Dynamic Pages Manual

2.8
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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 other. 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, it’s 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 it’s 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.

![Properties panel with Text File Path and Browse button]

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.

![Properties panel with Randomize checked]

**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 coping 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 an 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.

![Database Text Region](image)

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.

![Advanced Options](image)
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

![Sample Excel Spreadsheet](image_url)

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 connected 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.

- Select the desired type of Database to be connected 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.

![Select Table Window](image)

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.
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.

![Randomize Image](image)

**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**
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.

![Connect button in Excel Spreadsheet](image)

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

![Select Table window in Excel Spreadsheet](image)
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**).

![Properties](image)

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, and 5)

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, and 10)

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

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Company Name</th>
<th>Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Smith</td>
<td>Company - X</td>
<td>123456.00</td>
</tr>
<tr>
<td>Cindy</td>
<td>Wilson</td>
<td>Company - Y</td>
<td>789123.00</td>
</tr>
<tr>
<td>Ted</td>
<td>Jones</td>
<td>Company - Z</td>
<td>456789.00</td>
</tr>
</tbody>
</table>
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][2:1][3:1]

The 1st 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**

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

\[1:1\] \[2:1\] \[3:1\] with Row offset of 1

The 1\textsuperscript{st} **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**

\[1:1\] \[2:1\] \[3:1\] with Row Increment 3

The 1\textsuperscript{st} **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 \[1:1\] \[2:1\] \[3:1\] with **Row offset** 1 and **Row Increment** 3

The 1st **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:

1st Region \([1:1] \n[2:1] \n[3:1]\)

with **Row offset** 1 and **Row Increment** 3

2nd Region \([1:1] \n[2:1] \n[3:1]\)

with **Row offset** 4 and **Row Increment** 3

The 1st **Rotation** would display

<table>
<thead>
<tr>
<th>1st Region</th>
<th>2nd Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 – Cindy</td>
<td>5 - Jim</td>
</tr>
<tr>
<td>3 – Ted</td>
<td>6 - Mike</td>
</tr>
<tr>
<td>4 – Sandy</td>
<td>7 - Tina</td>
</tr>
</tbody>
</table>

then the next **Rotation** would display

<table>
<thead>
<tr>
<th>1st Region</th>
<th>2nd Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 – Jim</td>
<td>8 - Frank</td>
</tr>
<tr>
<td>6 – Mike</td>
<td>9 - David</td>
</tr>
<tr>
<td>7 – Tina</td>
<td>10 - Susan</td>
</tr>
</tbody>
</table>

then the next **Rotation** would display

<table>
<thead>
<tr>
<th>1st Region</th>
<th>2nd Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 – Frank</td>
<td></td>
</tr>
<tr>
<td>9 – David</td>
<td></td>
</tr>
<tr>
<td>10 – Susan</td>
<td></td>
</tr>
</tbody>
</table>

**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\textsuperscript{st} Rotation will display -  
Text File Line 1

2\textsuperscript{nd} Rotation will display -  
Text File Line 2

3\textsuperscript{rd} Rotation will display -  
Text File Line 3  
Text File Line 4
Example 2: Text File Line 1\tText File Line 2
Text File Line 3 \ Text File Line 4

1\textsuperscript{st} Rotation will display –

Text File Line 1 Text File Line 2

2\textsuperscript{nd} 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

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First Name</td>
<td>Last Name</td>
<td>Company Name</td>
<td>Account Number</td>
</tr>
<tr>
<td>2</td>
<td>John</td>
<td>Smith</td>
<td>Company - A</td>
<td>11111</td>
</tr>
<tr>
<td>3</td>
<td>Cindy</td>
<td>Wilson</td>
<td>Company - B</td>
<td>22222</td>
</tr>
<tr>
<td>4</td>
<td>Ted</td>
<td>Jones</td>
<td>Company - C</td>
<td>33333</td>
</tr>
<tr>
<td>5</td>
<td>Sandy</td>
<td>Marshal</td>
<td>Company - D</td>
<td>44444</td>
</tr>
<tr>
<td>6</td>
<td>Jim</td>
<td>Carter</td>
<td>Company - E</td>
<td>55555</td>
</tr>
<tr>
<td>7</td>
<td>Mike</td>
<td>Black</td>
<td>Company - F</td>
<td>66666</td>
</tr>
<tr>
<td>8</td>
<td>Tina</td>
<td>Adams</td>
<td>Company - G</td>
<td>77777</td>
</tr>
<tr>
<td>9</td>
<td>Frank</td>
<td>Himes</td>
<td>Company - H</td>
<td>88888</td>
</tr>
<tr>
<td>10</td>
<td>David</td>
<td>Kline</td>
<td>Company - I</td>
<td>99999</td>
</tr>
<tr>
<td>11</td>
<td>Susan</td>
<td>Green</td>
<td>Company - J</td>
<td>12121</td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example:  First Name: [1:1] \t Last Name: [1:2] \n \nCompany: [1:3}

The 1\textsuperscript{st} Rotation will display -

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

Company: Company - A

The 2\textsuperscript{nd} 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\nRotation number \%page_current of \%page_total

The 1st Rotation will display -

Dynamic Region
Rotation Number 1 of 10

The 2nd 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.

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 1st row (after taking into account the Row offset). This will cause the Region to function as a normal Region (not Dynamic).

Note: The 1st 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 1st row will be displayed first and 3rd 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)