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# Advanced XSLT editing: Content query web part (CQWP)

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# About Me

- Dolev Raz
- 22 years-old
- Live in Qiriyat Ono
- Works in Logic trough Top Soft
- Working with SharePoint for the past 4 years
- Blog: [DolevRaz.blogspot.com](http://DolevRaz.blogspot.com)



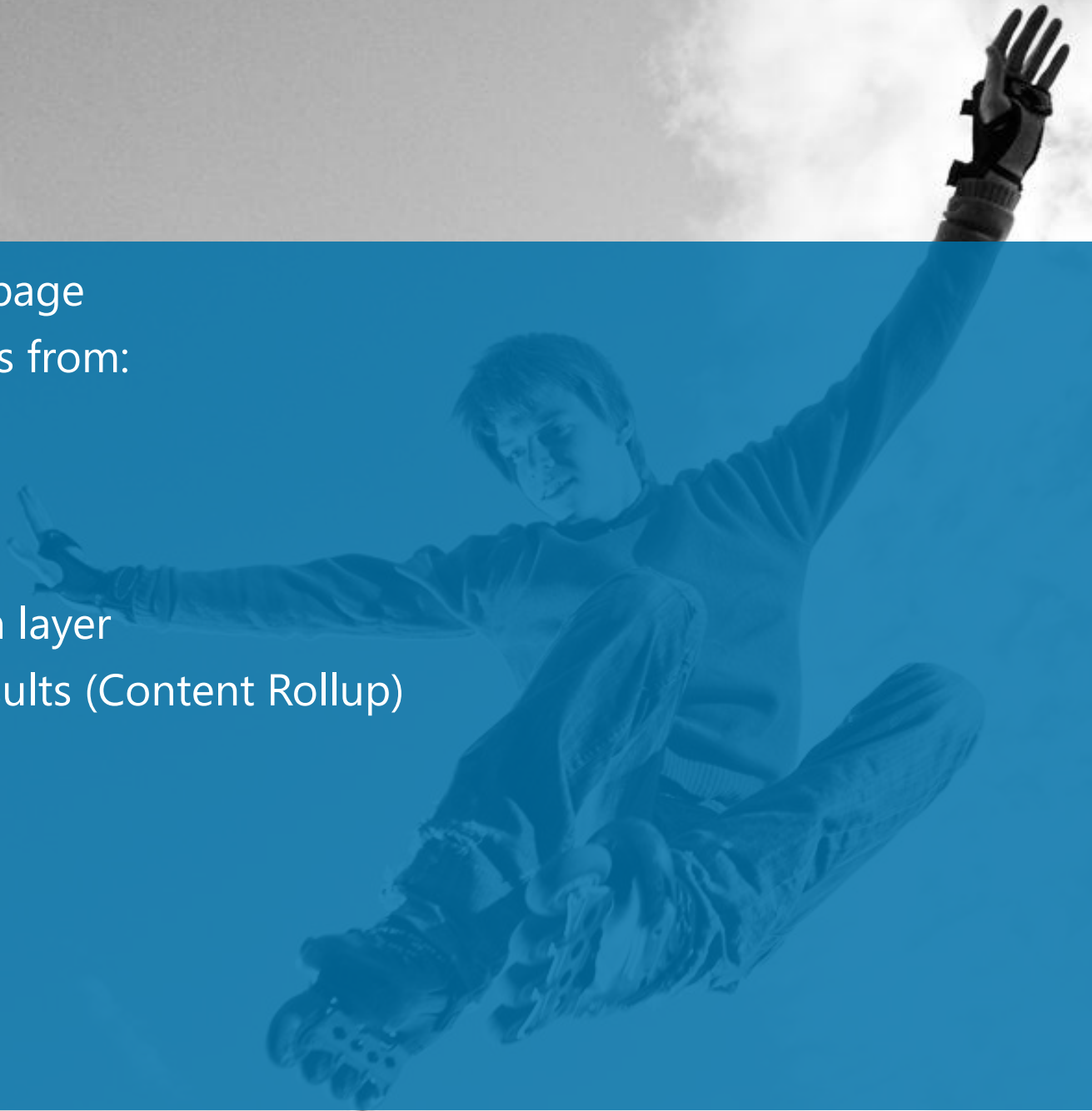


# Agenda

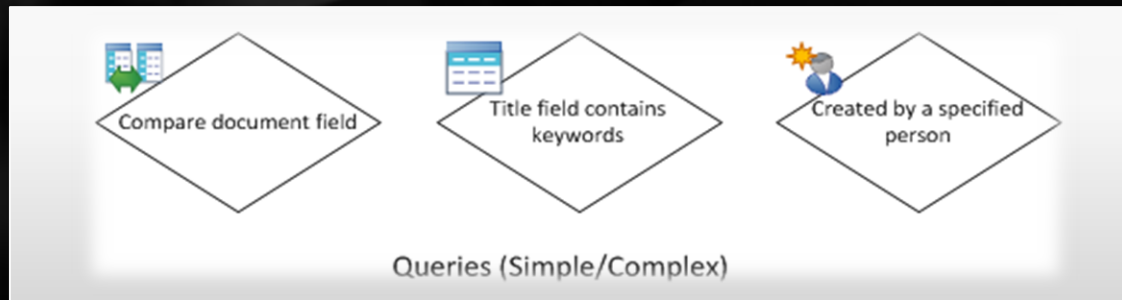
- CQWP – Understanding and using
- XSLT & Data View web part
- Conditional formatting
- Tip and trikes

# Content Query Web Part

- Displays a dynamic view of content on a page
- CQWP can be configured to retrieve items from:
  - Single or Multiple List(s)
  - Single site or Sub-sites
  - Entire site collection
- Centralize the content in the presentation layer
- Ability to Filter, Sort, Order and Group results (Content Rollup)
- Used in:
  - Content Management
  - Publishing
  - Content Delivery Scenarios



# CQWP Action



## FACULTY

All Faculty Members »

### CERA

#### Eye Care

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#### Neurosciences

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#### Obesity Intervention

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### ILLUS

#### Medical Dermatology

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Categories	Web Parts
Lists and Libraries	Categories
Business Data	Content Query
Content Rollup	Relevant Documents
...	...

Content Query Tool Part

- + Query [Help](#)
- + Presentation

**Styles:**

Group style:  
Default

Item style:  
Image on left

Play media links in browser

Content Query

Content Query Tool Part

Query [Help](#)

**Source:**

- Show items from all sites in this site collection
- Show items from the following site and all subsites:  
 [Browse...](#)
- Show items from the following list:  
 [Browse...](#)

**List Type:**

Show items from this list type:  
Announcements

**Content Type:**


Show items of this content type group:  
<All Content Types>

Show items of this content type:  
