



# Dynamic Pages Manual

2.8



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# Noventri Suite

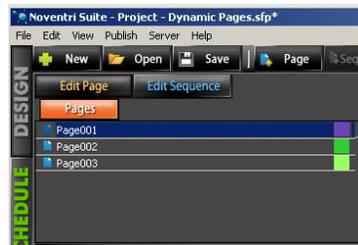
## Dynamic Pages Manual

### 1 Overview

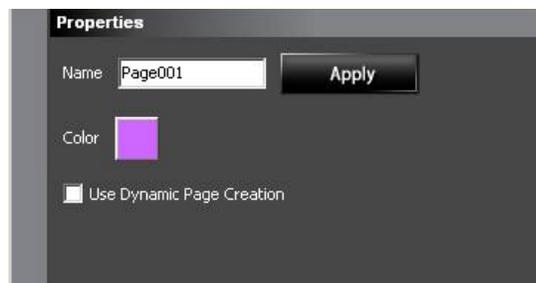
- 1.1 The **Dynamic Page** feature enables a **Page** in a **Project** to **Rotate** through content that is pulled from an external **Data Source**. The number of **Rotations** is adjusted automatically to match the external **Data Source** volume, as it fluctuates.
- 1.2 Instead of having to create multiple **Pages**, that are nearly identical to each another. One **Dynamic Page** is created and formatted to accommodate the **Rotation** of content from an external **Data Source**.
- 1.3 Any **Page** or number of **Pages** within a **Project** can be set up as a **Dynamic Page** to allow flexibility in the **Project** design.
- 1.4 Once a **Page** is chosen as **Dynamic Page** the **Text / Image Regions** on that **Page** are **Dynamic Regions** that can point to and **Rotate** through content from a fluctuating **Data Source**.
- 1.5 A **Dynamic Page** can contain multiple **Dynamic Text / Image Regions**. These **Dynamic Text / Image Regions** can also easily be configured to be used as normal **Text / Image Regions** that do not **Rotate** their content.
- 1.6 **Dynamic Regions** can be configured to access multiple content from numerous types of **Data Sources**.
- 1.7 The **Dynamic Regions** have options that allow the data from the external **Data Source** to be *selectively* accessed.

## 2 Dynamic Page Selection

- 2.1 A new **Project** can be created or an existing **Project** can be used.  
(see the **Design** manual)
- 2.2 Once a **Project** is open in the **Design** tab of the **Noventri Suite**, choose the **Page** that will be the **Dynamic Page**.



- 2.3 When the **Page** is selected, its properties will be shown in the **Properties Panel** (bottom left).



**Note:** If a **Region** happens to be selected, the **Region Properties Panel** will be displayed instead of the **Page Properties Panel**. To switch to the **Page Properties Panel**, click the mouse outside of any **Region** boundaries.

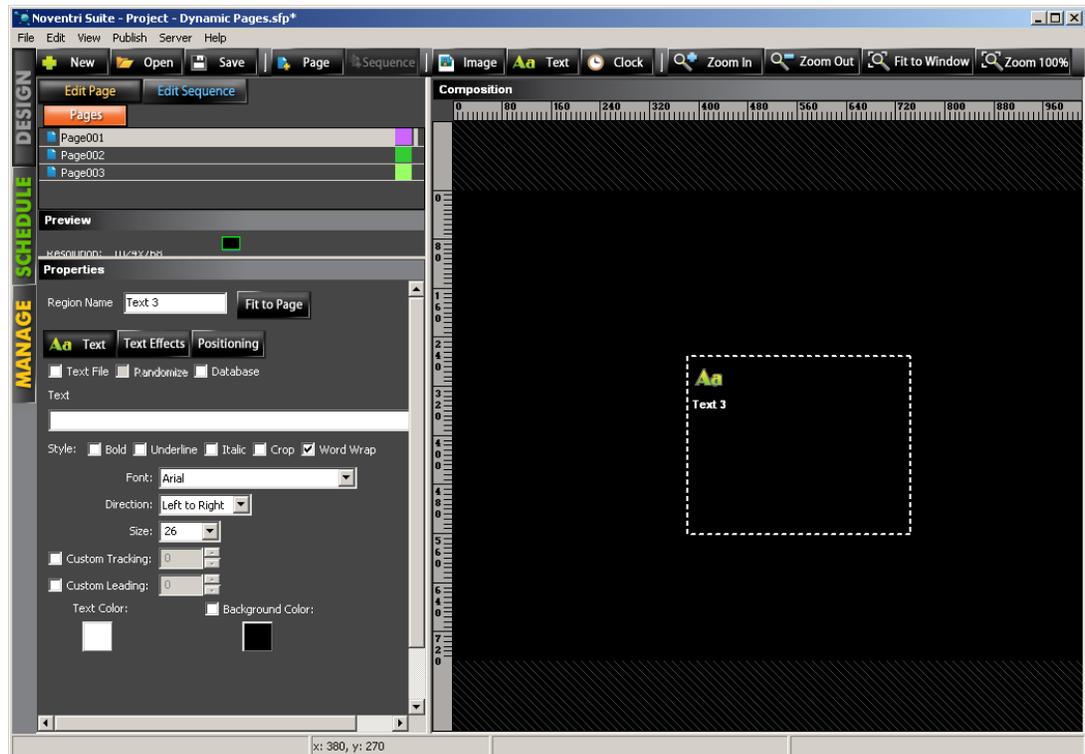
In some cases when the **Page** is completely covered with **Region/s** it will be necessary to temporarily select another **Page** in the **Project** and then go back to the desired page to display its **Page Properties Panel**.

- 2.4 Within the **Properties Panel** there is the **Use Dynamic Page Creation** option. Selecting this check box will activate this **Page** as a **Dynamic Page**.

**\*Note:** The **Use Dynamic Page Creation** check box needs to be selected to ensure that all **Dynamic Region Properties** options are visible in the **Region Properties** panel.

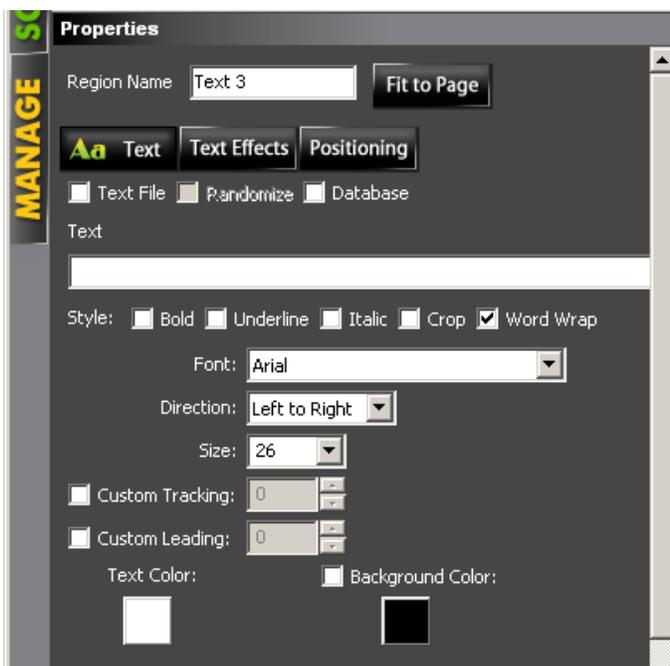
### 3 Formatting Dynamic Page - General

- 3.1 Once a **Page** is a **Dynamic Page**, it's existing and newly created **Text/Image Regions** can be used as **Dynamic Regions**.
- 3.2 Any **Text/ Image Region** that will have it's content **Dynamically** displayed (**Rotated**) needs to have it's **Properties** configured to access an external **Data Source**.
- 3.3 When the **Region** is selected, it's properties will be shown in the **Properties Panel** (bottom left).



## 4 Formatting Dynamic Page – Text Region

- 4.1 For a **Text Region** to be utilized as a **Dynamic Region** (rotating content) within the **Dynamic Page**, it needs to be pointed to an external **Data Source** that contains multiple **Text** entries.
- 4.2 The **Text Region's Properties Panel** would be selected as it normally would be when configuring a **Text Region**.



- 4.3 **Text Regions** can be pointed to an external **Data Source** in two different ways, through a **Text File** or through the **Database** option.

## 4.4 Text File

4.4.1 This option allows a **Text File** to be used as the **Data Source** for the content of **Dynamic Region/s** on a **Dynamic Page**.

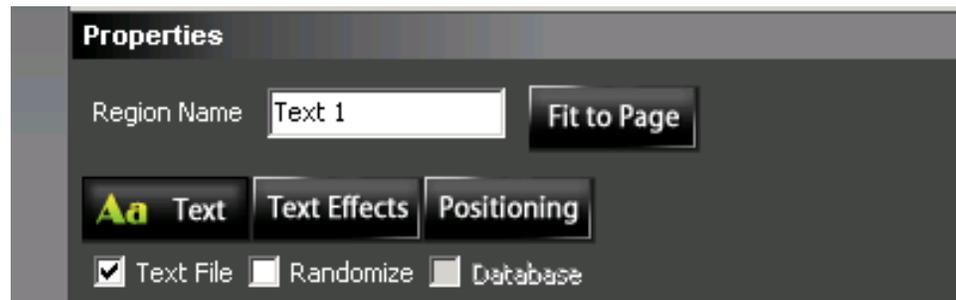
**Note:** A **Text File** is a *list* of **Text** entries.  
(covered here)

where as....

A **Data Text** file is a text file created with *delimiters*.  
(see the **Database** section of this manual)

4.4.2 Each line of text in the **Text File** will cause the **Dynamic Page** to be displayed again - populated with that text. This will continue until the last line of **Text** has been displayed.

