview Data Mart 3. Data Mart Details

You can create many data marts so give a descriptive name for your Data Mart. Good descriptions of your Supported Data Set Types can be new data and editing your data mart.

Name and Describe your Data Mart

Data Mart Name *
Indicee Bikes Data Mart

Description
Enter a description for your data mart here.

Tags

Share... Share just your data mart or your data mart and data.

Supported Dataset Types

Name *
Data sets like Indicee Bikes Sales Jan 2009.xls

Description

Source Application (e.g. AccPac)

File Format
Excel (XLS)

5. What data file types can I upload into nVISION On Demand?

nVISION On Demand can upload Crystal Reports, Excel (XLS) and comma separated variable (CSV) files. For Excel, nVISION On Demand currently accepts Excel 97 – 2003 workbooks. If you have an Excel file saved in a different version, open it in Excel and use the Save As command to save it as an Excel 97 – 2003 Workbook. nVISION On Demand only looks at the first worksheet in an Excel workbook, so make sure your data is in the first tab.

6. How do my CSV and Excel data files need to be formatted?

For Excel and CSV files, it's important that the data be in a columnar format with the following characteristics:

- Data of similar types arranged in columns
- Titles at the top of each column
- Each row represents one complete record

	A	B	C	D	E	F	G	H
1	Store Name	Department	Category	Item	Description	Qty Sold	Total Sale	Date Sold
2	Nelson	Bikes	Commuter	FV8320MM	2008 Leo Stockholm M Men	1	976.03	6/2/2008
3	Nelson	Accessories	Racks	171036-03	Comet Cage Helix Alloy	1	6.66	6/2/2008
4	Nelson	Accessories	Fenders	177784-01	Comet Fender Bladerunner Trekk	1	45.5	6/2/2008
5	Banff	Bikes	Kids	121675-01	2008 Symco Lil Missy 16in	1	199.99	6/3/2008
6	Nelson	Parts	Wheel Parts	259440-01	Sun Rim Singletrack 32h	1	81.52	6/3/2008
7	Whistler	Parts	Tire and tubes	1190	Tube 26" Presta	1	2.29	6/4/2008
8	Nelson	Accessories	Pumps	177435	Comet Pump Enforce Air DLX	1	41.11	6/14/2008
9	Banff	Helmets	Adult	8550152	Met Helmet Formula	1	45.06	6/14/2008
10	Nelson	Bikes	Kids	121740-01	2008 Symco ZX50	1	75.44	6/15/2008
11	Nelson	Accessories	Misc	174240	Honka Hoota Horn	2	14.76	6/15/2008
12	Nelson	Parts	Drivetrain	251066	KMC Chain Z-82 8spd	1	19.19	6/30/2008
13	Whistler	Parts	Tire and tubes	11902	Tube 26" Schraeder	1	5.01	6/30/2008

nVISION On Demand won't be able to understand files that have:

- Groupings or sub-totals
- Values for multiple time periods across multiple columns (e.g. financial statements are often in this format)

7. Does my data need to have dates?

No. However, because most users want to see how their data changed over time, it is recommended. There are some situations however where dates are not needed. For example, if the National Hockey League wanted to know which players had more than 500 career goals, they would not need to know in which years the goals were scored, but rather the total number of goals.

8. Can I use information in a report header?

Yes! From the **Data Mart Designer** navigate to the **Preview Data** tab. Additional header information will be displayed above the core data. Select the check-box of any information in the report header in order to create a new column with this information. *Note: This header information will be applied to every row of the Data Set.*

9. What is a hierarchy (drill down path, parent child relationship)?



Items can often be nested under broader categories. For example, at nVISION On Demand Bikes “categories” are nested within “departments”, and “items” are nested within “categories”. Items can only be nested if they have one “parent” because no category can be part of more than one department. However, departments must not be nested within “Store Name” as all the branches of nVISION On Demand Bikes have the same categories (ie. Departments have multiple parents).


10. What is a description?

By dragging an item, and placing it on top of another, it applies itself as a description. Items can have multiple descriptions, but descriptions can only apply to a single item.

11. How do I change the name of an item?

When creating or editing a Data Mart, display formats of an item can be modified. From the **Data Mart Designer** navigate to the **Preview Data Mart** tab. Double-click the item you would like to rename, type the new name in the text box, and press enter.

12. How do I change the display format of an item?

When creating or editing a Data Mart, display formats of an item can be modified. From the **Data Mart Designer** navigate to the **Preview Data Mart** tab. Hover over the item that you would like to modify, and select the  icon. From here the Display Format can be changed and Reset to the default.

13. How do I get rid of data fields that I don't want in my Data Mart?

When creating or editing a Data Mart, data fields can be removed. From the **Data Mart Designer** navigate to the **Preview Data** tab. Any check-box can be unselected in order to remove the column from the Data Mart.

14. How do I show items in the Preview Data Mart tab?

From the **Preview Data Mart** tab, items can be shown by dragging them onto the vircle rectangular outline beside the active items. This adds the item to the Question Interface.

15. How do I hide items in the Preview Data Mart tab?

From the **Preview Data Mart** tab, items can be hidden by dragging them onto the rectangular outline below the active items. This removes the item from the Question Interface.

16. How do I make calculated Items?

Similar to revenue or units sold, calculated items may apply to any level of summation (item, category, store) over a period of time, and with limits. Calculated items are unlike the common calculated columns found in spreadsheet applications as they do not generate a list of values, but are a calculation based on a summation of data. From the **Preview Data Mart** tab, select **Create Calculated Item**. Metrics, and Operators can be used to create a new Calculated Item.

17. How do I make combine or split Items?

Some values need to be combine or split before they can be added to the Data Mart. For example, if a report exports a customer's name as separate first and last names, nVISION On Demand can join these two into a single name. Alternatively, if a report exports a region and country as a single value, nVISION On Demand can split them into two columns allowing for the nesting of these values.