<All Content Types>

Include child content types

# Using CQWP – Filtering and Sorting

- Requires Publishing Features to be activated

**Additional Filters:** 

Show items when:

Staff Department

is equal to

Ceramics

And  Or

<no filter>

is equal to

And  Or

<no filter>


is equal to


Presentation

**Grouping and Sorting:**

Group items by:

Staff Department

 Show groups in ascending order.  
(A, B, C, or 1, 2, 3).


 Show groups in descending order.  
(C, B, A, or 3, 2, 1).


Number of columns:

1

Sort items by:

Name

 Show items in ascending order.  
(A, B, C, or 1, 2, 3).


 Show items in descending order.  
(C, B, A, or 3, 2, 1).

Limit the number of items to display

Item limit:

# Using CQWP – Fields

- Depending on the scope of your query, select one or more site or list columns
- Column from a particular group – Column [Group]

**Fields to display:** 

Link

Image

Title

Description



# Additional Filters - Page Content

- PageFieldValue – Dynamically replaces the value for the filter with the current page’s field value.
- PageQueryString – Looks at the URL query string for a value to use in the Query.

**Additional Filters:** ⓘ

Show items when:

News Category  
is equal to

Please edit on server

Custom Value or Query (Click help icon above for more info)

Include terms under selection

And  Or

Title  
is not equal to

And  Or

Created  
is greater than or equal to

[Today]

Custom Value or Query (Click help icon above for more info)

Return news stories that are tagged with the same "News Category" tag as this news story (i.e. if this is a "Sports" story, return other stories tagged with "Sports")

Don't return **this** article in the results

Return items that greater than or equal to today – (minus) 7 days

# Anatomy of CQWP

- CQWP uses property settings and CAML to construct the query
- SPSiteDataQuery class to query the SharePoint site to gather results
- More advanced properties available and requires modifying the web part file
- Once modified, you can re-import or even upload the modified file to the web part gallery