4.4.3 Select the **Text File** option by selecting the **Text File** check box.

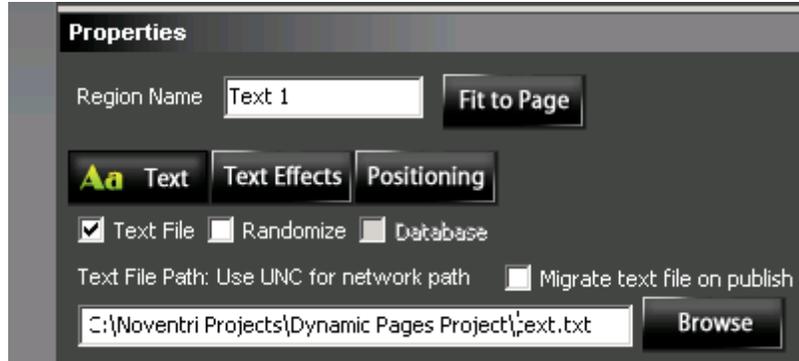


4.4.4 Set up a **Text File** (.txt) that contains a list of the **Text** entries to be displayed.  
(this can be done in any text program such as Notepad)

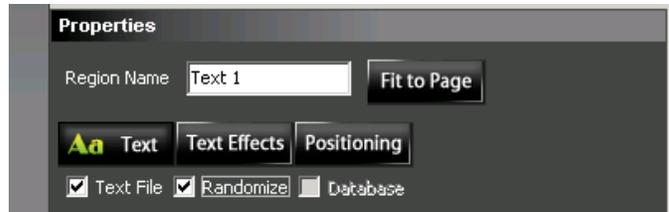
**Example File:**      Text File Line 1  
                              Text File Line 2  
                              Text File Line 3

**Metacharacters** can also be used within the **Text File**.  
(see the **Data Handling Options** section of this manual)

**4.4.5** In the **Text Properties** panel fill in the **Text File Path** or use the **Browse** button to select it.

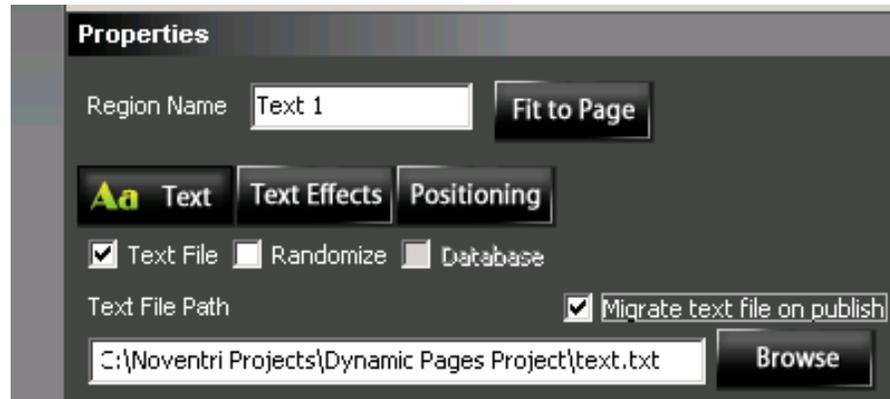


**4.4.6 Randomize** – Normally **Dynamic Page** creation for a **Text File** will cause **Rotations** that will display the **Text** lines in the order they are listed in the **Text File**. To allow this process to be random, select the **Randomize** check box.



**Note:** When **Randomize** is selected the number of **Rotations** will still match the number of **Text** lines in the **Text File**, however some **Text** lines may display more than once, and other **Text** lines may never be displayed. (truly random)

**4.4.7 Migrate Text File on Publish** – Lets a choice be made between copying the **Text File** to the **Server** when the **Project** is **Published**, or if allowing the **Server** to access the **Text File** at it's present location.



**Migrate Text File on Publish *Checked:***

Selecting the **Migrate Text File on Publish** option will place a copy of the image on the **Server**. This is typically the **Noventri Suite Projects** directory located on the PC where the **Server** is installed.

**Advantages:**

- No need to worry about the original path remaining available.
- **Text File** is less likely to be accidentally modified, deleted, or moved.

**Migrate Text File on Publish *Unchecked:***

The **Text File** will be accessed by the **Server** at it's current location. The **Text File** will not be copied to the **Server** with the **Project** when it is published. The **Text File** location must remain available or the text will not be displayed.

**Advantages:**

- Changing the text in the **Text File** can be done at its source (as long as the file name remains the same) without having to republish the **Project**.

- 4.4.8** When setting up **Data** to be displayed in a **Dynamic Region**, there are a multitude of creative ways the **Data** can be handled and displayed.  
(see the **Data Handling Options** section of this manual)
- 4.4.9** The **Rotations** for this **Region** will display a different row of data from the **Data Source** (as set up with **Row offset** and **Row Increment**). The number of **Rotations** will depend on how many rows of data are in the **Data Source** as well as how many other **Dynamic Regions** are on the **Dynamic Page**.  
(see the **Rotations** section of this manual)
- 4.4.10** When developing your **Dynamic Region** the **Data** from the external **Data Source** can be inserted and viewed in the **Suite Design** window.  
(see the **Refresh Now / Update Interval** section of this manual)
- 4.4.11** The content of each **Rotation** of a **Dynamic Page** can also be viewed in context of how it will be displayed with other **Pages**, by adding the **Dynamic Page** to a **Sequence**.  
(see the **Adding a Dynamic Page to a Sequence** section of this manual)

## **4.5 Database Text**

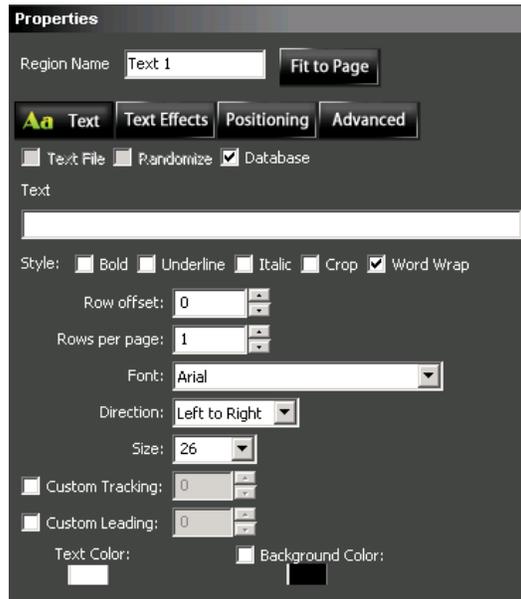
- 4.5.1** The **Database** option allows the use of many different types of **Data Sources**. All of which are stored in a **Database** style. This can be a simple **Text File** that has been created with delimiters, a **Spreadsheet**, an **XLM(RSS)** source, or a true **Database**.  
(see the **Noventri Suite - Database Manual**)

**Note:** Performance and reliability is best when using a true **Database** for the **Data source** as opposed to a **Excel Spreadsheet**.

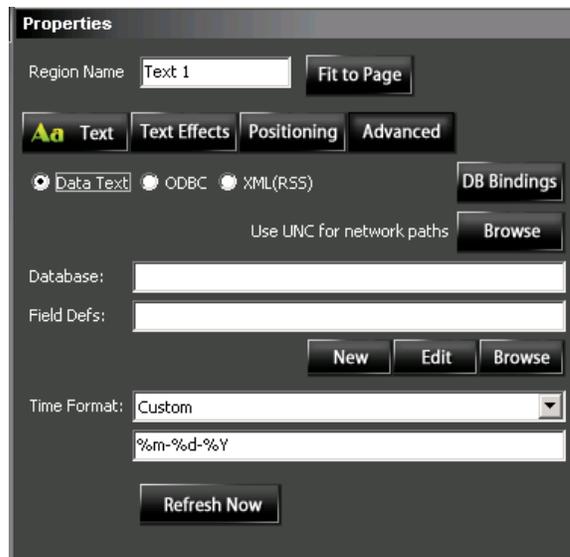
- 4.5.2** The **Dynamic Region/s** on the **Dynamic Page** connect to the **Data Source** and pull the data to be displayed.

**4.5.3** Each row of text in the **Data Source** (as selected by the configuration) will cause a **Rotation** of the **Dynamic Page** populated with that data. This will continue until the last row of **Text** has been displayed.

**4.5.4** A **Database Text Region** is created by selecting the **Database** check box.



**4.5.5** Once the **Database** option is selected a new **Advanced** tab will appear in the **Properties** panel. Selecting this **Advanced** tab will display the **Advanced** options.

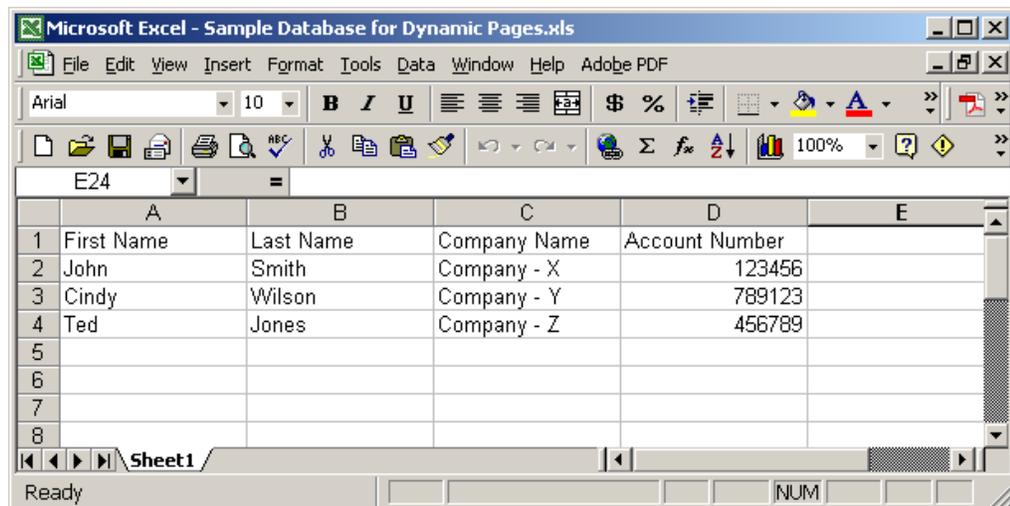


## Example using Excel Spreadsheet

- 4.5.6** For the purposes of this **Dynamic Pages Manual**, a simple Excel **Spreadsheet** will be used to demonstrate the **Database** use of **Dynamic Pages**, however **Dynamic Pages** is fully compatible with all the **Database** capabilities. Many **Database** options that are available with **Dynamic Pages** are not covered in this manual.  
(see the **Noventri Suite Database Manual**)

**Note:** When using a Excel **Spreadsheet** be sure not to use the first row for data to be displayed. The first row is always assumed to be column headers and is therefore not accessible.

## Sample Excel Spreadsheet



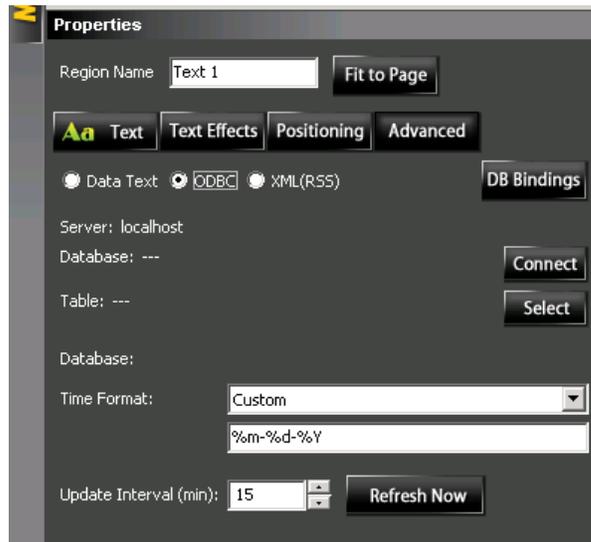
The screenshot shows a Microsoft Excel window titled "Microsoft Excel - Sample Database for Dynamic Pages.xls". The spreadsheet contains the following data:

	A	B	C	D	E
1	First Name	Last Name	Company Name	Account Number	
2	John	Smith	Company - X	123456	
3	Cindy	Wilson	Company - Y	789123	
4	Ted	Jones	Company - Z	456789	
5					
6					
7					
8					

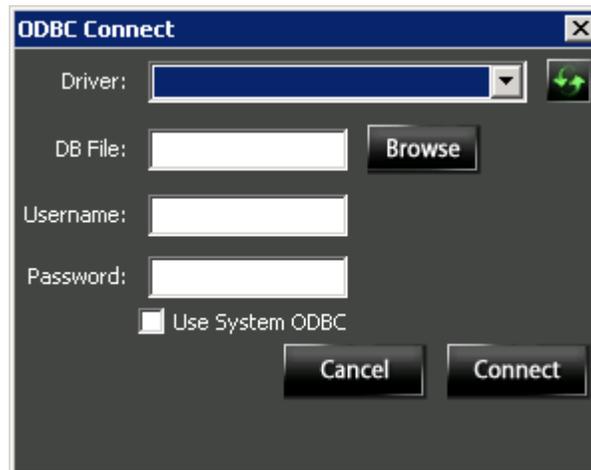
- 4.5.7** Under the **Advanced** tab select the **ODBC** (Open Database Connectivity) option.

## Example using Excel Spreadsheet

**4.5.8** Once the **ODBC** option is selected, the **Advanced** tab menu options will change to reflect it. To connect to the **Spreadsheet** select the **Connect** button.

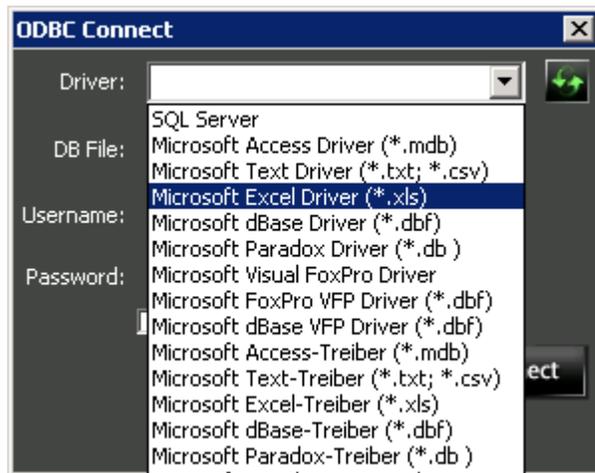


**4.5.9** The **ODBC Connect** window will then open.



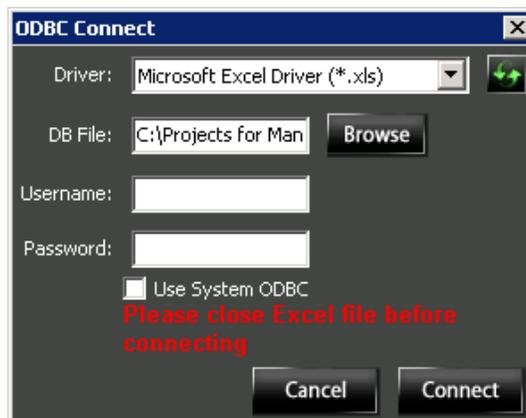
## Example using Excel Spreadsheet

- 4.5.9.1 Driver** – Select the desired type of **Database** to be connect to using the **Driver** drop down menu. For this example we are using a **Spreadsheet** created with Excel so the **Driver** “**Microsoft Excel Driver (\*.xls)**” needs to be selected.



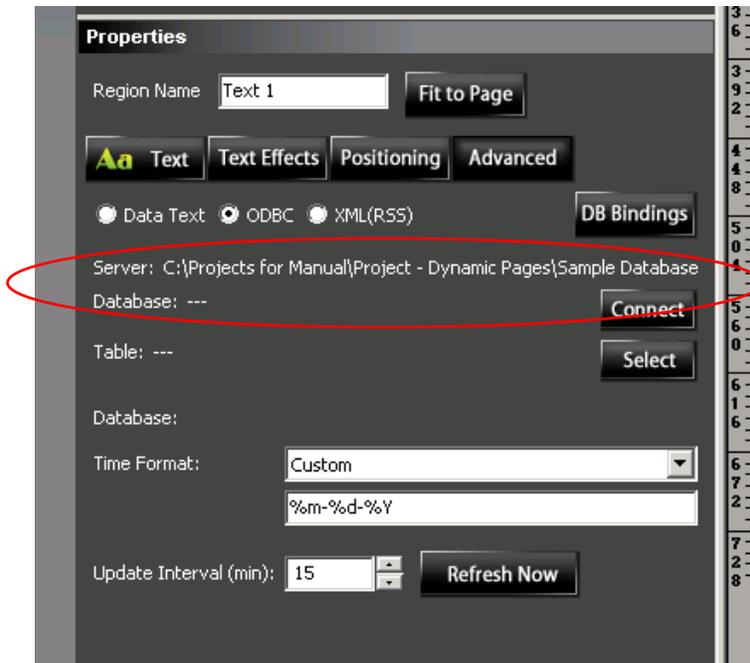
- 4.5.9.2 DB File** – Browse to the **Database** file and select **Open**.

**Note:** Some **Database** files, including Excel files need to be closed before they can be connected to.



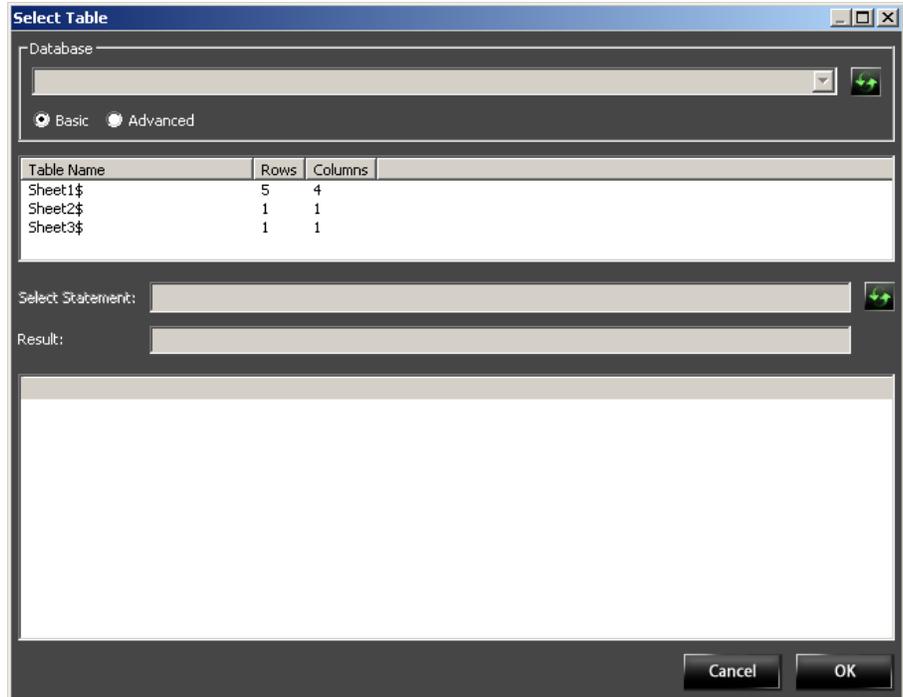
## Example using Excel Spreadsheet

- 4.5.9.3 Connect** – Select the **Connect** button. There will now be a connection to the **Database** and the connection can be verified by seeing the path to the file shown as the **Server**, under the **Advanced** tab.



## Example using Excel Spreadsheet

**4.5.10 Select** – Select the **Select** button. The **Select Table** window will open.



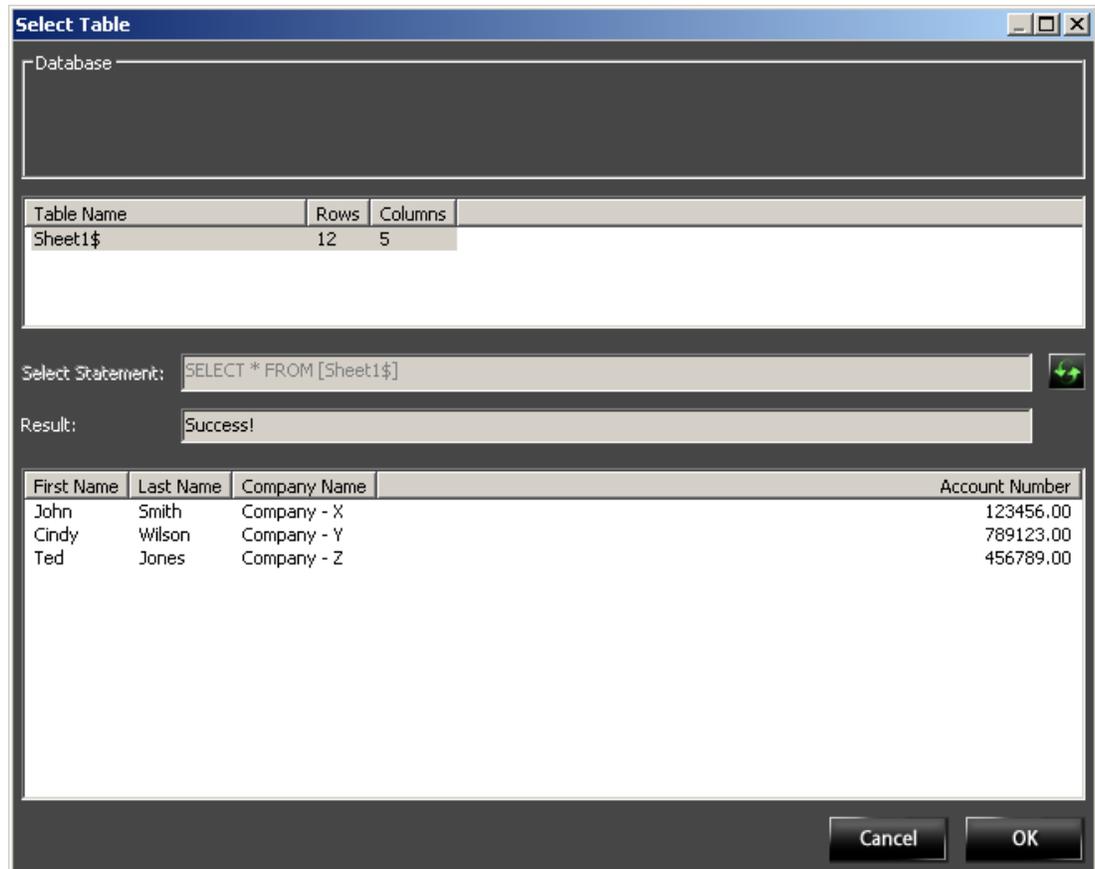
**4.5.10.1** Select the **Table Name** that contains the content to be use for this **Text Region**.