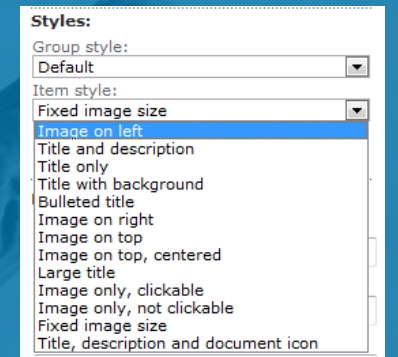
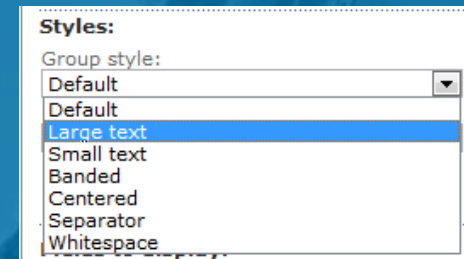
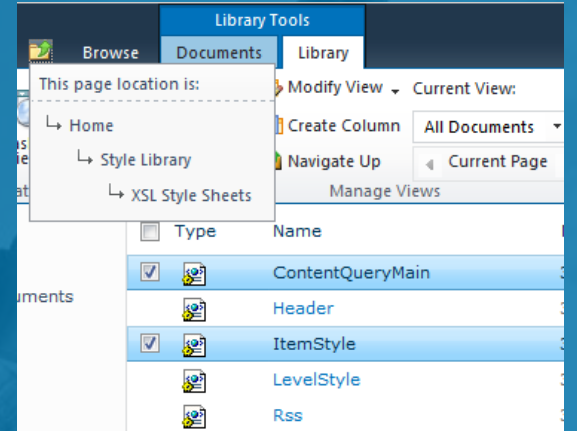
# CQWP XSL Sheets

## ▪ ContentQueryMain.XSL

- Receives all the content, parses it, and sends appropriate pieces to the ItemStyle and Header templates.
- Maintains the structure of the Content By Query Web Part.
- Stores data retrieved when querying content in the path /dsQueryResponse/Rows/Row.

## ▪ ItemStyle.XSL

- Contains templates that define how to display an item.
- These templates receive and process one row of data at a time, ensuring that the style and data in the item rows is consistent.



# Demo – Using CQWP



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# XSLT Theory

A person is skydiving, shown from a low angle looking up. They are wearing a dark jumpsuit and gloves, with their arms spread wide. The background is a bright, cloudy sky. The image is partially obscured by a blue semi-transparent overlay that contains the text.

- Extensible Style sheet Language Transformations (XSLT).
- Data Presentation – Style from XML
- Data Transformations – Medium, the output way.
- In SharePoint – received as XML and transformed into XSLT to be styled.

# XSLT Example – ECI Telecom Site

- SharePoint 2010 publishing platform
- XSTL Customizations
- <http://www.ecitele.com/>

The screenshot shows the ECI Telecom website homepage. At the top, there is a navigation bar with the ECI logo and links for CAREERS, CONTACT US, RESOURCE CENTER, and SUPPORT LOG-IN, along with a search box. Below the navigation bar, there are four main menu items: OUR OFFERING (Products, Services, Solutions), ABOUT ECI (Team, Corporate Responsibility, Profile), OUR PARTNERS (Become a Partner, Our Partners), and NEWS LOBBY (Events, News, Media). The main content area features a large banner with the text "BEYOND NEXT-GENERATION PACKET-OPTICAL TRANSPORT. INTRODUCING THE OMLT" and a "LEARN MORE" button. Below the banner, there are three columns of content: "Recommended Reading" with a link to a white paper, "1Net - Your Path for Growth" with a circular diagram and text, and "Get connected" with social media icons and a "KEEP ME UPDATED" button. The footer contains a grid of links for various sections and a copyright notice: "© All Rights Reserved ECI Telecom 2012".

# Demo – First Look On DVWP



# What the XSLT?!

- `<xsl:template>` definition of the template
  - `<xsl:call-template>` Call the Template to work
    - `<xsl:with-param>`, `<xsl:param>`, `<xsl:variable>` including the actions, parameters and values of the template.
    - `<xsl:for-each>` iterate over the group of rows (nodeset)
    - `<xsl:sort>` determine the sort order of the nodeset
    - `<xsl:if>` single conditional test – if true, it will work
    - `<xsl:choose>` multiple conditionals test
      - `<xsl:when>` used as a condition
      - `<xsl:otherwise>` a “fall-back” condition
  - `<xsl:value-of>` out-puts the value to which it evaluates



# The Templates

- `<xsl:template match="/">` the "initiation" function.
- `<xsl:template name="...">` the node set retrieved from the Data Source and the rendering starts and define the container.
- `<xsl:template name="...body">` calls the Rows template
- `<xsl:template name="...rowview">` where we work with each row, outputting the values
- The names are changeable, except their suffix. The names are default names so even it better to change them.