**Note:** For Excel files the **Table Name** represents the Sheets of the Excel document.

**4.5.10.2** To populate the **Database** content into the viewing area, select the **Refresh**  button located to the right of the **Select Statement** box.

## Example using Excel Spreadsheet

**4.5.10.3** The content of the **Table** will now be visible in the viewing area.



**4.5.10.4** The **Table** is now linked to the **Region**.  
Select **OK** to close the **Select Table** window.

**4.5.11** Now that the **Table** is linked to the **Dynamic Region**, the **Dynamic Region** can be formatted to display specific data from the **Table**.

## Example using Excel Spreadsheet

### 4.5.12 Return to the **Text** tab in the **Properties** panel.

The screenshot shows the 'Properties' panel with the 'Text' tab selected. The 'Region Name' is 'Text 1' and the 'Fit to Page' button is visible. The 'Text Effects' tab is active, showing options for 'Text File', 'Randomize', and 'Database' (checked). The 'Text' input field is empty. The 'Style' section includes 'Bold', 'Underline', 'Italic', 'Crop', and 'Word Wrap' (checked). The 'Row offset' is 0, 'Rows per page' is 1, 'Font' is 'Arial', 'Direction' is 'Left to Right', and 'Size' is 26. 'Custom Tracking' and 'Custom Leading' are both 0. 'Text Color' is white and 'Background Color' is black.

**Properties**

Region Name

**Aa** **Text** **Text Effects** **Positioning** **Advanced**

Text File  Randomize  Database

Text

Style:  Bold  Underline  Italic  Crop  Word Wrap

Row offset:

Rows per page:

Font:

Direction:

Size:

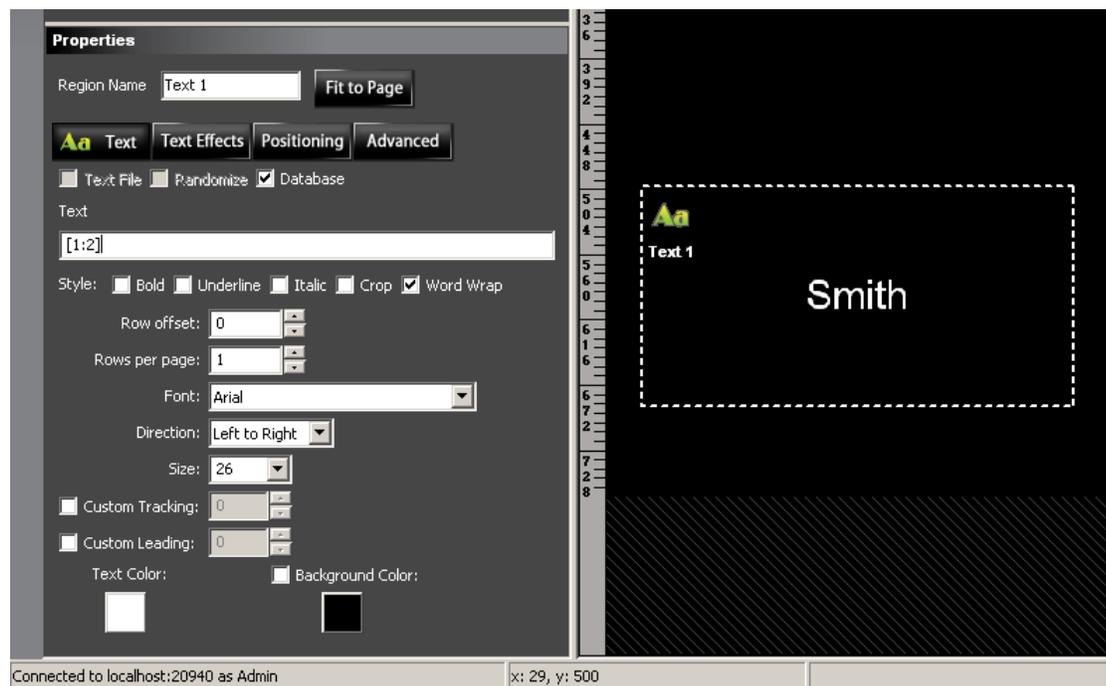
Custom Tracking:

Custom Leading:

Text Color:  Background Color:

**4.5.13 Text box** - Now that the **Text Region** is properly connected to an external **Data Source**, the **Text** box, can be used to point at the **Database** content using a **Formatter**. (see the **Formatter** section of this manual)

**Note:** The **Text** box when used for **Dynamic Pages** can (in addition to the **Formatter**) contain typed text, **Metacharacters**, and special **Dynamic Page** variables. (see the **Data Handling Options** section of this manual)



**4.5.14** When setting up **Data** to be displayed in a **Dynamic Region**, there are a multitude of creative ways the **Data** can be handled and displayed. (see the **Data Handling Options** section of this manual)

**4.5.15** The **Rotations** for this **Region** will display a different row of data from the **Data Source** (as set up with **Row offset** and **Row Increment**). The number of **Rotations** will depend on how many rows of data are in the **Data Source** as well as how many other **Dynamic Regions** are on the **Dynamic Page**. (see the **Rotations** section of this manual)

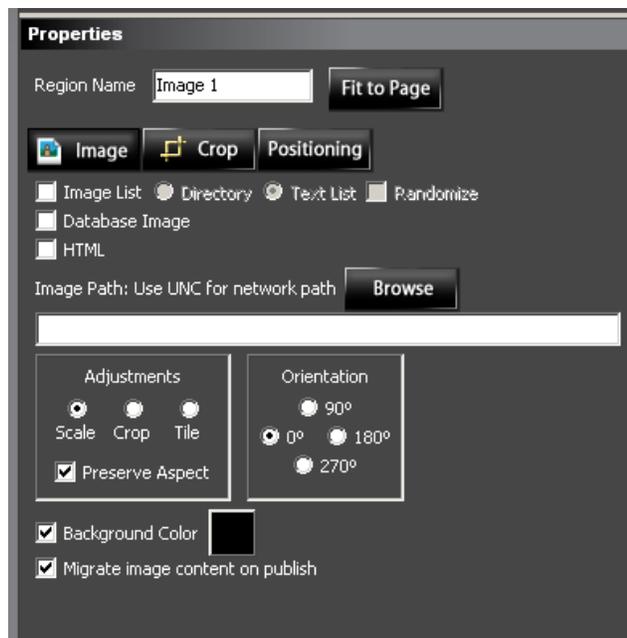
**4.5.16** When developing your **Dynamic Region** the **Data** from the external **Data Source** can be inserted and viewed in the **Suite Design** window.  
(see the **Refresh Now / Update Interval** section of this manual)

**4.5.17** The content of each **Rotation** of a **Dynamic Page** can also be viewed in context of how it will be displayed with other **Pages**, by adding the **Dynamic Page** to a **Sequence**.  
(see the **Adding a Dynamic Page to a Sequence** section of this manual)

## 5 Formatting Dynamic Page – Image Region

**5.1** For an **Image Region** to be utilized as a **Dynamic Region** (rotating content) within a **Dynamic Page**, it needs to be pointed to an external **Data Source** that contains paths to multiple **Image** entries.

**5.2** The **Image Region’s Properties Panel** would be selected as it normally would be when configuring an **Image Region**.

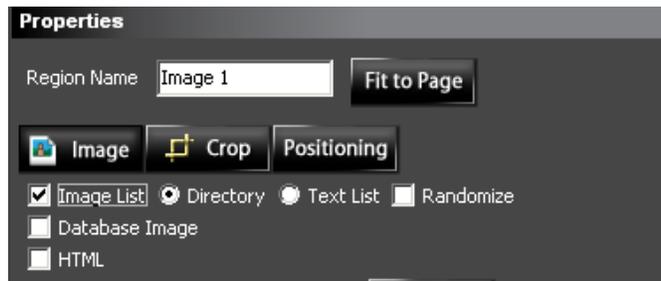


**5.3** **Image Regions** can be pointed to a **Data Source** in two different ways, through the **Image List** option, or the **Database Image** option.

## 5.4 Image List

**5.4.1** This option allows the use of a list of **Image** paths. The paths will direct the **Dynamic Region** to the **Image** files one at a time. Each **Rotation** will be populated with an **Image**. This will continue until the last **Image** has been displayed.

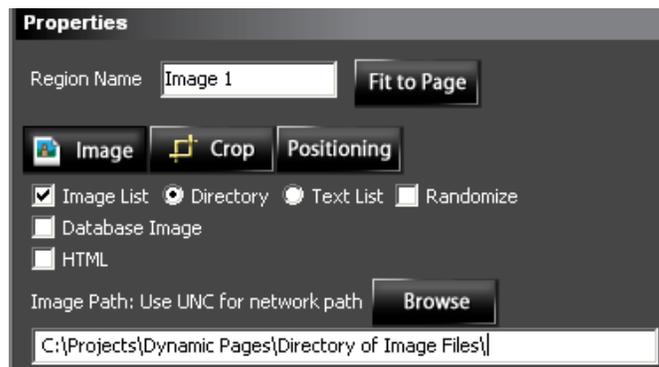
**5.4.2** Select this option by selecting the **Image List** check box.



**5.4.3** An **Image List** can be done in two different ways, through the **Directory** option or through the **Text List** option.

**5.4.4 Directory** - This option allows a file **Directory** to be used as the **Data Source**. The **Directory** would contain the actual **Image** files.

**5.4.4.1** In the **Image Properties** panel select the **Directory** option by selecting the **Directory** radio button.



**5.4.4.2** In the **Text Properties** panel fill in the **Image Path** box or use the **Browse** button to select the **Directory** that contains the **Image** files.

**Example Path:**

c:\Projects\Dynamic Pages\Directory of Image Files\

**5.4.5 Text List** - This option allows a .txt file to be used as the **Data Source** (list of **Image** paths).

**Note:** A **Text List** is a *list* of **Image** path entries.  
(covered here)

where as....

A **Data Text** file is a text file created with *delimiters*.  
(see the **Database** section of this manual)

**5.4.5.1** Set up a **Text List** file (.txt) that contains a list of the **Image** paths.  
(this can be done in any text program such as Notepad)

**Example File:**

c:\Projects\Dynamic Pages\Directory of Image Files\Image 1.jpg  
c:\Projects\Dynamic Pages\Directory of Image Files\Image 2.jpg  
c:\Projects\Dynamic Pages\Directory of Image Files\Image 3.jpg  
c:\Projects\Dynamic Pages\Directory of Image Files\Image 4.jpg

**5.4.6 Randomize** – Normally **Dynamic Page** creation for **Images** will **Rotate** each **Image** in the order they are listed in the **Image List (Directory/Text List)**. To allow this process to be random, select the **Randomize** check box.



**Note:** When **Randomize** is selected the number of **Rotations** will still match the number of **Images** in the list, however some **Images** may be displayed more than once, and other **Images** may never be displayed. (truly random)

**5.4.7** When setting up **Data** to be displayed in a **Dynamic Region**, there are a multitude of creative ways the **Data** can be handled and displayed.  
(see the **Data Handling Options** section of this manual)

**5.4.8** The **Rotations** for this **Region** will display a different row of data from the **Data Source** (as set up with **Row offset** and **Row Increment**). The number of **Rotations** will depend on how many rows of data are in the **Data Source** as well as how many other **Dynamic Regions** are on the **Dynamic Page**.  
(see the **Rotations** section of this manual)

**5.4.9** When developing your **Dynamic Region** the **Data** from the external **Data Source** can be inserted and viewed in the **Suite Design** window.  
(see the **Refresh Now / Update Interval** section of this manual)

**5.4.10** The content of each **Rotation** of a **Dynamic Page** can also be viewed in context of how it will be displayed with other **Pages**, by adding the **Dynamic Page** to a **Sequence**.  
(see the **Adding a Dynamic Page to a Sequence** section of this manual)

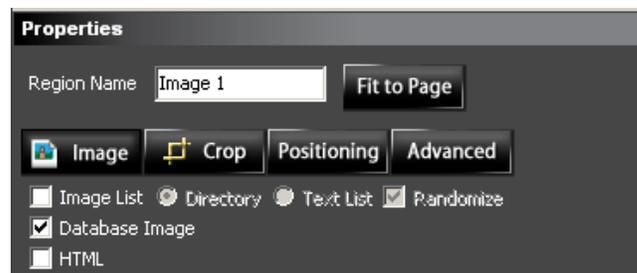
## 5.5 Database Image

**5.5.1** The **Database** option allows the use of many different types of **Data Sources**. All of which are stored in a **Database** style. This can be a simple **Text File** that has been created with delimiters, a **Spreadsheet**, an **XLM(RSS)** source, or a true **Database**.  
(see the **Noventri Suite - Database Manual**)

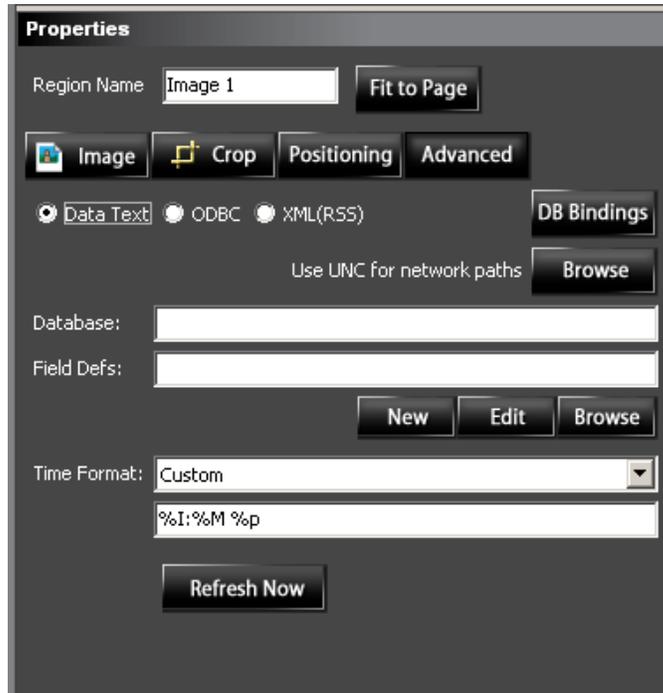
**Note:** Performance and reliability is best when using a true **Database** for the **Data source** as opposed to an Excel **Spreadsheet**.

**5.5.2** Each row of Image paths in the **Data Source** (as selected by the configuration) will cause a **Rotation** of the **Dynamic Page** displaying that **Image**. This will continue until the **Image** has been displayed.

**5.5.3** A **Database Image Region** is created by selecting the **Database Image** check box.



**5.5.4** Once the **Database** option has been selected a new **Advanced** tab will appear in the **Properties** panel. Selecting this **Advanced** tab will display the **Advanced** options.

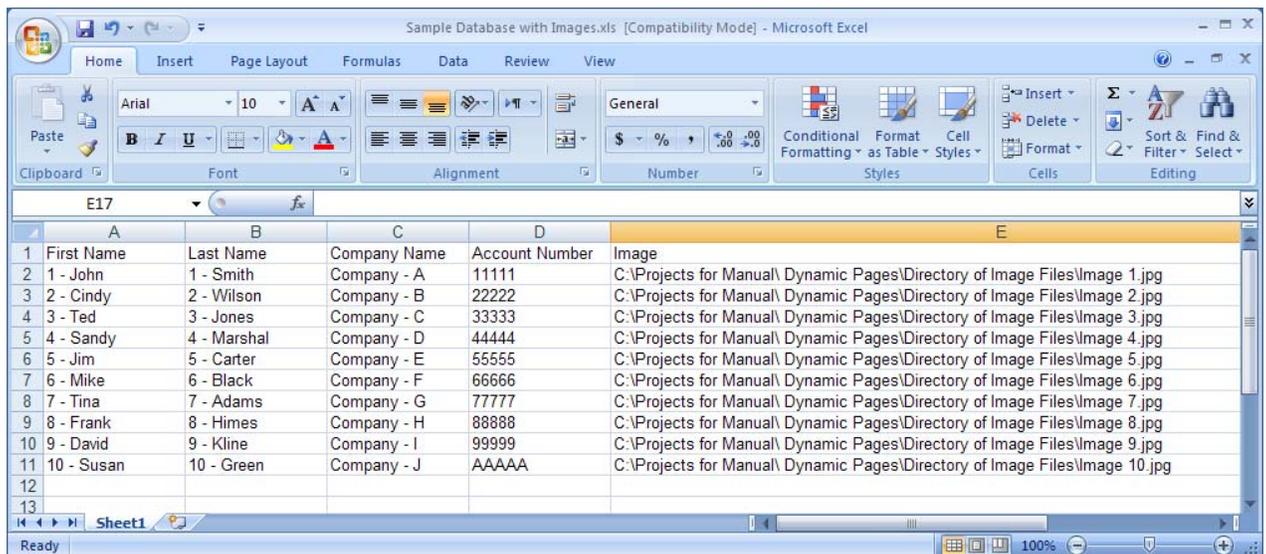


## Example using Excel Spreadsheet

**5.5.5** For the purposes of this **Dynamic Pages Manual**, a simple Excel **Spreadsheet** will be used to demonstrate the **Database** use of **Dynamic Pages**, however **Dynamic Pages** is fully compatible with all the **Database** capabilities. Many **Database** options that are available with **Dynamic Pages** are not covered in this manual.  
(see the **Noventri Suite Database Manual**)

**Note:** When using an Excel **Spreadsheet** be sure not to use the first row for **Images** to be displayed. The first row is always assumed to be column headers and is therefore not accessible.

### Sample Excel Spreadsheet with Images



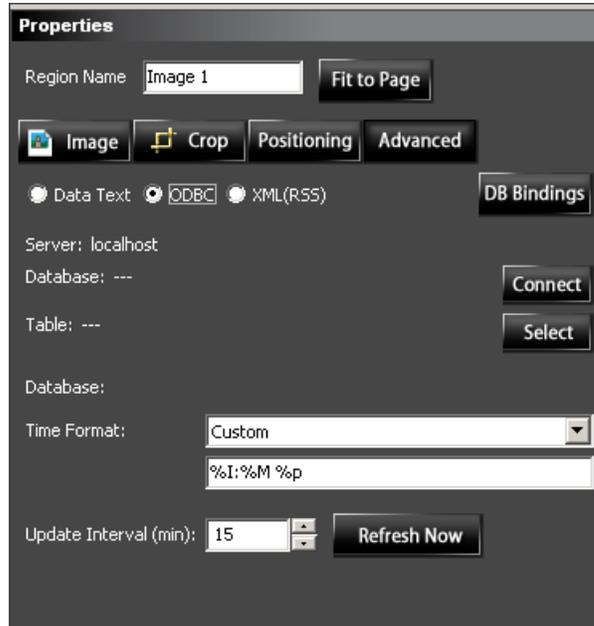
The screenshot shows a Microsoft Excel spreadsheet titled "Sample Database with Images.xls [Compatibility Mode] - Microsoft Excel". The spreadsheet has five columns: A (First Name), B (Last Name), C (Company Name), D (Account Number), and E (Image). The data is as follows:

	A	B	C	D	E
1	First Name	Last Name	Company Name	Account Number	Image
2	1 - John	1 - Smith	Company - A	11111	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 1.jpg
3	2 - Cindy	2 - Wilson	Company - B	22222	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 2.jpg
4	3 - Ted	3 - Jones	Company - C	33333	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 3.jpg
5	4 - Sandy	4 - Marshal	Company - D	44444	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 4.jpg
6	5 - Jim	5 - Carter	Company - E	55555	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 5.jpg
7	6 - Mike	6 - Black	Company - F	66666	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 6.jpg
8	7 - Tina	7 - Adams	Company - G	77777	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 7.jpg
9	8 - Frank	8 - Himes	Company - H	88888	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 8.jpg
10	9 - David	9 - Kline	Company - I	99999	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 9.jpg
11	10 - Susan	10 - Green	Company - J	AAAAA	C:\Projects for Manual\ Dynamic Pages\Directory of Image Files\Image 10.jpg
12					
13					

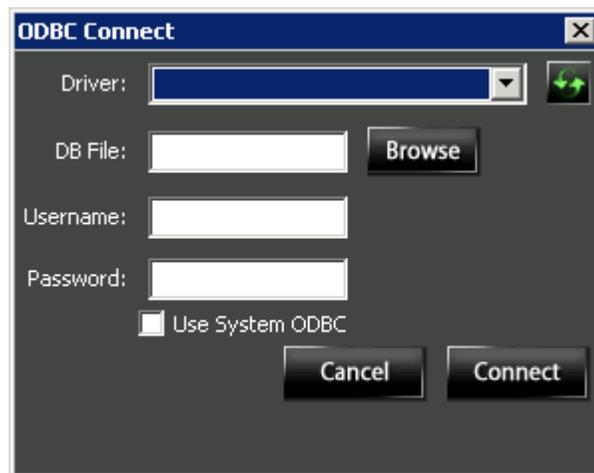
## Example using Excel Spreadsheet

**5.5.6** Under the **Advanced** tab select the **ODBC** (Open Database Connectivity) option.

**5.5.7** Once the **ODBC** option is selected, the **Advanced** tab menu options will change to reflect it. To connect to the **Spreadsheet** select the **Connect** button.