"Initiation" (/)

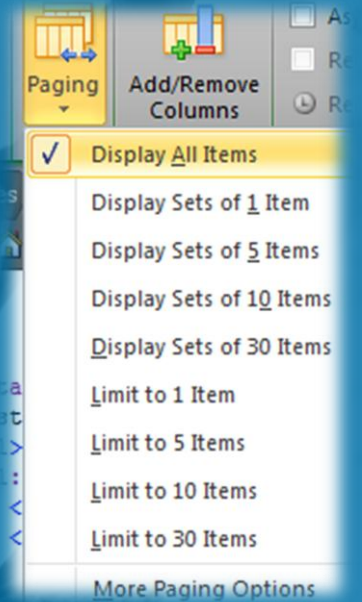
"..."

"...body"

"...rowview"

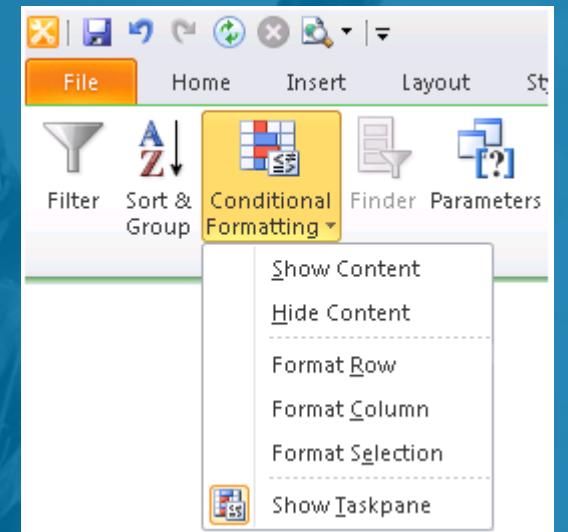
# Clean your Data View

- There are many options and functions we can remove from the code:
  - “Display all items” will remove some of the code.
  - `<xsl:when test="($ManualRefresh = 'True')">` - This function builds a table with “Refreshing” option. In many DVWP we don’t use it – so we can erase this.
  - `<xsl:call-template name="dvt_1.empty"/>` and `<xsl:template name="dvt_1.empty">` - Empty template
  - ms-alternating class function
  - `<xsl:if test="$dvt_1_automode = '1'" ddwrt:cf_ignore="1">`
- 178 rows to 31 rows of code.



# Conditional Formatting

- Apply conditional formatting based on rules and expressions.
- Use for:
  - Show Content
  - Hide Content
  - Format Content



# Conditional Formatting

- Select the desired row
- Set the rule
- Modify the style

Condition Criteria

Specify criteria to determine when conditional formatting will be applied.

	Field Name	Comparison	Value	And/Or
▶	Status	Equals	'Not Started'	And

Click here to add a new clause...

Group Ungroup Advanced...

Set Style Cancel

Modify Style

Category:

Font

Block

**Background**

Border

Box

Position

Layout

List

Table

font-family: [dropdown]

font-size: large [up/down] px [dropdown]

font-weight: bold [dropdown]

font-style: [dropdown]

font-variant: [dropdown]

text-decoration:  underline  overline  line-through  blink  none

text-transform: [dropdown]

color: #F2F6FA [dropdown] [color swatch]

Preview:

AaBbYyGgLIJj

Description: background-color: #FF0000; font-size: large; color: #F2F6FA; font-weight: bold

OK Cancel

# Conditional Formatting

- Where can I use it?
  - Task lists – Format statuses.
  - Birthday List – Format the birthday “boy”.
  - Document Library – Format the approved.
  - Budget List – Format values.



# Demo DVWP – Deep Dive



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# Tips and Tricks

- Use consistent site columns for content filtering.
- ALL XML inside a `<property/>` tag must be enclosed in a `<![CDATA[ ]]>` block.
- Upload to the web part gallery.
- If you need to query against >1000 lists you can add the `MaxListLimit` attribute to the `ListsOverride` property.
  - By default this is set to 1000
  - There is a performance trade-off here
- When filtering on Yes/No data type use the value "1" and "0"
- To render HTML and not raw tags set the `disable-output-escaping` attribute to true:
  - `<xsl:value-of select="@InternalName" disable-output-escaping="yes"/>`
- Use "Empty Data View" to start DVWP.

# Summary

- CQWP – Can be use for aggregation and doesn't have to look boring.
- XSLT is the way to format your SharePoint data.
- Conditional formatting is the way to highlight the important information.
- Tip and trikes







# Thank You!

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