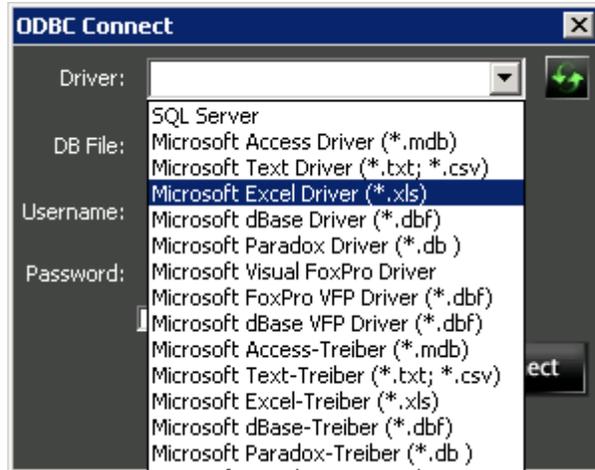


**5.5.8** The **ODBC Connect** window will then open.



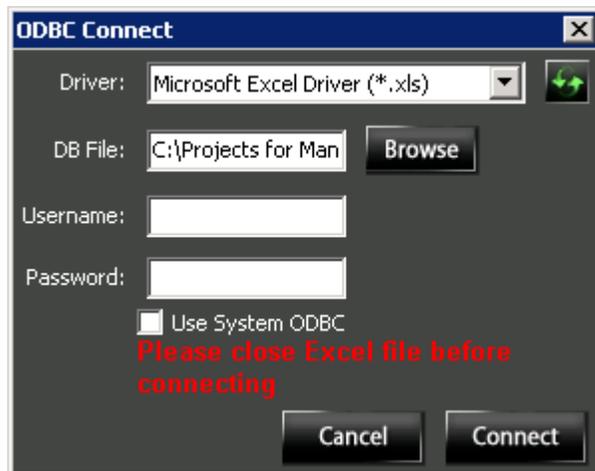
## Example using Excel Spreadsheet

- 5.5.8.1 Driver** – Select the **Driver** drop down menu and select the type of **Database** that will be connected to. For this example we are using a **Spreadsheet** created with Excel so the **Driver “Microsoft Excel Driver (\*.xls)”** needs to be selected.



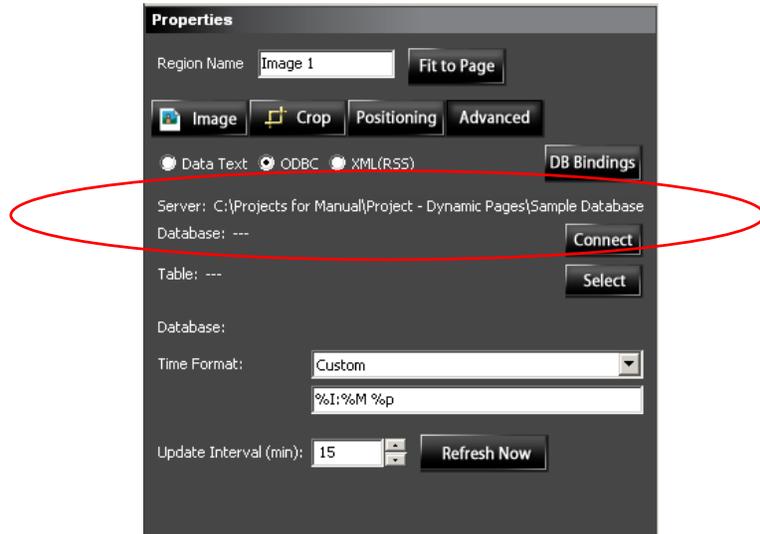
- 5.5.8.2 DB File** – Browse to the **Database** file and select **Open**.

**Note:** Some **Database** files, including Excel files need to be closed before they can be connected to.

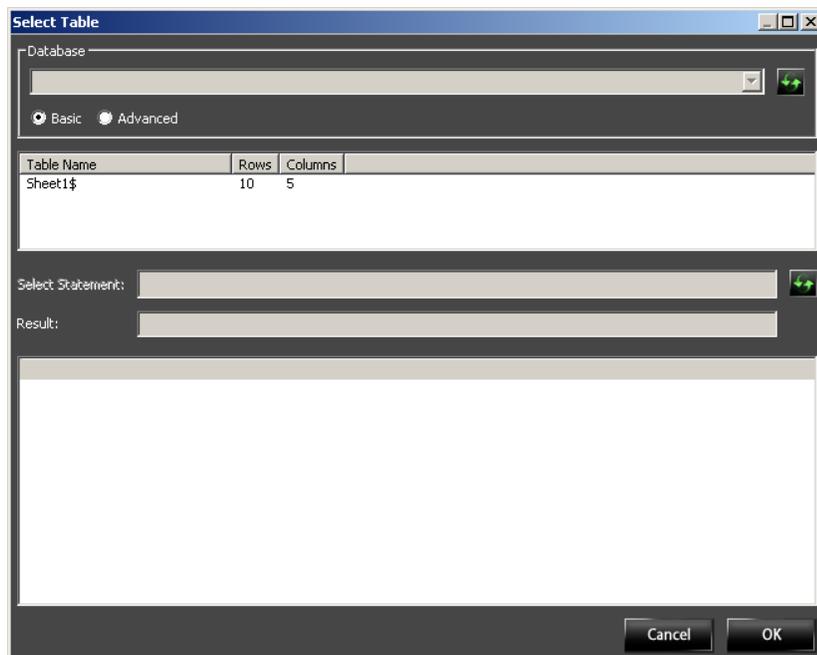


## Example using Excel Spreadsheet

**5.5.8.3 Connect** – Select the **Connect** button. There will now be a connection to the **Database** and to verify that the connection has been made, the path to the file is shown as the **Server**, under the **Advanced** tab.



**5.5.9 Select** – Select the **Select** button. The **Select Table** window will open.



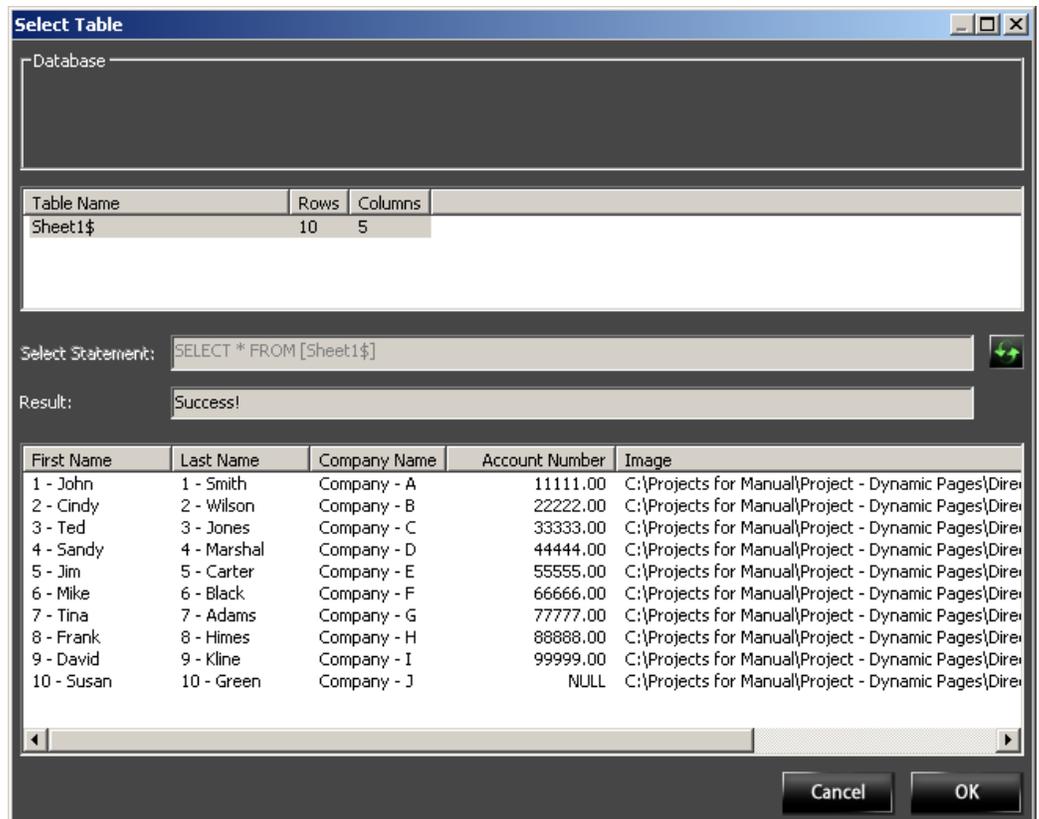
## Example using Excel Spreadsheet

**5.5.9.1** Select the **Table Name** that contains the content that will be used for this **Image Region**.

**Note:** For Excel files the **Table Name** represents the Sheets of the Excel document.

**5.5.9.2** To populate the **Database** content into the viewing area, select the **Refresh**  button located to the right of the **Select Statement** box.

**5.5.9.3** The content of the **Table** will now be visible in the viewing area.



## Example using Excel Spreadsheet

**5.5.9.4** The **Table** is now linked to the **Region**.

Select **OK** to close the **Select Table** window.

**5.5.10** Now that the **Table** is linked to the **Dynamic Region**, the **Dynamic Region** can be formatted to display specific data from the **Table**.

**5.5.11** Return to the **Image** tab in the **Properties** panel.



**5.5.12 Image Path box** - Now that the **Image Region** is properly connected to an external **Data Source**, the **Image Path** box, can be used to point at the **Database Image** paths using a **Formatter**.

(see the **Formatter** section of this manual)

**5.5.13** When setting up **Data** to be displayed in a **Dynamic Region**, there are a multitude of creative ways the **Data** can be handled and displayed.

(see the **Data Handling Options** section of this manual)

**5.5.14** The **Rotations** for this **Region** will display a different row of data from the **Data Source** (as set up with **Row offset** and **Row Increment**). The number of **Rotations** will depend on how many rows of data are in the **Data Source** as well as how many other **Dynamic Regions** are on the **Dynamic Page**. (see the **Rotations** section of this manual)

**5.5.15** When developing your **Dynamic Region** the **Data** from the external **Data Source** can be inserted and viewed in the **Suite Design** window. (see the **Refresh Now / Update Interval** section of this manual)

**5.5.16** The content of each **Rotation** of a **Dynamic Page** can also be viewed in context of how it will be displayed with other **Pages**, by adding the **Dynamic Page** to a **Sequence**. (see the **Adding a Dynamic Page to a Sequence** section of this manual)

## 6 Formatter

**6.1** A **Formatter** is used to point to a cell (row and column) of a **Database**. (see the **Noventri Suite Database Manual**)

**Examples** [1:2] would be row 1 column 2  
[3:3] would be row 3 column 3

**6.2** The **Formatter** points to a row and column in the **Spreadsheet** that contains the **Text** or path to an **Image**. This cell is the beginning point of data extraction.

**6.3** All the displayed **Data** will be from the column specified, and will cycle sequentially (as set up with **Row offset** and **Row Increment**) through the rows that contain **Data**. This **Formatter** is designed to cycle through the **Data** row by row but not column by column.

**Note:** The first row of the Excel **Spreadsheet** is always assumed to be column headers and is therefore not accessible.

So [1:2] would actually be Excel document row 2 column 2.

- 6.4** When a row is selected by the **Formatter** it is recommended to always select the first row in the table that contains an entry. Using the **Row offset** option allows the first displayed entry to be selectable without the possibility of blank entries being displayed at the end.

Using the **Formatter** to select a row (other than the first row) in the table that contains an entry, will not change the number of rows to be displayed.

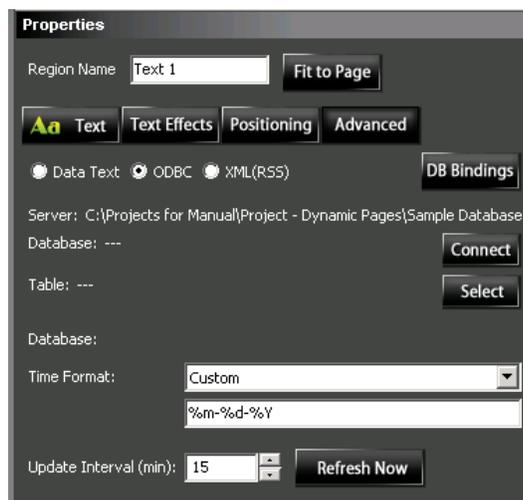
**Example:** The table being used has 10 rows of entries. However the first entry to be displayed is row 3.

If a **Row offset** of 2 is used, row 3 will be displayed first and row 10 will be the last entry displayed. (a total of 8 **Rotations** to display these)

If the **Formatter** [3:1] is used, row 3 will be displayed first, and row 10 will be the last entry displayed. However there will be a total of 10 **Rotations** (matching the number of rows), and the last two will have this **Region** blank.

## 7 Refresh / Update Interval

- 7.1** **Refresh Now** and **Update Interval** trigger the retrieval of **Data** from the external **Data Source**.
- 7.2** The **Refresh Now** button and the **Update Interval** setting are both found on the **Text/Image Advanced** tab.



### 7.3 Refresh Now – Suite

- 7.3.1 The **Refresh Now** is used for updating the **Data** being displayed in **Noventri Suite**.
- 7.3.2 The **Refresh Now** button is only needed for retrieval of **Data** from a **Database/Spreadsheet Data Source**. Other **Data Sources**, such as **Text Lists**, automatically refresh.
- 7.3.3 As long as a valid **Formatter** is entered, and the **Region** is properly linked to the **Data Source**, selecting the **Refresh Now** button will allow the **Noventri Suite** view of the **Region** to display the **Data** from the **Table**.

**Note:** Selecting the **Refresh Now** button only has to be done within the **Suite** the first time and then will automatically **Refresh**. It will however have to be selected again if the **Project** is closed and re-opened in the **Suite**.

### 7.4 Update Interval – Server

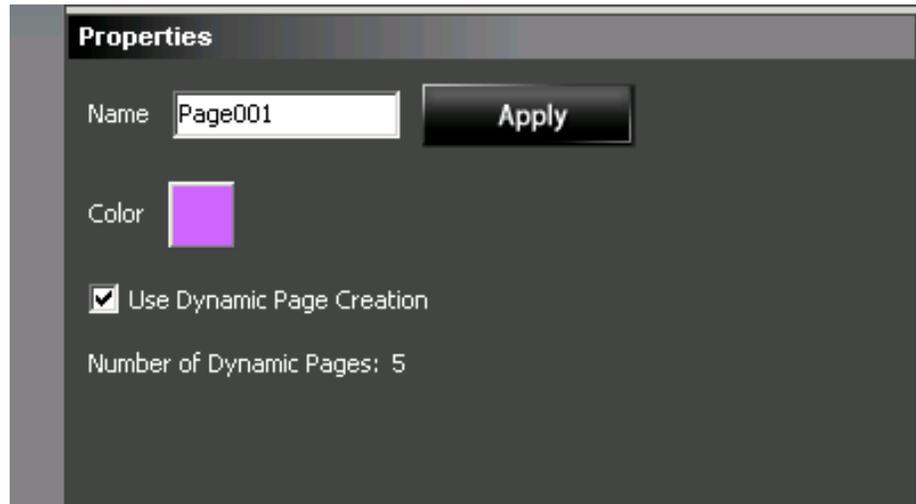
- 7.4.1 The **Update Interval** controls the time (in minutes) specified for how often the external **Data Source** is accessed by the **Server** and checked for updates.

**Note:** Setting this interval to less than 15 min may over tax the **Player** and is not recommended.

## 8 Rotations

- 8.1 This section will help clarify how many **Rotations** will be displayed for a **Dynamic Page**.
- 8.2 Once a **Dynamic Page** has been set up with one or more **Dynamic Regions**, it will automatically **Rotate** the number of times needed to display all the content.
- 8.3 The **Region** that has the largest number of entries to be displayed will determine the number of **Rotations** that will be displayed.

- 8.4 **Regions** that have *less* entries to be displayed, than the number of **Rotations** (due to other **Regions** that have more entries) will be blank once their last entry has been displayed.
- 8.5 The number of **Rotations** is shown in the **Pages Properties** box (**Number of Dynamic Page Rotations**).



- 8.6 To view the content of each **Rotation**, the **Dynamic Page** has to be added to a **Sequence**.  
(see the **Adding a Dynamic Page to a Sequence** section of this manual)
- 8.7 The total number of **Rotations** for a **Dynamic Page** can depend on the following...
- How many **Dynamic Text/Image Regions** are on the **Dynamic Page**.
  - How many individual links each **Dynamic Text/Image Region** has to a **Data Source**. For example, one **Dynamic Region** may contain several **Formatters** pointing to different columns of data.
  - How many **Text/Image** entries are in the **Data Source**.
  - How the **Row offset** and **Row Increment** options are configured for each **Dynamic Text/Image Region**.

**8.8** Simple examples of, how many **Rotations** will be displayed...

**Example 1: Dynamic Page** has one **Dynamic Region** with 5 entries...

Five **Rotations** will be displayed  
(**Rows** 1,2,3,4,and5)

**Example 2: Dynamic Page** has two **Dynamic Regions** with 5 entries each...

Five **Rotations** will be displayed  
(**Rows** 1,2,3,4,and 5 for each **Region**)

**Example 3: Dynamic Page** has two **Dynamic Regions**, one with 5 entries and the other with 7 entries...

Seven **Rotations** will be displayed  
(**Rows** 1,2,3,4, 5, blank, blank in the one **Region** and **Rows** 1,2,3,4,5,6 and 7 in the other **Region**)

**8.9** Examples when the **Row offset** option is used.

- **Row offset** will skip the top entries.

**Example 1: Dynamic Page** has one **Dynamic Region** with 10 entries and a **Row offset** of 1...

Nine **Rotations** will be displayed  
(**Rows** 2-10)

**Example 2: Dynamic Page** has two **Dynamic Regions** with 10 entries each and a **Row offset** of 0 for the first **Region** and a **Row offset** of 1 for the second **Region**....

Ten **Rotations** will be displayed\*\*  
(**Rows** 1-10 in the one **Region** and **Rows** 2-10, and a blank in the other **Region**)

**Example 3: Dynamic Page** has two **Dynamic Regions** with 10 entries each and a **Row offset** of 2 for the first **Region** and a **Row offset** of 3 for the second **Region**....

Eight **Rotations** will be displayed\*\*  
(**Rows** 3-10 in the one **Region** and **Rows** 4-10, and a blank in the other **Region**)

#### 8.10 Examples when the **Row Increment (Rows per page)** option is used.

- **Row Increment** –allows rows to be skipped.

**Example 1: Dynamic Page** has one **Dynamic Region** with 10 entries, **Row Increment** set to 1 (default)...

Ten **Rotations** will be displayed  
(**Rows** 1-10)

**Example 2: Dynamic Page** has one **Dynamic Region** with 10 entries, **Row Increment** set to 2...

Five **Rotations** will be displayed  
(**Rows** 1,3,5,7,9)

**Example 3: Dynamic Page** has two **Dynamic Regions** with 10 entries each, with **Row Increment** set to 1 for the first **Region** and a **Row Increment** set to 2 for the second **Region**....

Ten **Rotations** will be displayed\*\*  
(**Rows** 1-10 in the one **Region** and **Rows** 1,3,5,7,9, and five blanks in the other **Region**)

**Example 4: Dynamic Page** has two **Dynamic Regions** with 10 entries each, with **Row Increment** set to 3 for the first **Region** and a **Row Increment** set to 5 for the second **Region**....

Four **Rotations** will be displayed\*\*  
(**Rows** 1,4, 7,10 in the one **Region** and **Rows** 1,6, blank, blank in the other **Region**)

### 8.11 Examples when the **Row offset** option is used with the **Row Increment** option...

**Example 1: Dynamic Page** has one **Dynamic Region** with 10 entries, a **Row offset** of 1 and **Row Increment** set to 2...

Five **Rotations** will be displayed  
(**Rows** 2,4,6,8,and10)

**Example 2: Dynamic Page** has two **Dynamic Regions** with 10 entries each, a **Row offset** of 4 for the first **Region** and **Row Increment** set to 2 for the second **Region**....

Five **Rotations** will be displayed\*\*  
(**Rows** 1,2,3,4, 5, blank, blank in the one **Region** and **Rows** 1,2,3,4,5,6 and 7 in the other **Region**)

**\*\* The greatest number of entries always takes priority .**

**8.12** Examples when more than one cell on a **Spreadsheet** is pointed to in the same **Region**.

Examples below use the “**Sample Spreadsheet A**”.

**Examples** [1:1][1:2] would display JohnSmith

[1:1] [1:2] would display John Smith

[1:1] from [1:3] would display  
John from Company – X

[1:1]\n[2:1] would display  
John  
Cindy

**Note:** \n can be used for a line return

**Sample Spreadsheet A**

First Name	Last Name	Company Name	Account Number
John	Smith	Company - X	123456.00
Cindy	Wilson	Company - Y	789123.00
Ted	Jones	Company - Z	456789.00

**8.13** Examples of **Rotations** when more than one cell from a **Spreadsheet** is used in the same **Region**.

Examples below use the “**Sample Spreadsheet B**”.

**Examples** [1:1]\n[2:1]\n[3:1]  
The 1<sup>st</sup> **Rotation** would display

- 1 - John
- 2 - Cindy
- 3 - Ted

then the next **Rotation** would display

- 2 - Cindy
- 3 - Ted
- 4 - Sandy

and so on, scrolling through the column

**Sample Spreadsheet B**

	A	B	C	D
1	First Name	Last Name	Company Name	Account Number
2	1 - John	1 - Smith	Company - A	11111
3	2 - Cindy	2 - Wilson	Company - B	22222
4	3 - Ted	3 - Jones	Company - C	33333
5	4 - Sandy	4 - Marshal	Company - D	44444
6	5 - Jim	5 - Carter	Company - E	55555
7	6 - Mike	6 - Black	Company - F	66666
8	7 - Tina	7 - Adams	Company - G	77777
9	8 - Frank	8 - Himes	Company - H	88888
10	9 - David	9 - Kline	Company - I	99999
11	10 - Susan	10 - Green	Company - J	12121
12				

**8.14** Examples of **Rotations** when more than one cell from a **Spreadsheet** is used in the same **Region** in combination with **Row offset**.

Examples below use the “**Sample Spreadsheet B**”.

**Examples** [1:1]\n[2:1]\n[3:1] with Row offset of 1  
The 1<sup>st</sup> **Rotation** would display

2 - Cindy  
3 - Ted  
4 – Sandy

then the next **Rotation** would display

3 - Ted  
4 – Sandy  
5 – Jim

and so on, scrolling through the column

**8.15** Examples of **Rotation** when more than one cell from a **Spreadsheet** is used in the same **Region** in combination with **Row Increment**.

Examples below use the “**Sample Spreadsheet B**”.

**Examples** [1:1]\n[2:1]\n[3:1] with Row Increment 3  
The 1<sup>st</sup> **Rotation** would display

1 - John  
2 - Cindy  
3 - Ted

then the next **Rotation** would display

4 – Sandy  
5 – Jim  
6 – Mike

and so on, for the rest of the column

**8.16** Examples of **Rotations** when more than one cell from a **Spreadsheet** is used in the same **Region** in combination with **Row offset** and **Row Increment**.

Examples below use the “**Sample Spreadsheet B**”.

**Examples** [1:1]\n[2:1]\n[3:1] with **Row offset** 1 and **Row Increment** 3

The 1<sup>st</sup> **Rotation** would display

2 - Cindy  
3 - Ted  
4 – Sandy

then the next **Rotation** would display

5 – Jim  
6 – Mike  
7 - Tina

and so on, for the rest of the column

**8.17** Examples of **Rotations** when more than one cell from a **Spreadsheet** is used in the same **Region**, in combination with **Row offset** and **Row Increment**, while also having multiple **Dynamic Regions** on a **Dynamic Page**.

Examples below use the “**Sample Spreadsheet B**”.

**Examples:** 1<sup>st</sup> **Region** [1:1]\n[2:1]\n[3:1]  
with **Row offset** 1 and **Row Increment** 3

2<sup>nd</sup> **Region** [1:1]\n[2:1]\n[3:1]  
with **Row offset** 4 and **Row Increment** 3

The 1<sup>st</sup> **Rotation** would display

<u>1<sup>st</sup> Region</u>	<u>2<sup>nd</sup> Region</u>
2 – Cindy	5 - Jim
3 – Ted	6 - Mike
4 – Sandy	7 - Tina

then the next **Rotation** would display

<u>1<sup>st</sup> Region</u>	<u>2<sup>nd</sup> Region</u>
5 – Jim	8 - Frank
6 – Mike	9 - David
7 – Tina	10 - Susan

then the next **Rotation** would display

<u>1<sup>st</sup> Region</u>	<u>2<sup>nd</sup> Region</u>
8 – Frank	
9 – David	
10 – Susan	

- Note:** Whenever a cell is pointed to, that does not contain data
- The **Sequence Preview** will display it showing the formatters. e.g. [1:3]
  - The **Player** will display it as blank.

## 9 Data Handling Options

9.1 When using **Dynamic Regions**, there are options that can be very helpful in the manipulation and displaying of the data.

### 9.2 Metacharacters

9.2.1 A **Metacharacter** is a character that has a special meaning (instead of its literal meaning).

\n can be used for a line return  
\t can be used for a tab  
\ can be used as a literal \

9.2.2 **Metacharacters** can be used in **Dynamic Text Regions**. They can be used with the **Text File** option or the **Database** option.

9.2.3 **Metacharacters** when used within a **Text File** will allow multiple lines of text to be viewed on the same **Rotation**.

**Example 1:**           Text File Line 1  
                          Text File Line 2  
                          Text File Line 3\n Text File Line 4

1<sup>st</sup> **Rotation** will display - Text File Line 1

2<sup>nd</sup> **Rotation** will display - Text File Line 2

3<sup>rd</sup> **Rotation** will display - Text File Line 3  
                                  Text File Line 4

**Example 2:**           Text File Line 1\Text File Line 2  
                           Text File Line 3 \ \ Text File Line 4

1<sup>st</sup> **Rotation** will display –

Text File Line 1      Text File Line 2

2<sup>nd</sup> **Rotation** will display -

Text File Line 3 \ Text File Line 4

**9.2.4 Metacharacters** can be used when the **Database** option is selected by including them in the **Text** box entry with the **Formatter/s**.

**Note 1:**           Examples below use “**Sample Spreadsheet B**”

**Note 2:**           Additional examples are available.  
 (see the **Rotations** section of this manual)

**Sample Spreadsheet B**

	A	B	C	D
1	First Name	Last Name	Company Name	Account Number
2	1- John	1 - Smith	Company - A	11111
3	2 - Cindy	2 - Wilson	Company - B	22222
4	3 - Ted	3 - Jones	Company - C	33333
5	4 - Sandy	4 - Marshal	Company - D	44444
6	5 - Jim	5 - Carter	Company - E	55555
7	6 - Mike	6 - Black	Company - F	66666
8	7 - Tina	7 - Adams	Company - G	77777
9	8 - Frank	8 - Himes	Company - H	88888
10	9 - David	9 - Kline	Company - I	99999
11	10 - Susan	10 - Green	Company - J	12121
12				

**Example:** First Name: [1:1] \t Last Name: [1:2] \n \nCompany: [1:3}

The 1<sup>st</sup> **Rotation** will display -

First Name: 1 - John      Last Name: 1 – Smith  
Company: Company - A

The 2<sup>nd</sup> **Rotation** will display -

First Name: 2 - Cindy      Last Name: 2 – Wilson  
Company: Company - B

and so on, for the rest of the columns

### 9.3 Variables

**9.3.1** A **Variable** is a name or character that represents a value. There are two specific **Variables** set up for use in **Dynamic Text Regions**.

%page\_current      will display the current **Dynamic Page Rotation** number.

%page\_total -      will display the total number of **Dynamic Page Rotations** for that **Region**.

**Example:**

Dynamic Region\n Rotation number %page\_current of %page\_total

The 1<sup>st</sup> **Rotation** will display -

Dynamic Region  
Rotation Number 1 of 10

The 2<sup>nd</sup> **Rotation** will display -

Dynamic Region  
Rotation Number 1 of 10

and so on, for the rest of the **Rotations**

**9.3.2** When using the **Database** option for a **Dynamic Text/Image Region** the column name may be used as a **Variable** for the column number in the **Formatter**.

This has two advantages...

- Seeing the column name instead of the column number makes it easier to create the **Formatters** and recognize them.
- If columns are added or deleted from the Database, causing the column numbers to change, the **Formatter** will still point to the correct column.

**Example:**

[1:Company Name] would be the same as [1:3]

## 9.4 Row offset

9.4.1 The **Row offset** option allows the top line/s of a **Text File**, **Image List**, or **Table** to be ignored.

**Example 1:** If there are 5 rows of data in the **Text/Image List/Table** and the **Row offset** is set to 1, then only rows 2-5 will cause a **Rotation**, therefore prompting only four **Rotations** of the **Dynamic Page**.

**Example 2:** If there are 5 rows of data in the **Text/Image List/Table**. If **Row offset** is set to 2, two rows will be skipped, so only rows 3 - 5 will cause a **Rotation**.



The image shows a dark grey control panel with two rows of settings. The first row is labeled 'Row offset:' followed by a white input box containing the number '0' and a small vertical scroll arrow on the right. The second row is labeled 'Rows per page:' followed by a white input box containing the number '1' and a small vertical scroll arrow on the right.

## 9.5 Row Increment (Rows per page)

9.5.1 The **Row Increment (Rows per page)** option allows rows to be skipped.

**Example:** Leaving the **Row Increment** set to 1, will display every row.  
(unless already skipped due to **Row offset**).

**Example:** If **Row Increment** is set to 2, every other row will be displayed, and likewise if it is set to 3, every third row, and so on.

9.5.2 Changing the **Row Increment** to 0 will display *only* the 1<sup>st</sup> row (after taking into account the **Row offset**). This will cause the **Region** to function as a normal **Region** (not **Dynamic**).

**Note:** The 1<sup>st</sup> row (after any **Row offset**) will always be shown, then the rows being skipped will follow. So, if the **Row Increment** is set to 2, the 1<sup>st</sup> row will be displayed first and 3<sup>rd</sup> row second, etc...

## 10 Dynamic Page in a Sequence

- 10.1** The **Dynamic Page** needs to be added to a **Sequence** for two reasons.

First of all - While creating a **Dynamic Page Project**, it is convenient to see and cycle through the **Rotations** that will be created, as well as set the length of time each **Rotation** will be displayed. This will enable the content to be seen ahead of time, just as it will be displayed when the **Project** is **Assigned to a Player**.

Second – The **Sequence** must be created before the **Project** can be **Published**.

- 10.2** The **Dynamic Page** should be added to a **Sequence** as any other **Page** would be.  
(see the **Noventri Design Manual**)

- 10.3** Once a **Dynamic Page** is in a **Sequence**, it's colored block in the **Timeline** will say "**Dynamic**".

- 10.4** Normally when a **Page** is added to the **Timeline**, the width of the colored block is adjusted to determine the length of time that the **Page** will be displayed. For a **Dynamic Page** the length of time that is selected is the length of time that each **Rotation** will be displayed.

**Example:** If the length of time that was selected for the **Dynamic Page** colored block is 1 min. and it is formatted to **Rotate** 20 times, each one of the 20 **Rotations** will be displayed for 1 min. So a total of 20min before the next colored block (**Page**) in the **Sequence** will be displayed.

**Note:** The **Page Duration** indicated to the right of the **Timeline** does not take into account the number of **Dynamic Page Rotations**.

- 10.5** If a **Transition** is added to the **Dynamic Page** it will be the **Transition** used between each created **Page**.

- 10.6** To cycle through the **Rotations** that will be created and view them in the **Preview Panel**, select the **Dynamic Page** colored block in the **Timeline** and cycle through the **Rotations** by using the right and left arrow keys on the keyboard.
- 10.7** Once a **Project** with a **Dynamic Page** is completed it can be **Published, Scheduled,** and **Assigned** to a **Player** as any other **Project** would be.  
(see the **Noventri Design, Schedule,** and **Manage** Manuals)

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